

# **Southern Inshore Fisheries & Conservation Authority**

## **Technical Advisory Sub-Committee**

Chair - Dr Antony Jensen, Vice Chair - Mr Richard Stride Pia Bateman - Chief Executive Officer

# **EXTRAORDINARY MEETING OF THE TECHNICAL ADVISORY SUB-**COMMITTEE

## Thursday 4th December 2025

Dear Member,

An Extraordinary Meeting of the Technical Advisory Committee (TAC) will be held on Thursday 4th December 2025 at 10:00 to discuss the business on the under mentioned Agenda.

Members of the public can request a guest telephone dial-in code from enquiries@southern-ifca.gov.uk or confirm attendance via response to the same email address.

Yours sincerely,

Pia Bateman Chief Executive Officer

#### **AGENDA**

#### 1. Apologies

To receive apologies for absence.

#### 2. Declaration of Interest

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

#### ITEMS FOR INFORMATION

- 3. The BSB Management Package: Policy & Supporting Documents to receive a report (Marked A) which provides an overview of the BSB Management Intentions:
  - a) Process Document 1 Delivering Policy Objectives
  - b) Process Document 2 Decision Making & Roadmap
  - c) Process Document 3 Management Tools, Application & Review
  - d) Black Seabream Literature Review
  - e) Black Seabream Site Specific Evidence Packages

#### **ITEMS FOR DECISION**

- 4. Primary Policy Objective: Satisfying Section 154 of the MaCAA to receive a report (Marked B) which includes NE's advice and subsequent response from Southern IFCA.
  - a) Black Seabream Marine Conservation Zone Assessment Package
  - b) NE Response Letter, request for further information dated 10<sup>th</sup> November 2025
  - c) Southern IFCA Response Letter dated 20<sup>th</sup> November 2025
- 5. Secondary Policy Objective: Co-Developed Principles to receive a report (Marked C) which describes how Southern IFCA intend to further understandings of the BSB Fisheries, above and beyond the remit of the Conservation Objectives, in collaboration with the Dorset community.
  - a) Black Seabream Fishery Guidance
  - b) Data Collection Programme Data Logs

#### 6. Date of Next Meeting

To confirm the date of the next meeting of the Technical Advisory Committee on the 5<sup>th</sup> of February 2026 at Southern IFCA, Unit 3 Holes Bay Park, Sterte Avenue West, Poole Dorset BH15 2AA.



#### **EXECUTIVE SUMMARY**



# Black Seabream Management Package: Policy & Supporting Documents For Information Paper

Report by the CEO & DCO Birchenough

#### A. Purpose

For Members to receive the overarching policy & supporting documentation which forms part of the Black Seabream (BSB) Management Package and provides detail of BSB Management Intentions.

#### B. Recommendations

- That Members note the policy and supporting documentation
- That Members provide any comment on the policy and supporting documentation

#### C. Annexes

- 1. Process Document 1 Delivering Policy Objectives
- 2. Process Document 2 Decision Making Process & Roadmap
- 3. Process Document 3 Management Tools, Application & Review
- 4. Black Seabream Literature Review
- 5. Black Seabream Site Specific Evidence Packages

#### 1.0 Background

- Black Seabream (BSB) are designated as features of three Marine Conservation Zones (MCZs) in Dorset; Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ.
- Under Section 154(1) of the Marine & Coastal Access Act (MaCAA), Southern IFCA must '...seek
  to ensure that the conservation objectives of any MCZ in the District are furthered...', with
  Section 154(2) requiring that '...nothing in Section 153(2) is to affect the performance of the
  duty...'.
- In developing Southern IFCA's understanding of the brief to inform decision making for BSB management in the three Dorset MCZs, encompassing understanding the route of designation, the relevant Conservation Objectives (COs) and exploring early stages of policy development, founded upon the requirements under MacAA Section (154), the BSB review was split into two parallel streams of work, each having independent policy objectives and legislative underpinnings.
- The Primary Policy Objective, specific to duties under Section (154) of MaCAA considers high risk
  fishing activity to management BSB as a designated feature of MCZs and, in satisfying this objective
  by furthering the COs through existing management tools, the Secondary Policy Objective,
  considers additional management options for lower risk fishing activities to improve understandings
  of BSB across the Dorset MCZs, underpinned by Section (153) of MaCAA and working alongside
  the Dorset community.
- To provide clarity of the process and intention that underpinned this management approach, three
   Policy Documents have been drafted which collectively explain the route to achieving the Primary
   and Secondary Policy Objectives and Southern IFCA's intentions for the implementation and
   monitoring of management tools, and future review for BSB fisheries in the three Dorset MCZs.

#### 2.0 Management Intentions: Policy Documents

 There are three Policy Documents which provide detail of Management Intentions as part of the BSB Management Package. These documents collectively seek to provide clarity of intention and process which has underpinned the development of the Management Package, giving a transparent and comprehensive overview of how management tools ensure that Southern IFCA is able to meet its legal duties under the Marine and Coastal Access Act 2009 (MaCAA) for the two defined Policy Objectives.

#### Marked A

#### **EXECUTIVE SUMMARY**



#### **Primary Policy Objective - MaCAA 154**

Managing BSB as a designated feature of Marine Conservation Zones

#### **Secondary Policy Objective – MaCAA 153**

Improve understandings of BSB across the Dorset MCZs

The three Policy Documents are:

#### o Process Document 1 - Delivering Policy Objectives (Annex 1)

 Providing detail of Southern IFCA's delivery under each Policy Objective, providing the scope, legislative underpinning under MaCAA, focus areas/drivers/objectives and management tools. For each Policy Objective it is outlined how the Authority has satisfied the Policy Objective in delivering management.

#### Process Document 2 – Decision Making & Roadmap (Annex 2)

 Providing detail on understanding the brief to inform decision making, the process followed by the Authority in developing the BSB Management Package and how this led to the development of management tools under each Policy Objective and how each Policy Objective is therefore satisfied.

#### o Process Document 3 - Management Tools, Application & Review (Annex 3)

Outlining the detail of management tools which support BSB fisheries within the three Dorset MCZs with detail on the scope of management tools and the provisions each tool provides, defined by the relevant Policy Objectives. Detail is also given on monitoring compliance, data collection and the process by which a review process will be used to ensure an adaptive management approach.

#### 3.0 Management Intentions: Supporting Documents

- To support MCZ Assessments for the three Dorset MCZs and to inform and support understandings
  of BSB biology, ecology and fisheries. The Black Seabream Literature Review (Annex 4) has been
  developed which uses the best available evidence (BAE), namely peer reviewed papers and reports,
  with a focus on the most relevant sources in relation to the location and date published, to ensure
  that sound scientific evidence is used to inform assessments of BSB in relation to fishing activities.
- The Black Seabream Site Specific Evidence Packages (Annex 5) document provides site specific
  evidence for each of the three Dorset MCZs including feature location & extent, levels of fishing
  activity and additional data sources on landings, which has been used as one source of BAE to
  inform the MCZ Assessments for each site for each relevant fishing activity.
- Both of these supporting documents should be read in conjunction with the **Black Seabream Marine Conservation Zone Assessment Package** (see Annex 1, agenda item Marked B).
- The Policy Documents and Supporting Documents are designed to be read in conjunction with one another, providing detail of how, in satisfying both sets of Policy Objectives, via the application of dual legislative function, and in unification of the resulting management solutions applicable to each, Southern IFCA, with the support of the Dorset community are collectively championing a proportionate management approach which fundamentally seeks to improve understandings of the BSB populations, information which is vital in current and future approaches to sustaining the BSB fisheries across the three Dorset MCZs and beyond. The approach allows ongoing management to be based on improved evidence as supported and informed via ongoing co-development with the community, the holistic approach providing not only a solution to the primary legislative driver (MaCAA 154) but also facilitates holistic approaches which remain true to the wider functions of the IFCA, as specified under section 153 of MaCAA.

#### 4.0 Next Steps

 That the Policy & Supporting Documents are made available as part of the BSB Management Package and Southern IFCA delivers management for BSB fisheries across the three Dorset MCZs in line with the outlined intention of process and delivery.

# **Process Document 1: Delivering Policy Objectives**

# Introduction: Black Seabream in Dorset

Black seabream (BSB) (*Spondyliosoma cantharus*) are a member of the Sparidae family (Dunn, 1999; Ruiz, 2008) and are protogynous hermaphrodites, starting out as female and changing to male at a certain age and size (Pajuelo and Lorenzo, 1999; Baldock and Dipper, 2023). The genus Spondyliosoma (which includes black seabream) is one of only two genera within the Sparidae family which provides male-only care in the form of nest building and guarding of eggs (Beaulieu, 2020). The evolution of parental care alongside protogyny is a novel evolutionary strategy (Beaulieu, 2020).

In the UK, BSB are most abundant along the south coast and into the southern part of the North Sea (Rogers, 1998). For the past century during the spring months, specifically along the Southern coast of the UK, BSB have been recorded within the following Marine Conservation Zones (MCZs): Poole Rocks, Purbeck Coast, and Southbourne Rough (Baldock & Dipper, 2023; Collins & Mallinson, 2012; Doggett and Baldock, 2022).

BSB were designated as features of the Purbeck Coast MCZ and Southbourne Rough MCZ during the second tranche of MCZ designations in 2019. At the same time, BSB were designated as an 'additional feature' in the Poole Rocks tranche 1 MCZ.

BSB are the only designated feature in Southbourne Rough MCZ, whereas Purbeck Coast and Poole Rocks also protect a range of intertidal and subtidal habitats and species.

# 1.0 Primary Policy Objective - MaCAA 154

Managing BSB as a designated feature of Marine Conservation Zones

## **1.1 Scope**

To **further** the conservation objectives from a baseline position of no management via quantification of existing management measures.

# 1.2 Protection of Marine Conservation Zones: MaCAA Section 154 Duties

Under Section 154(1) of the Marine & Coastal Access Act (MaCAA), Southern IFCA must '...seek to ensure that the conservation objectives of any MCZ in the District are furthered...', with Section 154(2) requiring that '...nothing in Section 153(2) is to affect the performance of the duty...'. This includes socio-economic considerations.

Recognising the lack of a legal definition for 'furthered', the Authority agreed that 'further' and synonyms of, will be defined as "to take to a greater degree or a more advanced stage" in line with Oxford English Dictionary definition.

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### 1.3 Route of Designation

BSB are designated under MaCAA 117(5) to (1) **conserve diversity**, specifically, due to their ecological significance (the reoccurring time and place of reproductive behaviours, considered to be of critical importance to the life cycle of BSB), where if not protected the BSB would be affected at population or sub-population level, & (2) **persistence** - where they occur at high densities in contrast to surrounding areas.

# Black Sea Bream (BSB) are not designated under MaCAA 117(4) as rare or threatened due to limited numbers or limited locations where the BSB are present.

The designation of BSB across the three Dorset MCZs in 2019 was not based on a Condition Assessment, instead NE undertook a vulnerability assessment as a proxy. NE deemed BSB to be vulnerable to BTFG, netting and recreational angling and therefore considered BSB to be in an **unfavourable condition** and require management. No metrics have been provided by Natural England to quantify 'unfavourable condition' and to date there is no Condition Assessment for any of the three Dorset MCZs.

## 1.4 Conservation Objectives

For all three Dorset MCZs the Conservation Objectives (CO) provided in relation to black seabream are:

#### Conservation objective

- 5.—(1) The conservation objective is that, in relation to Black seabream (Spondyliosoma cantharus)—
  - (a) the habitat used by members of that species for the purposes of spawning ("spawning habitat")—
    - (i) so far as already in favourable condition, remains in such condition, and
    - (ii) so far as not already in favourable condition, be brought into such condition, and remain in such condition, and
  - (b) the population (whether temporary or otherwise) of that species occurring in the Zone be free of disturbance of a kind likely significantly to affect the survival of its members or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding.
- (2) In paragraph (1)(a)(i) and (ii), "favourable condition", with respect to spawning habitat within the Zone, means that the habitat is of sufficient quality and quantity to enable members of the species using the habitat to survive, aggregate, nest, or lay, fertilise or guard eggs during breeding.

Figure 1: Conservation Objectives relevant to three Dorset MCZs

#### **Focus Areas**

In the absence of quantification of 'unfavourable condition', and in accordance with Southern IFCA's Section 154 duties, the following **CO focus areas** (as identified via highlights in Figure 2) were identified to be used as metrics against which the Authority can demonstrate where and how any management interventions are **furthering** the conservation objectives of the MCZs.

At the time of BSB designation across all 3 MCZs, management measures which were already affording BSB protections were not considered in the NE Vulnerability Assessment. As such, the Authority consider that any qualification of 'furthering' of the COs will be taken from a baseline position of no management.

In accordance with the best available evidence, the recognised **spawning/breeding season** is 1<sup>st</sup> April – 31<sup>st</sup> July.

#### Conservation objective

- 5.—(1) The conservation objective is that, in relation to Black seabream (Spondyliosoma cantharus)—
  - (a) the habitat used by members of that species for the purposes of spawning ("spawning habitat")—
    - (i) so far as already in favourable condition, remains in such condition, and
    - (ii) so far as not already in favourable condition, be brought into such condition, and remain in such condition, and
  - (b) the population (whether temporary or otherwise) of that species occurring in the Zone be free of disturbance of a kind likely significantly to affect the survival of its members or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding.
- (2) In paragraph (1)(a)(i) and (ii), "favourable condition", with respect to spawning habitat within the Zone, means that the habitat is of sufficient quality and quantity to enable members of the species using the habitat to survive, aggregate, nest, or lay, fertilise or guard eggs during breeding.

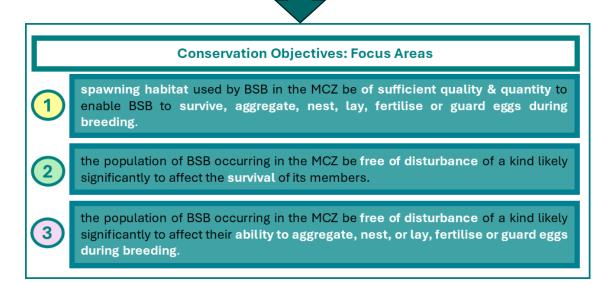


Figure 2: Conservation Objectives relevant to three Dorset MCZs with CO Focus Areas highlighted and identified CO Focus Areas

#### 1.5 Management Solutions

#### **Existing Statutory Measures**

Under the **Southern IFCA Bottom Towed Fishing Gear (BTFG) Byelaw 2016** the following protections are afforded to BSB. These spatial protections eliminate, to the following degrees, the highest risk fishing activity (risk rating from Gear Risk Assessment = HIGH) relevant to the CO Focus Areas - BTFG across Poole Rocks (100% spatial prohibitions) and Purbeck MCZ (90% spatial protections):

<u>Poole Rocks MCZ:</u> whole site protection for 12 months a year (100% closure to BTFG)

Purbeck MCZ: 90% closure to BTFG for 12 months a year

Southbourne Rough: No protections under this byelaw

<u>Poole Rocks MCZ:</u> whole site protection for 12 months a year (100% closure to BTFG)

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Poole Rocks MCZ: whole site protection for 12 months a year (100% closure to BTFG)

Purbeck MCZ: 90% closure to BTFG for 12 months a year

Southbourne Rough: No protections under this byelaw

Under the **Southern IFCA Minimum Conservation Reference Size Byelaw**, the following protections are afforded to BSB at a District wide level applicable to all gear types and throughout the supply chain, which supports the furthering of the CO Focus Areas outlined above:

Poole Rocks MCZ:

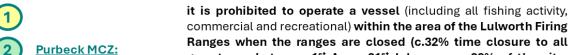
it is prohibited to remove any BSB below 23cm from the fishery

Purbeck MCZ: (NB: this is a District wide measure)

#### **Existing External Measures**

Southbourne Rough:

The spatial closures created by the Lulworth Ranges which, based on best available data, is known to be closed to all activity in the Inner Ranges area for c.32% of the breeding season between 1st April and 31st July each year, overlaps with c.33% of the Purbeck Coast MCZ and 57% of the BSB nest areas within the site. This provides additional protection for BSB populations from all fishing gear types during the breeding season. The Outer Ranges will also be closed periodically, whilst no information is available to quantify this, the closure of the Outer Ranges would provide additional protections to BSB over (in combination with the Inner Ranges) c.54% of the site. Additionally, the Lulworth ranges continue to operate outside of the breeding season, providing extended protections to BSB outside of the breeding season. The spatial protections provided by the Lulworth Ranges, applicable to all gear types, support the furthering of the CO Focus Areas:



gear types between 1st Apr – 31st Jul across c.33% of the site, potential to be increased to c.54% with outer ranges), closures

cover 57% of BSB nests within the site.

#### **Development of New Statutory Measures**

Between 2020 and 2023, the **Southern IFCA BTFG Byelaw 2023** was developed, and made by the Authority in order to satisfy multiple aims. Of relevance to the BSB Review, increased spatial

protections for BSB have been developed relevant to the Purbeck MCZ (an **increase** of protections to 93%), in addition to the introduction of **whole site** BTFG protection across the entirety of the Southbourne Rough MCZ. The area of Purbeck Coast which remains open to BTFG poses no risk to BSB due to the absence of nest areas and suitable habitat, as agreed by Natural England through the outcome of the Part A Assessment for Purbeck Coast MCZ under the BTFG Review Phase I<sup>1</sup>.

The development and subsequent ratification of the Byelaw by the Secretary of State on the 7<sup>th</sup> July 2025 has further increased the spatial protections afforded to BSB, via removal of the highest risk activity BTFG:

	Purbeck MCZ:	Increase to 93% closure to BTFG for 12 months a year (100% not achievable due to unreliable NE data)	
	Southbourne Rough:	Introduction of whole site protection for 12 months a year (100% closure to BTFG)	
	Purbeck MCZ:	Increase to 93% closure to BTFG for 12 months a year (100% n achievable due to unreliable NE data)	
	Southbourne Rough:	Introduction of whole site protection for 12 months a year (100% closure to BTFG)	
(3)	Purbeck MCZ:	Increase to 93% closure to BTFG for 12 months a year (100% not achievable due to unreliable NE data)	
	Southbourne Rough:	Introduction of whole site protection for 12 months a year (100% closure to BTFG)	

### **Satisfying Policy Objective 1**

The Authority, via spatial and technical statutory mechanisms, are furthering the Conservation Objectives relevant to BSB across the three Dorset MCZs, primarily via the **elimination of BTFG activity** across the entirety of Poole Rocks MCZ and Southbourne Rough MCZ and via a BTFG spatial closure across 93% of the Purbeck MCZ, thus removing the highest risk fishing activity almost in its entirety across the three Dorset MCZs.

Additionally, the furthering of the COs is being achieved via enforcement of a MCRS for BSB at a District wide level, applicable to all commercial and recreational users, which is also applicable to the wider supply chain. Furthermore, spatial restrictions via an exclusion zone in the Purbeck Coast MCZ, which equate to quantifiable closures for c.32% of the breeding season across c.33% of the site (increased to c.54% with the outer ranges) as enforced by the Ministry of Defence (MOD) are further enhancing protections to BSB in the Purbeck Coast MCZ across the entirety of gear types (commercial and recreational) via closures applicable to all users.

Collectively, the Southern IFCA statutory measures (as well as those enforced by the MOD) are providing protections to BSB above and beyond the three MCZ's collective footprint, at a temporal scale beyond that of the breeding season, which provides additional protections to BSB populations outside of the MCZs and outside of the breeding season. A. As such, collectively, these statutory measures are providing protections to BSB nesting sites and populations at a level

<sup>&</sup>lt;sup>1</sup> The remainder of the Purbeck Coast MCZ is subject to feature data which has been deemed unreliable in terms of location and/or extent by Natural England and is therefore not suitable as a basis for making management determinations. The feature data does not relate directly to BSB and it has been confirmed by NE through the Part A Assessment process for the BTFG Review Phase I that the area of the MCZ which remains open to BSB poses no risk to BSB as a designated feature.

which exceeds the scope of the COs. In combination, these measures are furthering the COs for BSB across the Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ and are thus satisfying the Primary Policy Objective to further the COs from a baseline position of no management.

# 2.0 Secondary Policy Objective – MaCAA 153

Improving Understandings of BSB across the Dorset MCZs

#### 2.1 Scope

In satisfying the furthering of BSB CO across the three Dorset MCZs, Members determined that there was a **need to consider additional management opportunities** relevant to the BSB fishery within the MCZs; which could both complement the protections already afforded, as well as advance understandings of the health of the BSB fishery overtime.

Recognising the absence of a Natural England Condition Assessment for the three MCZs at the point of designation and up to present day; coupled with recognition of the concurrent development of a national Seabreams Fisheries Management Plan (FMP), Members committed to exploring the development of a Shared Principles Model of management with the Dorset community.

## 2.2 Legislative Underpinning

Under Section 153 (2) of the MaCAA, when managing the exploitation of inshore fisheries, Southern IFCA must:

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

# 2.3 Policy Drivers

Members agreed the following policy drivers to underpin the exploration of a **Shared Principles Model**:

- (1) To improve understandings of BSB behaviours, fisheries and ecosystem management, recognising that these are currently data poor.
- (2) To be proportionate in the application of precaution, complementing existing statutory measures for lower impact fisheries (adaptive management approach).
- (3) To be precautionary, as despite evidence suggesting that current effort is not having an impact, this remains data poor. Additionally, potential future impact also remains unknown.

#### 2.4 Headline Objectives

Subsequently, Members drafted the following headline objectives which provide the rationale for the exploration of additional management solutions:

- (1) To ensure current and future sustainability of BSB populations for the benefit of the marine environment and all sectors.
- (2) To improve understandings via data collection.
- (3) to monitor and review measures (adaptive management).
- (4) include users in policy development and ongoing management interventions.

#### 2.5 Management Solutions

#### Co-Developed Management Principles

Following a four-stage approach to Co-Development (CoD) and subsequent period of public consultation, the following CoD Principles were finalised:

Application of CoD Principles:						
Voluntary, applying within the 3 Dorset MCZs, and in force during the period 1st April to 31st July.						
Proposed CoD Principles:						
Minimum Conservation Reference Size 28cm						
Maximum Conservation Reference Size	38cm					
Recreational Bag Limit 6 fish per person per day						
Guidance	Good practice fishing & handling					
Data Collection Year-round, all sectors						

#### **Satisfying Policy Objective 2**

The introduction of the CoD Principles across the entire footprint of the 3 Dorset MCZs during the recognised BSB breeding period (1st April to 31st July), provides a suitable management mechanism by which Southern IFCA can both satisfy and facilitate progress towards the overarching goal, which is to advance understandings of the BSB fisheries over time. This approach provides a mechanism which satisfies both the Policy Drivers and Headline Objectives which frame the Secondary Policy Objective, as set by the Authority.

#### **Policy Drivers**

- (1) To **improve understandings** of BSB behaviours, fisheries and ecosystem management, recognising that these are currently data poor.
- (2) To be **proportionate** in the application of precaution, complementing existing statutory measures for **lower impact fisheries** (adaptive management approach).
- (3) To be precautionary, as despite evidence suggesting that current effort is not having an impact, this remains data poor. Additionally, potential future impact also remains unknown.

#### **Headline Objectives**

- (1) To ensure **current and future sustainability** of BSB populations for the benefit of the marine environment and all sectors.
- (2) To improve understandings via data collection.
- (3) to monitor and review measures (adaptive management).
- (4) include users in policy development and ongoing management interventions.

# **Process Document 2: Decision Making & Roadmap**

# 1.0 Understanding the Brief to inform Decision Making

### 1.1 Protection of Marine Conservation Zones

Under Section 154(1) of the Marine & Coastal Access Act (MaCAA), Southern IFCA must '...seek to ensure that the conservation objectives of any MCZ in the District are furthered...', with Section 154(2) requiring that '...nothing in Section 153(2) is to affect the performance of the duty...'. This includes socio-economic considerations.

BSB were designated as features of the Purbeck Coast MCZ and Southbourne Rough MCZ during the second tranche of MCZ designations in 2019. At the same time, BSB were designated as an 'additional feature' in the Poole Rocks tranche 1 MCZ.

BSB is the only designated feature in Southbourne Rough MCZ, whereas Purbeck Coast and Poole Rocks also protect a range of intertidal and subtidal habitats and species.

#### 1.2 Route of Designation

BSB are designated under Section 117(5) of the MaCAA to (1) **conserve diversity**, specifically due to their ecological significance (the reoccurring time and place of reproductive behaviours, considered to be of critical importance to the life cycle of BSB), where if not protected the BSB would be affected at population or sub-population level, & (2) **persistence** – where they occur at high densities in contrast to surrounding areas.

# BSB are not designated under Section 117(4) of MaCAA as rare or threatened due to limited numbers or limited locations where the BSB are present.

The designation of BSB across the three Dorset MCZs in 2019 was not based on a Condition Assessment, instead Natural England (NE) undertook a vulnerability assessment as a proxy. NE deemed BSB to be vulnerable to bottom towed fishing gear (BTFG), netting and recreational angling and therefore considered BSB to be in an **unfavourable condition** and requiring management. No metrics have been provided by NE to quantify 'unfavourable condition' and to date there is no Condition Assessment for any of the three Dorset MCZs.

# **1.3 Conservation Objectives**

#### **Southern IFCA Focus Areas**

In the absence of quantification of 'unfavourable condition', and in accordance with Southern IFCA's Section 154 duties under MaCAA, the following **CO Focus Areas** (as identified via highlights and detail in Figure 1) were identified to be used as metrics against which the Authority could understand the task at hand and subsequently demonstrate how any management interventions are furthering the conservation objectives of the MCZs.

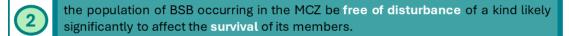
#### Conservation objective

- 5.—(1) The conservation objective is that, in relation to Black seabream (Spondyliosoma cantharus)—
  - (a) the habitat used by members of that species for the purposes of spawning ("spawning habitat")—
    - (i) so far as already in favourable condition, remains in such condition, and
    - (ii) so far as not already in favourable condition, be brought into such condition, and remain in such condition, and
  - (b) the population (whether temporary or otherwise) of that species occurring in the Zone be free of disturbance of a kind likely significantly to affect the survival of its members or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding.
- (2) In paragraph (1)(a)(i) and (ii), "favourable condition", with respect to spawning habitat within the Zone, means that the habitat is of sufficient quality and quantity to enable members of the species using the habitat to survive, aggregate, nest, or lay, fertilise or guard eggs during breeding.



#### **Conservation Objectives: Focus Areas**





the population of BSB occurring in the MCZ be free of disturbance of a kind likely significantly to affect their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding.

Figure 1: Conservation Objectives relevant to three Dorset MCZs with CO Focus Areas highlighted and identified CO Focus Areas

#### **Key Definitions**

From the CO Focus Areas, and based on best available evidence, the following key definitions are taken:

- 'spawning habitat': BSB nests
- 'during breeding': 1st April 31st July, as informed by Section 1.2.1 of the Black Seabream Literature Review and the Black Seabream Site Specific Evidence Packages
- 'likely significantly': to probably happen or to be expected in a way that is easy to see or by a large amount
- **'sufficient quality & quantity':** to be defined via Spatial Principles agreed by the Authority (Section 1.4 of this document)

#### 1.4 Defining Principles

In order to facilitate the progression of management considerations the following Legislative, Evidence and Spatial Principles were developed as part of a series of Member Working Groups prior to ratification at the Technical Advisory Committee (TAC):

#### Legislative

(1) 'further' will be defined as 'to take to a greater degree or a more advanced stage' in line with the Oxford English Dictionary definition

Under Section 154(1) of the Marine & Coastal Access Act (MaCAA), Southern IFCA must '...seek to ensure that the conservation objectives of any MCZ in the District are furthered...', Recognising the lack of a legal definition for 'furthered', the TAC agreed that 'further' and synonyms of, will be defined as "to take to a greater degree or a more advanced stage" in line with Oxford English Dictionary definition.

At the time of BSB designation across all 3 MCZs, management measures which were already affording BSB protections were not considered in the NE Vulnerability Assessment. As such, the Authority consider that any qualification of 'furthering' of the COs will be taken from a baseline position of no management.

#### **Evidence**

Two Evidence Principles were developed in order to clarify the source of best available evidence used to inform nest locations and detailed how any additional evidence received will be considered appropriately.

- (2) The best available evidence used to inform nest locations for black seabream is that provided in:
  - a) The Natural England designated features layer provided to Southern IFCA in 2023
  - b) Data from Cefas Project Report for NE (2021)
  - c) Data from Southern IFCA side scan sonar of Chapmans Pool (2016)
  - d) Data collected by Collins, K. Side scan sonar survey (2010)

(3) Any additional evidence received after the 29<sup>th</sup> January 2024 will be considered during the period of formal byelaw consultation (where relevant) and then (subject to byelaw ratification), in subsequent byelaw reviews, as determined under the provisions of the byelaw.

When considering wider spawning habitat, i.e., the habitat type which may be suitable for BSB nests, it was determined that there was no evidence available to indicate where this habitat type may occur within the three MCZs. Southern IFCA also undertook specific work with the recreational angling sector to better understand fishing patterns and practice for BSB within the three MCZs, this data is provided in the **Black Seabream Supporting Evidence Packages** and was used to inform understandings of activity as part of the Part B MCZ Assessments detailed in the **Black Seabream Marine Conservation Zone Assessment Package**. It is identified that there are significant evidence gaps on the location and extent of BSB nests within the three MCZs, by compiling multiple sources of evidence as listed under Principle (2), Southern IFCA have created a best available evidence base on which to base management considerations.

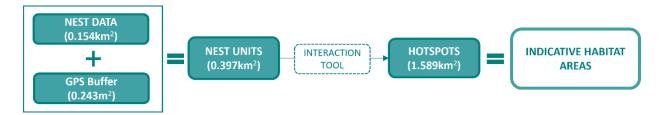
#### **Spatial**

Six Spatial Principles were developed to describe the process by which 'Indicative Habitat Areas' have been developed, which used the best available evidence and adopted a precautionary approach recognising the need to achieve 'sufficient quality & quantity' of habitat, as specified in the CO.

- (4) In accordance with the best available evidence, three data types are to be used to identify nest locations. 'Nest Data'
  - a) Individual nests (Cefas and NE data)
  - b) Polygon data (Southern IFCA data)
  - c) Nest areas of 50m x 50m where nest(s) have been noted to occur (Collins, K. data)
- (5) A 10m buffer will be added to all nest locations to account for confidence in GPS accuracy. This will be referred to as 'GPS Buffer'.
- (6) Nest data and GPS Buffer combined with be called 'Nest Units'
- (7) Three or more Nest Units existing within 320m of another will be grouped using straight lines to form 'Hotspots'.
- (8) Collectively principles 4-7 build to provide 'Indicative Habitat Areas'.
- (9) Management will be considered within 'Indicative Habitat Areas'.

From the best available evidence listed in the Evidence Principle, it was determined that there was collectively 0.154km² of 'Nest Data' across the three MCZs (equivalent to 21 football pitches).

Collectively, the 13 Indicative Habitat Areas covered 1.589km<sup>2</sup> (equivalent to 222 football pitches).



# 1.5 Testing the Draft Management Proposal: 'No Take Zones' across 13 IHAs

In order to gather information about the BSB fishery operating in the three MCZs, Members initially proposed that a seasonal closure be considered for all 13 IHAs for all fishing activity (recreational and commercial [pots/traps, nets and lines]) between 1st April-31st July. The aim of this initial proposal was to gain an understanding of the potential impact that the introduction of 'no take zones' could have, if applied across the 13 IHAs, as an initial iteration of possible draft measures. Using this proposal as a starting point, a Quantification of Impact Exercise (QIE) was undertaken with the stakeholder community to understand more about the BSB fishery at a site level. IFCAs' are required by Defra to ensure that any potential impacts are identified and considered in all decision-making processes to ensure that any subsequent management intervention is proportionate to the risk being addressed.

#### **Quantification of Impact Exercise**

The intention of this exercise was not to complete a full Impact Assessment, nor undertake a full consultation, rather, the brief was to conduct targeted engagement with relevant stakeholders to help to provide initial understandings via a snapshot, which could be used to inform the early stages of policy development and understanding risk (fishing activity and feature interaction).

Accordingly, the exercise sought information on fishing activity and any mitigation measures already employed by a particular sector, potential economic, social, cultural, heritage and community impacts.

On the basis of publicly available data and data available through data sharing channels being at a larger spatial scale than the IHAs, Southern IFCA sought information from the following sources:

- Targeted engagement with stakeholders a direct engagement exercise, speaking with key individuals across the potentially affected gear types/sectors/geographic areas to understand specific impact information related to the IHAs.
  - 23 stakeholders engaged through in-person or telephone meetings
    - Charter Vessel Sector = 6
    - Recreational Angling Sector (RSA) = 4
    - Commercial Fishing Sector (spanning 3 different gear types) = 15
- Data available online on charter vessels data obtained from publicly available online sources in relation to charter vessels operating from key ports in the District. This data consisted of costs for trips, number of trips within the April to July season, number of anglers per trip and any other relevant information.
- **Data obtained from the MMO** data obtained from the MMO under the Environmental Information Regulations 2004 for specific vessels known to operate in the IHAs for the period April to July (2018-2023) providing 5 years of data<sup>1</sup>
- **Data obtained from literature** information sourced from published papers or reports, aiming to provide an initial indication of wider economic contributions of different sectors and participation in recreational fisheries.

#### **Outcomes**

A cumulative assessment was carried out for the data sources to look at the total potential economic impact for any given season. From a combination of engagement data and online data, it was determined that there would be an annual impact of approx. £1.3m across the sectors, if no take zones were introduced across the 13 IHAs. The information was presented to the TAC and published in a report (agenda item Marked B).

# 2.0 Review & Refocus

The outcomes of the **Quantification of Impact Exercise** instigated a three-month review of the work undertaken to date. The catalyst for this review was recognition that, whilst the draft management proposal could satisfy 154 of MaCAA in isolation, based on the crudest outcomes of the QIE, it was apparent that there could be significant unintended consequences associated with the introduction of such spatial management. As such, The Authority resolved to undertake a wider analysis of the task at hand, via consideration of Material Considerations.

<sup>&</sup>lt;sup>1</sup> Data from 2020 was not included due to changes in normal patterns of fishing due to the Covid-19 Pandemic.

#### 2.1 Material Considerations

#### **Background**

As a basic principle of Administrative Law, a decision maker must consider all Material Considerations (MC's) during a decision-making process. Bean *et al* (2022)<sup>2</sup> notes that some MC's may be expressly stated in legislation (such as 154 duties), however notes that these listing are rarely intended to be exhaustive. Further Bean *et al* (2022) states that, in reaching a decision, that not all material considerations carry the same weight.

#### Relevant MC's



As part of the decision-making process, the Authority identified the following relevant MCs:

#### • The IFCA overarching values & purpose

- National IFCA Vision
- Southern IFCA Vision

#### IFCA Legal duties

- MaCAA 153 & 154
- Fisheries Act 2020 (Joint Fisheries Statement, Fisheries Objectives)
- o Environment Act 2021
- Marine Strategy Regulations 2010

#### Overarching Policy Drivers

- Proportionality
- Hampton Principles
- Defra's Guidance to IFCA
- Collaborative Management
- o Best Available Evidence
- Precautionary Management
- Adaptive Management
- o Risk Based Management

#### Impact

- o Fisheries: Charter Fleet, RSA Sector & Commercial Fleet
- o Marine Environment/Conservation

#### NE Formal Advice

#### Other

Achieving compliance

- Maintaining stakeholder relations
- o Reputational risk
- Unintended consequences
- Shared space

<sup>&</sup>lt;sup>2</sup> Bean, E., Clark, R., Lowther, J. and Williams, M. (2022). Specialist Advice to IFCAs and IFCA Decision-Making.

- o Existing/pending management
- o Consistency as regulators

Further details of each of the MC's and how they informed the decision-making process can be found in Annex 1. Members resolved at the May 2024 meeting of the TAC that as part of the decision-making process, draft measures for BSB in Dorset MCZs would be developed with consideration of social, economic and environmental impact, in addition to all other MCs and that the MC's would be cross referenced to any draft management proposals via a Management Matrix (Annex 2).

#### **2.2 New Directions**

Following consideration and agreement by the Authority at Member Working Groups in April and August 2024 and a meeting of the TAC in May 2024, the BSB Review was subsequently split into two parallel streams of work, each having independent policy objectives and legislative underpinnings: one specific to MaCAA 154 duties and one specific to MaCAA 153 duties. The Primary Policy Objective considering high risk fishing activity to manage BSB as a designated feature of Marine Conservation Zones (MaCAA 154) and the Secondary Policy Objective to consider lower risk fishing activities to improve understandings of BSB across the Dorset MCZs (MaCAA 153).

# 3.0 Primary Policy Objective - MaCAA 154

Managing BSB as a designated feature of Marine Conservation Zones

# **3.1 Scope**

To **further** the conservation objectives from a baseline position of no management via quantification of existing management measures.

# 3.2 Legislative Underpinning

To satisfy Section 154(1) of the MaCAA: '...seek to ensure that the conservation objectives of any MCZ in the District are furthered...', with Section 154(2) requiring that '...nothing in Section 153(2) is to affect the performance of the duty...'. This includes socio-economic considerations.

# **3.3 Existing Statutory Measures**

Under the **Southern IFCA Bottom Towed Fishing Gear (BTFG) Byelaw 2016** the following protections are afforded to BSB. These spatial protections eliminate, to the following degrees, the highest risk fishing activity (risk rating from Gear Risk Assessment = HIGH) relevant to the CO Focus Areas - BTFG across Poole Rocks (100% spatial prohibitions) and Purbeck MCZ (90% spatial protections):

**Poole Rocks MCZ:** 

whole site protection for 12 months a year (100% closure to BTFG)

**Purbeck MCZ:** 

90% closure to BTFG for 12 months a year

Southbourne Rough:

No protections under this byelaw

Poole Rocks MCZ:

whole site protection for 12 months a year (100% closure to BTFG)

**Purbeck MCZ:** 

90% closure to BTFG for 12 months a year

Southbourne Rough:

No protections under this byelaw



**Poole Rocks MCZ:** 

whole site protection for 12 months a year (100% closure to BTFG)

**Purbeck MCZ:** 

90% closure to BTFG for 12 months a year

Southbourne Rough:

No protections under this byelaw

Under the Southern IFCA Minimum Conservation Reference Size Byelaw, the following protections are afforded to BSB at a District wide level, applicable to all gear types and throughout the supply chain, which supports the furthering of the CO Focus Areas:



**Poole Rocks MCZ:** 



**Purbeck MCZ:** 



Southbourne Rough:

it is prohibited to remove any BSB below 23cm from the fishery (NB: this is a District wide measure)

#### 3.4 Existing External Measures

The spatial closures created by the Lulworth Ranges which, based on best available data, is known to be closed to all activity in the Inner Ranges area for c.32% of the available time between 1st April and 31st July each year, overlaps with c.33% of the Purbeck Coast MCZ and 57% of the BSB nest areas within the site. This provides additional protection for BSB populations from all fishing gear types during the breeding season. The Outer Ranges will also be closed periodically, whilst no information is available to quantify this, the closure of the Outer Ranges would provide additional protections to BSB over (in combination with the Inner Ranges) c.54% of the site. Additionally, the Lulworth ranges continue to operate outside of the breeding season, providing extended protections to BSB outside of the breeding season. The spatial protections provided by the Lulworth Ranges, applicable to all gear types, supporting the furthering of the CO Focus Areas:





Purbeck MCZ:



it is prohibited to operate a vessel (including all fishing activity, commercial and recreational) within the area of the Lulworth Firing Ranges when the ranges are closed (c.32% time closure to all gear types between 1st Apr - 31st Jul across c.33% of the site, potential to be increased to c.54% with outer ranges), closures cover 57% of BSB nests within the site.

### 3.5 Development of New Statutory Measures

Between 2020 and 2023, the **Southern IFCA BTFG Byelaw 2023** was developed, and made by the Authority in order to satisfy multiple aims. Of relevance to BSB Review, increased spatial protections for BSB have been developed relevant to the Purbeck MCZ (an **increase** of protections to 93%), in addition to the introduction of **whole site** BTFG protection across the entirety of the Southbourne Rough MCZ. The area of Purbeck Coast which remains open to BTFG poses no risk to BSB due to the absence of nest areas and suitable habitat, as agreed by Natural England through the outcome of the Part A Assessment for Purbeck Coast MCZ under the BTFG Review Phase I<sup>3</sup>.

The development and subsequent ratification of the Byelaw by the Secretary of State on the 7<sup>th</sup> July 2025 has further increased the spatial protections afforded to BSB, via removal of the highest risk activity BTFG:

	Purbeck MCZ:	Increase to 93% closure to BTFG for 12 months a year (100% not achievable due to unreliable NE data)	
	Southbourne Rough:	Introduction of whole site protection for 12 months a year (100% closure to BTFG)	
	Purbeck MCZ:	Increase to 93% closure to BTFG for 12 months a year (100% nachievable due to unreliable NE data)	
	Southbourne Rough:	Introduction of whole site protection for 12 months a year (100% closure to BTFG)	
(3)	Purbeck MCZ:	Increase to 93% closure to BTFG for 12 months a year (100% not achievable due to unreliable NE data)	
	Southbourne Rough:	Introduction of whole site protection for 12 months a year (100% closure to BTFG)	

# 3.6 MCZ Assessments

Part A MCZ Assessments identified that **Anchored Nets/Lines** (all three MCZs), **Pelagic Fishing** (all three MCZs), **Traps** (all three MCZs) and **Demersal Trawl** (Southbourne Rough MCZ)<sup>4</sup> have the potential to pose a likely significant effect through relevant pressures.

A **Gear Risk Assessment** was subsequently carried out to explore the level of risk posed by each relevant gear type in each MCZ, with consideration of site-specific fishing activity known to be present in the MCZs. Table 1 provides the outcomes, which removed the pressure of abrasion for Anchored Nets/Lines and Traps, and thus the removal of traps and associated forms of pot fishing<sup>5</sup> as a relevant fishing gear interaction to be taken forward for management consideration.

<sup>&</sup>lt;sup>3</sup> The remainder of the Purbeck Coast MCZ is subject to feature data which has been deemed unreliable in terms of location and/or extent by Natural England and is therefore not suitable as a basis for making management determinations. The feature data does not relate directly to BSB, and it has been confirmed by NE through the Part A Assessment process for the BTFG Review Phase I that the area of the MCZ which remains open to BSB poses no risk to BSB as a designated feature.

<sup>&</sup>lt;sup>4</sup> The Part A Assessments for Southbourne Rough and Purbeck Coast in relation to BTFG were carried out as part of the Southern IFCA BTFG Review Phase I. These Part A Assessments were also included in the Part A Assessments conducted for BSB given the relevance of these assessments to the consideration of BSB as a designated feature of the Southbourne Rough and Purbeck Coast MCZs.

<sup>&</sup>lt;sup>5</sup> Full detail of the determination of risk is provided in the **Black Seabream Marine Conservation Zone Assessment Package**, this considers best available evidence on fishing effort and location, as provided in the **Black Seabream Site Specific Evidence Packages**, commercial landings and peer-reviewed literature provided in the **Black Seabream Literature Review**.

Table 1: Risk levels assigned to relevant gear types in relation to the feature of BSB. (activities & pressures which are crossed through were removed as a result of the gear risk assessment)

Gear Type	Sector	Pressure	Risk
	Commercial	Abrasion	HIGH
Demersal Trawl		Removal Non-Target	HIGH
Demersal frawt		Removal Target	HIGH
		Smothering & Siltation	HIGH
<del>Traps</del>	Commercial	Abrasion	LOW
	Commercial	Abrasion	LOW
Anchored Nets/Lines		Removal Non-Target	LOW
		Removal Target	LOW
	Commercial	Removal Non-Target	LOW
Dologio Fishing		Removal Target	LOW
Pelagic Fishing	Recreational	Removal Non-Target	MED
	necreationat	Removal Target	MED

**Subsequently Part B MCZ Assessments** concluded that BSB spawning habitat is already afforded protection from high-risk fishing activity during the breeding season, allowing for that habitat to be found in sufficient quality and quantity to avoid any likely significant effect.

Further, additional measures which are relevant to low and medium impact fishing activity concluded no likely significant impact.

In relation to fishing activity, and non-fishing activity no in-combination effect was identified.

The MCZ Assessments documents and explanation of the MCZ process can be found here.

## 3.7 Satisfying Policy Objective 1

It is concluded that appropriate mitigative measures are already in place via a combination of spatial and technical statutory mechanisms, which are collectively furthering the Conservation Objectives relevant to BSB across three Dorset MCZs.

This is primarily being achieved via the **elimination of BTFG activity** across the entirety of Poole Rocks MCZ (whole site) and Southbourne Rough MCZ (whole site) and via a BTFG spatial closure across 93% of the Purbeck Coast MCZ, thus removing the highest risk fishing activity almost in its entirety across the three Dorset MCZs.

Additionally, the furthering of the COs is being achieved **via enforcement of a MCRS** for BSB at a District wide level, applicable to commercial and recreational users, which is also applicable to the wider supply chain.

Furthermore, **spatial restrictions via an exclusion zone** in the Purbeck Coast MCZ, which equates to quantifiable closures for c.32% of the breeding season, across c.33% of the MCZ (increased to c.54% with the outer ranges), as enforced by the Ministry of Defence (MOD), are further enhancing protections to BSB in the Purbeck Coast MCZ **across the entirety of gear types** (commercial and recreational) via closures applicable to all users.

Collectively, the Southern IFCA statutory measures (as well as those enforced by the MOD) are providing protections to BSB above and beyond the three MCZ's collective footprint, at a temporal scale beyond that of the breeding season, which provides additional protections to BSB populations outside of the MCZs and outside of the breeding season. As such, collectively, these statutory measures are providing protections to BSB nesting sites and

populations at a level which exceeds the scope of the COs. In combination, these measures are furthering the COs for BSB across the Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ and are thus satisfying the Primary Policy Objective to further the COs from a baseline position of no management.

# 4.0 Secondary Policy Objective - MaCAA 153

Improving Understandings of BSB across the Dorset MCZs

#### 4.1 Scope

In satisfying the furthering of the COs across the three Dorset MCZs, Members determined that there was a **need to consider additional management opportunities** relevant to the BSB fishery within the MCZs; which could both complement the protections already afforded, as well as advance understandings of the health of the BSB fishery over time.

This decision recognised the absence of a Natural England Condition Assessment for the three MCZs at the point of designation and up to present day; coupled with recognition of the concurrent development of a national Seabreams Fisheries Management Plan (FMP).

Members committed to exploring the development of a Shared Principles Model of management with the Dorset community.

### 4.2 Legislative Underpinning

Under Section 153 (2) of the MaCAA, when managing the exploitation of inshore fisheries, Southern IFCA must:

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

# 4.3 Policy Drivers

Members agreed the following policy drivers to underpin the exploration of a **Shared Principles Model:** 

- (1) To improve understandings of BSB behaviours, fisheries and ecosystem management, recognising that these are currently data poor.
- (2) To be proportionate in the application of precaution, complementing existing statutory measures for lower impact fisheries (adaptive management approach).
- (3) To be precautionary, as despite evidence suggesting that current effort is not having an impact, this remains data poor. Additionally, potential future impact also remains unknown.

#### 4.4 Headline Objectives

Subsequently, Members drafted the following headline objectives which provide the rationale for the exploration of additional management solutions:

- (1) To ensure current and future sustainability of BSB populations for the benefit of the marine environment and all sectors.
- (2) To improve understandings via data collection.
- (3) to monitor and review measures (adaptive management).
- (4) include users in policy development and ongoing management interventions.

#### 4.5 Co-Development of Shared Principles

#### **Stage 1: Member Management Proposals**

In August 2024 Members discussed the following Management Proposals that they wanted to be taken forward to the stakeholder community for further discussion:

Measure	Member Management Proposal				
Spatial	No take zana in IIIAs during broading easeen (April July inclusive)				
Temporal	No take zone in IHAs during breeding season (April – July inclusive)				
Gear	<ul><li>Use of circle hooks</li><li>Use of barbless hooks</li></ul>				
Effort	<ul> <li>Recreational bag limit (5 or 6)</li> <li>0% bycatch during breeding season in IHAs (April – July inclusive)</li> </ul>				
Technical Conservation	<ul> <li>Increase MCRS to 30cm (to align with L50)</li> <li>Introduce Max. landing size April – July (to avoid removal of males)</li> </ul>				
Data	<ul> <li>Recreational data collection</li> <li>Fishery dependant and independent data collection</li> <li>Supplementary info. for commercial data (where not already provided for by other means)</li> <li>M&amp;C Programme with thresholds.</li> </ul>				

#### **Stage 2: Stakeholder Management Proposals**

In October 2024, an Industry Workshop was held with representatives from the commercial (12) and recreational/charter (10) sectors, covering all relevant gear types. Attendees at the Industry Workshop were provided with a contextual underpinning framed around the Drivers and Headline Objectives developed by the Members. Attendees were invited to comment on proposed management options and put forward any additional industry informed management suggestions:

Measure	Industry Management Proposal
Spatial	No take zone in IHAs during breeding season (April – July inclusive) where there is less social
Temporal	economic impact, e.g. IHAs 4&5. NB – not a preferred option
Gear	Use of less impactful types of hooks
Effort	<ul><li>Recreational bag limit (6)</li><li>Commercial effort cap 6.2tpa (rod, line, netting)</li></ul>
Technical Conservation	Increase MCRS to 29cm
Data	<ul> <li>Recreational data collection and charter logbooks to include: no. of fish caught, no of fish retained, no. of oversized, no. of undersize, no. of anglers, areas fished, no. of hours fished in MCZs.</li> </ul>

#### **Stage 3: Officer Feasibility Exercise & Management Matrix**

Between August and November 2024, the suggested management options proposed by the Members and Industry were reviewed by officers who undertook a plausibility & feasibility check against all MCs. This exercise encompassed cross-checking of all of the draft proposals with compatibility of the MCs listed in Section 2.1.

In addition, the **literature review** for BSB was finalised, with the inclusion of updated evidence coming from publications on BSB tagging studies in Sussex by the University of Plymouth FishIntel Project.

A **Management Matrix** was developed to enable the identification of how management scenarios proposed under the Secondary Policy Objective would meet the material considerations relevant to BSB under the six main categories (as outline in Section 2.1).

All scenarios considered the implementation of additional management alongside the spatial and technical management already in place. The three scenarios tested were:

- Scenario 1: BTFG Byelaw 2023, MCRS Byelaw & External Spatial Closures + No Take
   Zones across 13 IHAs: 1 Apr 31 Jul
- Scenario 2: BTFG Byelaw 2023, MCRS Byelaw & External Spatial Closures + Co-Developed Principles
- Scenario 3: BTFG Byelaw 2023, MCRS Byelaw & External Spatial Closures + No additional management

The full Matrix and associated outputs are given in **Annex 2** to this document.

Each management scenario was categorised as having **met**, **partly met** or **not met** each of the Material Considerations, of which there were 65 in total. The pie charts in Figure 2 illustrate the outcome of this process. The greatest number of material considerations were achieved under the 'Co-Developed Principles' scenario (98.5%) compared to the 'no additional management scenario' (23.1%) and the 'No Take Zones across 13 IHAs: 1 Apr – 31 Jul' scenario (6.2%).

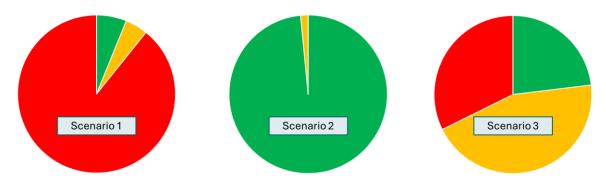


Figure 4: Outputs of the Material Considerations Matrix for three management scenarios

Figure 3 (Annex 3) summarises the outputs of this process for each individual management proposal under the Officer Feasibility Exercise and the outcomes consider the MC's against theoretical application of both non-statutory and statutory management solutions Each management scenario was categorised as having met, partly met or not met each of the MC's.

#### **Impact**

An understanding of the potential impact of the Co-Developed Principles, as one of the Material Considerations, is derived primarily from the information gained during the Quantification of Impact Exercise, carried out prior to the Review and Refocus stage of management development and supplemented through additional engagement during the co-development process.

As detailed in Section 1.5 of this document, the QIE provided information on fishing activity and any mitigation measures already employed by a particular sector and, in addition to a focus on informing the early stages of policy development, generally facilitated understandings of economic, social, cultural, heritage and community aspects associated with BSB fisheries in the three Dorset MCZs. Through the QIE, detail was provided on mitigation measures already employed within BSB fisheries which are aligned with the CoD Principles (recreational bag limits, increased MCRS, good handling and fishing practices) with support expressed for measures such as these being considered as management options, a perspective which was maintained by the community through the co-development staged process.

The approach taken in the co-development process under the Secondary Policy Objective is also aligned with the general message from the QIE which was mirrored across all sectors:

Given the current population of BSB, why can't management seek to do a little to aim to maintain those numbers (which seems plausible with current activities) rather than seeking to do a lot, the response would appear to be disproportionate to the risk. Across all gear sectors, if the BSB population was in decline, then there would be support across the board for management measures, given the current population being seen, it is felt that the good will of industry/individuals to help will be lost which then couldn't be recovered if the population ever reached a point where more stringent management was necessary.

Further discussions on potential impact formed part of Stages 2 and 5 of the co-development process with an overall indication that, in providing the opportunity for the Dorset community to be part of the process and have opportunities to feed in and shape management options, the level of impact economically, socially, culturally and to wellbeing was greatly reduced from that identified through the QIE with input primarily reflecting benefits of the approach. Whilst it is not possible at this stage to quantify the impact of the Co-Developed Principles, the information available from community participation indicates that the material consideration for impact across all sectors is only able to be fully met through the application of Co-Developed Principles and continued co-development through an adaptive approach.

#### Stage 4: Finalising Co-Developed Principles

In February 2025 a Members Working Group was held, with the overall objective of drawing together and reviewing all of the co-developed components and to consider these in parallel with the outcomes of the officer feasibility exercise. The Members subsequently finalised the following Co-Developed Principes (CoD), as well as their application, to be taken forward for public consultation:

Application of CoD Principles:					
Voluntary, applying within the 3 Dorset MCZs, and in force during the period 1st April to 31st July.					
Proposed CoD Principles:					
Minimum Conservation Reference Size 28cm					
Maximum Conservation Reference Size	38cm				
Recreational Bag Limit	6 fish per person per day				
Guidance	Good practice fishing & handling				
Data Collection Year-round, all sectors					

#### **Stage 5: Public Consultation**

A public consultation was held between 6<sup>th</sup> May to 22<sup>nd</sup> June 2025. Both in-person and online engagement options were available to stakeholders throughout the duration of the consultation, to include, coastal drop-in sessions, a targeted industry workshop, coastal engagement, community forums, stakeholder group meetings, an online meeting and an online questionnaire.

The consultation received 124 responses, the highest number ever received by Southern IFCA during an informal consultation. Responses were received from charter vessels (33), recreational anglers (65), commercial fishers (23) and other representatives (3). The BSB community were engaged with the consultation and were supportive of the Co-Development approach, wanting to continue to work with Southern IFCA to ensure the future health of the BSB population.

# All Co-Developed Principles, as taken to consultation, received majority support through the consultation responses.

In August 2025, Members discussed the outcomes of the consultation focussing on five discussion areas. Subsequently Members resolved to take forward the Co-Developed Principles with no amendments. <u>Further details can be found here</u> (agenda item Marked D).

#### Satisfying the Secondary Policy Objective

The introduction of the CoD Principles across the entire footprint of the 3 Dorset MCZs during the recognised BSB breeding period (1<sup>st</sup> April to 31<sup>st</sup> July), provides a suitable management mechanism by which Southern IFCA can both satisfy and facilitate progress towards the overarching goal, which is to advance understandings of the BSB fisheries over time. This approach provides a mechanism which satisfies both the Policy Drivers and Headline Objectives which frame the Secondary Policy Objective, as set by the Authority.

#### **Policy Drivers**

- (1) To **improve understandings** of BSB behaviours, fisheries and ecosystem management, recognising that these are currently data poor.
- (2) To be **proportionate** in the application of precaution, complementing existing statutory measures for **lower impact fisheries** (adaptive management approach).
- (3) To be precautionary, as despite evidence suggesting that current effort is not having an impact, this remains data poor. Additionally, potential future impact also remains unknown.

#### **Headline Objectives**

- (1) To ensure **current and future sustainability** of BSB populations for the benefit of the marine environment and all sectors.
- (2) To improve understandings via data collection.
- (3) to monitor and review measures (adaptive management).
- (4) include users in policy development and ongoing management interventions.

# 5.0 Holistic Fisheries & Conservation Management

# 5.1 Unifying Management Solutions

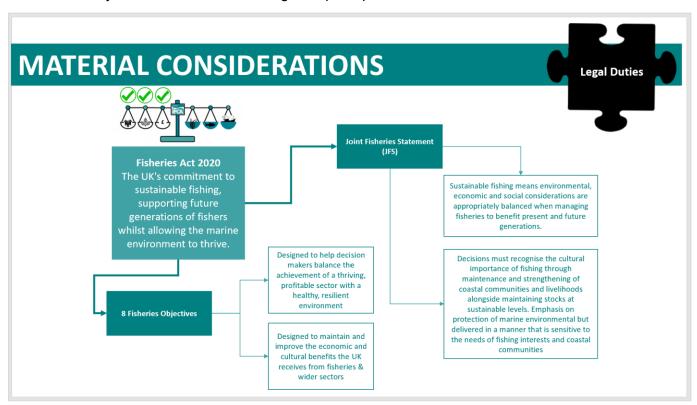
In satisfying both sets of Policy Objectives, via the application of dual legislative function, and in unification of the resulting management solutions applicable to each, Southern IFCA, with the support of the Dorset community are collectively championing a proportionate management approach which fundamentally seeks to improve understandings of the BSB populations, information which is vital in current and future approaches to sustaining the BSB fisheries across the three Dorset MCZs and beyond. This approach allows ongoing management to be based on improved evidence as supported and informed via ongoing co-development with the community.

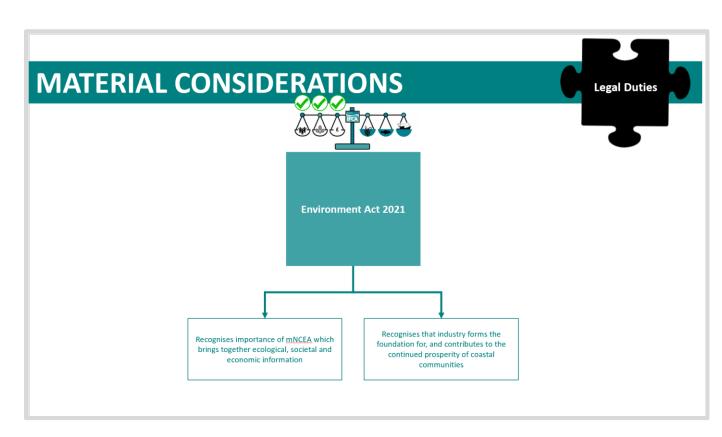
This holistic approach to management provides not only a solution to the primary legislative driver, namely the furthering of COs to satisfy the MaCAA 154 duties but also facilitates holistic approaches which remain true to the wider functions of the IFCA, as specified under section 153 of the MaCAA.

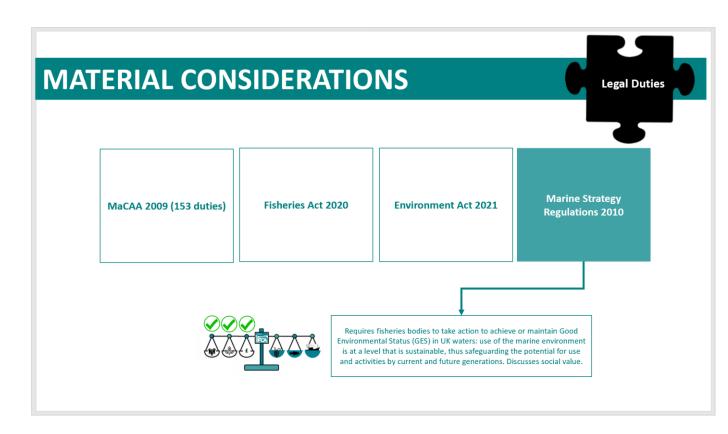
#### **Annexes**

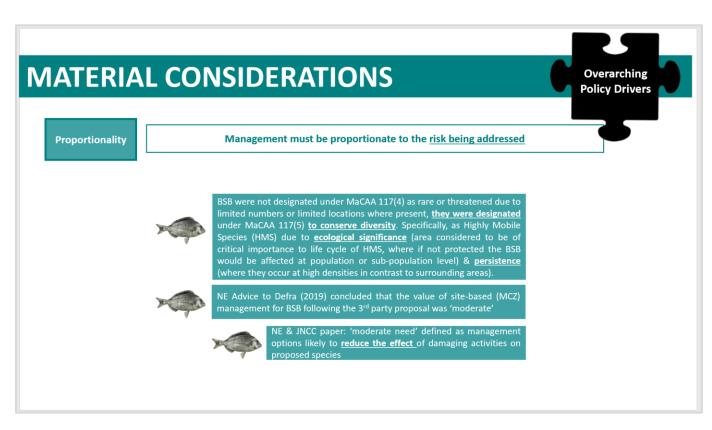
# **Annex 1 – Material Considerations**

As discussed by the Members at a Working Group in April 2024.









# **MATERIAL CONSIDERATIONS**

Overarching Policy Drivers

**Proportionality** 

Management must be proportionate to the risk being addressed

Hampton Principles Regulators should only intervene when there is a <u>clear case for protection</u> and legislation should be the last resort

DEFRA's Guidance to IFCAs IFCAs must ensure that potential impacts are identified and considered in the Decision-Making Process A byelaw should only be introduced when it can be demonstrated that existing activity is having an impact or that it may in future.

Collaborative Management JFS 3.4: Co-Management, Fisheries Objectives. Clearly sets out vision for co-designed fisheries management

# **MATERIAL CONSIDERATIONS**

Overarching Policy Drivers

Best Available Evidence

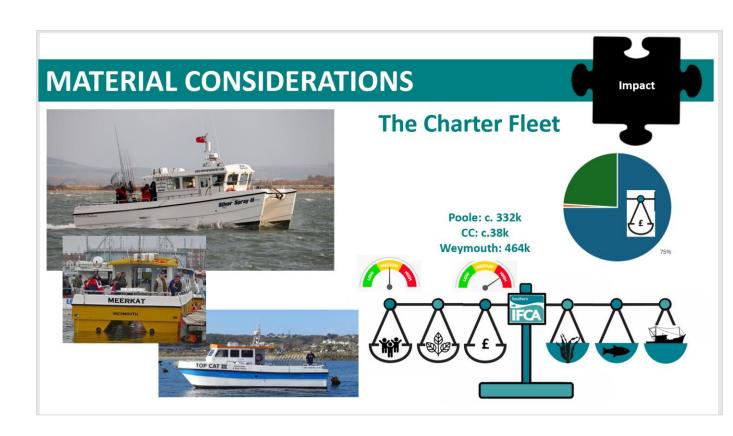
IFCAs must have regard to this guidance when carrying out their functions. The guidance outlines the best practice for the delivery and implementation of byelaws, which must be based on sound evidence.

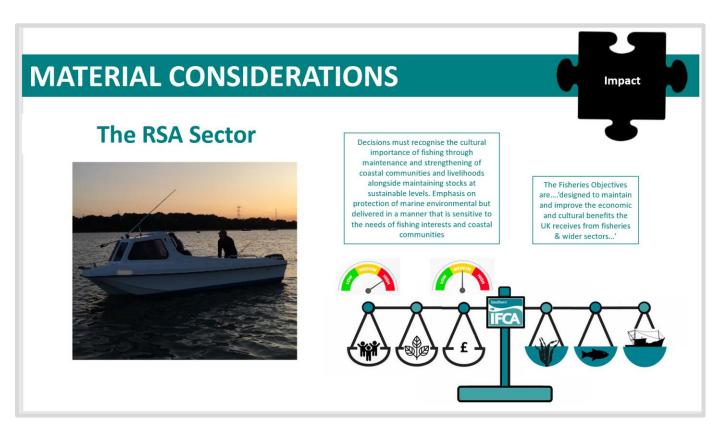
Risk Based Management Aa risk-based approach to byelaw development may be used to assess the potential risks that fishing activity may present to the marine environment. A risk assessment would provide the evidence base for prioritising the development of management measures, enabling IFCAs to carry out their duties in an evidence based, strategic and proportionate way.

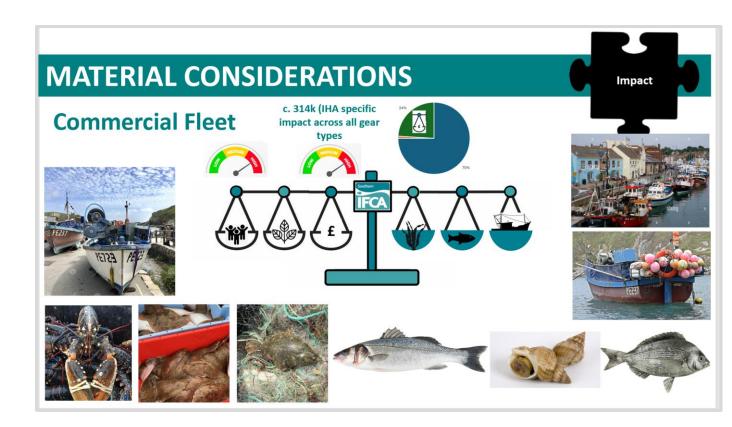
Adaptive Management

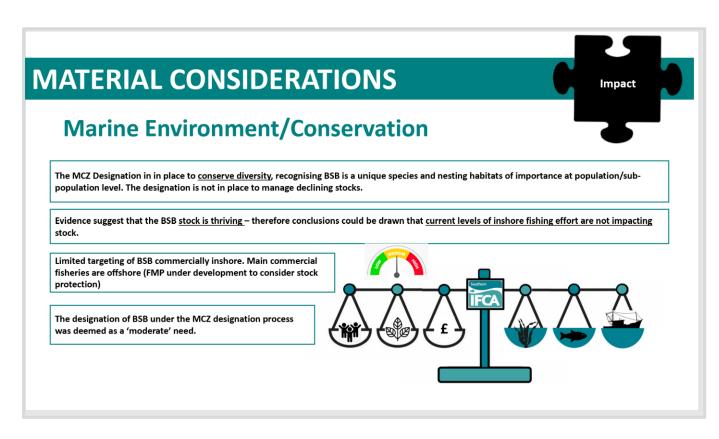
In response to best available evidence, consideration of what management tools look like to achieve this

Precautionary Approach The precautionary principle is applied in the circumstances where there are reasonable grounds for concern that an activity is harmful but where there is uncertainty about the degree of risk and harm. In simple terms, this means that where a risk assessment leads the IFCA to conclude that there is an unacceptable risk of harm to the environment or fish stocks, but conclusive evidence is lacking, this should not be used as a reason for not acting. In these situations, a precautionary approach would involve the IFCA taking proportionate action to address the risk whilst gathering further evidence to understand the issue better.









# **MATERIAL CONSIDERATIONS**



MCZ Designation in place to conserve nesting habitats of an ecologically unique species.

Abundance of BSB inshore suggests that current levels of inshore fishing, (commercial targeted, commercial non-targeted, charter sector and RSA) are not impacting the nest sites at a population or sub-population level.



Anticipated annual loss to inshore fisheries if a no take zone introduced across all IHAS for the period April – July:

c. £1,306,890.000

Is a no-take zone proportionate to the risk being addressed

# MATERIAL CONSIDERATIONS

Formal Advice: NE

#### MaCAA 126: Duties of Public Authorities in relation to certain decisions

(10) In carrying out its duties under this section a public authority must <u>have regard to any advice or guidance</u> given by the appropriate statutory conservation body under Section 127

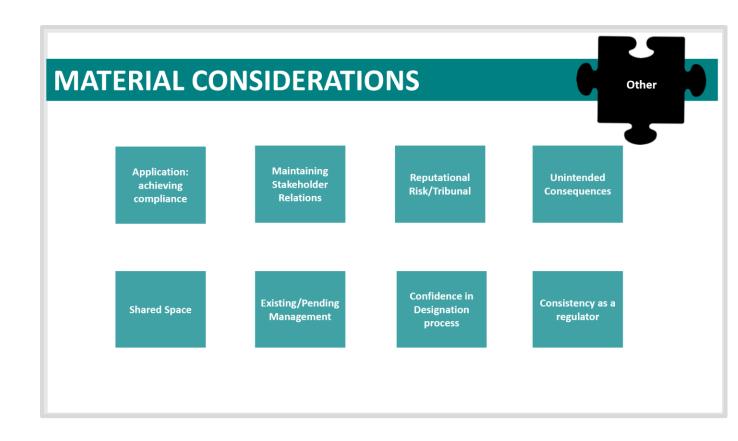
# **MATERIAL CONSIDERATIONS**

(In a nutshell)

Dr E Bean (Devon & Severn IFCA), R Clark (AIFCA), J Lowther (Associate Professor in Law School of Society & Culture, University of Plymouth and Prof. M Williams (Devon & Severn IFCA)

- Basic principle of Administrative Law that, <u>during the course of</u> decision making, the decision maker must <u>take into account</u> all material considerations.
- Some material considerations may be expressly stated in legislation however, such listings are rarely intended to be
  exhaustive and other material considerations not expressed must be taken into account.
- It is important to remember when considering specialist advice that an IFCA is a regulatory environmental decisionmaker and must reach its own decision, rather than simply follow unquestioningly the advice of other regulators or advisors.
- Consequently, an IFCA must reach its own determinations, taking into account all material considerations.
- In reaching its decisions an IFCA will need to attach differing weight to differing material considerations. In other words, while all material considerations must be taken into account, not all material considerations carry the same weight

weight.



# **Annex 2 – Material Considerations Matrix**

	Material Considerations (MCs)	BTFG Byelaw 2023 +  Spatial Exclusions at Lulworth Ranges c.32% time closed over c.33% Purbeck Coast MCZ  +  No Take Zone across 13 IHAs: 1 Apr -	Achieving MC's Met Partially Met	BTFG Byelaw 2023 +  Spatial Exclusions at Lulworth Ranges c.32% time closed over c.33% Purbeck Coast MCZ  +  Co- Developed	Achieving MC's Met Partially Met	BTFG Byelaw 2023 +  Spatial Exclusions at Lulworth Ranges c.32% time closed over c.33% Purbeck Coast MCZ  +  No additional Management	Achieving MC's Met Partially Met
	Overarching IFCA values and purpose	31 July	Not Met N/A	Principles verarching IFCA va	Not Met N/A alues and purp	oose	Not Met N/A
National Vision	IFCAs will lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry'						
Southern IFCA Vision	championing prosperous inshore fisheries founded upon thriving marine environments'						

		Legal Dutie	es & Policy Drivers	Legal Duties & Policy Drivers				
	(53) IFCAs must act in accordance with the Marine Policy Statement							
	(152) IFCAs must	t manage the	exploitation of sea fisheries resources in the district					
	(153) In performing its duty (to manage exploitation of sea fisheries resources) the authority must:		(a) seek to ensure that the exploitation of sea fisheries resources is carried out in a sustainable way.					
MaCAA 2009			(b) seek to balance the social and economic benefits of exploiting the sea fisheries resourceswith the need to protect the marine environment from, or promote its recovery from, the effects of such exploitation					
	(c) take any other steps which in the authority's opinion are necessary or expedient for the purpose of making a contribution to the achievement of sustainable development.		See rows 27-36					
			(d) seek to balance the different needs of persons engaged in the exploitation of sea fisheries resources in the district.					
	(175) IFCAs must collect data relating to exploitation of sea fisheries resources, as considered necessary to satisfy 153							
		there is a cl	ampton Review re: regulators should only intervene when lear case for protection and legislation should be the last n considering options for regulation.					
	Defra Byelaw Making Guidance 2011		of solutions available, byelaws should only be considered r non-regulatory measures have been exhausted.					
SoS Guidance MaCAA		existing act now and in						
			e activity has potential to cause damage but evidence on via voluntary means, adopt a precautionary approach ace controls					
			roportionate action to address risk whilst gathering further understand the issue better. Use principle of adaptive					

	managemen becomes av		nt is altered as new information			
	Risk based management - IFCAs must ensure that potential impacts are identified and taken into account during the decision-making process.					
	considering		IL Marine Objectives when e environmental, economic and social			
		accordance with Mar ne Objective:	ine Policy Statement - to achieve SD			
		(1) Achieving a sustainable	Marine environment and resources are used to maximise sustainable activity, prosperity and opportunities for all, now and in the future			
Defra		marine economy	Marine businesses acting in a way which respects the ME and is socially responsible and rewarded in the market place			
Sustainable Development Guidance 2011		(2) Ensuring a strong, healthy and just society	Use of ME benefits society as a whole, contributing to resilient and cohesive communitiescontributing to physical and mental wellbeing			
			Equitable access to all			
		(3) Living within environmental limits	Ocean to support all			
		(4) Promoting good governance	Marine businesses are subject to clear, timely, proportionate and (where appropriate) plan-led regulation			
		(5) Using sound science responsibly	Understandings to be developed via scientific, socioeconomic relationships & data collection			

	(3.5) IFCAs n models	nust seek to accom	modate multiple users via co-existence			
		ent to thrive. IFCA	ng future generations of fishers whilst required to have regard to Act, the agement Plans (FMPS)			
	Eight Fisheries Objectives: designed to help decision makers balance the achievement of a thriving, profitable sector with a healthy, resilient marine environment.	Sustainability	(2)'fishactivities are environmentally sustainable and managed so as to achieve economic, social and employment benefits and contribute to the availability of food supplies and fleets economically viable but do not overexploit stocks.			
	Section (2.2.1) 'The [fisheries] objectives seek to maintain and improve the economic and cultural benefits UK receives from fisheries and wider sectors'	Precautionary	(3) precautionary approach applied, andexploitation of stocks restores and maintains populations of harvested species above biomass levels capable of producing MSY			
Fisheries Act 2020		Ecosystem	(4) activities are managed using an ecosystem based approach so as to ensure negative impacts on marine ecosystems are minimised' Incidental catches are minimised. '			
		Scientific Evidence	(5)'data to be collectedfisheries authorities work together on collection/sharemanagement based on best available scientific evidence'			
		Evidence	2.1.15: evidence base to support decision making, includes how fishing impacts in conjunction with other marine sector and activities			
		Bycatch	(6) catching below MCRS and other bycatch is avoided, catches are recorded			
		Equal Access	(7) access to areas not affected by home port			

	National Benefit  (8) fishing activities bring social or economic benefits to the UK or any part of the UK
	(9) fish activities adapt to climate change. (2.1.26): climate change will continue to alter the marine  Climate Change environment, changing species compositions - fisheries authorities to support industry adaptation to change.
Joint Fisheries Statement	(2.1.2): sustainable fishing means environmental, economic and social considerations are appropriately balanced when managing fisheries to benefit present and future generations. Decisions must recognise the cultural importance of fishing through maintenance and strengthening of coastal communities and livelihoods alongside maintaining stocks at sustainable levels. Emphasis on protection of marine environmental but delivered in a manner that is sensitive to the needs of fishing interests and coastal communities  (2.1.4) emphasis placed on rebuilding stocks and protecting environment, to be delivered in a manner that is sensitive to the needs of the fishing interests, including coastal communities and takes into account wider environmental impacts.
(JFS) to achieve or contribute to the achievement of eight fisheries objectives.	(3.3) Working in Partnership  (3.4) Participatory Decision Making (co-management) - industry to play a greater role in fisheries management,
	to include developing management and contributing to fisheries science, decisions and co-designing policy.  (2.2.7) Management is proportionate to the risk being
	addressed.  (4.1.8) vital role of seafood sector in supply of food and employment and cultural value - decision makers to take this into account in accordance with sustainability, equal access and national benefit objectives in order to ensure continuity of this role and protect interests of sector and wellbeing of communities it supports.

		Importance of sustaining vulnerable coastal communities, ports and harbours				
	Fisheries Management (FMP)	Black seabream FMP under development in N UNDERWAY 2023-2026. Outcomes anticipate Southern IFCA are the lead IFCA feeding into development of this work. Covers English wa 7a,d,e,f,h,g,j)	ed 2026. the			
Environment Act 2021	target of 48% by 2028,	nated features to be in a favourable condition by 2042 to be achieved via management measures by 2024. Ty forms the foundation for, and contributes to the con				
		ich brings together ecological, societal and economic ir es to take action to achieve or maintain Good Environn				
Marine Strategy Regulations 2010	Status (GES) in UK wate	ers: use of the marine environment is at a level that is so potential for use and activities by current and future ge	ustainable,			
	Discusses social value:					
		mpact of intervention		Impact of int	ervention	
Ecological	CONTEXT: BSB designa to ecological significan where if not protected & persistence (where t	ted under MaCAA 117(5) to conserve diversity. Specific ce (area considered to be of critical importance to life of the BSB would be affected at population or sub-popula hey occur at high densities in contrast to surrounding a MaCAA 117(4) as rare or threatened due to limited num	ycle , ition level), reas) (NB:	Impact of int	ervention	
Ecological	CONTEXT: BSB designa to ecological significan where if not protected & persistence (where t not designated under limited locations where	ted under MaCAA 117(5) to conserve diversity. Specific ce (area considered to be of critical importance to life of the BSB would be affected at population or sub-popula hey occur at high densities in contrast to surrounding a MaCAA 117(4) as rare or threatened due to limited num	ycle , ition level), reas) (NB: ibers or	Impact of int	ervention	
Ecological	CONTEXT: BSB designato ecological significan where if not protected & persistence (where the not designated under following limited locations where is hard the significant with the significant where the significant with	ted under MaCAA 117(5) to conserve diversity. Specific ce (area considered to be of critical importance to life of the BSB would be affected at population or sub-population or sub-population occur at high densities in contrast to surrounding a MaCAA 117(4) as rare or threatened due to limited number present)  available evidence: No suggestion that the current lever	ycle , ition level), reas) (NB: ibers or el of fishing invironment	Impact of int	ervention	

	Culture & Coastal Communities	which is clos supported the Cultural heri Poole Mused the marine e to other indu of transferak	the culture of having a small-scale, local fishing fleet sely integrated into coastal communities and has he development of key tourist towns such as Poole. itage of fishing has previously been the focus of exhibits at um and has helped foster Dorset's close connection with environment through multi-generational families inputting ustries and sharing knowledge. Identity as a fisher and lack ble skills for other work could cause detrimental impact if ntinue as a fisher is lost.			
	Wellbeing	wellbeing be natural envir minded indiv	tional sea angling and commercial fishing provide enefit in the form of reducing stress, getting out into the ronment, sharing experiences & engaging with likeviduals, physical exercise and, for recreational sea angling m work and the development of skills which can involve all ilities.			
	Charter Fishing	Poole are lar recognised) main ports in transit to Do vessels to be done for c.7-£66,750, nor (total from e	industry across three key ports (of which Weymouth & rgest charter fishing fleets in the UK and internationally in addition to Christchurch in Dorset and at least four n Hampshire/The Solent where vessels may choose to orset. Across the three Dorset ports, potential for 17 e impacted. Businesses rely on BSB April-July (and have '+years). IHA specific impact from engagement data = n-area specific impact from engagement data = £78,760 engagement = £145,510), additional data gathered from the ses identified potential impact as £834,600.			
Economic	Commercial Fishing	Lines	8-10 vessels operating from Weymouth targeting BSS and BSB. Likely to be more but unable to be quantified at present due to limited data - 77 commercial fishers registered as using rod & line and living in Dorset in Southern IFCA permit to fish database, potential to access Dorset sites and/or bream as a target species. All vessels <12m, small vessels single crewed - 24 of the 77 registered as <6m, likely single crewed, 53 registered as 6m or over, potential for double crewed or triple crewed - on the basis of single or double crewed, potential at least 130 individuals.			

		Pot & Traps	88 vessels registered for pot fishing living in Dorset under Southern IFCA permit to fish database, potential for access to Dorset sites for pot fishing activity. All vessels <12m, 53 under 7m, 31 at 7-10m, 4 at 10-12m, under 7m likely single crewed, 7-10m potential for x1 crew, over 10m potential for 2+ crew - on this basis potential for 127 individuals. All vessels dependent on weather and tide conditions due to size, anything <10m reliant on sheltered areas in certain conditions.			
		Nets (non- targeted)	(5.5mesh): POL, SOL, SKA, BSS, & Ray. Pot fishers net for bait. From engagement exercise, no. of non-target commercial net fishers approximately 12, small vessels <10m, between 1-2 participants, all dependent on weather and tide conditions due to size, reliant on sheltered areas in certain conditions.			
		Nets: (targeted) fishery	Exact no. of netters targeted BSB not known - based on any net fishers in the area having potential to target BSB, above nos. would apply.			
R	Recreational Fishing	Rod & Line	Predominantly operate April-July (Easter throughout summer). c. 50 vessels at any time across the MCZs during this time. Target BSS, PLE, POL, MAY, RAY, BSB is the staple. Well established and internationally recognised location for angling and angling competitions. of national and international importance. Limited areas where visiting RSA can launch boats from, cost associated with launch and travel to coastal locations, for locals costs of marinas/mooring fees and club memberships limited fishing opportunities costs would outweigh benefit - example angling club impact could be up to £9,000.			
S	Supply Chain	importance accommoda bait provide angling clubs RSA (local): a providers, co	c: supports wide downstream sector - significant to local and UK economies - fishing tourism, tion, coastal businesses, food and drink, marinas, tackle & rs, boat builders and mechanics, harbour authorities, sangling clubs, marinas, harbour authorities, tackle and bait postal businesses, boat builders and mechanics sector: harbour authorities, marinas, boat builders and merchants & processors, transport, establishments selling			

	Tourism	Charter fleet and local industry - maintaining links between active fishing industry and local businesses including restaurants championing locally caught seafood, accommodation and retail businesses benefiting from tourism inputs from anglers (at a national and international scale) who come to fish in Dorset waters as a documented prime tourist location for fishing due to proximity to areas of natural beauty and combination of potential tourism activities.  Poole known as one of the best angling competition venues in England - perception of sustainable fishing opportunities important to maintaining this status.			Formal	Advica	
		Torridance			T Offiliat	Autice	Based on
MaCAA 126 (10): IFC	MaCAA 126 (10): IFCAs must have regard to any advice or guidance from NE					Based on indication of the outcome of a request for FA provided by NE 25.11.26	indication of the outcome of a request for FA regarding CoD Principles provided by NE 25.11.26
		Other Considerations			Other Cons	iderations	
Achieving Compliance		ons enforceable to achieve objectives of intervention (assets, resources, oney, proportionate to risk)					
Offshore fisheries/outside MCZ		tion in BSB fishery. FMP considering offshore fishery is in development , treating inshore and offshore sector equally					
	Displacement -	stock pressures outside relevant areas					

Unintended	Displacement - safety of single handed 8-foot vessels			
consequences	Displacement - cost of fuel			
	No restriction on anchoring in relevant area/over known nest sites.			
	Active firing range restricts access to parts of Purbeck MCZ on a regular basis.			
Marine Spatial Planning -Shared	Swanage Bay disposal site adjacent to Purbeck Coast MCZ - consideration of use as a disposal site was subject to WFD assessments must include reference to protections for Natura 2000 sites (SACs and SPAs) but do not include a requirement to consider protected features of MCZs. In addition, reference in this particular application that risks to fish from a licenced activity only need be screened in if the fish occur within an estuary or the fish are entering an estuary.			
space	There is the potential for marine licences to be granted for works in the areas under consideration.			
	Inshore South Marine Plan - identifies overlap in one or more MCZs with the following activities:  defence activity, hydrocarbon licence blocks with wells and surface infrastructure, passenger ferry and high density navigation routes, pipelines, recreational scuba diving, personal watercraft, motor boating and sailing, underwater noise exposure Potential for aggregate dredging in areas adjacent to MCZs (based on identification of potential ground for future extraction)			
New Entrants	Supporting new entrants into fisheries			

# **Annex 3 - Summary Outputs of Material Considerations Matrix**

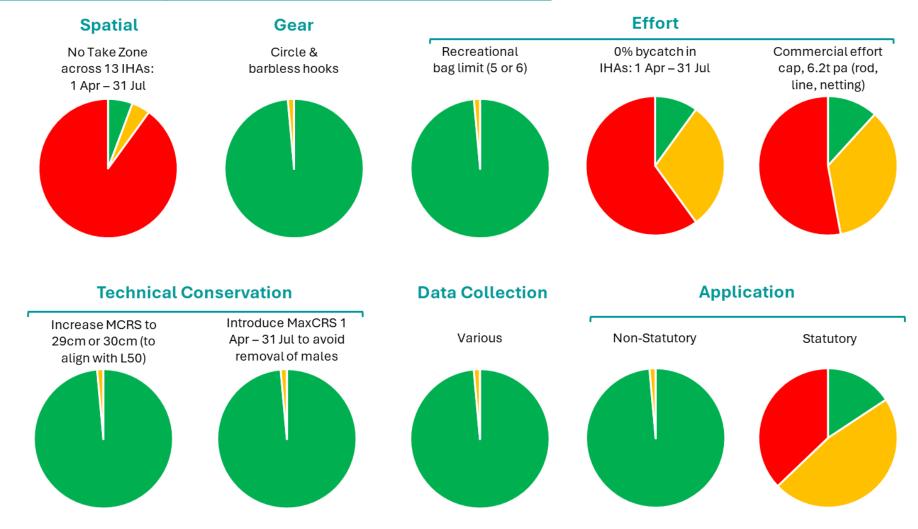


Figure 3: Outputs of the feasibility exercise showing the proportion of material considerations which were met, partially met or not met by each management option and the options for the application of any measures.

# Process Document 3: Management Tools, Application & Review

# Introduction

This document, to be read in conjunction with Process Documents 1 & 2, outlines the detail of management tools which support BSB fisheries within three Marine Conservation Zones (MCZs) in Dorset; Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ as part of the BSB Management Intervention Package.

Detail on the scope of management tools and the provisions each tool provides are given in each section, with management tools defined by the Policy Objective which is achieved by each.

# 1.0 Management Tools under the Primary Policy Objective

# 1.1 Bottom Towed Fishing Gear Byelaw 2023

Between 2020 and 2023 the **Southern IFCA BTFG Byelaw 2023**<sup>1</sup> was developed and made by the Authority in order to satisfy multiple aims. The new Byelaw replaced the BTFG Byelaw 2016 and introduced new prohibition areas and extensions to existing prohibition areas across the District. Under the Byelaw, extended protections are afforded to BSB through prohibition areas within which all types of BTFG are prohibited at all times, the passage of a vessel through the prohibited areas carrying BTFG also continues to be managed (*Figure 1*).

# **Bottom Towed Fishing Gear Byelaw 2023**

#### **Prohibition**

- A person must not...use bottom towed fishing gear within a prohibited area
- A person must not...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

Figure 1: Prohibitions as listed in the Southern IFCA Bottom Towed Fishing Gear Byelaw 2023

The prohibitions under this Byelaw maintain the whole site protection for Poole Rocks MCZ from BTFG (100% closure) included in the previous BTFG Byelaw 2016, extend and increase the protections for Purbeck Coast MCZ to cover 93% of the site and introduce new whole site protection for Southbourne Rough MCZ in line with the conclusion of the Part B Assessment carried out for this site under the BTFG Review: Phase I (100% closure). For Purbeck Coast MCZ, the determination of the area of the site requiring a prohibition is based on feature-based management of designated features within MCZs in line with Southern IFCA's legal duties and the process for delivering management under the BTFG Review: Phase I. The area remaining open to BTFG is due to their either being no evidence of the location of a designated feature within that

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<sup>&</sup>lt;sup>1</sup> BTFG-Byelaw-2023-signed.pdf

area (eastern part of the site) or a lack of confidence in the data indicating the presence of a designated feature (towards the western part of the site), the approach and resulting management has been agreed by NE through the BTFG Review: Phase I process and consideration of relevant MCZ Assessments. The prohibition areas under the BTFG Byelaw 2023 overlaid with the three Dorset MCZs is shown in *Figure 2*.

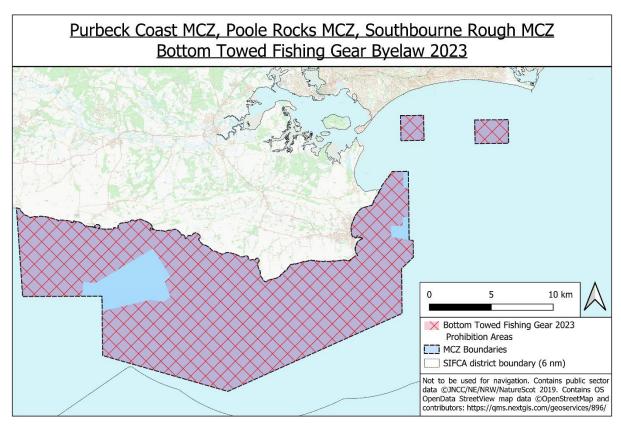


Figure 2: MCZ boundaries for Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ (grey) overlaid with the relevant prohibition areas under the Southern IFCA Bottom Towed Fishing Gear Byelaw 2023

# 1.2 Existing External Measures

The spatial closures created by the Lulworth Ranges which, based on best available data, is known to be closed to all activity in the Inner Ranges area for c.32% of the available time between 1st April and 31st July each year, overlaps with c.33% of the Purbeck Coast MCZ (*Figure 3*) and 57% of the BSB nest areas within the site. This provides additional protection for BSB populations from all fishing gear types during the breeding season. The Outer Ranges will also be closed periodically, whilst no information is available to quantify this, the closure of the Outer Ranges would provide additional protections to BSB over (in combination with the Inner Ranges) c.54% of the site. Additionally, the Lulworth ranges continue to operate outside of the breeding season, providing extended protections to BSB outside of the breeding season.

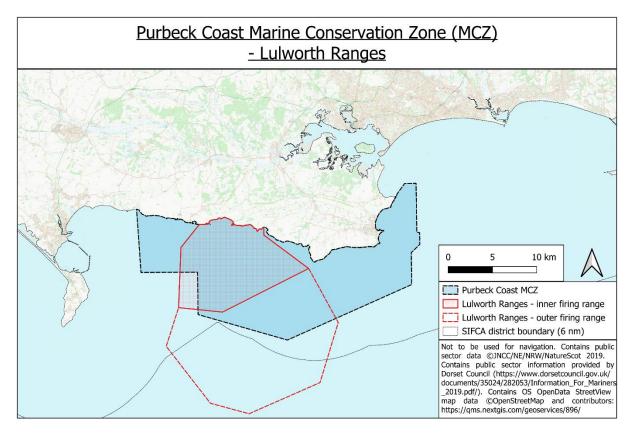


Figure 3: Purbeck Coast MCZ (blue) overlaid with the area of the Lulworth Firing Ranges showing the Inner Ranges (red hashed) and the Outer Ranges (red dashed outline)

# 1.3 Minimum Conservation Reference Size Byelaw

The Southern IFCA Minimum Conservation Reference Size Byelaw provides a MCRS for BSB at 23cm. There is no national MCRS for BSB therefore the MCRS Byelaw provides protections for this species specifically within the Southern IFCA District by implementing a size below which individuals cannot be removed from a fishery and thus allowing an opportunity for reproduction before removal. The Byelaw extends the MCRS application beyond the immediate act of fishing for or taking the species, prohibiting a person from removing from the fishery, retaining on board, transhipping, landing, transporting, storing, selling, displaying or offering for sale BSB from a fishery within the District<sup>2</sup>.

# **1.4 Future Management Intentions**

The Bottom Towed Fishing Gear Byelaw 2023 provides for reviewing management through a provision allowing the Authority (or a sub-committee thereof authorised by the Authority to do so) to review the suitability of the byelaw in accordance with any changes in available evidence, to include any statutory advice provided by Natural England or other such bodies, organisations or persons at the Authority deem fit.

At the time that any such evidence is available, prior to any review taking place, considering will be given to the evidence provided in conjunction with Southern IFCA's priority workstreams, balancing any identified need for a review with resource capacity.

<sup>&</sup>lt;sup>2</sup> SIFCA-MCRS-Byelaw.pdf

Southern IFCA will review the scope and requirements for a review of MCRS alongside external data sources including to consider alignment with national direction and outputs from the Fisheries Management Plan (FMP) programme and to consider outputs from additional data gathering such has that under the Co-Developed Principles under the Secondary Policy Objective for BSB (see Section 2.0).

# 1.5 Education and Monitoring Compliance

For statutory management tools under the Primary Policy Objective, education is provided through multiple methods including direct engagement, patrol work, the Southern IFCA website & social media platforms, meetings, presentations, lectures and public events, with engagement tools developed to ensure individuals are fully informed and voluntary compliance is promoted. For example, the BTFG Byelaw 2023 is accompanied by a stakeholder facing infographic detailing the regulations and providing contextual information<sup>3</sup>.

Southern IFCA is committed to achieving fair, effective and proportionate enforcement with engagement and monitoring carried out through patrol work on land and at sea, and compliance inspections with both commercial and recreational operators. Southern IFCA operates using a risk-based, intelligence-led approach, following operational standards to undertake appropriate compliance and enforcement procedures. Full details can be found in the Southern IFCA Compliance & Enforcement Framework<sup>4</sup>.

# 2.0 Management Tools under the Secondary Policy Objective

# 2.1 Co-Developed Principles

As underpinned by a set of Drivers and Headline Objectives, which provided the rationale for the exploration of additional management solutions, the following Co-Developed (CoD) principles; in addition to their application, have been agreed to meet the Secondary Policy Objective for BSB fisheries within the three Dorset MCZs.

Application of Co-Developed Principles:							
Voluntary, applying within the 3 Dorset MCZs, and in force during the period 1 <sup>st</sup> April to 31 <sup>st</sup> July							
Co-Developed Principles:							
Minimum Conservation Reference Size	28cm						
Maximum Conservation Reference Size	38cm						
Recreational Bag Limit	6 fish per person per day						
Guidance	Good practice fishing & handling						
Data Collection	Year-round, all sectors						

<sup>&</sup>lt;sup>3</sup> BTFG-2023-Infographic.pdf

<sup>&</sup>lt;sup>4</sup> Compliance-and-Enforcement-Framework-2023.pdf

# 2.2 Management Intentions: Season 1

The Authority recognises the support of the Dorset community in the co-development process and that collectively the community and Southern IFCA are championing a proportionate management approach which fundamentally seeks to improve understandings of BSB populations. This is information which is vital in current and future approaches to sustaining BSB fisheries across the three Dorset MCZs and beyond, allowing ongoing management to be based on improved evidence as supported and informed via ongoing co-development with the community.

To facilitate the continued delivery of co-development, for Year 1 of the implementation of CoD Principles, the focus will be on engagement with all relevant sectors and raising awareness of the CoD Principles, including providing contextual information on the rationale for the exploration of additional management solutions and any contextual information which supports individual CoD Principles. Southern IFCA will monitor compliance with the CoD Principles utilising a variety of available tools, working alongside supporting engagement within the fisheries. Data collected during Season 1 will inform an annual review as detailed in Section 2.4.1.

# 2.3 Engagement & Monitoring Compliance: Season 1

Engagement and monitoring compliance with the CoD Principles will be carried out using mechanisms detailed below which aim to provide a comprehensive framework for monitoring and feedback of the CoD Principles to support ongoing management of BSB fisheries and the achievement of the Secondary Policy Objective.

The Authority recognises that the greatest way to ensure compliance is to increase knowledge and understanding of the measures in place. In line with the Management Intentions for Season 1, a focus on engagement with all relevant sectors and raising awareness of the CoD Principles through multiple engagement methods aims to achieve a collaborative delivery which seeks to maximise compliance.

# 2.3.1 Engagement

Engagement aims to inform and educate, in addition to supporting continued co-development by facilitating a continuous feedback mechanism between the Dorset community and Southern IFCA. Engagement also provides a valuable opportunity to understand patterns in fishing activity, any issues regarding compliance with management tools, and on-the-ground feedback on the implementation and application of management tools across different sectors.

In delivering effective engagement, Southern IFCA will seek to work with partner organisations and other bodies such as the Angling Trust, the Professional Boatman's Association, local fishing organisations such as the Poole & District Fishermen's Association, the Poole & District Sea Angling Association, the South Coast Fishermen's Council and the Recreational Angling Sector Group to facilitate the dissemination of information, help promote the benefits of the codevelopment approach to sustainable BSB fisheries and to help support reviews of management and ongoing management intentions through the sharing of feedback from the community.

Southern IFCA will also ensure that information is made available to other regulators, for example through the Tactical Co-ordination Group (TCG) process including the Marine Management Organisation, the Environment Agency and neighbouring IFCAs to facilitate engagement across a wider network.

Engagement will be facilitated using different methods to maximise delivery of information and awareness of the CoD Principles (*Figure 4*).

It is the intention of Southern IFCA to facilitate co-development through a sense of ownership and shared responsibility for BSB fisheries in Dorset, one method of achieving this is to allow responsible fishers to promote their support for and implementation of the CoD Principles, demonstrating their role as a key custodian of the marine environment and providing a supportive mechanism for local businesses to advertise their role in supporting sustainable BSB fisheries. Fishers will be invited to display a 'Black Seabream Custodians' sticker (*Figure 5*) with an associated hashtag to promote the good work being delivered and encourage further engagement by other members of the community with the CoD Principles. Southern IFCA will be actively seeking support from local organisations, clubs and wider bodies including the Angling Trust and the Professional Boatman's Association in promoting this initiative.



Attendance at stakeholder meetings e.g. Fishermen's Council, Poole & Distict Fishermen's Association, Poole & District Sea Angling Association, Recreational Angling Sector Group, Professional Boatman's Association, RFGs.



Creation of short videos to illustrate good handling practice which can support understandings of different handling methods



Charter vessel information materials for use by skippers and customers, easy to use format at sea (for example stickers)



Creation of a QR code to link to Southern IFCA dedicated webpage, for use on all information materials



Information materials for tackle and bait shops (see other engagement materials for detail on what can be provided)



Creation of information leaflets and posters, for dissemination at stakeholder meetings, to charter vessel operators, for tackle/fishing shops, accessed via the Southern IFCA website and made available to partner organisations for dissemination – to provide contextual information as well as detail of CoD Principles



Dedicated webpage on the Southern IFCA website with links to all relevant information and downloadable materials, also to host online submission methods for data collection



Social media # for use on Southern IFCA social media platforms (X, Instagram, Facebook) and by partner organisations as well as stakeholders and the wider Dorset community



Working with partner organisations such as the Angling Trust to promote awareness campaign and help distribution information

Figure 4: Methods of engagement for management tools under the Secondary Policy Objective to maximise delivery of information to the community and raise awareness of the Co-Developed Principles.

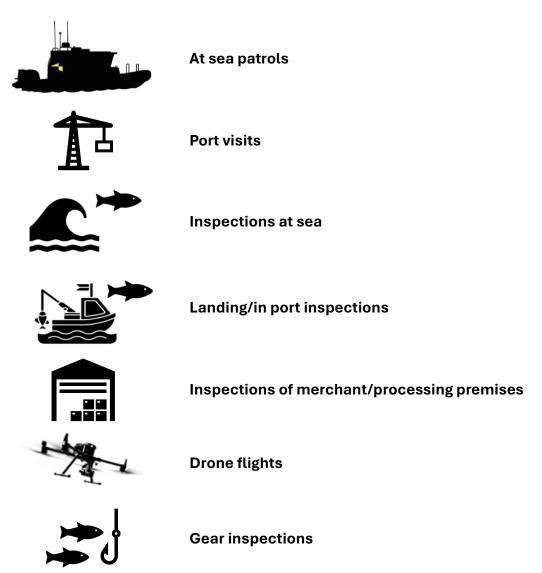


Figure 5: An example of the 'Black Seabream Custodians' sticker which fishers in the Dorset Community can display to show their role as key custodians for sustainable BSB fisheries and to promote a community approach to codevelopment.

# 2.3.2 Monitoring Compliance

As outlined in Section 1.5, Southern IFCA is committed to achieving fair, effective and proportionate monitoring of compliance and enforcement. In monitoring compliance with the CoD Principles, Southern IFCA is committed to maintaining engagement alongside monitoring, recognising that this is important for maintaining trust in the monitoring work carried out, facilitating communication and maximising compliance with the CoD Principles. Details of engagement tools which can be used to support the delivery of the CoD Principles are given in Section 2.3.1. As part of any monitoring activities consideration will be given to the most appropriate engagement tools to utilise and promote.

Southern IFCA has multiple tools available to monitor compliance:



#### **MCRS**

The MCRS CoD Principle is designed to allow BSB the opportunity to reproduce at least once before being removed from the fishery, to support sustainable populations and reproductive effort. The MCRS of 28cm reflects best available evidence on the size at which 50% & 95% of the population for female BSB become mature (noting there is no similar evidence available for male BSB), and the size range at which BSB change sex from female to male, the MCRS aiming to avoid fishing effort being directed at only one gender.

The CoD Principle for MCRS of 28cm is applicable to all sectors and all methods of fishing. As per regulations for MCRS under the Southern IFCA MCRS Byelaw, the CoD Principle would be applied to all parts of the supply chain, therefore monitoring compliance will encompass monitoring of fishers in the BSB fisheries as well as at merchants & processors.

The main methods of monitoring compliance with this CoD Principle are:



### **MaxCRS**

The MaxCRS CoD Principle is designed to help protect larger BSB individuals which are often most important ecologically and for reproduction. It offers protection to male BSB (given the change in sex from female to male), the larger individuals being suggested to guard multiple clutches of eggs, attract more females and have more success in defending nests. MaxCRS is noted to be a beneficial management measure for fish which change sex during their life cycle.

The CoD Principle for MaxCRS of 38cm is applicable to all sectors and all methods of fishing. As per regulations under the Southern IFCA MCRS Byelaw, the CoD Principle would be applied to all parts of the supply chain, therefore monitoring compliance will encompass monitoring of fishers in the BSB fisheries as well as at merchants & processors.

The main methods of monitoring compliance with this CoD Principle are:



# **Recreational Bag Limit**

The recreational bag limit CoD Principle is designed to support sustainable BSB fisheries by limiting the removal of BSB as a target species within recreational fisheries. The combination of this with other CoD Principles, for example MCRS and MaxCRS and good handling guidance increases the benefits of this measure, in combination helping to avoid unintended practices such as high-grading and providing a holistic approach to sustainability in the fishery.

The CoD Principle for a recreational bag limit of 6 black seabream per fisher per day is applicable to the recreational angling and charter vessel sectors using rod & line. Monitoring compliance with the recreational bag limit will involve working closely with charter vessel operators and local angling clubs, and Southern IFCA will be seeking support from operators, as part of the education and awareness campaign to encourage customers to promote their support and compliance with

this CoD Principle utilising the social media hashtag. In addition, fisher-dependent data collected under the Data Collection CoD Principle (see Data Collection Section) will provide additional data to monitor compliance with the Guidance CoD Principle.

The main methods of monitoring compliance with this CoD Principle are:



### Guidance

The Black Seabream Fishery Guidanceedeveloped under this CoD Principle supports good fishing practice relevant to the BSB fisheries and includes recommendations on fishing gear, handling techniques, and care practices designed to improve survivability through minimal handling time and air exposure. Consistent handling practices will also support improved data for the fishery over time, helping to deepen understandings of BSB populations and the effectiveness of management.

The main methods of monitoring compliance with this CoD Principle are:



#### **Data Collection**

BSB populations and associated fisheries are considered data poor, the data collection programme will provide data at the spatial scale of the three MCZs, supporting wider external research on BSB, and to provide an evidence base to help inform ongoing management of relevant fisheries. The data collection programme will also provide data to the Seabreams FMP during the implementation phase helping to support local and national management through an aligned, evidence-based approach.

Data Collection mechanisms seek to develop greater understandings of BSB populations and fisheries, to include:

- activity levels within the MCZs,
- landings data from the MCZs,
- relative proportions of BSB caught in relation to MCRS and MaxCRS CoD-Principles,
- breeding patterns (spatially and temporally),
- use of different fishing methods,
- the proportion of BSB caught of different sexes

Data will be sought from commercial fisheries (net, rod & line), recreational fisheries (rod & line) and charter vessel fisheries (rod & line) via multiple platforms, as described in **Annex 1**.

It is recognised that the provision of data can introduce an additional effort requirement for fishers and therefore, as part of the delivery of this CoD Principle, Southern IFCA will be providing contextual information for data collection, the benefits of provision of data at this spatial level and how the data will be used to help inform ongoing management, to help support and maximise participation. Southern IFCA will, as part of engagement across all sectors, be seeking feedback

on this programme and the community are encouraged to provide feedback on the application of this CoD Principle to feed into annual reviews (see Section 2.4).

In seeking data through the programme, and to support the availability of information to encourage participation, Southern IFCA will be working with other organisations to help support the provision of fisher-dependent data through promotion of data requirements, sharing of links to submit data and seeking support in the dissemination of engagement materials outlining the purpose of the data collection programme and how the community can participate. Southern IFCA will also engage with other data sources such as the Sea Angling Diary which is run in partnership with Cefas to explore opportunities for data sharing.

As part of monitoring compliance, information on how to participate in the data collection programme will be provided to fishers in addition to through all other relevant engagement tools outlined in Section 2.3.1.

Monitoring compliance with this CoD Principle will include engagement with fishers across all sectors, at sea and on land, to ascertain whether individuals are participating and, if not, what the reasons are for not participating. Monitoring during engagement and inspections will also include Officers gathering fisher-independent data, utilising the same data collection deliverables outlined in Annex 1, which will be used as part of overall analysis and also as a method of quality assuring the fisher-dependent data.

Further collection of fisher-independent data will be explored prior to and during Season 1, to determine suitable additional methods for supporting fisher-dependent data collection and analysis, exploration of such methods may include observer trips, partnership working or working with academic institutions.

The main methods of monitoring compliance with this CoD Principle, and to facilitate Officers collection of fisher-independent data are:



In addition to delivering the data collection programme, Southern IFCA will engage with Sussex IFCA, Natural England, the Angling Trust and any relevant fisher associations to explore opportunities for joint data collection through projects or programmes which will help support the development of the evidence base for BSB across identified evidence gaps. Outputs from the Seabreams FMP will help inform this process through the publication of known evidence gaps and an indication, through the FMP implementation process, of the prioritisation and ability of other authorities & academic institutions to support evidence gathering to fill identified gaps. Equally, data collected by Southern IFCA through the data collection programme and through any additional programmes delivered by or between agencies/organisations in accordance with organisation remit will help support the implementation of the Seabreams FMP through provision of evidence.

A summary of the monitoring components is given in Table 1. In addition to data gathered by Southern IFCA relating to monitoring compliance with CoD Principles, external monitoring tools such as VMS, MMO catch data and the provision of information by other regulators through the TCG process will also be collated, where available, to support monitoring and the provision of data related to BSB fisheries.

Table 1: Components of monitoring within the BSB fisheries related to CoD Principles

			Monitoring			
Component	MCZ	Sector	Data Requirement	Responsibility	CoD Principle	Analysis
A: Data Collection Programme – fisher-dependent	<ul><li>Purbeck Coast</li><li>Poole Rocks</li><li>Southbourne Rough</li></ul>	<ul><li>Commercial</li><li>Private Recreational</li><li>Charter</li></ul>	Data recorded in line with requirements detailed in Annex 1	Stakeholders in the BSB fishery	<ul><li>MCRS</li><li>MaxCRS</li><li>Recreational Bag Limit</li><li>Guidance</li></ul>	Analysis following end of season for Year 1
B: Data Collection Programme – fisher- independent	<ul><li>Purbeck Coast</li><li>Poole Rocks</li><li>Southbourne Rough</li></ul>	<ul><li>Commercial</li><li>Private Recreational</li><li>Charter</li></ul>	Data recorded by Officers as part of patrols/inspections in line with requirements detailed in Annex 1  Data recorded through any other methods explored for Season 1	Southern IFCA	<ul><li>MCRS</li><li>MaxCRS</li><li>Recreational Bag Limit</li><li>Guidance</li></ul>	Analysis following end of season for Year 1
			Record of data submissions	Southern IFCA	Data Collection	
C: Targeted Compliance	<ul><li>Purbeck Coast</li><li>Poole Rocks</li><li>Southbourne Rough</li></ul>	<ul><li>Commercial</li><li>Private Recreational</li><li>Charter</li></ul>	Data from targeted compliance trips carried out to implement monitoring in accordance with S2.3.2	Southern IFCA	<ul> <li>MCRS</li> <li>MaxCRS</li> <li>Recreational Bag Limit</li> <li>Guidance</li> <li>Data Collection</li> </ul>	Analysis following end of season for Year 1
D: Non-Targeted Compliance	<ul><li>Purbeck Coast</li><li>Poole Rocks</li><li>Southbourne Rough</li></ul>	<ul><li>Commercial</li><li>Private Recreational</li><li>Charter</li></ul>	Data from non-targeted compliance trips carried out to implement monitoring in accordance with S2.3.2	Southern IFCA & partner organisations Supported via TCG	<ul> <li>MCRS</li> <li>MaxCRS</li> <li>Recreational Bag Limit</li> <li>Guidance</li> <li>Data Collection</li> </ul>	Analysis following end of season for Year 1
E: External Monitoring Tools (i.e., VMS, Catch App, Sea Angling Diary)	<ul><li>Purbeck Coast</li><li>Poole Rocks</li><li>Southbourne Rough</li></ul>	<ul><li>Commercial</li><li>Private Recreational</li><li>Charter</li></ul>	Data sharing processes for external monitoring tools continue to be developed, data from this component will complement other monitoring components according to available data	Partner organisations Supported via TCG	Data Collection	Analysis following end of season for Year 1

# 2.4 Review

Southern IFCA recognise that BSB fisheries are data poor, as such an adaptive management approach, as facilitated under the Secondary Policy Objective, allows Southern IFCA to robustly respond to BAE in a timely way to ensure the future sustainability of the fisheries in Dorset.

In order to facilitate an adaptive approach, Southern IFCA are committed to reviewing the management tools under the Secondary Policy Objective through both an Annual Review pathway and a Wider Review pathway, the latter incorporating a review of the MCZ Conservation Assessment Package which underpins the Primary Policy Objective and outlines the additional support provided to sustainable management of BSB in the three Dorset MCZs under the Secondary Policy Objective in line with the defined Policy Drivers and Headline Objectives.

#### 2.4.1 Annual Review

The first Annual Review of the CoD Principles will follow the conclusion of the recognised breeding season in Year 1 of implementation, intended for 2026. Following this, an annual review will be carried out each year for 2027-2029 following the breeding season.

The Annual Review, will consider:

- **community feedback** following on the application of the CoD Principles & overall health of BSB fishery.
- analysis of data collected during the applicable season,
- additional data collected (running all year-round)
- IFCA compliance & enforcement metrics,
- data from external sources (other relevant authorities),
- any updated Conservation Advice from Natural England,
- BSB FMP outcomes (goals, actions and data gaps),
- **emerging evidence on BSB populations or fisheries** (for example published outputs from the Angling for Sustainability Project).

Following Annual Review in any given year, if changes to the CoD Principles are identified to be required, any proposals will be considered with the community prior to consideration by the Authority. Any changes will be implemented prior to the subsequent season.

Following Annual Review in any given year, if singular or multiple CoD Principles are deemed to be not achieving the Policy Objectives, then consideration may be given to the development of fisheries relevant triggers and/or statutory management mechanisms for one or more CoD Principles in accordance with recognised practice. In this instance, Southern IFCA would follow the established byelaw making process with associated opportunities for consultation with stakeholders.

### 2.4.2 Wider Review

Notwithstanding the commitment in Section 2.4.1 based on the outcomes of an Annual Review, a wider review, to incorporate a review of the MCZ Conservation Assessment Package will take place following the 2029 breeding season, at which point all best available evidence will be considered, including that collected and reviewed through each Annual Review under the CoD Principles as well as any external evidence or updated Formal Advice from Natural England.

Through this review process, Southern IFCA will work collectively with the community, considering the elements listed in Section 2.4.1, to determine whether the Primary and Secondary Policy Objectives continue to be met.

As per the Annual Review process, consideration may be given at this point to the development of fisheries relevant triggers and/or statutory management mechanisms for the management of BSB fisheries in the three Dorset MCZs in accordance with recognised practice, including, if required, the Southern IFCA established byelaw making process, with associated opportunities for consultation.

The Authority wish to maintain the co-development approach to achieving the Secondary Policy Objective for this fishery, recognising the importance of industry expertise in shaping this process and supporting sustainable BSB populations and fisheries alongside thriving coastal communities.

# **Annex**

# **Annex 1 – Data Collection Requirements**

Sector	Required Data	Additional Data (recognising that this may be more difficult for stakeholders to provide)	Submission Methods
	<ul> <li>Vessel name and PLN</li> </ul>	<ul><li>Number of bream displaying</li></ul>	An Online form able to be
	<ul><li>Date of trip</li></ul>	breeding colours when bought	submitted at the end of every
	<ul><li>Method (Net or Rod &amp; Line)</li></ul>	on board	trip or on a monthly basis
	<ul><li>Location (Coordinates)</li></ul>	<ul> <li>Number of roed bream caught</li> </ul>	• A <b>Monthly log</b> that can be
	<ul> <li>Duration of trip or net soak time</li> </ul>		submitted within 14 days
Commercial	■ Total length of net hauled, <b>or</b> total	Option will also be given for	following end of month
	number of rods used	providing any additional comment	o Made available to
	<ul> <li>Was bream the target species or bycatch</li> </ul>		download or print on the
	<ul> <li>Weight of bream retained</li> </ul>		SIFCA website
	<ul> <li>Number of bream under MCRS returned</li> </ul>		<ul> <li>A QR code will be made</li> </ul>
	<ul> <li>Number of bream over max CRS returned</li> </ul>		available to submit the
	<ul><li>Vessel name</li></ul>	<ul> <li>Number of bream displaying</li> </ul>	catch return by email
	<ul><li>Date of trip</li></ul>	breeding colours when bought	
	<ul> <li>Charter or private vessel</li> </ul>	on board	
	<ul><li>Location (Coordinates)</li></ul>	<ul> <li>Number of roed bream caught</li> </ul>	
	<ul> <li>Duration of trip</li> </ul>	<ul> <li>Weight of fish retained</li> </ul>	
Recreational & Charter	<ul> <li>Number of anglers</li> </ul>		
Vessels	<ul><li>Number of rods</li></ul>	Option will also be given for	
	Was bream the target species?	providing any additional comment	
	<ul> <li>Number of bream retained</li> </ul>		
	<ul> <li>Number of bream under MCRS returned</li> </ul>		
	<ul> <li>Number of bream over max CRS returned</li> </ul>		
	<ul><li>Method (lure, bait type etc.)</li></ul>		



# Southern Inshore Fisheries and Conservation Authority

# **Black Seabream Literature Review**

Supporting Document for the Black Seabream Management Package

# Contents

Section A: I	ntroduction to the Literature Review	4
Section B: I	_iterature Review	4
1. Blacl	k Seabream Biology and Ecology	4
1.1	Biology	4
1.2	Reproduction	5
1.2.1 Sites	, i	· · · · · · · · · · · · · · · · · · ·
1.2.2	Pecundity	6
1.2.3	Size of Maturity	7
1.2.4	Summary of Biology and Reproduction	7
1.2.5	Nesting Behaviours and Parental Care	7
1.2.6	Nesting Habitat	10
1.2.7	' Summary	11
1.3	Distribution	12
1.3.1	Geographical Distribution worldwide	12
1.3.2	2 Distribution in the English Channel	12
1.3.3	Distribution in Relation to Dorset Marine Conservation Zones	12
1.3.4	Distribution in the Water Column	13
1.4	Population of Black Seabream	13
1.4.1	General Population Trends	13
1.4.2	2 UK Population Trends	13
1.4.3	Summary of Distribution and Population of Black Seabream	13
1.5	Relationship between Black Seabream and the Marine Environment .	14
1.5.1	Summary	14
2. Fishi	ng for Black Seabream	15
2.1	General	15
2.2	Commercial Fisheries	15
2.2.1	General	15
2.2.2	Southern IFCA District	15
2.3	Recreational Fisheries	16
2.3.1	General	16
2.3.2	Southern IFCA District	17
3. Impa	acts of Fishing Activities	17
3.1	General	17
3.1.1	Removal of black seabream as a target or non-target species	18
3.1	1.1.1 General Impacts	18
3.1	1.1.2 Size and sex related Impacts	18
3.1	1.1.3 Impacts relating to nests and eggs	19
3.1	1.1.4 Impacts relating to stress response and fitness	19

		20
3.1.1.	5 Summary	20
3.1.2	Abrasion/disturbance of the substrate on the surface of the seabed	20
3.1.2.	1 General Impacts	21
3.1.2.	2 Summary	21
3.2 Ge	ar Specific Impacts	21
3.2.1	Abrasion/disturbance of the substrate on the surface of the seabed	21
3.2.1.	1 Pots/Traps	21
3.2.1.	2 Summary	23
3.2.1.3	Nets (Pelagic and Demersal)	23
3.2.1.	4 Summary	24
3.2.1.	5 Lines (Pelagic and Demersal)	24
3.2.1.	Summary	25
3.2.2	Removal of black seabream as a target species or non-target species	25
3.2.2.	1 Pots/Traps	25
3.2.2.	2 Summary	25
3.2.2.	Nets (Pelagic and Demersal)	25
3.2.2.	4 Summary	27
3.2.2.	5 Lines (Pelagic and Demersal)	27
3.2.2.	6 Catch and Release from Lines	28
3.2.2.	7 Summary	31
<ol><li>Mitigation</li></ol>	n	31
Section C: Refe	erences	34
	mercial fishing data from Southern IFCA District, Dorset Specific Ports Data	
Annex 2: Data	provided to Southern IFCA in 2014 from records held by the Angling Tru	ıst . 45

# Section A: Introduction to the Literature Review

This literature review is a supporting document for the assessment of existing management and the co-development of additional measures for the Sparid species Black Seabream (*Spondyliosoma cantharus*) in the Southern IFCA district.

The literature review aims to further inform and support understanding of:

- the biology and ecology of the species
- the distribution of the species geographically and within the water column
- population trends
- the relationship between the species and the marine environment
- fishing practice for black seabream
- potential impacts of fishing activities
- potential mitigative measures to reduce impacts
- potential mitigating measures to avoid impacts from fishing gear

This document uses the best available evidence, namely peer reviewed papers and reports, with a focus on the most relevant sources in relation to the location and date published to ensure that sound scientific evidence is used to inform assessments of this species in relation to fishing activities. For each section it is noted whether the evidence presented is more general and relates to black seabream across their distribution and across different fishing gear types or whether evidence has come from specific studies, separated into those from work in the UK and those from work outside the UK.

This literature review relates to the fishing methods of pots/traps, nets (pelagic and demersal) and lines (pelagic and demersal). Bottom towed fishing gears have been considered separately during Phase I of the BTFG Review and resulting management, assessments and literature to support the management decisions relating to BTFG are contained in the relevant supporting documentation for the BTFG Byelaw 2023<sup>1</sup>.

This literature review is to be read in conjunction with the Black Seabream Marine Conservation Zone Assessment Package and the Black Seabream Site Specific Evidence Packages.

# Section B: Literature Review

# 1. Black Seabream Biology and Ecology

## 1.1 Biology

The following points relate to the general biology of black seabream and are relevant to the species across their geographic distribution.

• Black seabream, *Spondyliosoma cantharus*, are a member of the Sparidae family (Dunn, 1999; Ruiz, 2008).

<sup>&</sup>lt;sup>1</sup> Part B Assessment for Southbourne Rough for BTFG available on the Southern IFCA Website here: <u>Southbourne-Rough-BTFG-Bream.pdf</u>

- They are a deep bodied oval shaped fish with a slightly forked tail, small head and jaws, and on average reach lengths up to 40 cm, but can reach as long as 60 cm total length (Sussex IFCA, 2020).
- Adults are typically silver in colour, but during breeding season the males become black with three vertical pale bars on the sides. During this season, females also change their colour with a pale horizontal bar along their side (Doggett, 2018).
- Black seabream are opportunistic omnivores able to adapt their diet depending on what
  is available (Gonçalves & Erzini, 1998; Box et al., 2009). Typically, adult black bream
  predate on seaweed and invertebrates including cephalopods (cuttlefish), small
  crustaceans (shrimp and crab), polychaetes and molluscs (Clark & Vause, 2011; Daban,
  2022b).
- Black seabream have few natural predators; they are sometimes predated by marine birds and mammals (Vause and Clark, 2011).
- The species are protogynous hermaphrodites, starting out as female and changing to male at a certain age and size (Pajuelo and Lorenzo, 1999; Baldock and Dipper, 2023).
- The Sparidae family display the most complex expression of hermaphroditism in teleost fishes (Beaulieu, 2020).
- The genus Spondyliosoma (which includes black seabream) is one of only two genera within the Sparidae family which provides male-only care in the form of nest building and guarding of eggs (Beaulieu, 2020). The evolution of parental care alongside protogyny is a novel evolutionary strategy (Beaulieu, 2020).
- Females have been noted to change sex anywhere between 18 cm and 35 cm depending on the population (Perodou and Nedelec, 1980; Soletchnik, 1982; Mouine et al., 2015; Neves, 2018; Sussex IFCA, 2020; Doggett and Baldock, 2022). The sex change can occur from around October and it can take 2-3 months for an individual to transition from female to male.
- A study in the English Channel in the 1980s found that all individuals under 30cm were female and all above 40cm were male (Perodou and Nedelec, 1980).

# 1.2 Reproduction

# 1.2.1 Seasonality of Reproduction in the UK and Bream Movements within Spawning Sites

- For spawning events, large shoals of males and females travel towards areas of the inshore coastline where there are areas of hard bedrock or compacted substrate with a thin layer of finer sediment such as sand or gravel (Collins & Mallinson, 2012; Clark & James, 2013).
- The Natural England advice on seasonality for black seabream in all three of the relevant Dorset MCZs advises that significant numbers of the species are most likely to be present at the site between March and July each year based on combined information from published sources or additional site-specific surveys (Natural England, 2020a, b, c)
- The onset of nesting activity is documented to be variable with the main occurrence along the south coast of England being from early April into early summer (July) (Lythygoe and Lythgoe, 1971; Pawson, 1995).
- In certain studies, it was noted that adult black seabream move inshore to spawn between April and July once water temperatures are between 12-14°C (Wilson, 1958; Collins and Mallinson, 2012).
- From tagging black seabream as far back as the 1980's, it has been noted that individuals
  exhibit site fidelity, or philopatry (Clark & James, 2013), where they return to the same
  spawning grounds each year (Doggett et al., 2016; Pawson, 1995) or at least within 10km
  (Collins and Mallison, 2012).
- It has been noted over multiple years that nests are present between May and June in the Poole Bay area (Collins and Mallinson, 2012).

- Black seabream that had been fitted with acoustic tags in Sussex were detected at their nesting areas from late March to early July. On average, the fish stayed around for about 31 days at Kingmere and 39 days at Boulder Bank. These stay lengths are shorter than what's seen in a similar species (*S. emarginatum*), where males were observed staying for 57 days, spending about a quarter of that time caring for their offspring. Even though the spawning season is long, individual fish don't stay in one nesting site for very long. This may mean different fish reproduce at different times.
- Further acoustic tagging work looking at Marine Conservation Zones and nesting sites in Sussex found that 92% of fish tagged were detected at known nesting areas during the period April to June in 2022 and almost exclusively within this period in 2023 (Davies et al., 2024).
- It was noted in the same study that detection time at nesting sites was shorter than expected, whilst it cannot be excluded that this may be related to the array design and the returning location of individual fish, there is potential that a low residency time may suggest the spawning season is long compared to individual residency at nest sites (Davies et al., 2024).
- In multiple years, transparent eggs were noted in June at nest sites on bare rock in Poole Bay and Southbourne Rough. By July each year, it was noted that no eggs were present, the assumption being made that eggs had hatched due to the presence of juvenile black bream swimming around adjacent reefs (Collins and Mallinson, 2012).
- A study under The Black Bream Project found that, in Kimmeridge, in June eggs had hatched, nests had been abandoned and the black seabream had left the site, however in late June/early July over a 10-12 day period the bream returned, re-built nests and underwent another spawning period (Doggett, 2018).
- Following egg laying, females can remain in loose shoals near the spawning area or head towards feeding grounds such as seagrass beds where cuttlefish and small crustaceans can be found (Jackson et al., 2006).
- Following the spawning season, the adult males leave the site (Jackson et al., 2002).
- The eggs typically hatch between 9 days (Wilson, 1958) and two weeks (Jackson et al., 2002) and remain in a larval form for approximately 38 days (Wilson, 1958).
- Juveniles remain around nest sites until 7-8 cm in length when they migrate to estuaries, shallow rocky reefs, and seagrass beds. These habitats are important for juveniles providing sanctuary and a food source for example seagrass beds can host prey in high abundance such as small crabs, shrimp and cuttlefish (Jackson et al., 2002).
- Juveniles have been noted to use both natural and artificial habitats as areas of refuge (Hall et al., 2021).
- Juveniles remain within these habitats for two to three years until they are sexually mature (approx. 20 cm total length), they then join the adult stock in the English Channel (Baldock & Dipper, 2023; Clark & James, 2013).

## 1.2.2 Fecundity

- In terms of reproductive resilience, black seabream are classed as 'medium', with a minimum population doubling time of 1.4 4.4 years (Arkley and Caslake, 2004).
- Black seabream are found to exhibit relatively low fecundity, which is thought to be related
  to their reproductive behaviour with parental care potentially increasing success rates for
  fertilization and hatching (Goncalves and Erzini, 2000).

## Evidence from outside the UK

 Annual fecundity estimates are only available from studies undertaken in the Mediterranean. Estimates in this case range between 31,670 and 544,070 eggs per female (Dulcic et al., 1998).

## 1.2.3 Size of Maturity

### Evidence from the UK

- There are few studies that have identified size of maturity (SOM) for black seabream in their northern range (Small, 2021).
- A study from the English Channel conducted in the 1980s estimated that females reach 50% maturity (L50) between 20-22 cm in length with 95% of females captured at 25cm being mature (Soletchnik, 1982). There was no SOM estimate for males from this study.

#### Evidence from outside the UK

- At the southern range for black seabream, SOM (as L50) has been noted to range from 17.3-22 cm for females and 21.3 to 22.7 cm for males (Small, 2021).
- For a Portuguese population of black seabream, a combined SOM (L50) for both sexes, hermaphrodites and individuals of indetermined sex was given as 20.1 cm corresponding to 2-3 years of age (Goncalves and Erzini, 2000).
- Other studies in the Mediterranean found that I50 occurred in females at 2 years and males at 3 years (Perodou and Nedelec, 1980; Pajuelo and Lorenzo, 1999; Boughamou et al., 2015), although in Tunisia females matured later at around 4 years of age (Mouine et al., 2015).

# 1.2.4 Summary of Biology and Reproduction

- Black seabream prey on a variety of species as opportunistic omnivores but have few natural predators themselves.
- The species are protogynous hermaphrodites starting as female and changing to male.
- The sex change can occur anywhere between 18cm to 35cm, taking 2-3 months to complete in the autumn. All individuals above 40cm in the English Channel have previously been found to be males.
- The species aggregates for spawning in inshore areas with suitable habitats and exhibit site fidelity, returning to the same spawning grounds each year.
- There are varying periods given for the spawning aggregation between March and July. The general season from studies specific to the south coast of England and MCZs in Dorset is from April to July.
- Following egg laying females may remain or leave the site to head for feeding grounds.
- Males remain in the spawning areas until the spawning period is concluded.
- Juveniles remain in the spawning areas until 7-8cm when they move to suitable juvenile fish habitats where they remain until 2-3 years old.
- Black seabream are noted to exhibit relatively low levels of fecundity, likely related to the increased level of parental care used to increase success rates for fertilization and egg hatching.
- There is limited data for Size of Maturity in black seabream, the only data available from the English Channel indicates an L50 of 20-22cm for females, no size is given for males.

### 1.2.5 Nesting Behaviours and Parental Care

The following points relate to the general behaviours exhibited by black seabream and are relevant to the species across their geographic distribution.

 Black seabream return to the same nesting areas across multiple years, indicating strong site fidelity and likely spatial structuring of the population, with some fish returning within ~20 meters of their previous capture location, suggesting highly accurate homing. (Davies et al., 2024).

- Males scout the area for suitable sites to establish their territories and build their nests, excavating small areas until they find a suitable substrate (Clark & James, 2013).
- Males often compete with each other through circling and flexing behaviour to claim their area (Faure-Beaulieu & Attwood, 2022; James et al., 2011). With territories established, multiple males tend to build their nests grouped next to each other creating a "compound nesting site", which increases egg survival against predation (Faure-Beaulieu and Attwood, 2022).
- Once a site is chosen males use their tails in a swiping motion to clear lighter sediment from the area down to the solid substrate up to 30 cm deep and up to two metres in diameter (Clark & James, 2013). They use their bodies to physically remove larger obstructions like stones and sessile organisms, forming a rampart structure outlining the perimeter of their nests (Baldock & Dipper, 2023).
- Nest building is an energetically costly process, a male black seabream may excavate over 70-80kg of sediment depending on the surrounding habitat (Doggett and Baldock, 2022).
- It has been observed that where nests have been destroyed (either absent or covered in sand) following natural disturbance from wind and wave action, most of the pre-existing nests were re-built within a span of days following the event (Faure-Beaulieu and Attwood, 2022).
- Males may maintain their nests for days or weeks prior to a female spawning, it is
  postulated this is to demonstrate the suitability of the nest substrate and their ability to
  care for the eggs once spawned (Doggett and Baldock, 2022).
- Once nests are built, the males attract females down to the seabed to inspect their nests by swimming within their territory angling their body, flaunting the pale bands on their sides (Jackson et al., 2006). During this time the male keeps the nest surface exceptionally clean, if the female approves of the nest, they lay their eggs and the male fertilises them (Dulcic et al, 1998).
- The female lays her eggs in a thin layer within the nest where they adhere to the rock due to their sticky exterior (James et al., 2010). In some cases eggs have also been noted to be laid on the algae bordering the nest surface (Faure-Beaulieu and Attwood, 2022).
- The males constantly maintain the eggs using their tail to keep the eggs clean and prevent a build-up of sediment which could result in the eggs being smothered (Wilson, 1958; James et al., 2010).
- Having benthic eggs implies that biotic factors including predation and parental care may be more relevant for reproductive success in black seabream than environment factors such as currents and wave action (Goncalves and Erzini, 2000).
- Males can have multiple females' eggs within their nest at different stages of development, as they continue to attract females whilst on guard (Wilson, 1958). The male remains guarding the nest and caring for the eggs until all batches have hatched (Jackson et al, 2006).
- Males become physically aggressive to invaders and predators, chasing or physically attacking and removing the threat. Male Steentjie seabream were observed only leaving the nest to chase trespassers or to avoid predation or anthropogenic disturbance (Faure-Beaulieu & Attwood, 2022).
- Males protect the eggs from predators including gobies, wrasse, crustaceans, whelk, and even other black bream (Beaulieu, 2020).
- It has also been observed that males remain at the nest site to brood the eggs until they hatch (Wilson 1958).
- It is thought that larger males have a higher probability of success in defending nest territory and therefore have increased reproductive success, on this basis the protogynous reproductive strategy may confer an ecological advantage for black seabream (Goncalves and Erzini, 2000).

- The cost of reproduction for male bream species is related to a combination of gonadal investment, energetically expensive nesting activities, loss of feeding opportunities and a heightened risk of predation (Faure-Beaulieu and Attwood, 2022).
- Fish typically leave nesting sites after spawning, indicating these areas are not used as summer feeding grounds (Davies et al., 2024).

#### Evidence from the UK

• Specifically in Dorset, nests have been observed being exploited by corkwing and goldsinny wrasse (Collins and Mallinson, 2012).

#### Evidence from outside the UK

- A study in South Africa on Steentjie seabream (*Spondyliosoma emarginatum*) noted that in the presence of eggs, males spent 86% of their time on the next compared to 51% in the absence of eggs (Faure-Beaulieu and Attwood, 2022). The increased presence on the nest was accompanied by a reduced frequency of nest departures, and a reduction in the length of time of a departure from 56 seconds on an empty nest to 16 seconds when eggs were present (Faure-Beaulieu and Attwood, 2022). Over a 67-day nesting period, it was noted that only 13 minutes per hour was spent off the nest suggesting that the males do not feed during the nesting period (Faure-Beaulieu and Attwood, 2022).
- In Steentjie seabream, females have been noted to visit empty male nests more frequently than those with eggs but the time spent per visit did not change based on egg presence (Faure-Beaulieu and Attwood, 2022).
- For an average sized ripe male Steentjie seabream, the total condition loss over the nesting period was estimated at 10% or 30g body mass (Faure-Beaulieu and Attwood, 2022).

# Summary

- Male black seabream build nests, competing with other males to claim a particular area.
- Once territories have been established, males tend to build nests in groups to increase egg survival against predation.
- Males will clear nest sites of sediment and remove larger objects to create a clear nest area with an elevated boundary.
- Nest building is an energetically costly process for male black seabream with additional costs coming from gonadal investment, loss of feeding opportunities and a heightened risk of predation.
- Nests are maintained for days or weeks prior to a female spawning, damage to the nests from natural processes is observed to result in the nest being re-built within a few days.
- The male's ability to look after its nest is a method of attracting females to lay eggs.
- Eggs are laid onto the rock surface where they stick and are then guarded by the male to keep the eggs clean and prevent predation.
- There may be eggs from multiple females within a single nest, at different stages of development. The male will remain guarding the nest until all the eggs have hatched.
- Males are likely to spend the majority of their time on the nest when eggs are present with a reduced frequency of departures from the nest and the length of time spent away from the nest
- Males are aggressive to invaders/predators, chasing, attacking and/or physically removing the threat. Larger males have a higher probability of successfully defending a nest and thus have increased reproductive success.
- It is noted that male black seabream are likely not to actively feed whilst guarding a nest and therefore may not take bait or may exhibit aggressive behaviours rather than fully taking a baited line.

## 1.2.6 Nesting Habitat

The following points relate to features of nesting sites from evidence sources related to the UK.

- A common feature of studied nesting sites is a thin sediment veneer over a hard or compacted layer of stones, shells or bedrock with this lower, hard habitat exposed by the male during nest building (Vause and Clark, 2011; Collins and Mallison, 2012; Doggett and Baldock, 2022).
- Nests have been noted to be constructed adjacent to areas of rocky reef or shipwrecks (Vause and Clark, 2011; Doggett and Baldock, 2022).
- Sediments excavated during nest building are commonly mobile in nature and may shift with tide and wave action. This results in scouring over the underlying harder substrate which helps keep the area clean and reduces the energetic burden on male black seabream during nest construction (Doggett and Baldock, 2022).
- Rock surfaces covered in dense algal or faunal turf have not been recorded as associated with black seabream nesting sites (Doggett and Baldock, 2022).
- There are factors which have not been fully tested which may impact the geographic distribution of nest sites, these include fluctuations in population numbers between years with certain sites only being used when others have reached a carrying capacity (Doggett and Baldock, 2022).
- The size of a given area may influence site selection by male seabream, if there is insufficient suitable nesting habitat available, nests may be more isolated increasing the predation risk for both the male seabream and the eggs resulting in lower female interest and thus lower levels of successful spawning (Doggett and Baldock, 2022). Isolated nests are not often found and, if they are, are often small in size indicating exploratory excavations during a search for suitable nesting areas rather than an attempt to build a full nest (Doggett and Baldock, 2022).
- Depending on the type of surrounding/overlying sediment, the nest may or may not have an obvious boundary standing proud of the sediment, defining the limit of the nest (Doggett and Baldock, 2022).
- The use of boundaries and building of nests near to ledges, reefs or wrecks may provide shelter from prevailing currents and wave action or may increase the turbulence over the nest area to improve aeration (Doggett and Baldock, 2022).
- Net size may relate to the size and status of the male, with nests ranging from <1m with a single patch of eggs to over 2m in width and/or length with up to five patches of eggs, potentially from different females (Doggett and Baldock, 2022).
- Post-hatching of the eggs, nests may be erased as quickly as in 1-2 days by strong wind and wave events, or may persist throughout the summer and autumn as algae species readily colonise areas of bare rock left behind (Doggett and Baldock, 2022).

### Specific to Southern IFCA District

- Nests have been noted to be made of novel materials, in Poole Bay (it is not known if this is within or outside of the two MCZs) nests have been noted to be excavated from dead slipper limpet habitat, with surface shells removed to expose compacted shell layers beneath on which the nest is built (Doggett and Baldock, 2022).
- At Poole Rocks, many bream nests are noted to surround the multiple patch reefs which
  occur in the area as the sediments are thinnest at the interface of the two substrates
  (Collins and Mallinson, 2012; Doggett and Baldock, 2022). This can result in spawning
  activity concentrating at the perimeter of the sandstone outcrops but not within the main
  sections of patch reef likely due to the presence of epifauna and flora (Doggett and
  Baldock, 2022).
- Nests in central Poole Bay are noted to be restricted by the presence of irregular rock surfaces and boulders (Collins and Mallinson, 2012).
- In Purbeck Coast MCZ, nests are established adjacent to the bedrock reef wall with examples of nests off Lulworth Banks and Ballard occurring where sediments run up

- against bedrock with a short transition between the two leading to thin sediments (Doggett and Baldock, 2022).
- Nests near Kimmeridge Bay have been noted to occur in a band which varied in width from 20-30m at the base of a 3-4m high reef wall (Doggett and Baldock, 2022). Depending on the exact location, eggs were either attached to bedrock or flat boulders (Doggett and Baldock, 2022).
- At Kimmeridge Ledges and Lulworth Banks, nests have been observed at varying densities, from a narrow band which is 1-2 nests wide at the base of some reefs to being scattered between boulders to larger aggregations where more suitable habitat occurs (Doggett and Baldock, 2022).
- Nests near to Kimmeridge have been noted to be significantly larger than in other areas along the south coast, this is attributed to the presence of a wide extent of flat bedrock with shallow sediment cover (Collins and Mallinson, 2012).
- The Southbourne Rough MCZ is documented to have a patch reef composed of sizeable flat rock slabs and ridges, with the reef to the north covered with a thin layer of sandy shell gravel which is deemed to be important for nesting bream (DEFRA, JNCC, NE, 2019c).
- The shape and structure of nests around both Poole Rocks and Southbourne Rough MCZs can be dictated by the nature of surrounding bedrock (Doggett and Baldock, 2022).
- Nests occurring at Southbourne Rough and Dancing Ledge are thought to be limited by the size of the reef and the extent of sediment patches respectively (Collins and Mallinson, 2012).

# 1.2.7 Summary

- Nests are found in rocky areas where there are thin veneers of sediment over hard compacted layers of sones, shells or bedrock. The lower, harder habitat is used as the nest surface.
- A factor which may relate to the distribution of nest sites, but has not yet been fully tested is fluctuations in black seabream population numbers between years which may result in a certain area reaching a carrying capacity.
- The size of available area may influence a decision on where to build a nest, the less suitable habitat there is available the more likely it would be that nests would be isolated rather than grouped which increases the risk to the eggs and makes the area less desirable for females.
- Nest size may relate to the size and status of the male black seabream, ranging from <1m to over 2m in width.
- After the eggs have hatched, nests may be erased within 1-2 days by environmental conditions or may persist through the summer and autumn with opportunistic species colonising areas of bare rock.
- For Poole Rocks, nests surround multiple patch reefs within the site and are likely restricted by the presence of irregular rock surfaces and boulders.
- For Purbeck Coast, nests can be found adjacent to the bedrock reef wall with eggs either
  attached to bedrock or flat boulders. Nests in the Kimmeridge area of this site are noted
  to be significantly larger than in other areas along the south coast due to a wide extent of
  flat bedrock.
- For Southbourne Rough, the areas of reef covered by sandy shell gravel are deemed to be important for nesting black seabream with nest shape and structure dictated by surrounding bedrock.

# 1.3 <u>Distribution</u>

# 1.3.1 Geographical Distribution worldwide

- Black seabream are distributed through the northeast Atlantic shelf waters between Norway and Orkney, down to the Mediterranean Sea and Canary Islands (Pawson, 1995).
- Black seabream remain in the same geographic area throughout their life, therefore populations are thought to be discrete throughout their geographical range (Neves et al., 2018).
- This is supported by studies of otolith chemistry have suggested that black seabream do not originate from a single stock, with a study in Portugal being able to discriminate between black seabream from three fishing grounds with a high level of accuracy (91%) suggesting distinct local population units (Correia et al., 2012).
- This is also suggested from studies in the English Channel with differences in lengthweight relationships identified for black seabream in the Western Channel and Bay of Biscay, although this is yet to be statistically tested (Seafish – unpublished).
- Black seabream return year after year to the same nesting areas, even when those areas
  are close but distinct (18 km apart). This behaviour suggests the population is split into
  smaller groups that stick to specific places, which could lead to genetic differences and
  local adaptations over time (Davies et al, 2024).

## 1.3.2 Distribution in the English Channel

- In the UK, black seabream are most abundant along the south coast and into the southern part of the North Sea (Rogers, 1998).
- The population is more dispersed until Spring when they start to aggregate in preparation for their migration to the spawning grounds. During the months of April and May they migrate to areas such as Kimmeridge, Poole Bay, and Sandown Bay on the southern coast of the UK (Collins & Mallinson, 2012; Doggett & Baldock, 2022). They also migrate to other locations such as the Channel Islands along the French coastline (Blampied et al., 2022; Mahe et al., 2006; Soletchnik, 1982) and even the Bay of Biscay (Neves, 2018; Kopp et al., 2018).
- Previous studies based on fish catches suggested that black seabream migrate across
  the English Channel in autumn (to the west of Alderney), then come back in spring. New
  evidence found that black seabream migrate across the Channel every year, based on
  both acoustic and external tags. It is suggested that the migration follows an eastward
  movement of the 9°C isotherm as the Channel warms in the spring (Pawson, 1995; Clark
  & Vause, 2011).
- Data from historical trawling between 1913 and 2003 in Cornwall appeared to indicate that 12°C is an annual temperature threshold above which black seabream are more abundant (Arkley and Caslake, 2004).
- In July, after the spawning season, they migrate to the south of the North Sea, feeding at inshore sites. They follow the isotherm in the English Channel in November, from east to west, returning to the deep waters in the western Channel in the Winter months, typically starting to appear in January (Pawson, 1995).

#### 1.3.3 Distribution in Relation to Dorset Marine Conservation Zones

- For the past century during the spring months, specifically along the Southern coast of the UK, black seabream have been recorded within the following MCZs: Poole Rocks, Purbeck Coast, and Southbourne Rough (Baldock & Dipper, 2023; Collins & Mallinson, 2012; Doggett and Baldock, 2022).
- Within the Purbeck Coast MCZ, at Kimmeridge Bay, large shoals of black seabream are noted to arrive for the breeding season (Doggett et al., 2016).

- Nests have been recorded near Kimmeridge Bay in multiple years (Doggett and Baldock, 2022) and the most extensive occurrence of bream nests in the area was found off Kimmeridge (Collins and Mallinson, 2012).
- Southbourne Rough MCZ has exhibited high site fidelity, with males recorded returning to the site for 14 years (DEFRA, JNCC, NE, 2019c).

#### 1.3.4 Distribution in the Water Column

The information provided on distribution of black seabream in the water column relates to the population in the English Channel.

- Outside the breeding period, adults are typically located in deeper waters, they then migrate to shallower inshore waters in the Spring (Ruiz, 2008; Sussex IFCA, 2020).
- During Winter, adults are found at depths of 50-500 metres in the west of the English Channel (Bourdaud et al., 2017; Pawson, 1995). Pre-spawning adult concentrations have been found in waters from 50-100m depth west of a line from Alderney to Start Point (Pawson, 1995). In spring, following the seasonal migration to inshore areas, most spawning areas are less than 50m deep (Pawson, 1995) and nesting activity may occur in waters as shallow as 5m (Pawson, 1995; Collins and Mallinson, 2012).
- In the UK, black seabream are recorded to have spawned in waters of 5-25m depth (Doggett and Baldock, 2022).

# 1.4 Population of Black Seabream

# 1.4.1 General Population Trends

 Black seabream are not subject to ICES stock assessments or classed as a pressure stock for EU fisheries management, there is also no Total Allowable Catch prescribed (Collins and Mallinson, 2012).

# 1.4.2 UK Population Trends

- A report assessing black seabream from the English Channel in terms of sustainability as a food choice notes that there is currently little information on the abundance of black seabream in the English Channel but also no indication that the species is depleted (The Safina Center, 2014).
- It is thought that climate change has had a positive impact on black seabream stocks in the English Channel as the mean annual frequency of occurrence of black seabream has been documented to increase with rising sea temperatures from 1913 to 2003 (Arkley and Caslake, 2004).
- A Cefas eastern English Channel beam trawl survey suggested an upward trend in black seabream between 1993-2001 (Collins and Mallinson, 2012).

# 1.4.3 Summary of Distribution and Population of Black Seabream

- Black seabream remain in the same geographic area throughout their life, therefore populations are likely to be discrete.
- In the UK black seabream are most abundant along the south coast and into the southern part of the North Sea.
- The population is more dispersed until spring when the spawning aggregation occurs. Migration occurs to the south coast of the UK including Kimmeridge, Poole Bay and Sandown Bay on the Isle of Wight as well as the French coast and the Channel Islands.
- Migration may be temperature driven following isotherms within the English Channel.
- Following spawning, migration is noted to occur to the North Sea and deeper areas of the English Channel in the winter months.

- Site fidelity has been observed for Southbourne Rough MCZ and annual aggregations of black seabream are observed in Poole Rocks and Purbeck Coast MCZs.
- Distribution in the water column is related to the above seasonal movements, deeper waters being utilised in the winter and shallower areas, between 5-25m for spawning aggregations.
- Black seabream are currently not subject to a population assessment.
- Climate change may be having a positive impact on stocks in the English Channel with upward trends seen in two surveys between 1913-2003 and 1993-2001 respectively.

### 1.5 Relationship between Black Seabream and the Marine Environment

The following points relate to the general behaviours exhibited by black seabream and are relevant to the species across their geographic distribution.

- Black Seabream are seen as seabed engineers (Doggett et al., 2016). The activity of building nests and the resultant nest structure involves the removal of any algae or sessile species from the immediate area, which temporarily changes the habitat. These alterations to the seabed allow for opportunistic benthic organisms, particularly predatory molluscs and crustaceans, to locate and move in on any unguarded or vulnerable nests (Clark & James, 2013).
- After the breeding season the nests are abandoned by the males, and the entire nesting
  area is vacated until next year when the bream return. During this time, the cleared
  seabed provides an excellent place for opportunistic algae to settle (Baldock & Dipper,
  2023). The rapid colonisation by algae communities provides habitat and food source for
  juvenile bream and other fauna, as well as increasing overall habitat complexity for the
  area (Baldock & Dipper, 2023).
- Black Seabream are an indicator species associated with complex habitats, used to ascertain the health and resilience of a habitat and its ecosystem (Blampied et al., 2022).
- Although adult bream are only seasonal at inshore areas, they can be considered a
  valuable part of the coastal ecosystem and a key feature for conservation due to their
  specific and returning necessity to these spawning grounds (Rees et al., 2020). Their
  specific habitat requirements during key stages of their life cycle combined with their
  opportunistic diet make them an ideal indicator species for researching management of
  inshore areas and of different habitat types (Rees et al., 2020).

## 1.5.1 Summary

- Black seabream can act as seabed engineers through their nest building behaviour.
- Nesting areas are abandoned at the end of the spawning period and vacated until the following year, the clear areas of seabed provide habitat for opportunistic species to colonise providing a habitat and food source for juvenile black seabream and other species.
- Black seabream are an indicator species for complex habitats used to help assess a habitat's health and resilience.
- The specific habitat requirements of black seabream during key life stages combined with an opportunistic diet makes them a good indicator species for reviewing management of inshore areas and different habitat types.

## 2. Fishing for Black Seabream

#### 2.1 General

The following points relate to black seabream across their geographic distribution.

- Black seabream are a highly valued sport fish and important commercial species throughout much of their geographic range (Pinder et al., 2016).
- Black seabream are a non-quota species and are landed in varying quantities by multiple fishing gear types along the southern UK coastline (MMO).
- In the English Channel, it is noted that black seabream are caught with mid-water trawls, bottom trawls, bottom gillnets (including gillnets, tangle nets and trammel nets) and handline gears (The Safina Center, 2014).
- There is currently no formal stock assessment for black seabream in the English Channel (Collins and Mallinson, 2012), therefore the only assumptions on the status of populations currently are those inferred from data on commercial and recreational fishing activities (Southern IFCA, 2014).

## 2.2 Commercial Fisheries

### 2.2.1 General

The following points relate to black seabream across their geographic distribution.

- In the face of changing availability of historically targeted species, it is noted that inshore fishers are adapting by identifying new fishing grounds, developing innovative fishing techniques and targeting different species (Prosperi et al., 2016).
- There also appears to be an increasing popularity to fish for non-quota species, and as such, black seabream are becoming a more globally commercialised species with fishing pressure reducing on more traditional species like cod and hake (Silva et al., 2021).
- Commercial fisheries for black seabream are known to occurs in Boulogne (July to December), Dieppe (July to November), Port en Bessin (July to October) and the Isle of Wight and Sussex coasts (May to November) (Peroudou and Nedelec, 1980) in addition to Dorset based fisheries.

#### Evidence from the UK

• Communities in Cornwall have been observed to alter their traditional fisheries to target under-exploited species like black seabream, whiting (*Merlangius merlangus*) and cuttlefish (*Sepia officinalis*) (Arkley & Caslake, 2004).

#### 2.2.2 Southern IFCA District

- In the Southern IFCA District the species has historically been noted to be targeted by trawl fishing, net fishing and commercial and recreational rod and line fishing, the latter encompassing private anglers and charter vessels (Southern IFCA, 2014).
- Data on the level of commercial fishing in English waters is compiled by the Marine Management Organisation (MMO) in the form of landings data. Due to the spatial level at which the data is recorded it cannot be attributed specifically to the Dorset MCZs where black seabream is a designated feature, however general landings into ports within the Southern IFCA District can be collated from this data.
- Annex 1 provides the MMO landings data for 2016-2020 showing the quantity landed for all ports in the Southern IFCA District and those within Dorset only and the associated value<sup>2</sup>. The data has been provided in this literature review as it does not represent site-

<sup>&</sup>lt;sup>2</sup> Data provided via request to the Marine Management Organisation.

specific records for the Dorset MCZs and therefore are not suitable for inclusion in the Black Seabream Site Specific Evidence Packages.

- Data is split by gear type into bottom towed fishing gear, nets, pots and traps and lines. It
  must be noted that the reporting mechanism for the MMO landings data uses the
  classification of 'black seabream' but also 'sea breams', the latter being the only category
  used from 2018 onwards thus quantities may represent other bream species, but it is
  thought that black seabream is likely to form the majority of the landings.
- For all gear types, Dorset ports account for the majority of commercial landings in the Southern IFCA District.
- Removal of BSB as target species is documented in the data for demersal fixed nets. Recorded catches of BSB in nets from landings data in 30E7 (Purbeck Coast) and 30E8 (Poole Rocks and Southbourne Rough) show general consistency in last 5 years (2020-2024), some increase in landings during breeding season in 30E7 but larger catches are outside breeding season in 30E8. Use of these gear types through documented activity (<12m vessels) is low in all three sites, average landings per year for 30E7 vary from 0.13 to 0.016 tonnes (2020-2024), and for 30E8 from 0.034 to 0.013 tonnes (2020-2024). Monthly averages (2020-2024) for 30E7 0.003-0.26 tonnes, peak in February, less than 0.05 tonnes (April to November), for 30E8 0.0067-0.08 tonnes, peak in April (less than 0.05 tonnes June to March.
- Landings based on MMO data for BSB for Dorset Ports within District for demersal fixed nets (highest resolution available and therefore likely overestimate of fishing within MCZs specifically) shows low levels of landings in 2024 (average 0.199 tonne) and for last 3 years (average all less than 0.1 tonne) and generally for last 9 nine years (average all less than 0.5 tonne), broken down by month for last three years higher levels of landings have occurred primarily outside the period April to July.
- BSB are a target species for commercial rod & line, however landings data into Dorset Ports indicates fluctuating and generally low levels. Catch levels on average remain low between 0.7 tonne and 0.06 tonne (2016-2024). No consistent pattern in MMO landings data into Dorset ports that suggests activity is focused on April to July breeding season, for most recent three years (2022-2024), highest landings per month limited to an average of 0.2 tonne maximum which occurred in November. Landings between April to July (2022-2024) varied from an average of 0.1 to 0.01 tonne.
- For wider areas 30E8 and 30E7 for commercial rod & line, vessels <12m, the average weight landed from 2020-2024 ranges from 0.026 to 0.048 tonnes per year, max weight 0.12-0.38 tonnes in 2024 (30E7), the average weight from 2020-2024 ranges from 0.018 to 0.027 tonnes per year, max weight 0.11-0.24 tonnes in 2024 (30E8). 30E7 highest target month March, 30E8 January.

#### 2.3 Recreational Fisheries

#### 2.3.1 General

- Fish of the family Sparidae (including breams) are a preferred fish for recreational fishing as they are found in coastal waters and can be fairly easily caught using rod and line (Herfaut et al., 2013).
- Black seabream are fished recreationally by sea anglers using rod and line and also recreational spear fishers, as they are a highly prized sport and competition species to catch and are a good eating fish (Jiménez-Alvarado et al., 2019).
- Recreational fishing is a popular sport across the world, with black bream having been recorded through trophy photographs as being landed by recreational anglers as far back as the 1940s (Pinder et al, 2016).

#### Evidence from the UK

- It was previously estimated from data collected in 2013, that of an estimated total annual catch by anglers of black seabream in the English Channel of >100,000 individuals (~70 tonnes), over 65% were removed (Pinder et al., 2016). For this same time period and area, commercial landing records equalled 203 tonnes making the recreational catch ~25% of the total annual catch for that year (Pinder et al., 2016).
- A review undertaken by the MMO to map recreational sea angling activity in England found seabream species (primarily black seabream) to be the second most valued species for charter boats within the South Marine Plan area (MMO, 2020).
- The species can be caught by anglers throughout the year but there is a focus in the period between April and June (Collins and Mallinson, 2012).
- There are often limits advised by charter vessels to ensure the majority of fish are returned to the breeding stock (Small, 2021).

#### 2.3.2 Southern IFCA District

- The majority of activity is vessel based with many charter boats providing specific trips to target black seabream, however the species can also be targeted from the shore but to a lesser extent (Small, 2021).
- Patch reefs within Poole Bay are noted to be the focus of intensive sport angling between April and June specifically targeting black seabream (Collins and Mallinson, 2012).
- It is difficult to obtain large datasets on bream fishing from the recreational angling sector as activities are not regulated to the extent of commercial fisheries, i.e., requirements for the submission of catch data (Southern IFCA, 2014).
- Data was provided to the Southern IFCA in 2014 from the Angling Trust, representing data collated periodically between 1990 and 2013. This data was originally provided in the 2014 Southern IFCA Black Seabream Status Report (Southern IFCA, 2014) and is reproduced here directly from that report.
- Due to the variation in timescales between different data sources, the different locations of data collection and the number of anglers involved, it is difficult to infer any definitive trends in the data which is representative mainly of Hampshire based angling clubs.
- The data have been provided as Annex 2 to this literature review as they do not represent site-specific records for the Dorset MCZs and therefore are not suitable for inclusion in the Black Seabream Site Specific Evidence Packages.

## 3. Impacts of Fishing Activities

#### 3.1 General

- FishBase has given a vulnerability score for black seabream of 52 out of 100, indicating black seabream have a medium inherent vulnerability to fishing (The Safina Center, 2014).
- Life history characteristics of black seabream make the species particularly vulnerable to
  overexploitation, as it is a protogynous hermaphrodite, slow-growing, long-lived and
  shows habitat specificity during spawning seasons with spawning aggregations and male
  nest guarding behaviour (Neves et al, 2020).
- Whilst aggregated around nesting sites, black seabream are particularly vulnerable to exploitation by both commercial and sport fishing (Collins and Mallinson, 2012; Pinder, et al., 2016) as spawning aggregations are predictable in space and time providing an easy opportunity to catch large numbers of reproductively active fish.

#### 3.1.1 Removal of black seabream as a target or non-target species

In considering the potential impacts of fishing activities on black seabream, the removal of black seabream as either a target or non-target species results in potential impacts which would be applicable regardless of the specific gear type involved. Evidence relating to these impacts has been presented in this section.

Gear specific impacts related to the removal of black seabream as either a target or non-target species consider the potential impacts for mortality and delayed mortality specific to each gear type, in this case relevant evidence is provided in the gear specific section (S3.2).

In each section, it is indicated whether the evidence relates generally to potential impacts to the species which are relevant across their geographic distribution. Where specific survey data is referenced, information is provided on the location of that survey and split into evidence from work in the UK and from outside the UK.

#### 3.1.1.1 General Impacts

The following points relate to black seabream across their geographic distribution.

- Fisheries that target aggregating spawning populations risk hyperstability, where CPUE remains stable but true abundance declines (Erisman et al., 2011). Aggregations tend to occur at predictable times and sites, and the high concentrations of fish provide an increased ability to harvest greater quantities over smaller time scales. CPUE can therefore remain high or increase whilst overall abundance decreases if fishers are able to repeatedly locate aggregations and target them (Erisman et al., 2011). In the event of hyperstability, it is only if a population gets close to collapse that the effect stops being masked (Erisman et al., 2011).
- It is noted from a wide range of studies that fish escaping or released from fishing gears can suffer immediate as well as delayed mortalities, resulting from physical injury, predation and disease (Chopin et al., 1995; Chopin et al., 1996).
- Modelling cumulative mortality has indicated that the mortality risk rises rapidly in response to repeated catch and release events from fishing activities. This is increased further where there are high recapture rates and short recapture intervals (Bartholomew and Bohnsack, 2005).
- It is noted that the removal of fish species may impact food webs and habitats associated with the target species if removals are of a sufficient magnitude. The removal of carnivorous sea breams may result in increased survival of certain benthic invertebrates which may result in the competitive exclusion of other species (ABPmer, 2020).

#### 3.1.1.2 Size and sex related Impacts

- Species which undergo a sex change may be particularly vulnerable to overexploitation by size-selective fishing (Lloret et al., 2012).
- It has been noted that species such as black seabream which employ a female-first sexchanging reproductive model are more likely to benefit more consistently, in terms of abundance, from protection through management than species which employ other reproductive models (Lloret et al., 2012).
- The use of a minimum size limit tends to protect juvenile females rather than males due to the protogynous hermaphrodite strategy of black seabream where the transition from female to male can occur up to 30-40cm in length, in addition the absence of a maximum size limit could skew targeting only to males (Sussex IFCA, 2013).
- This is noted in other studies which note that as males are dominant in upper length classes for black seabream and take on the parental care and nest guarding duties,

- overfishing of larger size classes is likely to adversely affect the spawning stock unless the species is able to increase its sexual inversion rate to compensate (Goncalves and Erzini, 2000).
- Overexploitation of smaller size classes of black seabream however is likely to affect predominantly the females within a population, also resulting in a potential negative impact on reproductive potential (Goncalves and Erzini, 2000).

#### Evidence from the UK

 Between 1977 and 1979, the modal size of black seabream in the English Channel was seen to decrease from 37-38cm to 28-30cm due to the expansion of fishing activities which selectively targeted larger fish thus selectively targeting male fish (Pawson, 1995; Sussex IFCA, 2013). It was noted that the selective removal of larger males had the potential to skew the sex-ratio and thus reproduction (Sussex IFCA, 2013)

#### 3.1.1.3 Impacts relating to nests and eggs

The following points relate to black seabream across their geographic distribution.

- The act of removing an individual male from a spawning aggregation may not be comparable to removing that same individual outside of the spawning period due to the secondary effect on reproductive output (Pinder et al., 2016).
- Complex reproductive behaviours may accelerate rates of population decline seen from harvesting and a reduction in subsequent rates of recovery. Nest building is considered a complex strategy and if a nesting male is harvested, rapid and total brood loss is likely due to the brood being left defenceless against predators (Lloret et al., 2012).
- The temporary displacement of a male from the nest potentially results in an immediate risk on conspecific nest invasion and brood predation (Pinder et al., 2016) as well as predation from other species including wrasse, blenny, goby and crustacean species (Doggett et al., 2016).
- When males are removed from nests, sediment can also accumulate without the male present to remove it, potentially resulting in the smothering of eggs reducing viability (Westerberg et al., 1996).
- Sediment accumulating to a level in excess of the thickness that black seabream are able to excavate may lead to the male being deterred away from the nest site reducing the area of suitable nesting habitat (Strain et al., 2012).

#### Evidence from the UK

 A study of black seabream on the Dorset coast found that the stomachs of five male fish (15% of all males captured) contained eggs of conspecifics, suggesting an immediate risk of brood loss regardless of whether the captured male was then released and navigated back to its nest (Pinder et al., 2016).

#### Evidence from outside the UK

For the black seabream fisheries in France, it is determined that as the majority of
individuals are removed from the fishery during the spawning season when they are
accessible within inshore fisheries, both mature black seabream and the embryos are at
risk of direct mortality (Herfaut et al., 2013).

#### 3.1.1.4 Impacts relating to stress response and fitness

The following points relate to black seabream across their geographic distribution.

• Physical or environmental disturbances that are severe enough to cause stress require compensatory action by the fish in the form of a stress response which enables the fish to avoid or overcome the stressor (Chopin et al., 1996).

- There are a variety of stressors associated with capture and escape, such as fatigue, damage and barotrauma. The reaction of a particular species to stress is dependent on the fish's condition, the magnitude of the stressor (which for fishing is a function of gear type) and the way in which the gear is operated (depth, retrieval rate etc.) (Chopin et al., 1996).
- Stress from catch and release from any fishing gear can cause physiological disturbance, physical injuries and behavioural impairments. Injuries such as soft tissue damage, fin abrasion and bleeding can result in mortality or reduced fitness (Cooke et al., 2013; Brownscombe et al., 2016).
- In returning to a nest, if sediment has been allowed to build up by an extended absence of the male, excessive fanning behaviour would be undertaken by the male to remove the excess sediment requiring a greater energy expenditure which could adversely affect the health of the guarding male (Westerberg et al., 1996).

### 3.1.1.5 **Summary**

The following points are noted as general impacts from the removal of black seabream as target or non-target species irrespective of gear type:

- Black seabream exhibiting spawning aggregations puts the species at risk of targeted exploitation with impacts to the population potentially being masked.
- There is a risk of direct or indirect/delayed mortality as a result of capture.
- The risk of mortality may increase with repeated capture events and shortened time between capture events which is a risk when an aggregation is targeted.
- The reproductive strategy of black seabream of female first then male introduces risks to
  the population of skewing the sex ratio by selective removal of only larger individuals. The
  Southern IFCA minimum conservation size for black seabream of 23cm provides
  protection to the mature females in the population reducing the risk of skewing sexes
  based on female removal.
- Catch and release of black seabream by any gear type can result in a stress response causing a variety of negative effects on the individual that may affect reproductive, nest building or nest guarding behaviours.
- The selective removal of more male fish increases the risk to nests and egg survival, nests may suffer predation by either black seabream or other species or become subject to sedimentation which results in either extra energetic expenditure for the male bream on returning to the nest or nest abandonment and smothering of the eggs.

#### 3.1.2 Abrasion/disturbance of the substrate on the surface of the seabed

The impact of abrasion/disturbance of the substrate on the surface of the seabed tends to be more gear specific, therefore there are fewer general points which apply across all gear types. The potential for impact is based on gear construction, deployment and operation as well as the spatial footprint of the gear on the seabed.

The main impact from this pressure is from BTFG, literature on this gear type was reviewed as part of the Southern IFCA BTFG Review: Phase I, under which a Part B MCZ Assessment was carried out for BTFG for Black Seabream at Southbourne Rough MCZ. This Assessment and the corresponding literature review is available on the Southern IFCA website here: <a href="Southbourne-Rough-BTFG-Bream.pdf">Southbourne-Rough-BTFG-Bream.pdf</a>.

There are no studies which look specifically at potential abrasion impacts of pots/traps, nets or lines specifically on black seabream nests. Therefore, evidence to indicate potential impacts for this pressure is taken from studies of these gear types on impacts to benthic environments. Gear specific evidence is provided in section 3.2.1. It is noted that any impact to habitats will

be less for static gear fisheries such as those being considered here when compared to bottom towed fishing gears, however there are potential impacts which may occur to impact the nests of black seabream, particularly when eggs are present which need to be considered.

#### 3.1.2.1 General Impacts

The following points relate to black seabream across their geographic distribution.

- Where species spawn in specific habitats, the risk of damage to that habitat directly affects reproductive success and can affect the future use of that area by the species (van Overzee and Rijnsdorp, 2014).
- Due to the nature of certain fisheries to follow spawning aggregations, the risk of damage to spawning habitat occurs primarily during the spawning period (van Overzee and Rijnsdorp, 2014).
- For species which lay eggs that are directly attached to the substrate rather than the eggs being released in the pelagic zone, the risk of direct impact by fishing gears is increased (van Overzee and Rijnsdorp, 2014).
- Black seabream eggs need to remain adhered to the nest substrate during their development, the use of fishing gear which has the potential to rub along the seabed could result in eggs being squashed or completely removed (Clark et al., 2013).

#### 3.1.2.2 **Summary**

- For species such as black seabream that use specific habitats for spawning, any damage to that spawning habitat can have an impact on reproductive potential and spawning success.
- Impacts to spawning habitat may alter or reduce the area of appropriate habitat available in a given year.
- The risk posed by abrasion of disturbance of the seabed in relation to spawning success is seen to occur only during the spawning period.
- The main risk for black seabream is to the eggs which are attached to the substrate within a nest. This strategy puts the eggs at greater risk from abrasion impacts as the eggs need to remain adhered to the nest surface.
- Any gear type which has the potential to cause abrasion can impact eggs through damage or complete removal.

#### 3.2 Gear Specific Impacts

The evidence presented in this section looks at information and studies specific to certain gear types.

## 3.2.1 Abrasion/disturbance of the substrate on the surface of the seabed

#### **3.2.1.1 Pots/Traps**

The following points relate to black seabream across their geographic distribution.

 Direct impacts of pot/trap fishing gear on the benthic environment may occurring during deployment, with pots landing on sensitive species, during soak, with underwater pot movement by tides and/or waves causing abrasion, and during retrieval, where gear can

- be dragged along the seabed including both the pots and associated ropes (Stephenson et al., 2017; Gall et al., 2020).
- It is noted in multiple studies that it is very unlikely for pots to land, soak and haul in exactly the same location on successive trips (Stephenson et al., 2017; Gall et al., 2020).
- Individual pots are noted to have a small footprint and thus a small area for interaction, however the specific location of an impact is hard to identify within the total area covered by a string/fleet of pots (Stephenson et al., 2017).
- Dragging of pots/traps on retrieval is noted to occur due to a number of conditions including a mismatch between the speed of the vessel and the distance between traps (Stevens, 2021). In addition to the trap, there is potential for the lines connecting traps to cause damage with the cumulative impact from lines having the potential to exceed that of the traps (Stevens, 2021).
- Anchor weights are often used on the ends of strings of pots to prevent dragging when fishing in dynamic areas (Coleman et al., 2013).

#### Evidence from the UK

- In a study of potting impacts on UK reef habitats, using singularly deployed pots, it was found that there were no changes in species abundance at intensive levels of potting, however there were no dragging elements introduced by virtue of the hauling of a single pot rather than a string (Stephenson et al., 2017).
- A further study from the Lyme Bay area of Dorset, UK, exposed reef to different levels of pot fishing over a period of four years (Rees et al., 2021). The study utilised normal commercial pot fishing trips to replicate normal practice with trips occurring 2-3 times per week during stable weather, typically in the summer, and 1 time per week during less stable weather, typically in the winter. This study identified that high densities of pot fishing can negatively affect sessile reef building taxa in a partially protected MPA and that a threshold could be established with effects likely to occur when densities of pots exceed 15-25 pots per 0.25km². It was thought that declines in reef building species were a result of repeated hauling and deployment of gear in addition to movements of pots related to weather and tides, with the biggest impact noted on species with slower recovery rates (Rees et al., 2021).
- A second study in Lyme Bay, Dorset, UK, found that when wind and tidal streams were strong, the incidence of pots dragging on the seabed increased, especially when the wind blew across the tide (Eno et al., 2001). It was also noted that when there was insufficient line during deployment, the lead pot could bounce up and down during periods of strong tides and larger swells (Eno et al., 2001).
- A study in south Devon, UK, found that uneven topography in rocky areas resulted in pots being likely to make some contact with the seabed but not at the footprint of the entire base therefore the area of impact based on total possible contact area would result in an overestimation (Gall et al., 2020). This study found that pots took an average of 3.46 seconds to settle from the point of first contact with the seabed with pots tending to land upright. Pots were noted to be relatively stable, but some movement was noted with occasional movement in 8.08% of soaks, small movements throughout soak in 4.04% of soaks and large movements in 1.52% of soaks (Gall et al., 2020). The total time that pots moved across the seabed on hauling was 20.71 seconds, therefore being in contact with the seabed for approximately half the time taken for them to be lifted clear. Rope movement occurred but 45.91% of the time this did not result in any scour impacts. The data was used to calculate the total possible contact area of 6.20m² ± 0.61 and the length of the seabed contact area as 3.04m² ± 0.24 (49.07% of the total contact area) (Gall et al., 2020). There was a significantly greater spatial footprint for inkwell pots compared to parlour pots (Gall et al., 2020).
- The same study noted impacts to sensitive reef taxa, with 25-30% of individuals damaged (through tissue abrasion) or removed (Gall et al., 2020). It is stated in the paper that the greatest concern over impacts is in relation to long-lived, slow growing taxa (Gall et al., 2020).

A study in Northumberland, UK, found no change in community structure at experimental
and non-fished sites, however the method involved setting and recovering single pots and
it was recognised that this would not allow for the dragging of pots which is found when
strings are retrieved (Stevens, 2021).

#### Evidence from outside the UK

- A study on fish traps in the Bay of Biscay soaking over an 8-hour period showed no movement in either 'light' (199kg) or 'heavy' (209kg) sets of gear during the soak time and a swept area of less than 2m² during retrieval. It was noted that although the movement is small, the movement of the trap during retrieval could damage sessile organisms such as gorgonians, sponges or algae (Kopp et al., 2020).
- Setting lobster traps on coral reef flats resulted in a reduction in percentage of benthic cover from 45% to 31% in quadrats along the movement path of the trap. In the same habitat, the mean distance moved by the trap was 3.6m affecting an area of 4.6m² in shallow depths. However, there were no assemblage changes noted in areas subject to potting compared to non-fished areas in temperate rocky habitats (Kopp et al., 2020).
- A review of trap fishing in the USA found that the likelihood of encounters with epibenthic
  organisms increased 50% during retrieval due to the traps being dragged along the
  seafloor (Stevens, 2021). The drag time and number of interactions increased with the
  position of the trap, ranging from 10 seconds for the first on the string to 60 seconds for
  the last (Stevens, 2021).

#### **3.2.1.2 Summary**

- Impacts to the seabed from pots/traps may occur during deployment, soak time or retrieval, with the latter seen to create the most movement of gear along the seabed.
- The pot, the lines and any associated weights have the potential to interact with the seabed.
- Whilst individual pots are noted to have a small footprint, the specific location of any impact is hard to identify within the total area covered by a string.
- The effect on the seabed during retrieval is dependent on the fisher's activity.
- Studies in the UK have shown that the possible contact area for pots on the seabed is small.
- Uneven topography in rocky areas results in pots being likely to make some contact with
  the seabed but not at the footprint of the entire base, therefore the area of impact based
  on the total possible contact area would be an overestimation.

#### 3.2.1.3 Nets (Pelagic and Demersal)

- For bottom-set gillnets, the parts of the fishing gear in contact with the seabed are the lead line, the anchors and the lines connecting the anchors to the net (Savina et al., 2018).
- Gillnets may be dragged along the seabed and become entangled in bottom features either during deployment/retrieval or with water flow when fishing (Polet & Depestele, 2010; Savina et al., 2018).
- Impacts from net fishing where the net interacts with the seabed occur mainly during retrieval, when anchors and ground lines can drag along the seabed (Grieve et al., 2014). This also increases the footprint over which an effect may be seen (Grieve et al., 2014).
- It has been noted that the complex effects of water, waves and wind can change over small scales influencing the behaviour of net fishing gear (Savina et al., 2018).
- Removal of seaweeds and algal plants could impact the hydrodynamics of the area as vertically growing species reduce impacts from wave energy (Coleman and Williams, 2002; Denny, 2021). At nesting sites this may result in eggs being exposed to higher wave

energy which could either dislodge eggs, cause damage to eggs from debris or introduce sediments into the nest area.

#### Evidence from the UK

- Reviewing net fishing in the English Channel, it was noted that where nets are fixed to the ground with anchors or weights, there is the potential for small amounts of habitat damage (The Safina Center, 2014).
- In a study in the Welsh part of the Irish Sea, UK, it was found that habitats consisting mostly of rock with associated branching species has a sensitivity of high to medium to net fishing at a high to low fishing intensity respectively (Savina et al., 2018).

#### Evidence from outside the UK

- A study on bottom set gillnets along the Danish coastline indicated that sweeping movements of the gear could be up to 2m (Kopp et al., 2020).
- A second study off the Danish coast found that the lead line of a bottom-set gillnet fully deployed could sweep the seabed in sandy habitats up to approximately 2m, the majority of the time being around 10cm. Movements were noted to be both continuous or in a sudden step (Savina et al., 2018). It was noted that any potential damage to the benthos would arise from this movement.
- A study in Mexico found that set gillnets impacted 22% of benthic gorgonian corals and removed 17% within 1m of the net (Stevens, 2021).
- A further study in Mexico found that kelp plants and gorgonian corals were entangled and removed when the net was being hauled. It was determined that the impact from hauling is likely to be larger than soaking due to more power being exerted by a net hauler, however it was noted that fisher's methods of handling the gear can significantly reduce potential habitat damage, i.e., by hauling in the direction of the current (Shester and Micheli, 2011).

## **3.2.1.4 Summary**

- The effect of abrasion/disturbance to the seabed is most likely to arise from bottom-set nets/fixed nets.
- The impact could arise from contact between the seabed and the lead line, anchors and lines associated with the net.
- Contact with the seabed can occur during setting, soak time and retrieval although the latter is noted as having the greatest potential for movement and the greatest footprint for interaction with the seabed.
- The magnitude of an effect can be affected by fisher experience and hauling practice.
- The behaviour of a net during soak time can be affected over small spatial areas by environmental factors such as wind and tide movements.
- Nets can remove seabed plant life, potentially reducing the potential for an area of seabed to be protected from wave energy.
- Studies from Europe have indicated that the sweep of a set gillnet could be up approximately 2m but the majority of the time was found to be around 10cm.

## 3.2.1.5 Lines (Pelagic and Demersal)

- For longlines, the principal components that can produce affects on the seabed are the anchors/weights and the mainline (Polet & Depestele, 2010).
- The effect is determined by how far the longline travels over the seabed during the setting or retrieval processes, with the distance likely to be greater during retrieval (Polet & Depestele, 2010). If the vessel hauling the gear is not above the part of the line being

lifted, the line, anchors/weights can be pulled across the seabed before ascending which can cause injury or detachment of exposed seabed organisms (Polet & Depestele, 2010).

#### Evidence from the UK

 A review of fishing in the English Channel noted that there is the potential for small lead weights at the end of lines to come into contact with the seabed (The Safina Center, 2014).

## Evidence from outside the UK

 An assessment of the effect of longlining in deep sea environments in the north-east Atlantic (Spain) found that there was a bycatch of corals and small sponge species in certain areas indicating a degree of interaction with seabed organisms (Duran Munoz et al., 2010).

#### 3.2.1.6 **Summary**

- The main effect from lines on the seabed comes from longlining activity where there are associated anchors and lines which may come into contact with the seabed.
- There is the potential for interaction during the setting, soak or retrieval processes with the latter having the largest potential impact based on how the gear is hauled and the potential for dragging on the seabed.
- Evidence from outside the UK indicates there is the potential for longlining gear to remove benthic organisms from the seabed.

#### 3.2.2 Removal of black seabream as a target species or non-target species

#### 3.2.2.1 Pots/Traps

The following points relate to black seabream across their geographic distribution.

• Discards from pot fishing can be removed quicker and with less handling than other methods (such as nets) resulting in a higher probability of survival (Petetta et al., 2020)

#### Evidence from the UK

- There is little research on bycatch of pot fisheries in the UK, although the general assumption is that bycatch is low relative to other fishing methods (Southern IFCA, 2017).
- An assessment of the crab and lobster fishery around the Isle of Man found that bycatch
  was relatively low, with fish species representing 20% of the bycatch composition
  (although this did not include black seabream) (Öndes et al., 2018). It was noted that
  bycatch varied significantly between areas and at a small scale between local fisheries
  (Öndes et al., 2018).

#### **3.2.2.2 Summary**

- The risk of bycatch of black seabream by pots is low.
- Should any bycatch arise individuals can be returned quickly with minimal handling.

#### 3.2.2.3 Nets (Pelagic and Demersal)

- Compared to pot fishing, discards from nets are seen to be greater with an increased discard mortality. The cleaning of a net implies additional time on deck as discards must be released or untangled manually (Petetta et al., 2020).
- Gillnets are noted to have both direct and indirect mortality for fish species, the latter defined as 'non-catch fishing mortality' (Potter and Pawson, 1991). This includes:
  - Predation mortality where fish caught in nets are removed or damaged by a predator to a point where they cannot be landed or a returned to the sea dead or injured (Potter and Pawson, 1991).
  - Escapement mortality where a fish which encounters a net and is temporarily caught escapes and subsequently dies from injuries, stress, disease or a heightened risk of predation. It is thought that the degree to which this happens relates to the range in size of the caught species relative to the size of the gear being used (Potter and Pawson, 1991).
  - Drop-out mortality where fish are caught and killed by nets but drop out before the net is hauled. This can be related to the construction of the fishing gear (Potter and Pawson, 1991).
  - Haul-back or fall out mortality, where fish are caught and killed by fishing gear but are lost as the gear is hauled which can be heavily influenced by fisher operations (Potter and Pawson, 1991).
  - Discard mortality where fish are caught and then discarded dead or are discarded and suffer delayed mortality from injuries or stress, influenced by the species composition in the area where the gear is set and the soak time (Potter and Pawson, 1991).
  - Unreported catch mortality where fish are taken as bycatch, for personal consumption or are illegally landed (Potter and Pawson, 1991).
- In fishing gears where fish must pass through net meshes, it is likely that damage will be caused when the fish passing through the mesh has an opercular circumference of the same size or larger than the mesh and thus there is a high probability that the fish will become wedged (Chopin et al., 1995).
- For species caught in trammel nets, it was noted that there is an increased risk of predation for entangled fish, the risk increasing with the soak time of the net (Sardo et al., 2023).

#### Evidence from the UK

There are no studies from the UK on the specific impacts of catching black seabream as a target or non-target species by nets.

#### Evidence from outside the UK

- A study looking at the impacts of trammel nets on the sea bream Pagrus major, found that the severity and degree of injuries increased with the length of time the fish was trapped in the net and included disruption of the mucus layer, removal of scales from the opercula, superficial cuts to the pectoral and tail fins and deeper cuts into the dermal tissue in front of the dorsal fin and in the belly. For all fish captured for less than 1 hour, there were only superficial injuries observed, for all fish captured for >1hr there were cuts into the dermis which developed into open wounds within 8 days (Chopin et al., 2016).
- In the same study, 28% of fish suffered mortality in the net, 5% within 48 hours of release, and 11% between 8-18 days after release. All mortalities in the net occurred after more than 3 hours, any fish dying in the following period had developed wounds as a result of net capture (Chopin et al., 2016). It was noted that stress increased with capture duration, and that water flow over the gills was severely restricted when the fish was caught round the opercula (Chopin et al., 2016).
- A study on the southern black bream Acanthopagrus butcheri targeted in a gill net fishery
  in Australia looked at estimating post-release survival rates based on a combination of
  estimates of initial survival from observations and delayed survival from field trials (Grixti
  et al., 2011). The estimated post-survival rate was high at greater than 90%, however

based on the methods used it was postulated that delayed mortality could have been underestimated (Grixti et al., 2011).

#### 3.2.2.4 **Summary**

- There is thought to be an increased risk of delayed mortality from net fishing compared to pot fishing due to increased handling if the fish has to be removed from the net before being returned.
- There are different types of secondary mortality noted to occur from net fishing involving an increased predation risk, injury and stress from net capture and illegal harvesting.
- Mesh size is seen to be linked to the degree of damage which could be sustained by an individual caught in a net.
- For trammel net fishing, studies point to the soak time being directly related to the severity of injuries and an increased risk of predation.
- Post-survival rates of other bream species have been noted to be high following capture in gill nets as part of targeted fisheries, with individuals suffering post-release mortality being limited to those that suffered injury in the net.
- Stress is noted to increase with capture duration, particularly when the gills are restricted by the net.

#### 3.2.2.5 Lines (Pelagic and Demersal)

The following points relate to black seabream across their geographic distribution.

- In light of the aggressive and courtship behaviours exhibited by male black seabream, it is noted that fitter (more aggressive) individuals and those exhibiting strong territorial behaviour are more susceptible to capture by recreational angling (Pinder et al., 2016).
- Unquantified hooking mortality can mean that other management measures such as a minimum size or a bag limit become less effective than intended (Coggins et al., 2007).

## Evidence from the UK

- A study on black seabream in Dorset, UK, stated that, based on nesting behaviour, males become aggressive to anything entering into their territory, this can include baited hooks (Pinder et al., 2016).
- A study on black seabream caught by anglers (private recreational and charter vessels) operating out of Poole, Swanage and Weymouth on the south coast of the UK, between May and June 2015 found that a total of 40 black seabream were captured with a mean length of 306 ± 10mm, all being sexually mature and with significantly more males captured than females (Pinder et al., 2016).
- It is noted from anecdotal evidence by a number of operators within Dorset that male black seabream do not take baited hooks during the period when they are nest guarding due to the absence of feeding behaviour, whilst there may be some aggressive displays towards hooks, the catch levels become much lower during this period as hooks are not fully taken by individual fish.

#### Evidence from outside the UK

 A study from a Portuguese longline fishery identified that the method was not highly species specific through the use of bait which is widely consumed by a variety of fish species (Erzini et al., 1996). It was determined that the species selectivity of this gear type would require consideration of local fish distributions, competition between species, hook size, hook design, gangion length, gangion accessories (floats and swivels), gangion diameter, colour and type (monofilament or braided), mainline diameter, mainline colour

- and material, bait type, bait size, bait shape, bait combinations, time of fishing and soak time (Erzini et al., 1996).
- In a small-scale Portuguese longline fishery, it was noted that the average length at capture was larger for males than females which is thought to be a consequence of the sequential hermaphroditism exhibited by black seabream (Goncalves and Erzini, 2000).
- For sea bream (*Pagrus major*) it was noted that cortisol levels were significantly elevated in captured fish from longlines compared to resting levels but that levels did peak rather than increase exponentially (Chopin et al., 2016). It is thought this may be a result of adaptive behaviour and that with increased time of capture on a longline, the fish regulates its swimming to maintain position with the line rather than fight against it. In this way the fish reduced becoming fatigued and the extent of injuries associated with struggling behaviours as well as reducing the tension on the line allowing the fish to regain an upright position (Chopin et al., 2016).

#### 3.2.2.6 Catch and Release from Lines

- In a general review of catch and release angling, the following factors were identified as being related to the incidence of mortality. Anatomical hook location, type of lure, type of hook, hook size, whether the hook was treble, single, modified, barbed or barbless, active vs passive fishing, playing time, handling time, angler experience, removal of deep hooks, venting swim bladders, capture depth and temperature (Bartholomew and Bohnsack, 2005; Viega et al., 2011; Cooke et al., 2013; Pinder et al., 2016; Morfin et al., 2017).
- Reflex indicators (i.e., ability to maintain equilibrium, escape response) are also considered in assessing the vitality of a fish, with determinations made by researchers that such reflexes can be indicative of future individual performance and post-release mortality (Pinder et al., 2016).
- The desired conservation benefits of catch and release rely on the assumption that a high proportion of the fish will survive, with any impacts on behaviour or physiology not compromising the reproductive potential of an individual fish (Pinder et al., 2016).
- Attributes of catch and release events such as water temperature, fight time and air exposure have been shown to induce a physiological stress response from which a fish may or may not recover (Cooke et al., 2013).
- Physiological changes which may occur in a fish during an angling event result primarily
  from burst exercise during capture where an energetic expenditure is required in white
  muscle which exceeds the ability of the tissue to respire aerobically, leading to anaerobic
  respiration to fuel activity (Cooke et al., 2013).
- The burst exercise is often accompanied by activation of a primary stress response, where the stress hormones adrenaline, noradrenaline and cortisol can be released into the bloodstream. This initiates changes including the release of glucose to fuel the heart or gills, splenic contractions to release red blood cells, elevated cardiac output and a recruitment of gill lamellae (Cooke et al., 2013).
- The magnitude of a physiological disturbance is seen to increase with angling duration and both cardiac and blood-based changes increase with duration of air exposure. These effects can then be further exacerbated at sub- or surpaoptimal temperatures, in larger compared to smaller fish and in fish that have not been feeding relative to well-fed fish (Cooke et al., 2013).
- The ability to recover from catch and release stressors has ecological outcomes, as swimming performance can be limited during the time required to clear metabolites from the blood and restore mussel energy. The time required is species specific and can scale proportionately with the duration and magnitude of the stressor. (Cooke et al., 2013).
- Failure of a fish to recover homeostasis efficiently can result in metabolic collapse and increase the risk of post-capture predation (Cooke et al., 2013; Ruiz-Jarabo et al., 2021).

- Post-release survival has been strongly linked to the position where the hook penetrates
  the tissue, shallow (lip, mouth) and foul (outside the mouth) hooking are usually
  associated with higher survival rates than deep hooking (throat, gills, oesophagus, gut)
  (Bartholomew and Bohnsack, 2005; Grixti et al., 2008; Viega et al., 2011). It has been
  suggested that this is the most important factor affecting hooking mortality (Viega et al.,
  2011).
- It is noted that hooking mortality rates can be highly variable between species (Viega et al., 2011). The complexity of factors affecting hooking mortality and the variability in mortality rates amongst species suggest that nation-wide management may be less appropriate, with species-specific guidelines on catch and release being preferable, but only if the appropriate data for specific species is available (Viega et al., 2011).
- Where there is no major tissue damage to vital organs, it is suggested that some fish can shed hooks, survive until a hook dissolves or grow new tissue around a hook (Grixti et al., 2008).
- Long air exposure times are likely to be detrimental to the fish, especially following a long
  fight time. Studies linking handling time and fight time to mortality are limited however it
  is thought that these elements add to the overall stress for the fish (Grixti et al., 2008).
  However, there are studies which show that air exposure only results in mortality where
  there is an unrealistically large exposure time employed and where the species is
  particularly sensitive (Cooke et al., 2013).
- Using natural bait may increase the risk of deep hooking as a fish is more likely to ingest natural bait than an artificial lure (Bartholomew and Bohnsack, 2005).
- Many of the elements associated with reducing the risk of catch and release mortality are under the direct control of the angler, however it is noted that anglers differ greatly in handling skill and catch and release behaviour making the physiological impacts of catch and release highly context dependent (Cooke et al., 2013).

#### Evidence from the UK

- A study on black seabream in Dorset UK, stated that although the ability of a male to return to the nest was not quantified, it appeared that, due to the mechanics of angling from an anchored vessel in depths of approximately 20m and strong tidal currents, that it was not untypical to catch and release fish 50m or more up-tide of their nests (Pinder et al., 2016). On this basis it was suggested that males who are released who can overcome the challenge of navigating back to their nest may have to decide to either continue guarding or abandon based on predation rates during the male's absence (Pinder et al., 2016). The navigational abilities of black seabream are not known (Pinder et al., 2016).
- The same study noted that, although in limited numbers, females captured by hook and line were observed shedding eggs during the process of unhooking and handling which could have an immediate impact on reproductive potential (Pinder et al., 2016).
- The same study noted that larger fish had significantly longer fight times and extended air exposure but that significantly more fish were easy to unhook than difficult and most fish incurred only minimal damage from being hooked (Pinder et al., 2016). Seven fish had the hook located in the oesophagus with attempts to remove resulting in considerable damage including bleeding from the gills in five fish (Pinder et al., 2016). Only one fish was deep hooked on a circle hook, the remainder of deep hooking occurred with J-hooks (Pinder et al., 2016).
- The same study applied reflex impairment tests and found that 32% of the fish sampled had an impairment score of 0.25 or higher, with the rest assessed as having no impairment (Pinder et al., 2016). However, correlations between increased lactate with increased fight time did not demonstrate increased impairment (Pinder et al., 2016). It was noted that the method used would not have accounted for all stress responses and therefore was a likely underestimate of the post-release physiology and behaviour impacts of catch and release on black seabream (Pinder et al., 2016).

• It was noted from this study that while hook damage was a significant predictor of impairment, there were interacting variables which make a single cause of impairment hard to identify, for example individual variability in angler behaviour, the gear used and the distance down the side of the boat from which the fish were captured (Pinder et al., 2016). It was postulated that all these factors could have either individual or additive effects on changes in blood chemistry concentrations and the extent of reflex impairment (Pinder et al., 2016).

#### Evidence from outside the UK

- Handling times for southern black bream in Australian rod and line fisheries were found to be significantly shorter for shallow-hooked fish than deep-hooked fish with fish who were deep hooked having displayed longer fight times during the fishing process (Grixti et al., 2008).
- The same study found that initial and delayed survival was significantly higher for shallow hooked fish than deep hooked fish and, for the latter, where hooks were not removed or the fish did not bleed, and was higher in warmer compared to colder water. The study also found that survival decreased with an increase in fish length as the instance of shallow hooking decreased with increased size (Grixti et al., 2008). Scale loss was found for 18% of fish and survival was lowest when the hook penetrated the throat or gill region (Grixti et al., 2008).
- It is noted that for southern black bream, longer term implications from deep hooking (dependent on hook location) such as interrupted hormone production, infections and impacts on feeding and digestion may not been seen within 72 hours leading to mortality or other sublethal effects including weight loss and reduced reproductive success (Grixti et al., 2008).
- When waters are warmer, mortality is generally seen to increase as at higher temperatures, dissolved oxygen concentrations decrease whilst the respiratory demands of the fish increase. For catch and release fishing, this combination can increase physiological stress (Bartholomew and Bohnsack, 2005).
- Increased handling times and playing/fight times increase physiological stress, depriving
  the fish of oxygen during a critical period following heavy exertion resulting in increased
  recovery time to normal function once released (Bartholomew and Bohnsack, 2005).
  During this recovery time, the fist may exhibit reduced fitness and altered behaviour
  increasing susceptibility to predation and/or disease (Bartholomew and Bohnsack, 2005).
- A study on blackspot seabream (Pagellus bogaraveo) in Spain found that longline capture induced an acute stress response including changes in plasma cortisol, lactate, glucose and osmoregularity. However, it was found that 90.6% of individuals captured survived in post-capture recovery tanks, with evidence of physiological recovery responses 5 hours after capture and complete homeostatic recovery within the first 24 hours (Ruiz-Jarabo et al., 2021). It was noted that survival in the wild may be greater due to the artificial conditions employed during this study, however that survival in the wild may also be less as post-capture predation could not be quantified (Ruiz-Jarabo et al., 2021).
- A study on hook and line impacts, using three different hook sizes, for three species of sea bream was carried out in an aquaculture facility in Portugal (Viega et al., 2011). It was noted that fish were hooked in the mouth or jaw more often than in the stomach or gills and that short-term hooking mortality for black seabream was 2.8% (Viega et al., 2011).
- A study on largemouth bass (*Micropeterus salmoides*), a species which exhibits solo parental care, found that catch and release impaired locomotory activity and subsequently reduced the care response for offspring for up to 24 hours (Cooke et al., 2000).

## 3.2.2.7 **Summary**

- During the spawning period male black seabream are noted to be more aggressive, with those exhibiting this characteristic strongly, along with increased fitness, noted to be more susceptible to capture by rod and line due to aggressive behaviours towards hooks.
- Anecdotal evidence by a number of operators within Dorset is that male black seabream
  do not take baited hooks during the period when they are nest guarding due to the
  absence of feeding behaviour.
- If hooking mortality is unknown, then other management measures such as bag limits and size related measures can become less effective.
- Longlining can be more indiscriminate in terms of species captured, the construction, operation, soak time and removal of any fish not to be retained will all impact on the degree of post-capture mortality.
- Fish may be able to minimise impacts related to stress induced responses if able to regulate their position relative to longlining gear when hooked. The degree to which this will be effective will be dependent on the initial hooking impact to the fish.
- Hooking location is seen to be a key variable in the degree of injury and thus post-capture mortality suffered by an individual.
- Many of the elements which contribute to post-capture mortality are seen to be under angler control, the main ones being related to handling time and practice and hook use with circle hooks resulting in lower mortality than J-hooks.
- There are varying physiological changes which could occur as a result of the stress response initiated during capture. The stress response is seen to increase with duration of the angling event, however recovery times can be variable occurring within a few hours to 24 hours. During that recovery period the fish may exhibit altered behaviours which could involve alterations to parental care behaviours or affect the ability to avoid predators.
- Study from Dorset, UK found that impairments were not found in the majority of fish caught and that increased fight time did not correlate with increased risk of impairment.
- A single cause of impairment is hard to identify, variations in angler behaviour, gear used etc. could have individual or additive effects.
- The ability for a black seabream male to navigate back to its nest following capture is not
  yet known, there is the potential based on angling practice to capture a fish up to 50m
  away from its nest and there is a risk to the eggs on the nest during the time that a male
  would need to navigate back to that nest.
- Females captured by hook and line have been observed to shed eggs during handling.
- Whilst larger fish had longer fight times and air exposure, they tended to be easier to unhook and suffer less damage.
- There is the potential for temperature to influence post-capture mortality rates with warmer temperatures positively correlated with increased mortality.

## 4. Mitigation

The following section details mitigation methods described in studies from both the UK and outside of the UK relevant to all fishing methods.

#### Seasonal management

 Management for species with complex reproductive strategies such as nest building and parental care should consider limiting or banning the catching of those species through seasonal closures that align with the spawning season (Lloret et al., 2012).

#### **Zonal management**

Catch and release zones can be used to provide recreational fishing opportunities whilst
providing some protection for exploited fish if fishing mortality can be reduced compared
to areas with normal extractive fishing practices (Bartholomew and Bohnsack, 2005).

#### Hook use

- A review of factors influencing mortality from catch and release angling highlighted the
  following general points related to improved survivability which can be related to multiple
  fish species; fish not being hooked in critical body areas, use of circle hooks rather than
  J-hooks, use of barbless hooks, active fishing and thus setting the hook quickly prior to
  retrieval, reduced air exposure, reducing handling time, more experienced anglers, cutting
  deep hook lines rather than removing the hook, and lower water temperatures
  (Bartholomew and Bohnsack, 2005).
- Circle hooks are more likely to lodge in the fish's mouth and cause less damage than J-hooks which are more likely to reach the gut. Even in the event that the bait is swallowed, circle hooks are less likely to do damage until the eye of the hook clears the mouth, they are usually easy to remove involving reduced handling time and thus reduced stress on the fish (Bartholomew and Bohnsack, 2005).
- The pattern of deep hooking and shallow hooking in relation to circle and J-hooks in a study of black seabream on the Dorset coast indicated that a change in behaviour to using circle hooks could limit deep-hooked black seabream and thus reduce post-release mortality (Pinder et al., 2016).
- Barbed hooks are consistently associated with a high CPUE, most likely due to the ability
  to remain secure within the fish and therefore, reducing the likelihood of loss of catch
  (Huehn and Arlinghaus, 2011; DuBois and Dubielzig, 2024; Shaeffer and Hoffman, 2022).
  A 22% increase in CPUE was seen when using barbed hooks, opposed to barbless
  alternatives in an angling fisher in St. Petersburg, Florida (Schaeffer and Hoffman, 2022).
- However, increase retention of fish has also raised concerns over fish welfare. Barbed hooks have been seen to significantly increase dehooking time and risk of tissue tearing, therefore leading to higher rates of anoxia and post-release mortality of different fish species (Cooke et al. 1a, 2022; Cooke et al 1b, 2022; Cowx, et al. 2017; Meka, 2004). The use of barbed hooks have been found to increase tissue tears up to 65%, reflex impairment increase mortality by 24%, increase dehooking times and increase reflex impairment (Cooke et al. 1a, 2022; Cooke et al. 1b, 2022).
- Barbed J hooks displayed the highest injury rates, due to increased dehooking and handling time, in a rainbow trout fishery in the Alagnak River, Alaska. The study emphasized the requirement for proper angler education to improve fish welfare in catch and release fisheries (Meka, 2004).
- Barbless hooks are generally favoured for reducing handling time and minimising tissue damage, thus improving post-release survival (Casselman, 2005; Cowx et al., 2017; Diggles and Ernst, 1997), however, some concerns remain that the absence of a barb may allow the hook to lodge deeper or move within the fish, therefore potentially increasing risk of injury (Cowx et al., 2017). Beyond biological considerations, the barbed vs. barbless hook debate has also been referred to as a social issue, particular referring to the impact of gear restrictions have impacted anglers (Schill & Scarpella, 1997).
- The use of barbless hooks is recommended, and in some cases, mandated in several fisheries worldwide, including regions in the United States and river systems within south west England, due to their benefits in reducing injury and facilitating quicker release (Cowx et al., 2017).
- Mixed conclusions have been drawn from investigations into hooks size on fish injury and catch efficiency, with some research stating hooks size is the sot important predictor of deep hooking, with larger hooks limiting risk (Alos et al., 2008), while others suggest that

- larger hooks increase risk of tissue tearing, bleeding and the potential for visual impairment of individual species (Mapleston et al., 2008).
- For yellowfin bream in Australia, it is identified that anatomical hook location is a major predictor of mortality, with fewer than 4% of mouth or jaw hooked fish suffering mortality compared to more than 45% of fish which ingest hooks (Broadhurst et al., 2007). In addition, the removal of ingested hooks resulted in 88% mortality compared to 0% when hook-ingested fish were released with the line cut (Broadhurst et al., 2007). The cutting of lines rather than removal of hooks has also been noted as improving survivability for black seabream in Portugal (Viega et al., 2011) and southern black bream in Australia (Grixti et al., 2008).
- For smallmouth bass, it was found that mortality was associated with the site and depth of hook penetration, with an 11% mortality for fish caught on live bait and swallowing the hook compared to 0% for fish caught with artificial lures and hooked in the mouth (Chopin et al., 1995).
- It is noted that anglers in recreational fisheries tend to apply larger or greater amounts of bait as the hook size increases. The risk of deep-hooking can be decreased significantly as the hook and bait size increases, however if a fish is deep-hooked with a larger hook the likelihood of significant injury is greater (Grixti et al., 2007).
- Studies indicate that the impact of gear type and hook size on both fish welfare and catch
  efficiency is highly dependent on species-specific factors, including fishing method,
  feeding behaviour, and mouth morphology.
- Employing methods related to hook size, bait and fishing with a tight line may only come through voluntary measures, given that most fisheries are mixed species and require different gears and techniques as well as variations in angler experience (Grixti et al., 2007).

### **Handling and Fishing Practice**

- Analyses of multiple sources indicated that angler education on proper catch and release techniques could reduce mortality. Practices to encourage included: fishing actively and setting a hook as soon as possible, avoiding playing a fish for long periods of time, the use of de-hooking tools, leaving a fish in the water when removing hooks, avoiding touching the gills and the soft underbelly of the fish and leaving hooks in deep-hooked fish (Bartholomew and Bohnsack, 2005).
- For angling, gear choices, for example gear with extends fight duration can influence the physiological stress experienced by a fish (Cooke et al., 2013).
- In a study looking at the mortality of fish released from trawls and seines, it was noted that the mortalities of 16% and 17% respectively were reduced to around 1% with improved handling practices (Chopin et al, 1995).
- When handling fish, it is recommended that anglers avoid touching the gills to reduce the risk of breaking the gill arches (Grixti et al., 2008).
- A fundamental element to catch and release is the ability to inform anglers on how they can minimise impacts to ensure that recovery is as rapid as possible (Cooke et al., 2013).

#### **Maximum landing size**

 The establishment of a maximum landing size could be beneficial in lowering the fishing mortality of larger individuals particularly for species which exhibit sex change behaviours (Lloret et al., 2012).

#### **Other Management Measures**

- Size and bag limit related management measures will be most effective when the level of post-release survival is high. Techniques and fishing gears which increase survival rates need to be prioritised in fisheries using these management strategies (Grixti et al, 2007).
- It is noted that management measures designed to promote the survivability of larger individuals are only likely to be successful if the level of release mortality can be understood and limited (Bartholomew and Bohnsack, 2005).

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Designated

Sites:
<a href="https://designatedsites.naturalengland.org.uk/Marine/Seasonality.aspx?SiteCode=UKMCZ00">https://designatedsites.naturalengland.org.uk/Marine/Seasonality.aspx?SiteCode=UKMCZ00</a>
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## Annex 1: Commercial fishing data from Southern IFCA District, Dorset Specific Ports from MMO Landings Data

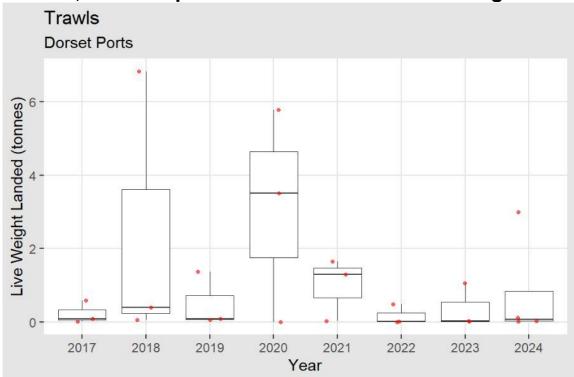


Figure A1: Quantity (tonnes) of black seabream landed by commercial trawls for 2017-2024 into Dorset ports within the Southern IFCA District Data was obtained from the Marine Management Organisation.

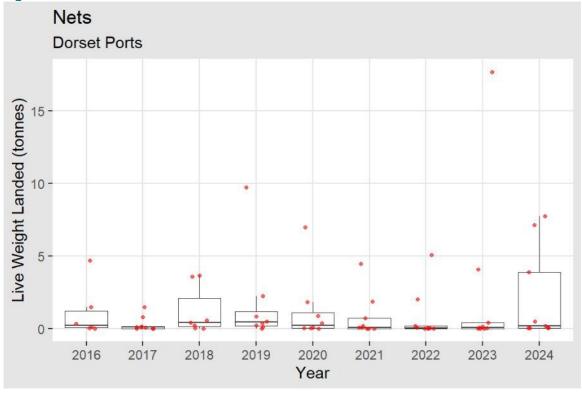


Figure A2: Quantity (tonnes) of black seabream landed by commercial net fishing vessels for 2016-2024 into Dorset ports within the Southern IFCA District. Data was obtained from the Marine Management Organisation.

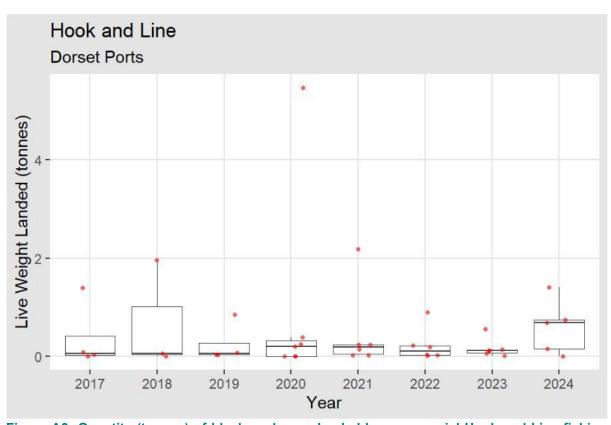


Figure A3: Quantity (tonnes) of black seabream landed by commercial Hook and Line fishing vessels for 2017-2024 into all Dorset ports within the Southern IFCA. Data was obtained from the Marine Management Organisation.

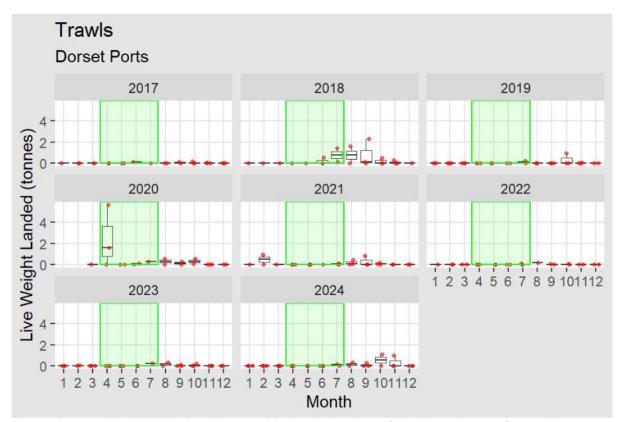


Figure A4: graphs highlighting the monthly landings data of black sea bream from 2017 – 2024 for commercial trawlers from within Dorset Ports. Green boxes highlight the breeding season determined by literature. recorded for each year based on landings data.

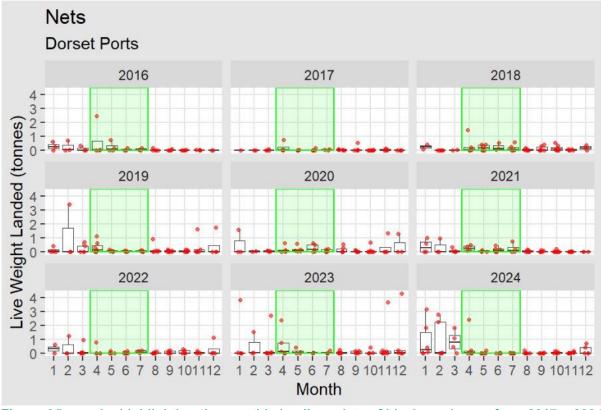


Figure A5: graphs highlighting the monthly landings data of black sea bream from 2017 – 2024 for commercial Net fishing from within Dorset Ports. Green boxes highlight the breeding season determined by literature. recorded for each year based on landings data.

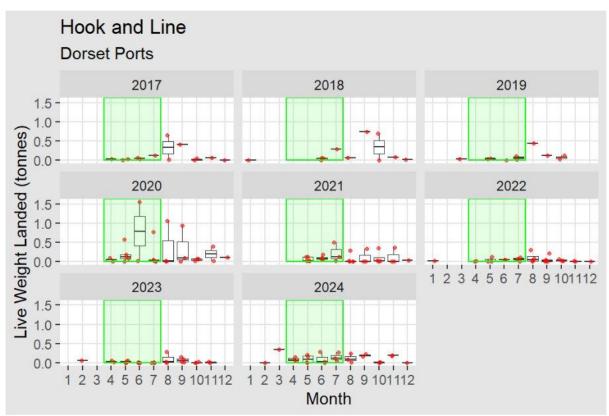


Figure A5: graphs highlighting the monthly landings data of black sea bream from 2017 – 2024 for commercial Hook and Line fishing from within Dorset Ports. Green boxes highlight the breeding season determined by literature. recorded for each year based on landings data.

## Annex 2: Data provided to Southern IFCA in 2014 from records held by the Angling Trust

This data is reproduced from the 2014 Southern IFCA Black Bream Status Report (Southern IFCA, 2014).

Table A1. The 'Black Bream Competition' records caught by anglers in Hampshire, between 2009 and 2013 (data provided by the Angling Trust).

Year	No. of Entrants	No. of Fish Weighed-in	Top Weight (kg)	Average Weight (kg)
2009	38	36	1.79	1.13
2010	27	34	1.56	1.16
2011	36	32	1.67	1.02
2012	14	10	1.96	1.05
2013	27	17	1.19	0.88

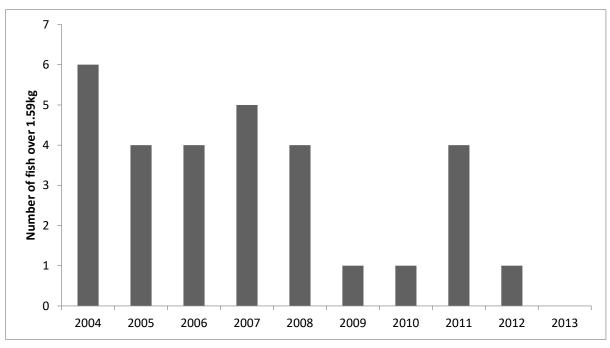


Figure A5. The number of black bream caught by anglers at the Eastney Cruising Association between 2004 and 2013 over 1.59kg (data provided by the Angling Trust)

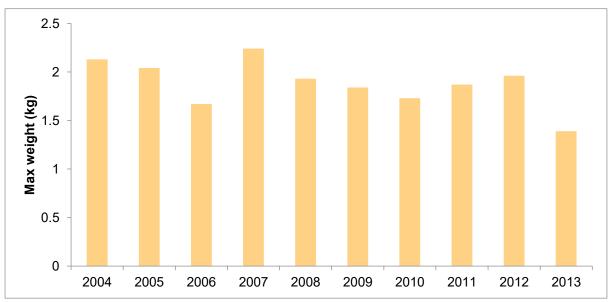


Figure A6: The 'fish of the month' maximum weight (kg) records caught by anglers at the Eastney Cruising Association between 2004 and 2013 for black seabream (data provided by the Angling Trust)

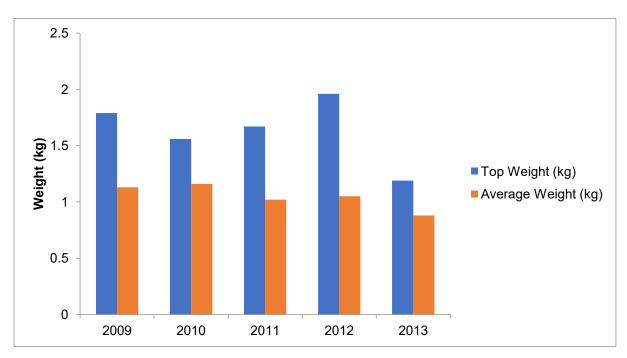


Figure A7: The 'Black Bream Competition' weight (kg) records caught by anglers in Hampshire between 2009 and 2013 for black seabream (data provided by the Angling Trust)

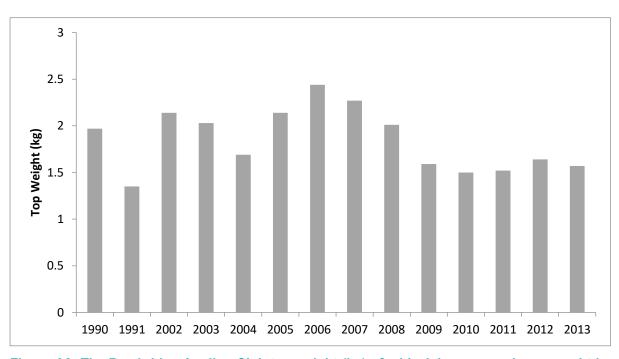


Figure A8: The Bembridge Angling Club top weight (kg) of a black bream specimen caught by anglers between 1990-1991 and 2002-2013 (data provided by the Angling Trust)



## Southern Inshore Fisheries and Conservation Authority

# Black Seabream Site Specific Evidence Packages

Supporting Document for the Black Seabream Management Package

## Contents

SITE S	PECIFIC EVIDENCE	3
1. Pu	urbeck Coast MCZ	3
1.1	General Description	3
1.2	MCZ feature under assessment	3
1.3	Evidence of black seabream using Purbeck Coast MCZ	3
1.3	3.1 Seasonality	6
1.4	Fishing effort data – rod & line, net fishing, pot fishing	7
1.5	Fishing effort data – Southern IFCA data collection program for rod a	
1.6	Fishing effort data – bottom towed fishing gear	10
2. Po	pole Rocks MCZ	10
2.1	General Description	10
2.2	MCZ feature under assessment	11
2.3	Evidence of black seabream using Poole Rocks MCZ	11
2.3	3.1 Seasonality	13
2.4	Fishing effort – rod & line, net fishing, pot fishing	14
2.5	Fishing effort data – Southern IFCA data collection program for rod a	
2.6	Fishing effort data – bottom towed fishing gear	16
3. Sc	outhbourne Rough MCZ	16
3.1	General Description	16
3.2	MCZ feature under assessment	17
3.3	Evidence of black seabream using Poole Rocks MCZ	17
3.	3.1 Seasonality	18
3.4	Fishing effort – rod & line, net fishing, pot fishing	19
3.5	Fishing effort data – Southern IFCA data collection program for rod a	
3.6	Fishing effort data – bottom towed fishing gear	21

# SITE SPECIFIC EVIDENCE

This document provides site specific evidence for each of the three Marine Conservation Zones (MCZs), including feature location & extent, levels of fishing activity and additional data sources on landings, which has been used as one source of best available evidence to inform the MCZ Assessment for each site for each relevant fishing activity. This document should be read in conjunction with the Black Seabream Marine Conservation Zone Assessment Package.

# 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 282km² 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.

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 best available evidence used to inform this document is the evidence package provided in 2023. 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 1.3 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 Evidence of black seabream using Purbeck Coast MCZ

Figure 2 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<sup>2</sup>.

Figure 3 displays the outcome of a 2022 Natural England project<sup>3</sup> 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 remote sensing data, still images, videos

<sup>&</sup>lt;sup>1</sup> Defra, 2019. Purbeck Coast Marine Conservation Zone - <u>Purbeck Coast Marine Conservation Zone factsheet</u> (<u>publishing.service.gov.uk</u>)

<sup>&</sup>lt;sup>2</sup> Sperry, J. (2021). Black Bream Side-scan survey – Purbeck Coast, 2021. Cefas Project Report for Natural England

<sup>&</sup>lt;sup>3</sup> Doggétt, M. & Báldock, L. 2022. Present knowledge of black bream (Spondyliosoma cantharus) nesting grounds in the English Channel and beyond. A report to Natural England.

and written and verbal descriptions of field observations, the data includes side scan sonar survey data provided by Southern IFCA from a 2016 survey conducted in the area of

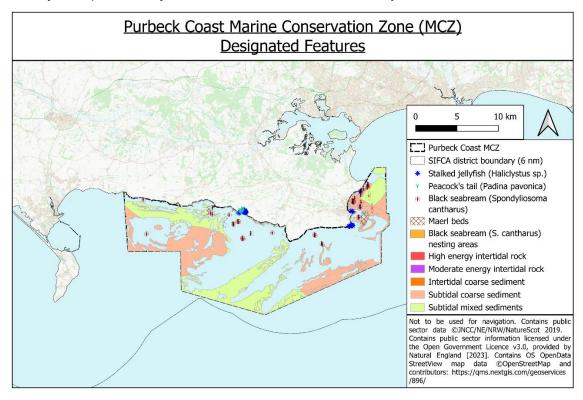
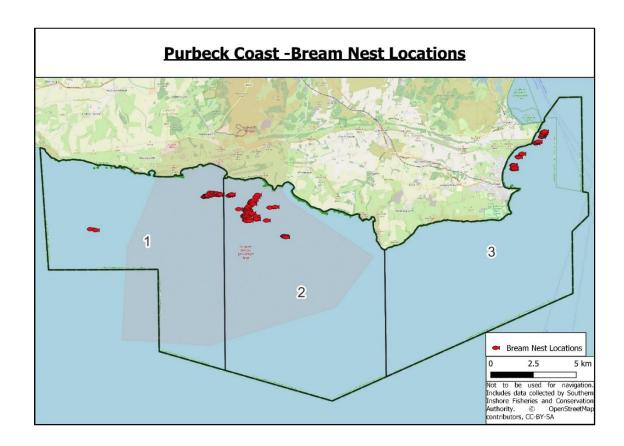


Figure 1. The Purbeck Coast MCZ with location and extent of designated features from the Natural England evidence base provided in 2023.



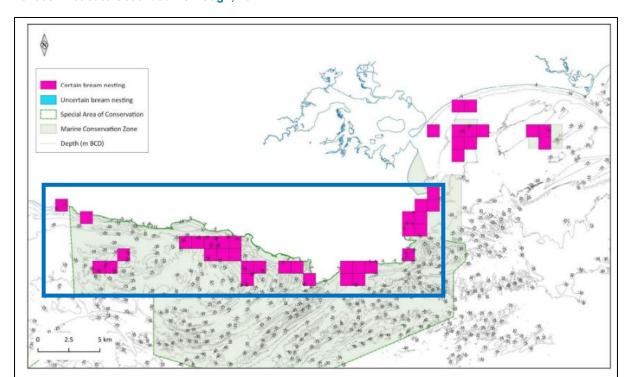


Figure 2. Black Seabream nesting locations as reported in the Cefas Black Seabream Side-scan Survey - Purbeck Coast to Southbourne Rough, 2021<sup>2</sup>.

Figure 3. "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<sup>3</sup> report detailing the known bream nesting locations on the Dorset Coast. The blue box highlights the data around the Purbeck Coast MCZ.

Chapman's Pool. The resulting indication of nest site presence was compiled using GIS shapefiles, point data and broadscale area descriptions.

The data was assigned to a 1km<sup>2</sup> grid system, where data indicating nest presence overlapped with a grid square, the square was shaded (see Figure 3). For each shaded grid square, one or more nest sites could fall anywhere within the square.

This method was used to account for annual variation in nest location within suitable areas and to reduce the risk to breeding populations by accidental overlap with nests which may be increased if a precision chart of bream nesting areas was used that accounted for exact nest presence over only a short time frame<sup>6</sup>.

Confidence levels in the location of Black seabream nests were defined by the Natural England project using an assessment matrix for nest presence and nest site extent as described below. Figure 3 refers to areas of certain and uncertain bream nesting sites, with the confidence levels referring to confidence in the data sources used to inform the project. A full description of the data confidence process used is given in section 2.2 of the Natural England project report.

# **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<sup>4</sup>

# 1.3.1 Seasonality

The Purbeck Coast MCZ Factsheet developed by Defra in 2019<sup>5</sup> 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<sup>6</sup> for the site includes advice on seasonality for Black seabream. A seasonality table (Table 1) is provided which illustrates the advice provided in green, stated on the Natural England designated sites view to represent "the months in which significant numbers of each mobile designated feature are most likely to be present at the site during a typical calendar year. Months with significant numbers were highlighted on the basis of generic information on seasonal patterns of occurrence in published sources or from additional site specific surveys". The advice also states that any assessment of potential impacts on the features must be based on up-to-date data and take account of population trends evident from the data provided and any other available information.

A further table (Table 2) is provided to represent information on seasonality gathered from peer-reviewed literature for the south coast of England combined with specific studies which included the Purbeck Coast MCZ. The full details of the relevant studies are included in the **Black Seabream Literature Review**.

Table 1: Seasonality advice for Black seabream in the Purbeck Coast MCZ provided through Natural England Conservation Advice.

J	F	М	Α	М	J	J	Α	S	0	Ν	D

Table 2: Seasonality evidence for Black seabream in the Purbeck Coast MCZ based on peer-reviewed literature included in the Literature Review.

J	F	М	Α	М	J	J	Α	S	0	N	D

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> Defra, 2019. Purbeck Coast Marine Conservation Zone - <u>Purbeck Coast Marine Conservation Zone factsheet</u> (publishing.service.gov.uk)

<sup>&</sup>lt;sup>6</sup> Natural England Conservation Advice for Marine Protected Areas: Purbeck Coast MCZ

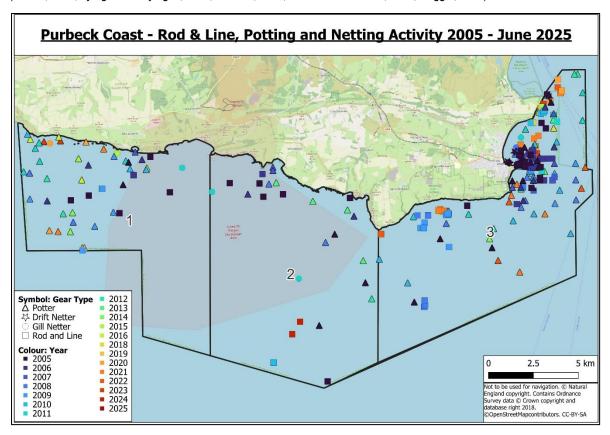


Figure 4. Rod and Line, Net fishing and Pot fishing activity recorded by Southern IFCA in the Purbeck Coast MCZ between 2005 and June 2025.

# 1.4 Fishing effort data – rod & line, net fishing, pot fishing

Figure 4 displays data on occurrence of different fishing gear types within the Purbeck Coast MCZ as recorded by Southern IFCA between 2005 and June 2025. The site has been split into three distinct areas to accommodate analysis of fishing activity patterns.

The yearly contributions of each fishing method to SIFCA fishing vessel sightings<sup>7</sup> are summarised in Figure 5. Areas 1 and 2 have been predominantly subject to pot fishing activity at low levels 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 2009 (18), the overall level remaining low when considered over a year period. Combined sightings for all gear types in recent years (2020-2025) have remained below 10 with the exception of Area 3 in 2021(16). Levels of drift netting and gill netting are very low with drift netting not been seen to occur in the site since 2005 and the last sighting of gill netting being in Area 1 in 2020.

In Figure 6, sightings data has been combined for all years (2005-2025) 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, at the maximum this relates to less than 40 sightings in Area 3 and less than 5 in Area 1.

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

<sup>&</sup>lt;sup>7</sup> 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 but provides a good indication of overall patterns and location of fishing effort.

December and March. 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 Areas 1 nor 2 have shown any 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 Area 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.

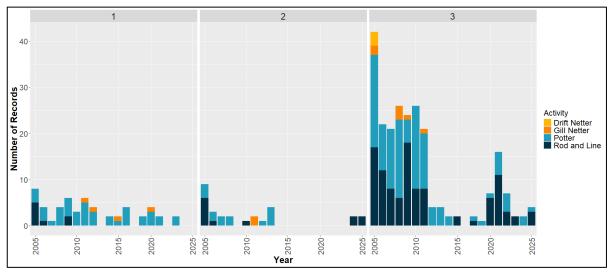


Figure 5. Sightings of fishing activity between 2005 and June 2025 in each of the three sub-areas of the Purbeck Coast MCZ separated by fishing method.

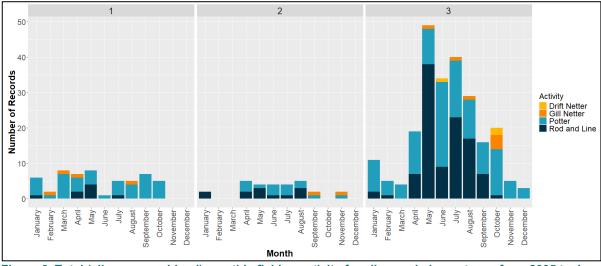


Figure 6. Total (all years combined) monthly fishing activity for all recorded gear types from 2005 to June 2025 in sub-areas 1: Area 1, 2: Area 2, and 3: Area 3 of the Purbeck Coast MCZ.

# 1.5 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 black 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 7 and Table 3.

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 7 displays a peak CPUE at the end of May (7). The three days during the survey period with more than one data point (2<sup>nd</sup> May 2021, 31<sup>st</sup> May 2021 and 16<sup>th</sup> 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%). It must be noted that this data represents 2021 and 2022 only and angling practices may have changed and evolved in the period up to the present day.

Table 3. 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.

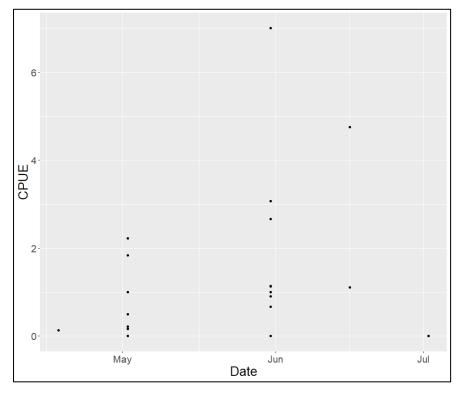


Figure 7. Trends in Catch Per Unit Effort (CPUE) of black seabream in the Purbeck Coast MCZ during the nesting season (data was collected in 2021 and 2022 with both years combined in this figure).

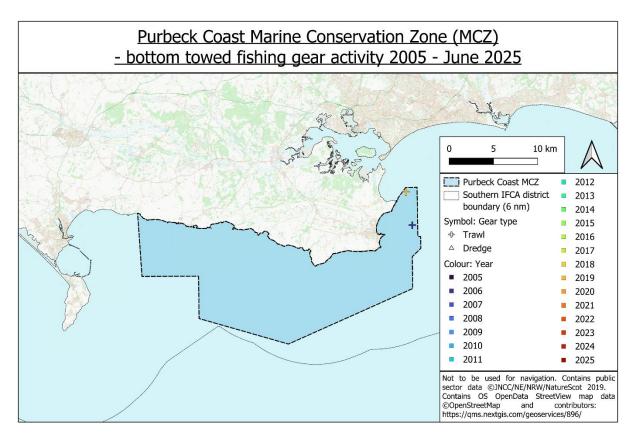


Figure 8. Bottom Towed Fishing Gear activity recorded by Southern IFCA in the Purbeck Coast MCZ between 2005 and June 2025.

# 1.6 Fishing effort data – bottom towed fishing gear

Sightings of bottom towed fishing gear between 2005 and June 2025 are shown in Figure 8. Activity is limited to trawling only and since 2016 has occurred outside of the area closed under the Bottom Towed Fishing Gear Byelaw 2016 (closed area in place due to Studland to Portland Special Area of Conservation), and since 2023 outside the area closed under the Bottom Towed Fishing Gear Byelaw 2023.

# 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 3.73km², 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)<sup>8,9</sup>.

Figure 9 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 best available evidence used to inform this document is the evidence package provided in 2023. 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 2.3 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 Evidence of black seabream using Poole Rocks MCZ

Figure 10 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. It is reported in the survey report that strong winds prior to the survey likely destroyed a quantity of nests within the MCZ boundary.

A 2022 Natural England project to collate existing evidence on the presence and extent of all known black seabream nesting sites in the UK is discussed in Section 1.3. Figure 11 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 1.3.

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<sup>10</sup>.

<sup>&</sup>lt;sup>8</sup> Natural England. 2013. Poole Rocks Marine Conservation Zone factsheet v2 - <u>Poole Rocks MCZ Factsheet - MCZ041</u> (naturalengland.org.uk)

<sup>&</sup>lt;sup>9</sup> Defra, 2019. Poole Rocks Marine Conservation Zone - <u>Poole Rocks Marine Conservation Zone factsheet</u> (<u>publishing.service.gov.uk</u>)

<sup>&</sup>lt;sup>10</sup> Sperry, J. (2021). Black Bream Side-scan survey – Purbeck Coast, 2021. Cefas Project Report for Natural England

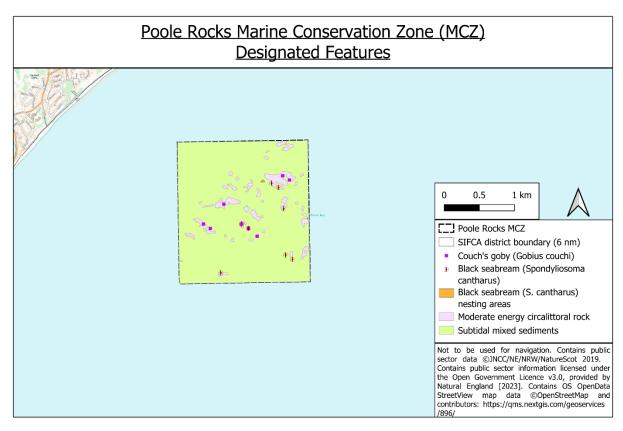


Figure 9. The Poole Rocks MCZ with location and extent of designated features from the Natural England evidence base provided in 2023.

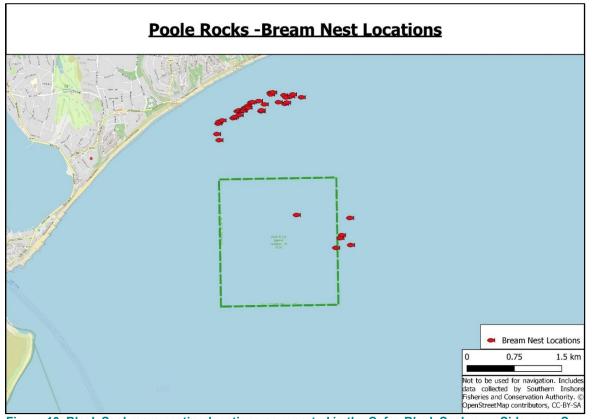


Figure 10. Black Seabream nesting locations as reported in the Cefas Black Seabream Side-scan Survey - Purbeck Coast to Southbourne Rough, 2021<sup>2</sup>.

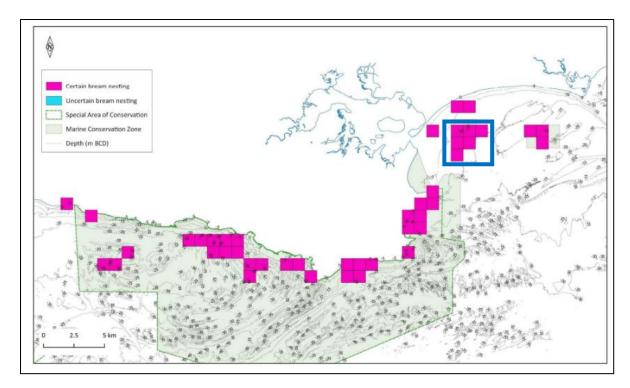


Figure 11. "Detailed distribution of known black bream nesting locations along the Dorset Coast. Contains OS data Crown copyright and database right 2021. Contains public sector information, licences under the Open Government Licence v3.0, from the Maritime and the Channel Coastal Observatory. Not to be used for navigation." – A figure taken from a Natural England Commissioned report detailing the known bream nesting locations on the Dorset Coast. The blue box highlights the area around the Poole Rocks MCZ.

# 2.3.1 Seasonality

The Poole Rocks MCZ Factsheet developed by Defra in 2019<sup>11</sup> 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<sup>12</sup> for the site includes advice on seasonality for Black seabream (Table 4). For details of how this advice is formulated see Section 1.3.1.

A further table (Table 5) is provided to represent information on seasonality gathered from peer-reviewed literature for the south coast of England combined with specific studies which included the Poole Rocks MCZ. The full details of the relevant studies are included in the **Black Seabream Literature Review.** 

Table 4: Seasonality advice for Black seabream in the Poole Rocks MCZ provided through Natural England Conservation Advice.

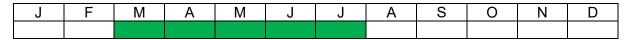


Table 5: Seasonality evidence for Black seabream in the Poole Rocks MCZ based on peer-reviewed literature included in the Literature Review.

J	F	М	Α	М	J	J	Α	S	0	N	D

(Wilson, 1958; Lythgoe and Lythgoe, 1971; Pawson, 1995; Collins and Mallison, 2012; Dogget, 2018)

<sup>&</sup>lt;sup>11</sup> Defra, 2019. Poole Rocks Marine Conservation Zone - <u>Poole Rocks Marine Conservation Zone factsheet</u> (publishing service gov.uk)

<sup>(</sup>publishing.service.gov.uk)

12 Natural England Conservation Advice for Marine Protected Areas: Poole Rocks MCZ

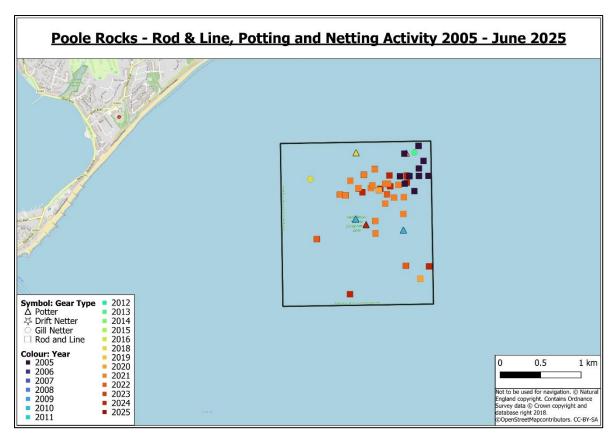


Figure 12. Rod and Line, Net fishing and Pot fishing activity recorded by Southern IFCA in the Poole Rocks MCZ between 2005 and June 2025.

# 2.4 Fishing effort - rod & line, net fishing, pot fishing

Figure 12 displays data on occurrence of different fishing gear types within the Poole Rocks MCZ as recorded by Southern IFCA between 2005 and June 2025. Activity is predominantly rod and line with yearly contributions of each fishing method to the sightings data summarised in Figure 13. Activity in the Poole Rocks MCZ displays a clear peak of rod and line fishing in 2021.

In Figure 14, sightings data has been combined for all years (2005-2025) and then the occurrence of each activity has been analysed by month. Rod and line fishing activity peaks from April to June (maximum number for a single month is below 30, commonly below 10) however netting and potting display no distinct trends and remain at low levels throughout the year. Overall sightings of net fishing and pot fishing are low for all years where data is available.

There is no observed drift netting activity taking place within the site. Occurences of gill net fishing activity are low and not consistent between years. At a monthly level, when gill net fishing is observed to occur it is focused in January, February and November.

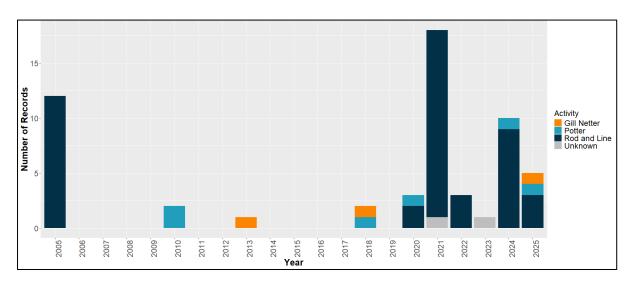


Figure 13. Sightings of fishing activity between 2005 and June 2025 in Poole Rocks MCZ separated by fishing method.

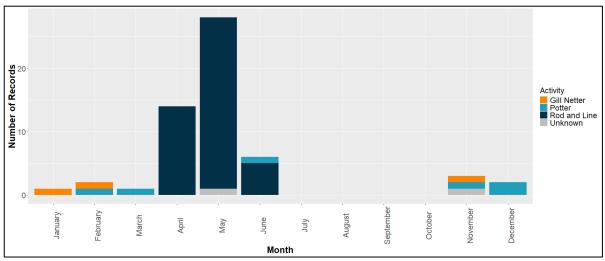


Figure 14. Total (all years combined) monthly fishing activity for all recorded gear types from 2005 to June 2025 in Poole Rocks MCZ.

# 2.5 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 program detailed in Section 1.5 are summarised in Figure 15 and Table 6.

The highest CPUE occurred on the 31<sup>st</sup> 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 2<sup>nd</sup> 2021, and May 31<sup>st</sup> 2021 with mean CPUE values of 0.93 and 0.83 respectively with the outlying point removed. In addition, black 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 6 displays the percentage of bream caught that were retained during the survey in the Poole Rocks MCZ (15.4%). It must be noted that this data represents 2021 and 2022 only and angling practices may have changed and evolved in the period up to the present day.

Table 6. Data summary from the Southern IFCA black seabream nesting period survey for Poole Rocks MCZ.

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

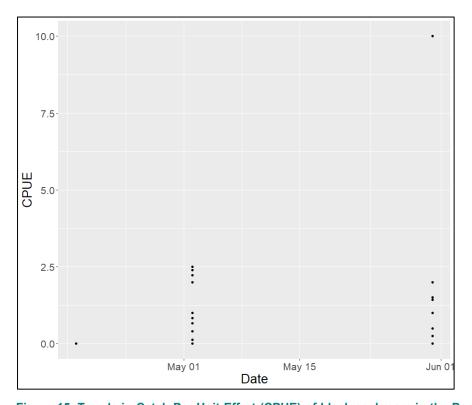


Figure 15. Trends in Catch Per Unit Effort (CPUE) of black seabream in the Poole Rocks MCZ during the nesting season (data was collected in 2021 and 2022 with both years combined in this figure).

# 2.6 Fishing effort data – bottom towed fishing gear

There are no sightings data of bottom towed fishing gear activity within the Poole Rocks MCZ as the activity has been prohibited from the entirety of the site since 2013.

# 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 5km². The site protects the mobile species Black seabream (*Spondyliosoma cantharus*) during the nesting stage of their lifecycle<sup>13</sup>.

<sup>&</sup>lt;sup>13</sup> Defra, 2019. Southbourne Rough Marine Conservation Zone - <u>Southbourne Rough Marine Conservation Zone factsheet</u> (publishing.service.gov.uk)

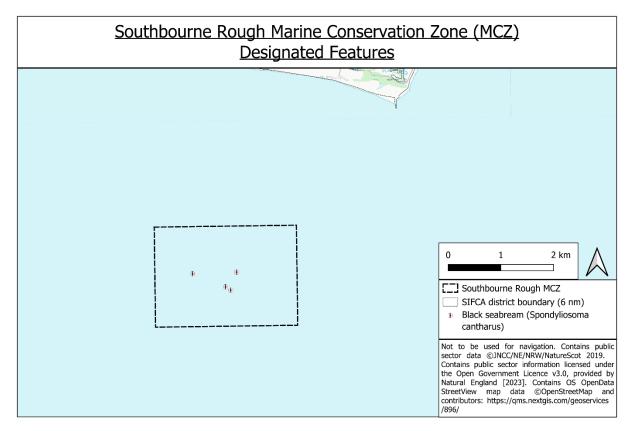


Figure 16. The Poole Rocks MCZ with location and extent of designated features from the Natural England evidence base provided in 2023.

Figure 16 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 best available evidence used to inform this document is the evidence package provided in 2023. 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 3.3 for details of the evidence base.

# 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 Evidence of black seabream using Poole Rocks MCZ

A 2022 Natural England project to collate existing evidence on the presence and extent of all known black seabream nesting sites in the UK is discussed in Section 1.3. Figure 17 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 1.3. Overall, there is high confidence in the presence of Black Seabream nesting sites Southbourne Rough<sup>14</sup>. Note that there is no data from the side scan sonar survey carried out by CEFAS and submitted to Natural England in 2021 for Southbourne Rough MCZ.

<sup>&</sup>lt;sup>14</sup> Doggett, M. & Baldock, L. 2022. Present knowledge of black bream (Spondyliosoma cantharus) nesting grounds in the English Channel and beyond. A report to Natural

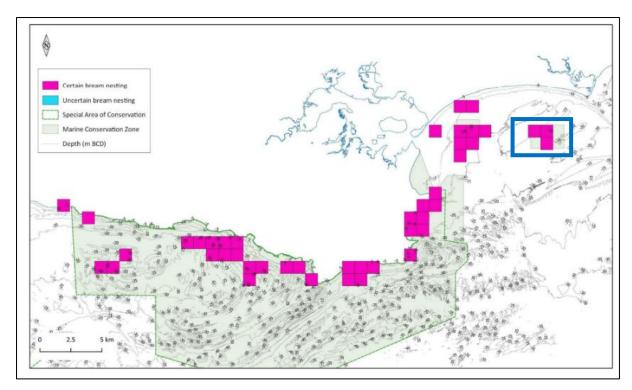


Figure 172. "Detailed distribution of known black bream nesting locations along the Dorset Coast. Contains OS data Crown copyright and database right 2021. Contains public sector information, licences under the Open Government Licence v3.0, from the Maritime and the Channel Coastal Observatory. Not to be used for navigation." – A figure taken from a Natural England Commissioned<sup>18</sup> report detailing the known bream nesting locations on the Dorset Coast. The blue box highlights the data for Southbourne Rough MCZ.

# 3.3.1 Seasonality

The Southbourne Rough MCZ Factsheet developed by Defra in 2019<sup>15</sup> 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<sup>16</sup> for the site includes advice on seasonality for Black seabream (Table 7). For details of how this advice is formulated see Section 1.3.1.

A further table (Table 8) is provided to represent information on seasonality gathered from peer-reviewed literature for the south coast of England combined with specific studies which included the Southbourne Rough MCZ. The full details of the relevant studies are included in the **Black Seabream Literature Review.** 

Table 7: Seasonality advice for Black seabream in the Southbourne Rough MCZ provided through Natural England Conservation Advice.

J	F	M	Α	M	J	J	Α	S	0	N	D

<sup>&</sup>lt;sup>15</sup> Defra, 2019. Southbourne Rough Marine Conservation Zone - <u>Southbourne Rough Marine Conservation Zone</u> factsheet (publishing.service.gov.uk)

<sup>&</sup>lt;sup>16</sup> Natural England Conservation Advice for Marine Protected Areas: Southbourne Rough MCZ

Table 8: Seasonality evidence for Black seabream in the Southbourne Rough MCZ based on peer-reviewed literature included in the Literature Review.

J	F	М	Α	М	J	J	Α	S	0	N	D

(Wilson, 1958; Lythgoe and Lythgoe, 1971; Pawson, 1995; Collins and Mallison, 2012; Dogget, 2018)

# 3.4 Fishing effort – rod & line, net fishing, pot fishing

Figure 18 displays data on occurrence of different fishing gear types within the Southbourne Rough MCZ between 2005 and June 2025. 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 19. Fishing activity appears to peak in 2021.

In Figure 20, sightings data has been combined for all years (2005-2025) and then the occurrence of each activity has been analysed by month. Rod and line fishing activity peaks in May (20 occurences) but otherwise is at a low level (below 5 sightings per month), however, netting and potting display no distinct trends througout the year and remain at low levels both between years and by monthly analysis.

There is no observed drift netting activity taking place within the site. Occurences of gill net fishing activity, although increased from 2023-2025 onwards remain low with less than 2.5 sightings in a year. At a monthly level, when gill net fishing is observed to occur it is focused in January, April and December.

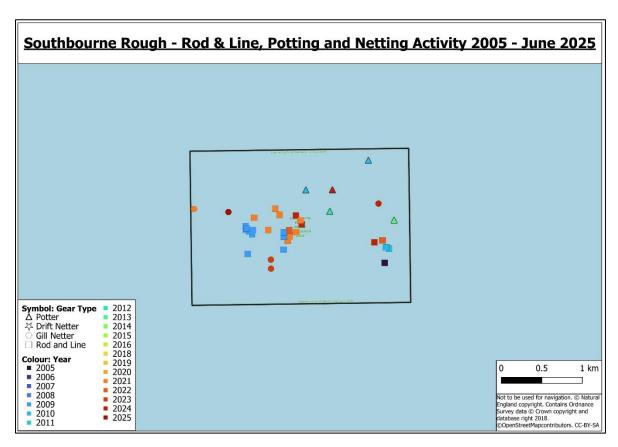


Figure 18. Rod and Line, Net fishing and Pot fishing activity recorded by Southern IFCA in the Southbourne Rough MCZ between 2005 and June 2025.

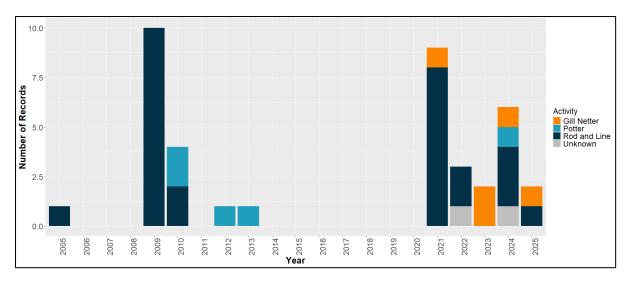


Figure 19. Sightings of fishing activity between 2005 and June 2025 in the Southbourne Rough MCZ separated by fishing method.

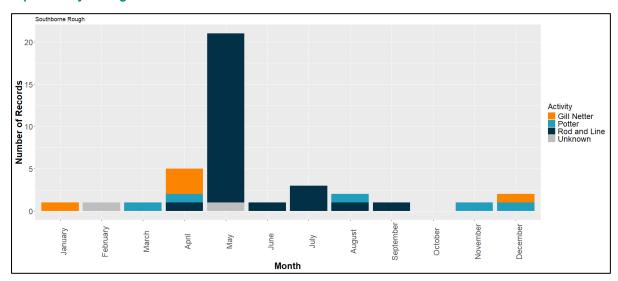


Figure 20. Total (all years combined) monthly fishing activity for all recorded gear types from 2005 to June 2025 in the Southbourne Rough MCZ.

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

Data for the Southbourne Rough MCZ from the Southern IFCA data collection program detailed in Section 1.5 are summarised in Figure 21 and Table 9.

The highest CPUE occurred on the 2<sup>nd</sup> July 2021 (2.78). The three days surveyed with more than 1 data point were May 2<sup>nd</sup> 2021, May 31<sup>st</sup> 2021 and July 2<sup>nd</sup> 2021 with mean CPUE values of 0.41, 1.15 and 1.43. In addition, black 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 9 displays the percentage of seabream caught that were retained during the survey in the Southbourne Rough MCZ (21.5%). It must be noted that this data represents 2021 and 2022 only and angling practices may have changed and evolved in the period up to the present day.

Table 9. Data summary from the Southern IFCA black seabream nesting period survey for Southbourne Rough MCZ.

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

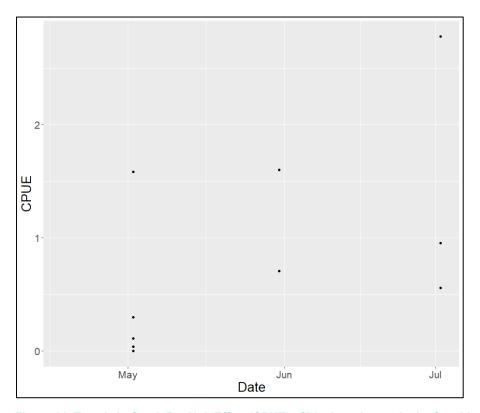


Figure 21. Trends in Catch Per Unit Effort (CPUE) of black seabream in the Southbourne Rough MCZ during the nesting season (data was collected in 2021 and 2022 with both years combined in this figure).

<u>3.6</u> Fishing effort data – bottom towed fishing gear Sightings of bottom towed fishing gear between 2005 and June 2025 are shown in Figure 22. Activity is limited to trawling only.

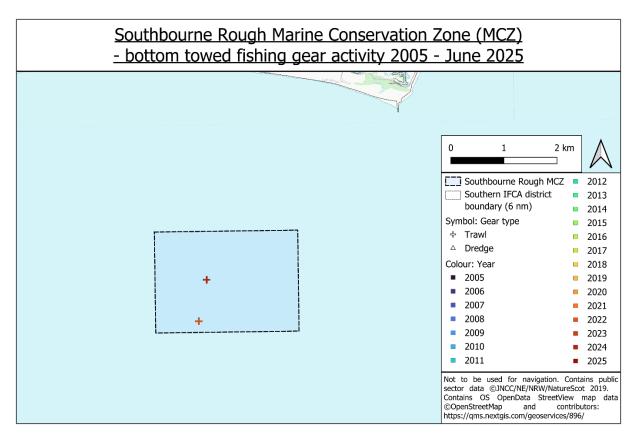


Figure 22. Bottom Towed Fishing Gear activity recorded by Southern IFCA in the Southbourne Rough MCZ between 2005 and June 2025.



# **EXECUTIVE SUMMARY**



# Black Seabream: Satisfying 154 Duties: Primary Policy Objective Decision Paper

Report by the CEO & DCO Birchenough

# A. Purpose

For Members to consider whether the Authority are satisfying their duties under Section 154 of the MaCAA in relation to Black Seabream (BSB), namely the furthering of the Conservation Objectives (COs) across the 3 Dorset Marine Conservation Zones (MCZs).

# B. Recommendation

1. That, in combination, existing statutory spatial and technical measures applicable across the 3 Dorset MCZs are collectively 'furthering' the Conservation Objectives of the sites.

# C. Annexes

- 1. Black Seabream Marine Conservation Zone Assessment Package
- Natural England Response Letter to request for Formal Advice, seeking further information (dated: 10<sup>th</sup> Nov 2025)
- 3. Southern IFCA Response Letter to NE (dated: 20th Nov 2025)

# 1.0 Background

Under Section 154(1) of the Marine & Coastal Access Act (MaCAA), Southern IFCA must '...seek to ensure that the conservation objectives of any MCZ in the District are furthered...', with Section 154(2) requiring that '...nothing in Section 153(2) is to affect the performance of the duty...'.

The **Primary Policy Objective** for BSB Management is set in the context of MaCAA 154, to manage BSB as a designated feature of MCZs, by furthering the COs from a baseline position of no management via quantification of existing management measures.

# 2.0 Satisfying 154 Duties via the ongoing application of existing statutory measures

The MCZ Assessments conclude that appropriate mitigative measures are already in place via a combination of spatial and technical statutory mechanisms, which are collectively furthering the COs relevant to BSB across three Dorset MCZs.

This is primarily being achieved via the **elimination of BTFG** activity across the entirety of Poole Rocks MCZ (whole site) and Southbourne Rough MCZ (whole site) and via a BTFG spatial closure across 93%<sup>1</sup> of the Purbeck MCZ, thus removing the highest risk fishing activity almost in its entirety across the three Dorset MCZs.

Additionally, the furthering of the COs is being achieved via **enforcement of a MCRS for BSB** at a District wide level, applicable to all commercial and recreational users, which is also applicable to the wider supply chain.

Furthermore, **spatial restrictions via an exclusion zone** in the Purbeck MCZ, which equates to quantifiable closures for c.32% of the time (during the relevant season), across c.33% of the MCZ (which can be extended to c.54%), as enforced by the Ministry of Defence (MOD), are further enhancing protections to BSB in the Purbeck MCZ across the entirety of gear types (commercial and recreational) via closures applicable to all users.

Collectively, the Southern IFCA statutory measures (as well as those enforced by the MOD) are already providing protection to BSB beyond the three MCZ's collective footprint, at a temporal scale beyond that of the breeding season. As such, these statutory measures are providing protection to BSB nesting sites and populations at a level which exceeds the scope of the Conservation Objectives.

¹ The remainder of the Purbeck Coast MCZ is subject to feature data which has been deemed unreliable in terms of location and/or extent by Natural England and is therefore not suitable as a basis for making management determinations. The feature data does not relate directly to BSB and it has been confirmed by NE through the Part A Assessment process for the BTFG Review Phase I that the area of the MCZ which remains open to BSB poses no risk to BSB as a designated feature.

# **EXECUTIVE SUMMARY**





Therefore, in combination, these measures are furthering the Conservation Objectives for BSB across the Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ and accordingly will not hinder the achievement of the COs, thus satisfying the Primary Policy Objective in accordance with Section 154 duties.

# 3.0 Natural England Formal Advice

- Formal Advice was sought from Natural England (NE) on the Black Seabream Marine Conservation Zone Assessment Package (Annex 1) on 13<sup>th</sup> October 2025.
- **NE sent a response letter to Southern IFCA** on 10<sup>th</sup> November 2025 (Annex 2) providing advice that NE agrees with the approach and conclusions of the BSB Site Activity Screening document and the BSB MCZ Assessments: Part A and that there were no specific comments on the BSB Literature Review or the BSB Site Specific Evidence Packages. NE requested further clarity specifically around (1) the length of the breeding season and (2) matters specific to recreational angling (RA).
- A response letter was provided by Southern IFCA on 20<sup>th</sup> November 2025 (Annex 3).
- A subsequent meeting was held between NE and Southern IFCA on 24<sup>th</sup> November 2025 where NE concluded
  that the existing measures were furthering the COs relevant to BTFG activity (BTFG Byelaw 2023) but would
  welcome a precautionary seasonal spatial closure to supplement the existing mitigations relevant to RA (MCRS
  Byelaw & MOD spatial closures).
- Preceding the meeting, NE provided the following summary position:
  - NE welcomes SIFCA's commitment to assess and manage impacts upon black seabream in the three Dorset MCZs.
  - While we accept that the April-July breeding season was previously agreed as a defining principle by Authority members, it remains our position that the season should be defined as March-July to include pre-spawning aggregation – which is of relevance to the Conservation Objectives.
  - We support SIFCA's prohibition of bottom-towed fishing gear within these sites and agree that this
    measure will further the MCZ Conservation Objectives with respect to protecting spawning habitat and
    avoiding disturbance to individuals from this activity.
  - Regarding the assessment of pressures associated with rod and line angling: we acknowledge that this remains a data-poor area with evidence gaps relating to angling effort, the effects of disturbance, and whether such effects are likely to significantly affect the survival of black seabream or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding.
  - o In such a scenario, it is Natural England's position that a precautionary management approach encompassing seasonal spatial closures would be the most appropriate option with respect to furthering the Conservation Objectives. However, we acknowledge SIFCA's duty under MaCAA 2009 to balance the social and economic benefits of exploiting the sea fisheries resources of the district with the need to protect the marine environment.
  - We support the application of the co-developed principles and acknowledge that in conjunction with SIFCA's existing MCRS Byelaw and the MoD spatial closures in Purbeck Coast MCZ these measures will deliver ecological benefits to black seabream. However, given the existing evidence gaps around angling effort and impact, we are currently unable to agree with SIFCA's conclusion that these measures sufficiently further the Conservation Objectives with respect to this activity.
  - Natural England is committed to improving the collective evidence based for black seabream as an MPA feature and we welcome the opportunity to co-develop a data collection plan alongside other stakeholders to achieve this goal.
  - Finally, we have discussed with SIFCA the possibility of committing to a whole-policy review after 3-5
    years, to ensure this policy remains consistent with best available evidence (including that generated by
    the data collection plan).

#### 4.0 Next Steps

- Communication to all stakeholders who have been involved in the co-development process to date on the
  resolution of the TAC, recognising that there is no requirement to carry out a formal consultation for nonstatutory measures but that the Authority wish to support the continued engagement between the Dorset
  Community and Southern IFCA as part of the co-development process. Subject to the resolution of the TAC at
  this meeting, as part of this communication Southern IFCA will indicate the intention to implement the CoDeveloped Principles for the start of the breeding season in 2026.
- Ongoing education and monitoring of compliance with existing management measures in accordance with Section 1.5 of the Policy Document; Process Document 3 Management Tools, Application & Review.
- To submit the updated final BSB Management Package (to include all communications outlined above) to NE to support the provision of final Formal Advice on the BSB MCZ Assessment Package in early 2026.



# Southern Inshore Fisheries and Conservation Authority

# Black Seabream Marine Conservation Zone Assessment Package

**Supporting Document for Black Seabream Management Package** 

# **Document Control**

Title	Marine Conservation Zone Assessment Package for Black Seabream Management Co-Development
SIFCA Reference	SIFCA/MCZ Assessment Package_Blackseabream
Author(s)	S Birchenough
Approver(s)	The Southern Inshore Fisheries Authority
Correspondence	S Birchenough
Owner	Southern IFCA

# **Revision History**

Date	Author	Version	Status	Reason	Approver(s)
13.10.25	S Birchenough	1.0	Initial draft		P Bateman
24.11.25	S Birchenough	2.0	Updated draft	Following receipt of a request for additional information received from NE on 10.11.25 and subsequent response from Southern IFCA on 20.11.25 additional information has been added to provide clarity on rationale to support the information provided in the Assessment Package. The letter received from NE and Southern IFCA's response are included as Annexes 4 & 5 respectively, information related to specific points of clarity is included in purple text in the relevant section of this document (Section H).	P Bateman

# **Correspondence History**

This document has been distributed for information and comment to:

Organisation	Name	Date Sent	Comments Received
Natural England	Dr R Morgan	13.10.25	Request for additional information received 10.11.25, Southern IFCA response sent 20.11.25.

# Contents

Section	A: Introduction	5
1.0	Primary Policy Objective	5
Section	B: The MCZ Assessment Process	11
1.0	Supporting Documentation	11
2.0	Screening Assessment Outcomes	12
3.0	Part A Assessments	13
3.1	Part A Assessment Outcomes – Demersal Trawl	16
4.0	Gear Risk Assessment	17
Section	C: Management Solutions	19
1.0	Existing Statutory Measures	19
2.0	Existing External Measures	19
3.0	Development of New Statutory Measures	20
Section	D: Part B Assessments	22
Section	E: Part B Assessment Outcomes	28
Section	F: In-Combination Assessment	28
Section	G: Integrity Test	29
Section	H: Secondary Policy Objective	29
Section	I: Conclusion	33
Annex '	1: References	34
Annex 2	2: Gear Risk Assessment	35
Annex 3	3: Part B Assessment Table	39
Annex 4	4: Natural England Letter, 10 <sup>th</sup> Nov 2025	41
Annex (	5: Southern IFCA Response to NE Letter, 20 <sup>th</sup> Nov 2025	47
	of Figures	
Seabre	1: Location of the three Dorset Marine Conservation Zones (MCZs) warm as a designated feature; Purbeck Coast MCZ, Poole Rocks MCZ and SoumCZ	uthbourne
	2: Conservation Objectives relevant to three Dorset MCZs	
-	3: Conservation Objectives relevant to the three Dorset MCZs with CO Footeted	
Figure 4	4: Identified CO Focus Areas	8
Figure 8	5: Prohibitions as listed in the Southern IFCA Bottom Towed Fishing Gear Bye	
Figure	6: Purbeck Coast MCZ (blue) overlaid with the area of the Lulworth Firing	
showing	g the Inner Ranges (red hashed) and the Outer Ranges (red dashed outline)	20
_	7: Prohibitions as listed in the Southern IFCA Bottom Towed Fishing Gear Bye	
Figure	8: MCZ boundaries for Purbeck Coast MCZ, Poole Rocks MCZ and Sou	∠ı uthbourne
Rough	MCZ (grey) overlaid with the relevant prohibition areas under the South	ern IFCA
Bottom	Towed Fishing Gear Byelaw 2023	21

Figure 9: CO Focus Areas (1-3) supported by management interventions provided by the BTFG Byelaw 2016
Figure 10: CO Focus Areas (1-3) supported by management interventions introduced under
the BTFG Byelaw 2023, in addition to that already in place under the BTFG Byelaw 2016.23
Figure 11: Purbeck Coast MCZ with the area covered by the prohibition area under the BTFG
Byelaw 2023 (93%) and the BSB Nest Units defined under the Spatial Principles using best
available evidence
Figure 12: Poole Rocks MCZ with the area covered by the prohibition area under the BTFG
Byelaw 2023 (100%) and the BSB Nest Units defined under the Spatial Principles using best
available evidence
Figure 13: Southbourne Rough MCZ with the area covered by the prohibition area under the
BTFG Byelaw 2023 (100%) and the BSB Nest Units defined under the Spatial Principles using
best available evidence
Figure 14: CO Focus Areas (2 & 3) supported by management interventions provided by the
Minimum Conservation Reference Size Byelaw
Figure 15: Purbeck Coast MCZ overlaid with the prohibition area under the BTFG Byelaw
2023 and the spatial area covered by the Lulworth Ranges, showing the Inner Ranges (solid
orange) and the Outer Ranges (orange line) overlapped with BSB nest data from best
available evidence
Figure 16: CO Focus Areas (1-3) supported by external spatial management afforded by the
Lulworth Ranges
Figure 17: Summary of the outputs of the Part B Assessment in considering the furthering of
Conservation Objectives and associated CO Focus Areas for BSB across the three Dorset
MCZs against the management in place and the risk level posed by relevant fishing gear types
27
List of Tables
Table 1: Outcomes of the Screening Assessment for the three Dorset MCZs
Table 2: Summary of outcomes for the Part A Assessments for Anchored Nets/Lines, Pelagic
Fishing and Traps
Table 3: Summary of outcomes for the Part A Assessment for Southbourne Rough MCZ for
Demersal Trawl
Table 4: Risk levels assigned to relevant gear types in relation to the feature of BSB 18
Table 5: Co-Developed Principles for BSB in three Dorset MCZs
·

# **Section A: Introduction**

Black seabream (BSB) (*Spondyliosoma cantharus*) are a member of the Sparidae family (Dunn, 1999; Ruiz, 2008) and are protogynous hermaphrodites, starting out as female and changing to male at a certain age and size (Pajuelo and Lorenzo, 1999; Baldock and Dipper, 2023). The genus Spondyliosoma (which includes black seabream) is one of only two genera within the Sparidae family which provides male-only care in the form of nest building and guarding of eggs (Beaulieu, 2020). The evolution of parental care alongside protogyny is a novel evolutionary strategy (Beaulieu, 2020).

In the UK, BSB are most abundant along the south coast and into the southern part of the North Sea (Rogers, 1998). For the past century during the spring months, specifically along the Southern coast of the UK, BSB have been recorded within the following Marine Conservation Zones (MCZs): Poole Rocks, Purbeck Coast, and Southbourne Rough (Baldock & Dipper, 2023; Collins & Mallinson, 2012; Doggett and Baldock, 2022).

BSB are a designated feature in three MCZs in Dorset; Purbeck Coast, Poole Rocks and Southbourne Rough. This Conservation Assessment Package considers the requirement for management of relevant fishing activities to fulfil Southern IFCA's legal duties under the Marine and Coastal Access Act 2009 (MaCAA) with regard to the protection of MCZs.

# 1.0 Primary Policy Objective

# Managing BSB as a designated feature of Marine Conservation Zones

# 1.1 Scope

BSB were designated as features of the Purbeck Coast MCZ and Southbourne Rough MCZ during the second tranche of MCZ designations in 2019. At the same time, BSB were designated as an 'additional feature' for the Poole Rocks MCZ, a site originally designated under the first tranche of MCZ designations in 2013.

# 1.2 Route of Designation

BSB are designated under Section 117(5) of the MaCAA to (1) **conserve diversity**, specifically due to their ecological significance (the reoccurring time and place of reproductive behaviours, considered to be of critical importance to the life cycle of BSB), where if not protected the BSB would be affected at population or sub-population level, & (2) **persistence** – where they occur at high densities in contrast to surrounding areas.

BSB are not designated under Section 117(4) of MaCAA as rare or threatened due to limited numbers or limited locations where the BSB are present.

The designation of BSB across the three Dorset MCZs in 2019 was not based on a Condition Assessment, instead Natural England (NE) undertook a vulnerability assessment as a proxy. NE deemed BSB to be vulnerable to bottom towed fishing gear (BTFG), netting and recreational angling and therefore considered BSB to be in an **unfavourable condition** and requiring management. No metrics have been provided by NE to quantify 'unfavourable condition'.

# 1.3 Relevant MCZs

The location of the three MCZs in Dorset with BSB as a designated feature are summarised below and shown in **Figure 1**.

#### Purbeck Coast MCZ<sup>1</sup>

 An inshore site which covers an area of 282km², located in the Eastern channel stretching from Ringstead Bay in the west to Swanage Bay in the east along the Jurassic Coast World Heritage Site.

# Poole Rocks MCZ<sup>2</sup>

 An inshore site which covers an area of around 4km², lying to the east of the entrance to Poole Harbour and approximately 2-2.5km to the east of the beachfront at Sandbanks.

# • Southbourne Rough MCZ<sup>3</sup>

 An inshore site which covers an area of 5km², located in an area of patchy reefs to the east of Poole Rocks MCZ in Poole Bay, slightly further offshore and deeper than Poole Rocks MCZ.

The relevant designated feature for each site is listed as follows:

MCZ	Designated Feature
Purbeck Coast	Black seabream (nesting)
Poole Rocks	Black seabream
Southbourne Rough	Black seabream (nesting)

A full general description of each MCZ including all designated features and figures showing the best available evidence of the extent and location of designated features from the evidence package provided by NE to Southern IFCA in 2023 is provided in the **Black Seabream Site Specific Evidence Packages** supporting document.

Included in the Black Seabream Site Specific Evidence Packages is evidence of BSB using each of the MCZs. In order to ensure a full understanding of the best available evidence on the location and extent of BSB nests within each site, additional evidence sources to that provided by NE as the evidence package on designated feature location and extent (current version 2023) were interrogated. This was deemed necessary as the information available through the NE package was determined not to represent all the information which existed in peer-reviewed literature and from District specific studies and therefore did not constitute the full best available evidence base. The best available evidence used to inform nest locations for BSB are given in the Evidence Principles agreed by the Authority (see Section A 1.7 of this document) and this evidence is detailed in Sections 1.3 (Purbeck Coast MCZ), 2.3 (Poole Rocks MCZ) and 3.3 (Southbourne Rough MCZ) of the Black Seabream Site Specific Evidence Packages.

<sup>&</sup>lt;sup>1</sup> Marine Conservation Zones: Purbeck Coast - GOV.UK

<sup>&</sup>lt;sup>2</sup> Marine conservation zones: Poole Rocks - GOV.UK

<sup>&</sup>lt;sup>3</sup> Marine Conservation Zones: Southbourne Rough - GOV.UK

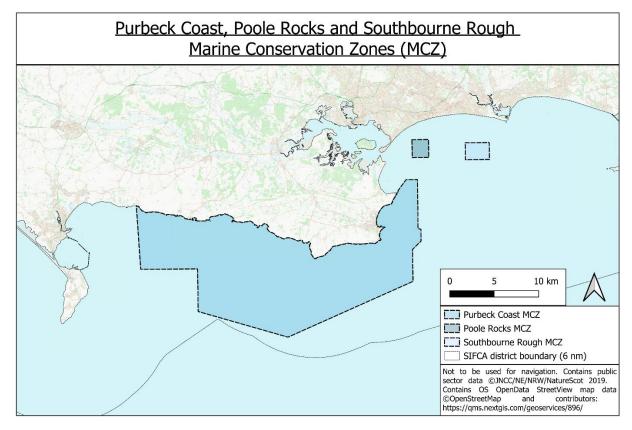


Figure 1: Location of the three Dorset Marine Conservation Zones (MCZs) with Black Seabream as a designated feature; Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ.

# 1.4 Conservation Objectives

For all three Dorset MCZs, the Conservation Objectives (COs) provided for BSB are given in **Figure 2** below.

# Conservation objective

- (1) The conservation objective is that, in relation to Black seabream (Spondyliosoma cantharus)—
  - (a) the habitat used by members of that species for the purposes of spawning ("spawning habitat")—
    - (i) so far as already in favourable condition, remains in such condition, and
    - (ii) so far as not already in favourable condition, be brought into such condition, and remain in such condition, and
  - (b) the population (whether temporary or otherwise) of that species occurring in the Zone be free of disturbance of a kind likely significantly to affect the survival of its members or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding.
- (2) In paragraph (1)(a)(i) and (ii), "favourable condition", with respect to spawning habitat within the Zone, means that the habitat is of sufficient quality and quantity to enable members of the species using the habitat to survive, aggregate, nest, or lay, fertilise or guard eggs during breeding.

Figure 2: Conservation Objectives relevant to three Dorset MCZs

#### 1.5 Protection of Marine Conservation Zones: MaCAA Section 154 Duties

Under Section 154(1) of the MaCAA, Southern IFCA must "...seek to ensure that the conservation objectives of any MCZ in the District are furthered...", with Section 154(2) requiring that "...nothing in Section 153(2) is to affect the performance of the duty..." This includes socio-economic considerations.

#### 1.6 Focus Areas

In the absence of quantification of 'unfavourable condition', and in accordance with Southern IFCA's Section 154 duties under MaCAA, the following **CO Focus Areas** (as identified via highlights in Figure 3 and detailed in Figure 4) were identified to be used as metrics against which the Authority can demonstrate where and how any management interventions are furthering the COs of the MCZs for BSB.

In accordance with the best available evidence, the recognised **spawning/breeding season** is 1<sup>st</sup> April – 31<sup>st</sup> July, details of the best available evidence used to inform this is provided in the **Black Seabream Site Specific Evidence Packages** for each MCZ and in **Section 1.2.1** of the **Black Seabream Literature Review**.

#### Conservation objective

- 5.—(1) The conservation objective is that, in relation to Black seabream (Spondyliosoma cantharus)—
  - (a) the habitat used by members of that species for the purposes of spawning ("spawning habitat")—
    - (i) so far as already in favourable condition, remains in such condition, and
    - (ii) so far as not already in favourable condition, be brought into such condition, and remain in such condition, and
  - (b) the population (whether temporary or otherwise) of that species occurring in the Zone be free of disturbance of a kind likely significantly to affect the survival of its members or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding.
- (2) In paragraph (1)(a)(i) and (ii), "favourable condition", with respect to spawning habitat within the Zone, means that the habitat is of sufficient quality and quantity to enable members of the species using the habitat to survive, aggregate, nest, or lay, fertilise or guard eggs during breeding.

Figure 3: Conservation Objectives relevant to the three Dorset MCZs with CO Focus Areas highlighted

# spawning habitat used by BSB in the MCZ be of sufficient quality & quantity to enable BSB to survive, aggregate, nest, lay, fertilise or guard eggs during breeding. the population of BSB occurring in the MCZ be free of disturbance of a kind likely significantly to affect the survival of its members. the population of BSB occurring in the MCZ be free of disturbance of a kind likely significantly to affect their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding.

Figure 4: Identified CO Focus Areas

From the CO Focus Areas, and based on best available evidence, the following key definitions are taken:

- 'spawning habitat': BSB nests
- 'during breeding': 1st April to 31st July
- 'likely significant': to probably happen or to be expected in a way that is easy to see or by a large amount
- 'sufficient quality & quantity': defined by Spatial Principles agreed by the Authority (see Section A1.7 of this document)

# 1.7 Defining Principles

In order to facilitate the progression of management considerations the following Legislative, Evidence and Spatial Principles were developed as part of a series of Member Working Groups prior to ratification at the Technical Advisory Committee (TAC):

# **Legislative**

(1) 'further' will be defined as 'to take to a greater degree or a more advanced stage' in line with the Oxford English Dictionary definition

Under Section 154(1) of MaCAA, Southern IFCA must '...seek to ensure that the conservation objectives of any MCZ in the District are furthered...', Recognising the lack of a legal definition for 'furthered', the Authority agreed that 'further' and synonyms of, will be defined as "to take to a greater degree or a more advanced stage" in line with Oxford English Dictionary definition.

At the time of BSB designation across all 3 MCZs, management measures which were already affording BSB protections were not considered in the NE Vulnerability Assessment. As such, the Authority consider that any qualification of 'furthering' of the COs will be taken from a baseline position of no management.

# **Evidence**

Two Evidence Principles were developed in order to clarify the sources of best available evidence used to inform nest locations and detailed how any additional evidence received will be considered appropriately.

- (2) The best available evidence used to inform nest locations for black seabream is that provided in:
  - a) The Natural England designated features layer provided to Southern IFCA in 2023
  - b) Data from Cefas Project Report for NE (2021)
  - c) Data from Southern IFCA side scan sonar of Chapmans Pool (2016)
  - d) Data collected by Collins, K. Side scan sonar survey (2010)

(3) Any additional evidence received after the 29<sup>th</sup> January 2024 will be considered during the period of formal byelaw consultation (where relevant) and then (subject to byelaw ratification), in subsequent byelaw reviews, as determined under the provisions of the byelaw.

When considering wider spawning habitat, i.e., the habitat type which may be suitable for BSB nests, it was determined that there was no evidence available to indicate where this habitat type may occur within the three MCZs. Southern IFCA also undertook specific work with the recreational angling sector to better understand fishing patterns and practice for BSB within the three MCZs, this data is provided in the **Black Seabream Supporting Evidence Packages** and was used to inform understandings of activity as part of the Part B

Assessments. It is identified that there are significant evidence gaps on the location and extent of BSB nests within the three MCZs, by compiling multiple sources of evidence as listed under Principle (2), Southern IFCA have created a best available evidence base on which to base management considerations.

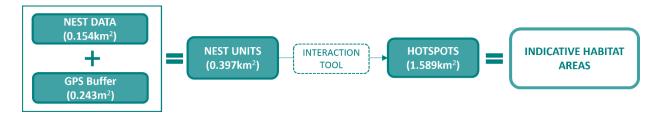
# **Spatial**

Six Spatial Principles were developed to describe the process by which 'Indicative Habitat Areas' have been developed, which used the best available evidence and adopted a precautionary approach recognising the need to achieve 'sufficient quality & quantity' of habitat, as specified in the CO.

- (4) In accordance with the best available evidence, three data types are to be used to identify nest locations. 'Nest Data'
  - a) Individual nests (Cefas and NE data)
  - b) Polygon data (Southern IFCA data)
  - c) Nest areas of 50m x 50m where nest(s) have been noted to occur (Collins, K. data)
- (5) A 10m buffer will be added to all nest locations to account for confidence in GPS accuracy. This will be referred to as 'GPS Buffer'.
- (6) Nest data and GPS Buffer combined with be called 'Nest Units'
- (7) Three or more Nest Units existing within 320m of another will be grouped using straight lines to form 'Hotspots'.
- (8) Collectively principles 4-7 build to provide 'Indicative Habitat Areas'.
- (9) Management will be considered within 'Indicative Habitat Areas'.

From the best available evidence listed in the Evidence Principle, it was determined that there was collectively 0.154km² of 'Nest Data' across the three MCZs (equivalent to 21 football pitches).

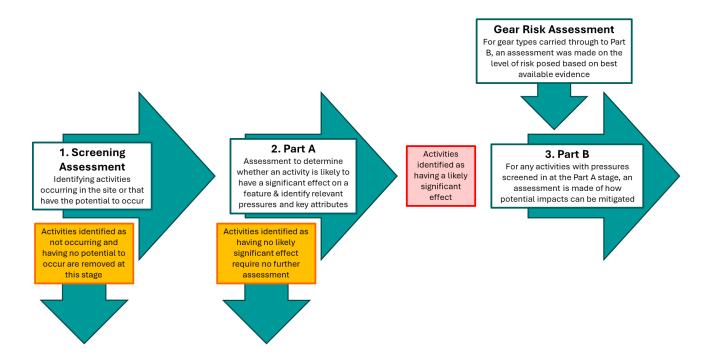
Collectively, the 13 Indicative Habitat Areas covered 1.589km<sup>2</sup> (equivalent to 222 football pitches).



# Section B: The MCZ Assessment Process

This section details the MCZ Assessment process undertaken to assess different fishing gear types against the designated feature of BSB within the three Dorset MCZs. The MCZ Assessment is a determination of whether, in the view of the Authority, management measures are required to achieve legal duties under MaCAA (154) and, whether the measures in place or proposed is appropriate in mitigating any identified risk to the achievement of the COs.

The assessment was undertaken following a stepwise process:



# 1.0 Supporting Documentation

This Conservation Assessment Package is to be read in conjunction with the following supporting documents (where applicable reference to specific sections of these documents have been highlighted):

- Black Seabream Site Specific Evidence Packages
- Black Seabream Literature Review

In addition, the Assessments in this package have been informed by<sup>4</sup>:

- The Black Seabream Site Activity Screening Document
- The Black Seabream MCZ Assessments: Part A Document

<sup>&</sup>lt;sup>4</sup> Note that these documents are provided to Natural England in order to inform the provision of Formal Advice on the conclusions of the Conservation Assessments, these documents can be made available on request.

# 2.0 Screening Assessment Outcomes

The Screening Assessment was carried out for each MCZ against the following gear categories:

# Bottom Towed Fishing Gear

- Towed (demersal)
- Towed (pelagic)
- o Dredges (towed)
- o Dredges (other, i.e., suction)

# • Intertidal Handwork

- Hand working (access from a vessel)
- Hand working (access from land)
- Mechanical hand working

# Static Pots/Traps

- Pots/Creels (crustacea/gastropods)
- o Cuttle Pots
- Fish Traps

#### Demersal Nets

- Static Fixed Nets
  - Gill Nets
  - Trammels
  - Entangling
- o Demersal Seines
- Beach Seines/Ring Nets

# Pelagic Nets

Drift Nets

# Other

- o Purse Seine
- o Shrimp Push Nets
- Fyke and Stake Nets

### Lines

- Longlines (demersal)
- Longlines (pelagic)
- o Handlines (rod/gurdy etc.)
- o Jigging/Trolling

#### Diving

o Commercial Diving

The outcome of the Screening Assessment resulted in the activities listed in **Table 1** being taken forward to a Part A Assessment.

From the activities taken forward, this has then been translated to the relevant category of gear type provided by NE through the Conservation Advice for the site, given as 'Advice on Operations' (AoO). When conducting the Part A Assessment, the AoO is used to determine relevant pressures and make an assessment of the potential for likely significant impact.

Table 1: Outcomes of the Screening Assessment for the three Dorset MCZs

MCZ Site Name	Activity	Relevant Advice on Operations
Purbeck Coast	Towed (Demersal)	Demersal Trawl
	Pots/Creels (crustacean/gastropod)	Traps
	Cuttle Pots	
	Static – Fixed Nets (all)	Anchored Nets/Lines
	Drift Nets	Pelagic Fishing
	Lines (all)	
	Diving	<ul> <li>Diving</li> </ul>
Poole Rocks	Pots/Creels (crustacean/gastropod)	• Traps
	Cuttle Pots	
	Static – Fixed Nets (all)	<ul><li>Anchored Nets/Lines</li><li>Pelagic Fishing</li></ul>
	Drift Nets	
	Lines (all)	
Southbourne Rough	Pots/Creels (crustacean/gastropod)	<ul> <li>Traps</li> </ul>
	Static – Fixed Nets (all)	<ul><li>Anchored Nets/Lines</li><li>Pelagic Fishing</li></ul>
	Handlines (rod/gurdy etc.)	
	Jigging/Trolling	
	Diving	Diving

# 3.0 Part A Assessments

For the relevant AoO identified through the Screening Process, Part A Assessments were carried out for each MCZ.

For each assessment, each type of activity was assessed with respect to the potential pressures which may be exerted on designated features. The assessment was undertaken using the AoO and Supplementary Advice provided by NE for each site. The AoO provides a broadscale assessment of the sensitivity of designated features to different activity-derived pressures, using nationally available evidence on their resilience (ability to recover) and resistance (the level of tolerance) to physical, chemical and biological pressures. The broadscale assessment of sensitivity to the pressures is measured against a benchmark. It should be noted that these benchmarks are not representative of the likely intensity of a pressure cause by typical activities, and do not represent a threshold of an 'acceptable' intensity of a pressure. It is therefore necessary to consider the specifics of the activity being assessed as they are relevant to the Southern IFCA District, i.e., assessing the potential for a significant effect of a pressure on a feature using knowledge of activity levels, occurrence, intensity, gear type, operation etc. The determination of whether a pressure/feature interaction needs to be carried forward to the Part B Assessment stage considers this site and District-specific detail alongside the broader AoO.

The Part A Assessments for Southbourne Rough and Purbeck Coast in relation to BTFG were carried out as part of the Southern IFCA BTFG Review Phase I. The Part A Assessments have however also been included in the Part A Assessments conducted as part of this package given the relevance of these assessments to the consideration of BSB as a designated feature of the Southbourne Rough and Purbeck Coast MCZs. The two Part A Assessments have been updated to reflect management introduced in 2025 under the Bottom Towed Fishing Gear Byelaw 2023 and any Formal Advice received from NE on these assessments through the BTFG Review Phase I has been referenced as needed.

The outcomes of the Part A Assessments identified the following pressures as having a potential likely significant effect:

# **Anchored Nets/Lines** (same for all three MCZs)

- Abrasion
- Removal of non-target species
- Removal of target species

# **Pelagic Fishing** (same for all three MCZs)

- Removal of non-target species
- Removal of target species

# **Traps** (same for all three MCZs)

Abrasion

# **Demersal Trawl** (Southbourne Rough MCZ only)

- Abrasion
- Removal of non-target species
- Removal of target species
- Smothering and siltation rate changes (light)

**Table 2** below provides a summary of the outputs of these assessments for each site for Anchored Nets/Lines, Pelagic Fishing and Traps, indicating the pressures which may exert a significant impact, the rationale for screening into the next stage in the assessment process and the relevant attributes listed by NE in the Supplementary Advice for designated sites which may be affected by the exertion of that pressures on that feature.

Table 2: Summary of outcomes for the Part A Assessments for Anchored Nets/Lines, Pelagic Fishing and Traps.

Advice on Operations: Anchored Nets/Lines								
Potential Pressure	Relevant MCZ	Rationale	Relevant Attributes					
Abrasion/disturbance on the surface of the seabed	<ul><li>Purbeck Coast</li><li>Poole Rocks</li><li>Southbourne Rough</li></ul>	There is potential for the activity to cause abrasion over areas where BSB nests occur. There is however limited overlap between areas where BSB nests have been identified and anchored netting activity.	Nest abundance Population: age/size frequency Population: population size Population: recruitment and reproductive capability Presence and spatial distribution of the species Supporting habitat: extent and distribution					
Removal of non-target species		BSB may be caught by the activity as a non-target species by either recreational or commercial operators.						
Removal of target species		BSB may be caught by the activity as a target species by either recreational or commercial operators.						
Advice on Operations:	Pelagic Fishing (or fishir	ng activities that do not interact with th	ne sea bed)					
Removal of non-target species  Removal of target	<ul><li>Purbeck Coast</li><li>Poole Rocks</li><li>Southbourne Rough</li></ul>	BSB may be caught by the activity as a non-target species by either recreational or commercial operators.  BSB may be caught by the activity as a	Population: population size Population: recruitment and reproductive capability					
species		target species by either recreational or commercial operators.	Tressines and spatial distribution of the species					
Advice on Operations: Traps								
Abrasion/disturbance on the surface of the seabed	<ul><li>Purbeck Coast</li><li>Poole Rocks</li><li>Southbourne Rough</li></ul>	There is the potential for the activity to cause abrasion over areas where BSB nests have been identified.	Nest abundance Population: recruitment and reproductive capability Supporting habitat: extent and distribution					

## 3.1 Part A Assessment Outcomes – Demersal Trawl

Under the Part A Assessments carried out for the BTFG Review: Phase I, the following conclusions were reached:

#### **Purbeck Coast MCZ**

All pressures were screened out at the Part A Assessment stage on the basis of the best available evidence on the location and extent of BSB nests within the site being within an area prohibited to all forms of BTFG under the Southern IFCA BTFG Byelaw 2016 (covering 90% of the site due to management for the Studland to Portland Special Area of Conservation). It was identified that the small remaining area of the site not closed to BTFG was not known to meet the habitat requirements to be suitable for BSB nesting sites.

The Part A Assessment was submitted to NE for Formal Advice on 7<sup>th</sup> October 2019, a formal statutory response was received from NE on 26<sup>th</sup> November 2019 stating "we note that bottom towed fishing gear impacts upon black seabream have been screened out as the activity does not overlap with nesting sites. Natural England agrees with this approach".

The Part A Assessment has been reviewed and updated following the ratification of the BTFG Byelaw 2023 in July 2025 which resulted in increased prohibitions for BTFG for the Purbeck Coast MCZ, extending the area of the site which is prohibited to all forms of BTFG to 93%. On this basis, and in consideration of the best available evidence used to inform the location and extent of BSB nests within the site, it is determined that the conclusion of the Part A Assessment review by NE is still valid and therefore no further assessment is required. It is noted that whilst nests or suitable nesting habitat is not identified to occur within the extended prohibition area under the BTFG Byelaw 2023, the inclusion of additional prohibition areas provides additional potential protection to BSB from removal as non-target or target species.

## Southbourne Rough MCZ

Under the Part A Assessment, the pressures of abrasion/disturbance of the substrate on the surface of the seabed, removal of non-target species, removal of target-species and smothering & siltation rate changes (light) were identified as relevant pressures for the gear type 'demersal trawl'. A summary is provided in **Table 3** below:

Table 3: Summary of outcomes for the Part A Assessment for Southbourne Rough MCZ for Demersal Trawl

Advice on Operations: Demersal Trawl							
Potential Pressure	Rationale	Relevant Attributes					
Abrasion/disturbance on the surface of the seabed	The gear type is known to cause abrasion and disturbance to the seabed. Male BSB clear a patch of sediment to use as a nest site, the gear type has the potential to move cleared sediment areas, destroying the nest and to smother and destroy eggs.	Nest abundance Population: age/size frequency Population: population size Population: recruitment and reproductive capability					
Removal of non-target species	Impacts on the feature may occur through the removal of the feature as a non-target species.	Presence and spatial distribution of the species Supporting habitat: extent					
Removal of target species	Impacts on the feature may occur through the removal of the feature as a target species.	and distribution Supporting processes: water quality - turbidity					
Smothering and siltation rate changes (light)	The gear type has the potential to move and increase sediment around nest areas, destroying the nest and smothering and destroying the eggs.						

The Part A Assessment was submitted to NE for Formal Advice on 7<sup>th</sup> October 2019, a formal statutory response was received from NE on 26<sup>th</sup> November 2019 supporting the conclusion that a Part B Assessment was required. A Part B Assessment was carried out by Southern IFCA titled 'Southbourne Rough MCZ – Part B Assessment – 001 BTFG Bream nest v.1.4'<sup>5</sup> for which Formal Advice was sought from NE on 7<sup>th</sup> February 2020. A formal statutory response was received on 6<sup>th</sup> May 2020. The advice received supported the conclusion of Southern IFCA that demersal trawling was likely to pose a significant risk to the feature and agreed with proposed mitigation to introduce BTFG prohibition across the whole site to protect the feature.

The Part A Assessment has been reviewed and updated following the ratification of the BTFG Byelaw 2023 which introduced a prohibition for BTFG across the extent of the site. On this basis there is no requirement for further assessment.

## 4.0 Gear Risk Assessment

Following the completion of the Part A Assessments, it was determined that an assessment would be made of the risk posed by relevant gear types to provide context to the consideration of those gear types under a Part B Assessment. As outlined in Section B3.0, there is a need to consider site specific information alongside the broadscale information provided by the Conservation Advice and specifically the Advice on Operations for each gear type in relation to a particular feature. In order to ensure full transparency in the site specific considerations for different gear types, the gear risk assessment was carried out following the Part A Assessment stage to fully explore the level of risk posed by each relevant gear type and how this would contribute to the consideration of appropriate mitigation to meet Southern IFCA's duties under MaCAA (154) under a Part B Assessment.

The risk levels determined for each gear type by this exercise are given in **Table 4** below. Full rationale for each risk level is given in the table in **Annex 2**. The risk levels were determined using best available evidence including on fishing effort and location provided in the **Black Seabream Site Specific Evidence Packages**, commercial landings and peer-reviewed literature provided in the **Black Seabream Literature Review**.

The information provided in Annex 2 allows the following pressures to be removed for the following gear types:

**Anchored Nets/Lines** (same for all three MCZs)

- Abrasion
- Removal of non-target species
- Removal of target species

**Pelagic Fishing** (same for all three MCZs)

- Removal of non-target species
- Removal of target species

**Traps** (same for all three MCZs)

Abrasion

**Demersal Trawl** (Southbourne Rough MCZ only)

- Abrasion
- Removal of non-target species
- Removal of target species
- Smothering and siltation rate changes (light)

<sup>&</sup>lt;sup>5</sup> Southbourne-Rough-BTFG-Bream.pdf

Resulting in the removal of 'Traps' and associated forms of pot fishing from the need for a Part B Assessment and the narrowing of relevant pressures for Anchored Nets/Lines to 'removal of non-target species' and 'removal of target species'.

Table 4: Risk levels assigned to relevant gear types in relation to the feature of BSB

Gear Type	Sector	Pressure	Risk			
		Abrasion	HIGH			
BTFG	Commercial	Removal Non-Target	HIGH			
טורט	Commercial	Removal Target	HIGH			
		Smothering & Siltation	HIGH			
Pot Fishing	Commercial	Abrasion	LOW			
Nets – Demersal –		Abrasion	LOW			
Drift Nets	Commercial	Removal Non-Target	LOW			
Dilit Nets		Removal Target	LOW			
Note Demorael		Abrasion	LOW			
Nets – Demersal – Fixed Nets	Commercial	Removal Non-Target	LOW			
Fixed INELS		Removal Target	LOW			
Nets - Pelagic -	Commercial	Removal Non-Target	LOW			
Drift Nets	Commercial	Removal Target				
Lines – Demersal –		Abrasion	LOW			
Longlines	Commercial	Removal Non-Target	LOW			
Longines		Removal Target	LOW			
Lines – Pelagic –	Commercial	Removal Non-Target	LOW			
Longlines	Commercial	Removal Target	LOW			
		Removal Non-Target (including	LOW			
	Commercial	jigging/trolling)				
Lines – Pelagic –		Removal Target	LOW			
Rod & Line		Removal Non-Target (including	MED			
	Recreational	jigging/trolling)				
		Removal Target				

# **Section C: Management Solutions**

## 1.0 Existing Statutory Measures

Under the **Southern IFCA BTFG Byelaw 2016**, protections are afforded to BSB through prohibition areas within which all types of BTFG are prohibited at all times and the passage of a vessel through these areas carrying BTFG is also managed (**Figure 5**).

## **Bottom Towed Fishing Gear Byelaw 2016**

## **Prohibition**

- A person must not...use bottom towed fishing gear within a prohibited area
- A person must not...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

Figure 5: Prohibitions as listed in the Southern IFCA Bottom Towed Fishing Gear Byelaw 2016

The prohibitions under this Byelaw provide whole site protection for Poole Rocks MCZ from BTFG (100% closure), and for 90% of Purbeck Coast MCZ by virtue of prohibitions introduced for designated features of the Studland to Portland Special Area of Conservation (SAC).

The **Southern IFCA Minimum Conservation Reference Size Byelaw** provides a MCRS for BSB at 23cm. There is no national MCRS for BSB therefore the MCRS Byelaw provides protections for this species specifically within the Southern IFCA District. The Byelaw extends the MCRS application beyond the immediate act of fishing for or taking the species, prohibiting a person from removing from the fishery, retaining on board, transhipping, landing, transporting, storing, selling, displaying or offering for sale BSB from a fishery within the District<sup>6</sup>.

## 2.0 Existing External Measures

There are additional measures restricting fishing activity in place by the Ministry of Defence for the largest of the three MCZs, Purbeck Coast MCZ. These restrictions are for the Lulworth Firing Ranges and comprise an area referred to as the 'Inner Ranges' and an area referred to as the 'Outer Ranges'. The combined area of the Inner and Outer Ranges is 151.8km² covering 53.8% of the Purbeck Coast MCZ (Figure 6). The Inner Ranges area covers 92.8km² (32.8%) and the Outer Ranges 59.0km² (21.0%). Information is available online for the closure periods for the Inner Ranges area, which is closed during the week and at certain weekends (outside of public holidays and defined stand down periods). During the closure periods all vessels, including all fishing activities, are prohibited from operating within the Inner Ranges area. The Outer Ranges area does not have specific information provided for closure periods but is closed periodically to all vessels.

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<sup>&</sup>lt;sup>6</sup> SIFCA-MCRS-Byelaw.pdf

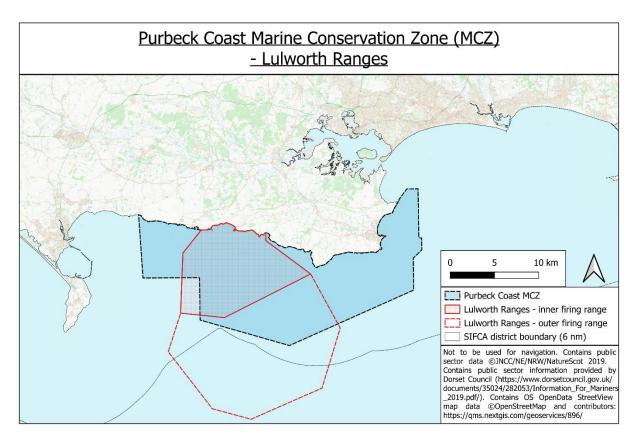


Figure 6: Purbeck Coast MCZ (blue) overlaid with the area of the Lulworth Firing Ranges showing the Inner Ranges (red hashed) and the Outer Ranges (red dashed outline)

Based on information for the Inner Ranges from 2025 for the period 1<sup>st</sup> April to 31<sup>st</sup> July, the area was closed to fishing activity for 32% of the total time available (based on total hours available during that period and a fishing pattern of activity predominantly occurring between 0400-1800 at a maximum). For 2026 based on closure patterns it is anticipated that the Inner Ranges area will be closed to fishing activity for 33% of the total time available (using the same calculation as for 2025). When looking at days, out of 122 days (1<sup>st</sup> April to 31<sup>st</sup> July), in 2025 the Inner Ranges were closed for a day period (7.5 hours) for 55 days (45%) and in 2026 an anticipated 57 days (47%). Whilst it is recognised that the day closures are not 24 hours in length, cutting out a large proportion of daytime hours will make fishing activities unviable to take place on those days from a commercial perspective and will make it unlikely that the area would be used by Charter Vessels or Recreational Angling Vessels on those days.

## 3.0 Development of New Statutory Measures

Between 2020 and 2023 the **Southern IFCA BTFG Byelaw 2023**<sup>7</sup> was developed and made by the Authority in order to satisfy multiple aims. The new Byelaw replaced the BTFG Byelaw 2016 and introduced new prohibition areas and extensions to existing prohibition areas across the District. Under the Byelaw, extended protections are afforded to BSB through prohibition areas within which all types of BTFG are prohibited at all times, the passage of a vessel through the prohibited areas carrying BTFG also continues to be managed (**Figure 7**).

<sup>&</sup>lt;sup>7</sup> BTFG-Byelaw-2023-signed.pdf

## **Bottom Towed Fishing Gear Byelaw 2023**

## **Prohibition**

- A person must not...use bottom towed fishing gear within a prohibited area
- A person must not...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

Figure 7: Prohibitions as listed in the Southern IFCA Bottom Towed Fishing Gear Byelaw 2023

The prohibitions under this Byelaw maintain the whole site protection for Poole Rocks MCZ from BTFG (100% closure), extend the protections for Purbeck Coast MCZ to cover 93% of the site and introduce new whole site protection for Southbourne Rough MCZ in line with the conclusion of the Part B Assessment carried out for this site under the BTFG Review: Phase I (100% closure). For Purbeck Coast MCZ, the determination of the area of the site requiring a prohibition is based on feature-based management of designated features within MCZs in line with Southern IFCA's legal duties and the process for delivering management under the BTFG Review: Phase I. The area remaining open to BTFG is due to their either being no evidence of the location of a designated feature within that area (eastern part of the site) or a lack of confidence in the data indicating the presence of a designated feature (towards the western part of the site), the approach and resulting management has been agreed by NE through the BTFG Review: Phase I process and consideration of relevant MCZ Assessments. The prohibition areas under the BTFG Byelaw 2023 overlaid with the three Dorset MCZs is shown in Figure 8.

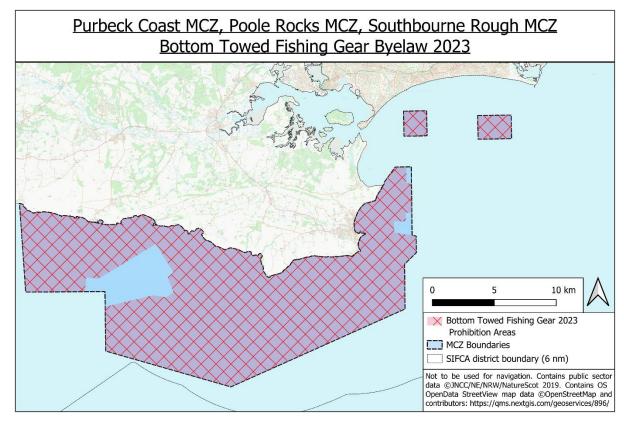


Figure 8: MCZ boundaries for Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ (grey) overlaid with the relevant prohibition areas under the Southern IFCA Bottom Towed Fishing Gear Byelaw 2023

## **Section D: Part B Assessments**

The aim of the Part B Assessments is to ensure that activities will not prevent the furthering of COs. The following information and evidence were used to carry out the required Part B Assessments, where information can be found in a supporting document this is indicated.

Evidence Type	Relevant Document	
Policy		
CO Focus Areas	Section A1.6 of this document	
Legislative, Evidence & Spatial Principles	Section A1.7 of this document	
Site Specific		
Gear Risk Assessment	Section B4.0 of this document	
Feature location & extent		
Additional evidence of BSB using the site	Black Seabream Site Specific Evidence	
Fishing activity location & effort	Packages	
Records of catch levels from Southern IFCA	Fackages	
RSA Project		
	Black Seabream Site Specific Evidence Packages	
Seasonality		
Codomanty		
	Black Seabream Literature Review	
General		
Trends in BSB catches (commercial)		
Historic RSA competition records related to		
BSB	Black Seabream Literature Review	
Evidence from peer-reviewed literature on		
BSB biology, ecology and potential impacts		
from fishing activity		
Existing and newly developed statutory		
management which applies across relevant	Section C1.0 & C3.0 of this document	
areas (Southern IFCA)		
Existing statutory management by other	Section C2.0 of this document	
authorities		

Considering the **CO Focus Areas**, used as metrics against which the Authority can demonstrate where and how any management interventions are furthering the COs of the MCZs, the existing and newly developed statutory management across the three MCZs provides the following protections to BSB:

## **Bottom Towed Fishing Gear Byelaw 2016**

Under the BTFG Byelaw 2016, spatial protections were provided which eliminated, to the following degrees, the activity deemed to pose the highest risk (risk rating from Gear Risk Assessment = HIGH) to achieving each of the CO Focus Areas with 100% protection provided for Poole Rocks MCZ and 90% protection provided for Purbeck Coast MCZ (Figure 9).

1	Poole Rocks MCZ: Purbeck MCZ: Southbourne Rough:	whole site protection for 12 months a year (100% closure to BTFG)  90% closure to BTFG for 12 months a year  No protections under this byelaw
2	Poole Rocks MCZ: Purbeck MCZ: Southbourne Rough:	whole site protection for 12 months a year (100% closure to BTFG) 90% closure to BTFG for 12 months a year No protections under this byelaw
3	Poole Rocks MCZ: Purbeck MCZ: Southbourne Rough:	whole site protection for 12 months a year (100% closure to BTFG) 90% closure to BTFG for 12 months a year No protections under this byelaw

Figure 9: CO Focus Areas (1-3) supported by management interventions provided by the BTFG Byelaw 2016

## **Bottom Towed Fishing Gear 2023**

In 2025 the BTFG Byelaw 2016 was revoked and replaced by the BTFG Byelaw 2023, this byelaw provides increased spatial protections which increased the degree to which the activity deemed to pose the highest risk to achieving the CO Focus Areas is eliminated, providing such protections across all three MCZs, two at 100% (Poole Rocks MCZ and Southbourne Rough MCZ) and at 93% in Purbeck Coast MCZ, the remaining area, as agreed by Natural England, posing no risk to BSB due to the absence of nest areas and suitable habitat in the area which remains open. **Figure 10** below illustrates the additional protections provided by the BTFG Byelaw 2023, recognising that the protections outlined in **Figure 9** for Poole Rocks are also maintained.

	Purbeck MCZ:	Increase to 93% closure to BTFG for 12 months a year (100% not achievable due to unreliable NE data)
	Southbourne Rough:	Introduction of whole site protection for 12 months a year (100% closure to BTFG)
	Purbeck MCZ:	Increase to 93% closure to BTFG for 12 months a year (100% not achievable due to unreliable NE data)
	Southbourne Rough:	Introduction of whole site protection for 12 months a year (100% closure to BTFG)
3	Purbeck MCZ:	Increase to 93% closure to BTFG for 12 months a year (100% not achievable due to unreliable NE data)
<b>3</b>	Southbourne Rough:	Introduction of whole site protection for 12 months a year (100% closure to BTFG)

Figure 10: CO Focus Areas (1-3) supported by management interventions introduced under the BTFG Byelaw 2023, in addition to that already in place under the BTFG Byelaw 2016

BTFG protections apply year-round and therefore offer extended protection to BSB populations beyond the identified breeding season.

**Figure 11** to **Figure 13** show each site with the overlaid BTFG Byelaw 2023 prohibition areas and the 'Nest Units' as defined under the **Spatial Principles** based on the best available evidence defined in the **Evidence Principles**. 100% of identified BSB nests within MCZs based on best available evidence are found within prohibition areas for BTFG.

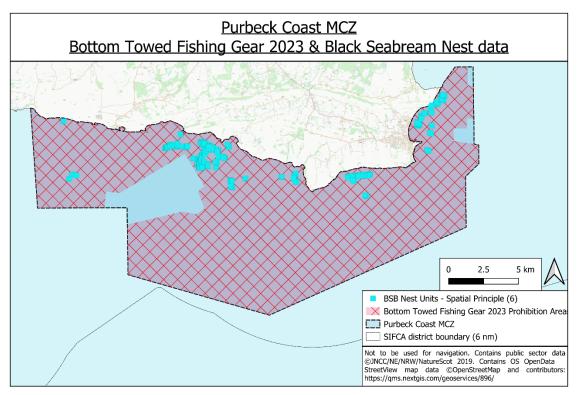


Figure 11: Purbeck Coast MCZ with the area covered by the prohibition area under the BTFG Byelaw 2023 (93%) and the BSB Nest Units defined under the Spatial Principles using best available evidence

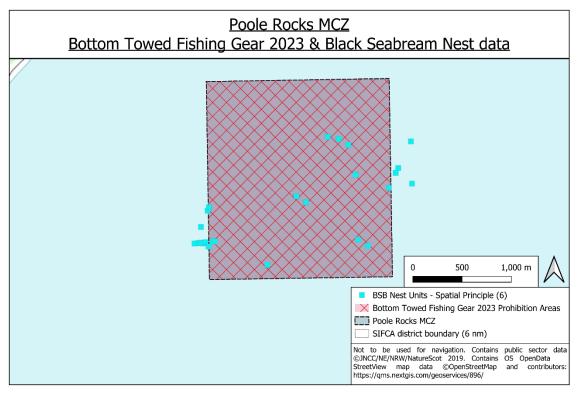


Figure 12: Poole Rocks MCZ with the area covered by the prohibition area under the BTFG Byelaw 2023 (100%) and the BSB Nest Units defined under the Spatial Principles using best available evidence

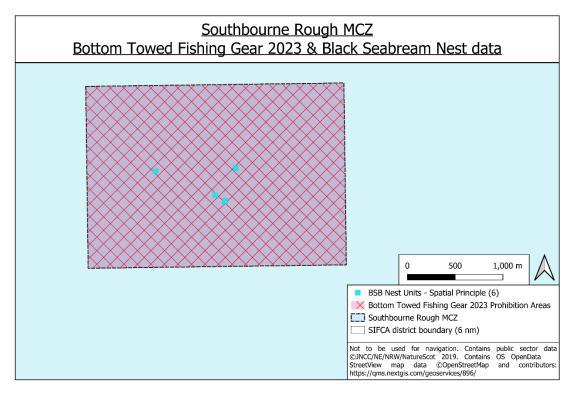


Figure 13: Southbourne Rough MCZ with the area covered by the prohibition area under the BTFG Byelaw 2023 (100%) and the BSB Nest Units defined under the Spatial Principles using best available evidence

## Minimum Conservation Reference Size Byelaw

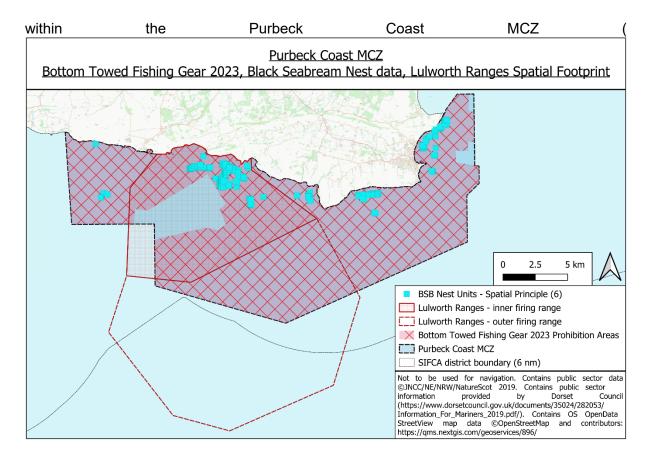
Under the Southern IFCA MCRS Byelaw with the prescribed MCRS of 23cm, applied across the entirety of the supply chain and to both commercial and recreational fishers for all fishing gear types, the following protections are afforded to BSB at a District wide level, extending protections beyond the boundary of the three Dorset MCZs, supporting the furthering of the CO Focus Areas as show in **Figure 14**.



Figure 14: CO Focus Areas (2 & 3) supported by management interventions provided by the Minimum Conservation Reference Size Byelaw

## **External Measures – Lulworth Ranges**

The spatial closures created by the Lulworth Ranges which, based on best available data, is known to be closed to all activity in the Inner Ranges area for between 32-33% of the available time between 1st April and 31st July each year, overlaps with 57% of the BSB nest areas



**Figure 15**). This provides additional protection for BSB populations from all fishing gear types during the breeding season for approx. a third of the total site area over approx. 1/3 of the total breeding season. The Outer Ranges will also be closed periodically, whilst no information is available to quantify this, the closure of the Outer Ranges would provide additional protections to BSB over (in combination with the Inner Ranges) 53.8% of the site. Additionally, the Lulworth ranges continue to operate outside of the breeding

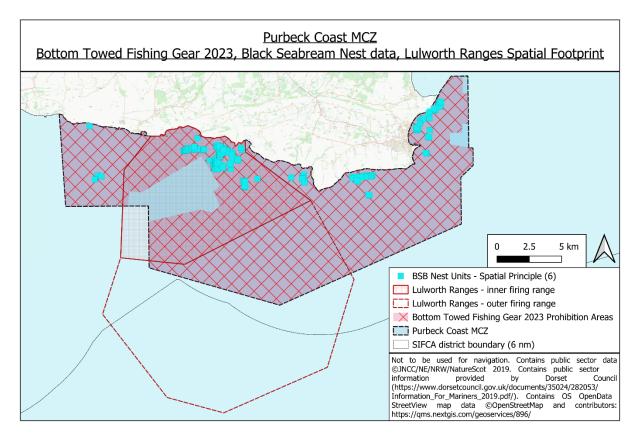


Figure 15: Purbeck Coast MCZ overlaid with the prohibition area under the BTFG Byelaw 2023 and the spatial area covered by the Lulworth Ranges, showing the Inner Ranges (solid orange) and the Outer Ranges (orange line) overlapped with BSB nest data from best available evidence

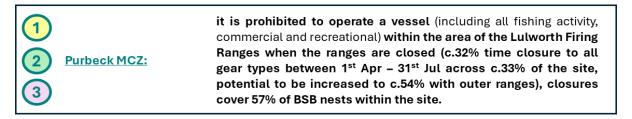


Figure 16: CO Focus Areas (1-3) supported by external spatial management afforded by the Lulworth Ranges

season, providing extended protections to BSB outside of the breeding season. The spatial protections provided by the Lulworth Ranges supporting the furthering of the CO Focus Areas as shown in

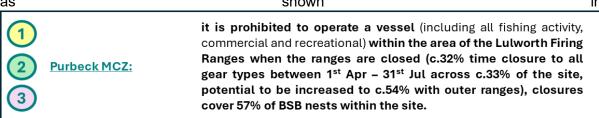


Figure 16.

A summary of the assessment of the furthering of the CO Focus Areas achieved by the combination of management measures in place combined with an assessment of the level of

risk posed by each relevant gear type is given in **Figure 17**. The full Part B Assessment tables are provided in **Annex 3**.

In relation to the key focus areas identified from the COs, the spawning habitat is protected from high risk fishing activity during breeding allowing for that habitat to be found in sufficient quality and quantity to avoid any likely significant effect. Additional measures and identification of risk levels for other gear types result in no likely significant impact from other gear types.

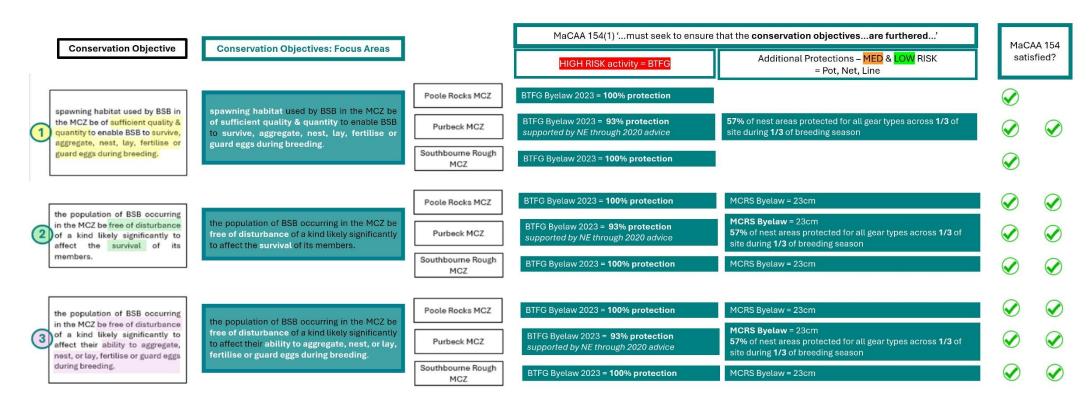


Figure 17: Summary of the outputs of the Part B Assessment in considering the furthering of Conservation Objectives and associated CO Focus Areas for BSB across the three Dorset MCZs against the management in place and the risk level posed by relevant fishing gear types

## **Section E: Part B Assessment Outcomes**

Based on the information presented in this document, and the consideration of the potential pressures identified for relevant gear types, in conjunction with designated feature location & extent, policy underpinning the designation of BSB, current & historic levels of fishing activity, the potential for impact to BSB COs from different gear types, evidence provided in peer-reviewed literature, previous NE Advice and Conservation Advice for each site it is concluded that appropriate mitigative measures are already in place via a combination of spatial and technical statutory mechanisms, which are collectively furthering the Conservation Objectives relevant to BSB across three Dorset MCZs.

This is primarily being achieved via the elimination of BTFG activity across the entirety of Poole Rocks MCZ (whole site) and Southbourne Rough MCZ (whole site) and via a BTFG spatial closure across 93% of the Purbeck MCZ, thus removing the highest risk fishing activity almost in its entirety across the three Dorset MCZs. Additionally, the furthering of the COs is being achieved via enforcement of a MCRS for BSB at a District wide level, applicable to commercial and recreational users, which is also applicable to the wider supply chain. Furthermore, spatial restrictions via an exclusion zone in the Purbeck MCZ, which equates to quantifiable closures for c.32% of the time (during the relevant season), across c.33% of the MCZ (which can be extended to c.54%), as enforced by the Ministry of Defence (MOD), are further enhancing protections to BSB in the Purbeck MCZ across the entirety of gear types (commercial and recreational) via closures applicable to all users.

Collectively, the Southern IFCA statutory measures (as well as those enforced by the MOD) are already providing protections to BSB beyond the three MCZ's collective footprint, at a temporal scale beyond that of the breeding season. As such, these statutory measures are providing protections to BSB nesting sites and populations at a level which exceeds the scope of the Conservation Objectives. In combination, these measures are furthering the Conservation Objectives for BSB across the Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ.

## **Section F: In-Combination Assessment**

As part of the assessment process, Southern IFCA is required to consider the in-combination effect of draft measures with other fishing activities and also other non-fishing plans/projects in relevant areas.

For fishing activities, the appropriate conservation assessments have been completed for the three Dorset MCZs for any activities identified as having a potential impact on the furthering of the Conservation Objectives. These include:

- Bottom Towed Fishing Gear (for all other designated features in the three MCZs)
- Shore gathering activities (for other designated features in Purbeck Coast MCZ)

<sup>&</sup>lt;sup>8</sup> The remainder of the Purbeck Coast MCZ is subject to feature data which has been deemed unreliable in terms of location and/or extent by Natural England and is therefore not suitable as a basis for making management determinations. The feature data does not relate directly to BSB and it has been confirmed by NE through the Part A Assessment process for the BTFG Review Phase I that the area of the MCZ which remains open to BSB poses no risk to BSB as a designated feature.

Pots/Creels (for other designated features in Poole Rocks & Purbeck Coast MCZs)

These assessments concluded, with appropriate management in place, that there will be no impact to the furthering of Conservation Objectives. **Therefore, in relation to fishing activity there is no in-combination effect.** 

Considering non-fishing plans/projects, the Southern IFCA is a consultee in the marine licencing process administered by the MMO. Southern IFCA reviews relevant applications for works taking place in the marine environment and through this process identifies whether there is likely to be an overlap with fishing activity. From the current pending marine licence applications, there are no identified plans/projects which overlap with any of the three Dorset MCZs, any marine licences which have been issued would be subject to consideration of an MCZ Assessment in relation to the works with a required conclusion of no impact to furthering the Conservation Objectives or appropriate mitigative measures put in place, therefore for any licenced works any impact would be mitigated resulting in no in-combination effect. In relation to non-fishing activity there is no in-combination effect.

# **Section G: Integrity Test**

On the basis of the information provided in the Conservation Assessment Package and the management in place in the form of the Bottom Towed Fishing Gear Byelaw 2023, the Minimum Conservation Reference Size Byelaw and external spatial management through the Lulworth Ranges, it is concluded that suitable and appropriate mitigation is in place to ensure that the Conservation Objectives of Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ can be furthered for Black Seabream.

# **Section H: Secondary Policy Objective**

## **Scope**

In addition to satisfying the primary policy objective and therefore the MaCAA 154 requirements, the Authority committed to explore additional management solutions in the BSB fishery, identifying the following drivers and headline objectives:

## **Drivers**

- (1) To improve understandings of BSB behaviours, fisheries and ecosystem management, recognising that these are currently data poor.
- (2) To be proportionate in the application of precaution, complementing existing statutory measures for lower impact fisheries (adaptive management approach).
- (3) To be precautionary, as despite evidence suggesting that current effort is not having an impact, this remains data poor. Additionally, potential future impact also remains unknown.

## **Headline Objectives**

- (1) To ensure current and future sustainability of BSB populations for the benefit of the marine environment and all sectors.
- (2) To improve understandings via data collection.
- (3) to monitor and review measures (adaptive management).
- (4) include users in policy development and ongoing management interventions.

## **Gear Risk Considerations – Lower Risk Gear Types**

The outcomes of the Gear Risk Assessment (detailed in **Section B4.0 of this document**), identified the following gear types as either presenting a low or medium risk to BSB within the three Dorset MCZs:

- Nets Demersal Fixed Nets (commercial)
- Lines Pelagic Rod & Line (commercial & recreational)

## Recreational Rod & Line Activity

Further information was sought from NE on the consideration of recreational rod & line activity (RA) under the Secondary Policy Objective. RA is already subject to active management across the three Dorset MCZs (and at a District wide level) through the application of the Southern IFCA MCRS Byelaw and via the application of MOD exclusion zones in the largest of the three Dorset MCZs (as detailed in Section D). These mechanisms, as per the outcome of the Part B Assessment, are and will continue to further the COs of the MCZs and therefore have direct relevant to Southern IFCAs duties under Section 154 of MaCAA and the achievement of the Primary Policy Objective.

It is the Authority's view that any potential disturbance resulting from RA which is likely significantly to affect a) the survival of BSB, and b) the ability of BSB to aggregate, nest, or lay, fertilise or guard eggs during breeding, is mitigated via:

the ongoing application of the Southern IFCA MCRS, this is a statutory measure that has been in place since 2001, with Southern IFCA compliance metrics demonstrating embedded community compliance with this established measure

the active enforcement by many of the charter operators working the MCZs of their own bag limits, and across the RA sector, charter operators and individuals working to an increased MCRS, recognising the importance of the sustainability of the BSB fishery via self-governance mechanisms

recent BAE (2025) provided through the Angling for Sustainability Fisheries Industry Science Partnerships Project (AfS FISP), providing an early indication that following tagging and release (a more invasive and intensive activity than catch & release), BSB can return to nesting site areas which some fish then appearing to spend time in a small spatial area potentially indicative of returning to nesting behaviour<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> This data is currently unpublished and is in the early stages of analysis, therefore a full determination of this behaviour can only be made following the conclusion of all required analysis. Reporting of early indications as detailed in the text is with the permission of the University of Plymouth.

additional spatial measures enforced by the MOD which further mitigate the potential impact of RA in 33% of the largest MCZ (Purbeck Coast), during 32% of the breeding season, with the potential for increased spatial coverage of closures up to 54%

The Authority deem that these measures in combination, which are directly applicable to RAs are furthering the COs without the requirement for further intervention under the Primary Policy Objective.

## **Legislative Underpinning**

The consideration of delivering the secondary policy objective is made under Section 153 (2) of the MaCAA, namely when managing the exploitation of inshore fisheries, Southern IFCA must:

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

## **Co-Developed Principles**

As underpinned by a set of Drivers and Headline Objectives, which provided the rationale for the exploration of additional management solutions, the following Co-Developed (CoD) principles; in addition to their application, have been finalised for consideration by the TAC in Autumn 2025.

The CoD principles have been informed via the co-development process and the best available evidence base as detailed in the Black Seabream Literature Review and the Black Seabream Site Specific Evidence Packages.

Table 5: Co-Developed Principles for BSB in three Dorset MCZs

Application of Co-Developed Principles:				
Voluntary, applying within the 3 Dorset MCZs, and in force during the period 1st April to 31st July				
Co-Developed Principles:				
Minimum Conservation Reference Size 28cm				
Maximum Conservation Reference Size 38cm				
Recreational Bag Limit 6 fish per person per day				
Guidance Good practice fishing & handling				
Data Collection	Year-round, all sectors			

## **Seasonality**

With respect to the application of the CoD Principles for the period 1st April to 31st July, further information was sought from NE as to the omission of March from the defined breeding season. In accordance with the best available evidence, the recognised breeding season for BSB is 1st April to 31st July. The details of the BAE used to inform this position are provided in the **Black Seabream Site Specific Evidence Packages** relevant to each MCZ and in Section 1.2.1 of the **Black Seabream Literature Review**, this information being used to inform an Authority Members' Working Group in February 2024 where the breeding season was discussed and agreed to be taken forward by Members as 1st April to 31st July.

The literature on seasonality used in the Literature Review includes six references to seasonality either along the south coast of England (3 studies), specific to the Dorset MCZs (2 studies) or specific to the Kingmere MCZ (1 study). The study for the Kingmere MCZ represents the most up to date published literature on BSB seasonality, reflecting that 92% of tagged BSB were detected at known nesting areas between April to June in 2022 and almost exclusively within this period in 2023 (Davies et al., 2024). Studies specific to the Dorset MCZs reference nest presence between May and June (Collins and Mallinson, 2012) and nesting within June, extending into July (Doggett, 2018). Studies for the south coast of England more widely reference the period April to July (Wilson, 1958; Lythgoe and Lythgoe, 1971; Pawson, 1995; Collins and Mallinson, 2012). The start of the breeding season in April is also consistent with the breeding season applied in the Sussex IFCA District to the Kingmere MCZ, with 'Bream Season Management' defined for the period 1st April to 30th June. Furthermore, the Purbeck Coast, Poole Rocks and Southbourne Rough MCZ Factsheets developed by Defra list the breeding season as April to July. The seasonality information provided by NE as part of the Conservation Advice is included in supporting documents to this Conservation Assessment Package, however it is noted that the advice also states that any assessment of potential impacts on the features must be based on up-to-date data and take account of population trends in evidence from any other available information as well as the Conservation Advice.

The Authority consider the BAE referenced in the Literature Review to provide the most accurate temporal determination of the breeding season, and as such it is determined that there is no risk to BSB populations associated with the breeding season omitting March.

## **Data Collection**

NE sought further information on how data collected under the Data Collection CoD Principle will be used for the purposes of adaptive management. BSB populations and associated fisheries are considered data poor, the data collection programme providing data at the spatial scale of the three MCZs, supporting wider external research on BSB, and providing an evidence base to help inform ongoing management of relevant fisheries. Details of the data collection programme and its application can be found in Sections 2.3.2 and 2.4 of the **Process Document 3: Management Tools, Application & Review** policy document which forms part of the BSB Management Package.

The CoD principles seek to complement the existing management protections afforded to BSB in the three Dorset MCZs, through an adaptive management approach which responds to the best available evidence.

Whilst the Secondary Policy Objective remains legislatively separate to the Primary Policy Objective, the application of management solutions relevant to the Secondary Policy Objective will contribute to the ongoing furthering of COs in a way which considers the wider complexities

of the BSB fisheries in Dorset, allowing understandings of the fisheries to advance in collaboration with stakeholders, which will facilitate achievement of shared endeavours which are relevant to Southern IFCA, Natural England and the wider community.

Affording BSB with proportionate and appropriate protections in an adaptive manner allows sustainability of these fisheries in Dorset. Southern IFCA's role as a regulator is not to inhibit fishing activity disproportionately and therefore must consider risk and proportion in its decision-making processes.

For full details of the BSB Management Intentions please see the policy documents which form part of the BSB Management Package;

- Process Document 1 Delivery Policy Objectives
- Process Document 2 Decision Making & Road Map
- Process Document 3 Management Tools, Application & Review

## **Section I: Conclusion**

In satisfying the primary policy objective, it is concluded that suitable and appropriate mitigation is in place to ensure that the Conservation Objectives of Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ can be furthered for Black Seabream. In delivering under the secondary policy objective in addition to this, Southern IFCA and the Dorset Community are affording BSB protections which go beyond the furthering of the Conservation Objectives by providing complementary measures to those already in place and by supporting advancing the understandings of the health of the BSB fishery over time with community byin.

Through pragmatic application of Southern IFCA's legal functions, shared objectives (namely the overall sustainability of BSB) can be achieved via parallel delivery of 154 and 153 duties, which will facilitate co-management with a community who are committed to the ongoing protection of the BSB. The dual approach presented by Southern IFCA allows the management focus for lower risk fishing activities to be iterative and adaptive, as supported by improved understandings, and thus providing a more holistic approach to conservation and fisheries management which, in combination will achieve a furthering of conservation objectives, whilst remaining true to the wider functions of the IFCA. This provides a platform upon which Southern IFCA can continue to work collegiately with NE and the Dorset community to ensure that shared objectives are achieved in the long term at a community level for the benefit of both conservation and fisheries.

## **Annex 1: References**

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# **Annex 2: Gear Risk Assessment**

The following table provides the rationale for the assigning of a risk level to a particular gear type under the gear risk assessment carried out for BSB in three Dorset MCZs.

Gear Type	Sector	Pressure	Risk	Rationale
		Abrasion	HIGH	Rock habitats at risk where interspersed throughout subtidal mixed sediments, risking overlap where mixed sediments fringe rock habitat. Footprint can be 0.2-2.0m wide and 30cm deep from otter boards or trawl doors. Beam width can be around 4m on each side. Study on trawling over habitat where veneer of sediment covered gravel and boulders resulted in sediment veneer being removed and underlying structure disrupted (supported by second study where single pass of an otter trawl had same effect) - sediment veneer over rock is preferred nesting habitat for BSB.
BTFG	Commercial	Removal Non-Target	HIGH	Dependent on location unable to fully determine level of obtaining BSB as a bycatch - aggregation of species increases risk. Potential for BSB to return to nest if released in good condition but damage from this gear type is not known and more likely/more likely to be severe than from other gear types. More risk of indiscriminate fishing due to footprint of gear type and wider range of species targeted.
		Removal Target	HIGH	Data from landings of BSB by trawls in 30E7 and 30E8 indicate mixed pattern over time but levels generally low, max. average 0.2 tonne in 2022 in 30E8 (incorporates all ICES area, not able to be District or MCZ specific with available data. However, this data is considering BTFG Byelaw 2016 closures, if no BTFG closures in place levels of activity within MCZs and corresponding landings not known.
		Smothering & Siltation	HIGH	High potential for sediment movements from gear passage which may smother neighbouring habitats. Wider passage of gear interacting with the seabed increases spatial extent and likelihood and severity of effect occurring.
Pot Fishing	Commercial	Abrasion	LOW	Levels of activity are generally low in the west and centre of Purbeck Coast MCZ, levels in the eastern part of the site have declined since 2005 with levels between 2020-2025 having a maximum of 5 sightings per year. For Poole Rocks and Southbourne Rough levels have been consistently low over 2005-2025.

Nets – Demersal – Drift Nets	Commercial	Abrasion Removal Non-Target Removal Target	LOW LOW	The activity is not identified as a risk activity by NE for BSB. Literature identifies potential for movement and interaction with seabed but at small scales, some studies show less than 2m² interaction area, organisms rather than habitats noted as being affected (long-lived sessile branching organisms), total time moving pots during hauling estimated to be around 20 seconds.  Activity not observed in Poole Rocks or Southbourne Rough, last sighting in Purbeck Coast in 2005. Activity in Purbeck Coast is limited by tidal action and based on best available evidence is not anticipated to occur.
Nets – Demersal –	Commercial	Abrasion  Removal Non-Target	LOW	Gill netting, trammel netting and entangling netting all have potential to occur in the site. Potential for lead line and anchors to sweep seabed causing abrasion, however indication from literature that swept area is small (Danish study up to 2m, commonly 10cm), documented impacts being for branching species. Potential for significant impact to nesting sites is very low. Low levels of documented activity within all three sites, no sightings of this type of fishing in Purbeck Coast MCZ since 2011, occurrences in Poole Rocks MCZ are limited to 1 sighting in 2025 and the same for Southbourne Rough.  Potential for low levels of activity in more inshore areas due to tidal influence in outer parts of Purbeck Coast MCZ, however generally levels remain very low. In Southbourne Rough MCZ trammel nets target sole, bycatch noted as plaice, turbot and brill but not documented as BSB. Entangling nets noted to be used to target ray and skate species, large mesh sizes required therefore risk of BSB as bycatch is reduced. Low levels of documented activity within all three sites (see row above).
Fixed Nets	Gommerolai	Removal Target	LOW	Removal of BSB as target species occurs, recorded catches of BSB in nets from landings data in 30E7 (Purbeck Coast) and 30E8 (Poole Rocks and Southbourne Rough) show general consistency in last 5 years (2020-2024), some increase in landings during breeding season in 30E7 but larger catches are outside breeding season in 30E8. Use of these gear types through documented activity (<12m vessels) is low in all three sites, average landings per year for 30E7 vary from 0.13 to 0.016 tonnes (2020-2024), and for 30E8 from 0.034 to 0.013 tonnes (2020-2024). Monthly averages (2020-2024) for 30E7 0.003-0.26 tonnes, peak in February, less than 0.05 tonnes (April to November), for 30E8 0.0067-0.08 tonnes, peak in April (less than 0.05 tonnes June to March Landings based on MMO data for BSB for Dorset Ports within District (highest resolution available and therefore likely overestimate of fishing within MCZs specifically) shows low levels of landings in 2024 (average 0.199 tonne) and for last 3 years (average all less than 0.1 tonne) and generally for last 9 nine years

Nets – Pelagic – Drift Nets Lines – Demersal –	Commercial	Removal Non-Target Removal Target  Abrasion Removal Non-Target	LOW LOW	(average all less than 0.5 tonne), broken down by month for last three years higher levels of landings have occurred primarily outside the period April to July. See 'Abrasion' row for this gear type for sightings data indicating low levels of activity in all three sites.  Activity not observed in Poole Rocks or Southbourne Rough, last sighting in Purbeck Coast in 2005. Activity in Purbeck Coast is limited by tidal action and based on best available evidence is not anticipated to occur.  Demersal long-lining is not known to occur within Poole Rocks or Southbourne Rough. Historic potential for 1-2 vessels to use the activity in Purbeck Coast but
Longlines	Commercial	Removal Target	LOW	no observed sightings by Southern IFCA or information that the activity is occurring, therefore it is not anticipate to occur.
Lines – Pelagic – Longlines	Commercial	Removal Non-Target Removal Target	LOW	Pelagic long-lining is not known to occur within Poole Rocks or Southbourne Rough. Historic potential for 1-2 vessels to use the activity in Purbeck Coast but no observed sightings by Southern IFCA or information that the activity is occurring, therefore it is not anticipated to occur.
Lines – Pelagic – Rod & Line	Commercial	Removal Non-Target (including jigging/trolling)  Removal Target	LOW	Commercial rod & line is a very targeted activity, whilst BSB may be caught as bycatch, different techniques and areas will be fished if other species are being targeted. Focused activity on MCZs is most commonly when BSB are a target species. Indication from recent research that BSB are returning to nests post-tagging, indicating strong likelihood that BSB returned from rod & line would also return to nests.  Sightings data does not distinguish between commercial and recreational rod & line activity, however for Purbeck Coast MCZ across the gear type of rod & line collectively sightings have decreased from 2005, the maximum in the last five years being 11 (2021). Peaks in activity were also seen in the same year for Poole Rocks MCZ (20) and Southbourne Rough MCZ (less than 10) with levels lower than this in subsequent years.  BSB are a target species for commercial rod & line, however landings data into Dorset Ports indicates fluctuating and generally low levels. Catch levels on average remain low between 0.7 tonne and 0.06 tonne (2016-2024). No consistent pattern in MMO landings data into Dorset ports that suggests activity is focused on April to July breeding season, for most recent three years (2022-2024),
				highest landings per month limited to an average of 0.2 tonne maximum which occurred in November. Landings between April to July (2022-2024) varied from an average of 0.1 to 0.01 tonne.

			For wider areas 30E8 and 30E7, vessels <12m, the average weight landed from 2020-2024 ranges from 0.026 to 0.048 tonnes per year, max weight 0.12-0.38 tonnes in 2024 (30E7), the average weight from 2020-2024 ranges from 0.018 to 0.027 tonnes per year, max weight 0.11-0.24 tonnes in 2024 (30E8). 30E7 highest target month March, 30E8 January.  See row above for sightings data.
	Removal Non-Target (including jigging/trolling)	MED	Charter or private RSA rod & line is a very targeted activity, whilst BSB may be caught as bycatch, different techniques and areas will be fished if other species are being targeted. Focused activity on MCZs is most commonly when BSB are a target species. Indication from recent research that BSB are returning to nests post-tagging, indicating strong likelihood that BSB returned from rod & line would also return to nests.
Recreational	Removal Target	MED	BSB are a target species for charter and private RSA rod & line activity. Charter vessels already employ larger MCRS and bag limits as voluntary measures on majority of vessels, RSA often employ larger MCRS (24cm) recommended by AT. Competitions are most commonly catch and release. Indication from recent research that BSB are returning to nests post-tagging, indicating strong likelihood that BSB returned from rod & line would also return to nests. Information collected through the Southern IFCA data collection program for May 2021 and May 2022 showed for Purbeck Coast an average CPUE of 1.47 BSB per rod per hour corresponding to a 21.5% retention, for Poole Rocks MCZ the average CPUE was 0.72 BSB per rod per hour with a retention of 15.4% and for Southbourne Rough an average CPUE of 0.86 BSB per rod per hour with a retention of 21.5%.

<sup>(\*)</sup> Note that for landings data from 30E7, 30E8 and at the level of 'Dorset Ports' does not provide for an analysis of the level of fishing activity taking place specifically within an MCZ, therefore catch levels will represent an overestimate of any catches occurring within an MCZ.

# **Annex 3: Part B Assessment Table**

Advice on Operations: Demersal Trawl							
Potential Pressure	Relevant MCZ	Rationale	Relevant Attributes	Gear Risk Level	Mitigation Measures		
Abrasion/disturbance on the surface of the seabed  Removal of non-target species  Removal of target species  Smothering and siltation		The gear type is known to cause abrasion and disturbance to the seabed. Male BSB clear a patch of sediment to use as a nest site, the gear type has the potential to move cleared sediment areas, destroying the nest and to smother and destroy eggs.  Impacts on the feature may occur through the removal of the feature as a nontarget species.  Impacts on the feature may occur through the removal of the feature as a target species.  The gear type has the	Nest abundance Population: age/size frequency Population: population size Population: recruitment and reproductive capability Presence and spatial distribution of the species Supporting habitat: extent and distribution Supporting processes: water quality - turbidity	HIGH	All forms of BTFG prohibited across the whole site at Southbourne Rough MCZ at all times of the year – 100% protection.  Extended protection provided by prohibition applying year round and therefore extended protections outside of identified breeding season further supporting the COs.		
rate changes (light)		potential to move and increase sediment around nest areas, destroying the nest and smothering and destroying the eggs.					
Advice on Operations: Anchored Nets/Lines							
Removal of non-target species	<ul><li>Purbeck Coast</li><li>Poole Rocks</li></ul>	BSB may be caught by the activity as a non-target species by either recreational or commercial operators.	Population: age/size frequency Population: population size Population: recruitment and reproductive capability	LOW	MCRS of 23cm applied across the supply chain.		

Removal of target species	Rough	BSB may be caught by the activity as a target species by either recreational or commercial operators.	Presence and spatial distribution of the species		Protection within 1/3 of the area of the Purbeck Coast MCZ for 1/3 of the breeding season covering 57% of BSB nest areas.
Advice on Operations: Pelagic Fishing (or fishing activities that do not interact with the sea bed)					
Removal of non-target	Purbeck	BSB may be caught by	Population: age/size	Pelagic Fishing:	MCRS of 23cm applied
species	Coast	the activity as a non-	frequency	Draft Nets,	across the supply
	Poole Rocks	target species by either	Population: population size	Longlines	chain.
	Southbourne	recreational or	Population: recruitment		
	Rough	commercial operators.	and reproductive capability	LOW	Protection within 1/3 of
Removal of non-target		BSB may be caught by	Presence and spatial	Pelagic rod & line	the area of the Purbeck
species		the activity as a non-	distribution of the species		Coast MCZ for 1/3 of
		target species by either		MED	the breeding season
		recreational or			covering 57% of BSB
		commercial operators.			nest areas.

# Annex 4: Natural England Letter, 10th Nov 2025

A copy of the letter received from Natural England dated 10<sup>th</sup> November 2025 seeking further clarity on specific points related to the Black Seabream Conservation Assessment Package, submitted for Formal Advice on 13<sup>th</sup> October 2025.

Date: 10 November 2025

Our ref: 530485

Your ref: Black Seabream Conservation Assessment Package

Sarah Birchenough Southern Inshore Fisheries & Conservation Authority Unit 3 Holes Bay Park Sterte Avenue West Poole Dorset BH15 2AA NATURAL ENGLAND

County Hall Colliton Park Dorchester Dorset DT1 1XJ

BY EMAIL ONLY

Dear Sarah

## Southern IFCA Black Seabream Conservation Assessment Package

Thank you for your consultation on the above which was received on 13 October 2025. The following constitutes Natural England's formal statutory response.

Purbeck Coast, Poole Rocks and Southbourne Rough MCZs are designated to protect black seabream (*Spondyliosoma cantharus*) during the breeding stage of their lifecycle (encompassing aggregating, nesting, laying, fertilising and guarding eggs) when they are particularly vulnerable to anthropogenic impacts. While the Purbeck Coast and Southbourne Rough sites were designated through the second tranche of the MCZ process in 2019, Poole Rocks was designated through the first tranche in November 2013 – with black seabream subsequently designated as an additional feature in 2019.

SIFCA has duties under section 154 of the Marine and Coastal Access Act 2009 (MaCAA) to ensure that the conservation objectives of any MCZ in the district are furthered. Section 125 of the Act also requires that public authorities (including IFCAs) exercise their functions in a manner which best furthers (or, if not possible, least hinders) the conservation objectives for MCZs.

The conservation objectives for the three Dorset MCZs are that, in relation to black seabream:

- the habitat used by individuals of that species for the purposes of spawning (spawning habitat);
  - (a) are maintained in favourable condition if they are already in favourable condition;
  - (b) be brought into favourable condition if they are not already in favourable condition.
- (2) the population (whether temporary or otherwise) of that species occurring in the zone be free of disturbance likely to significantly affect the survival of its members or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding.

Page 1 of 6

In order to demonstrate that their duties under MaCAA are being fulfilled, SIFCA has undertaken an assessment of fishing activities within the three Dorset MCZs with respect to the black seabream feature. The assessment comprises the following documents that have been provided to Natural England:

- Black Seabream Site Activity Screening Document
- Black Seabream MCZ Assessments Part A
- Black Seabream MCZ Assessment Package
- Black Seabream Site-Specific Evidence Packages
- Black Seabream Literature Review

As requested, Natural England has reviewed these documents with respect to their content and conclusions. Please find our advice detailed below.

#### 1. Black Seabream Site Activity Screening Document

The Site Activity Screening Document identifies the following activities that occur, or have the potential to occur, within each MCZ and are therefore taken forward for Part-A assessment:

- Purbeck Coast MCZ: Anchored nets/lines; pelagic fishing; traps; diving; demersal trawl
- Poole Rocks MCZ: Anchored nets/lines; pelagic fishing; traps
- Southbourne Rough MCZ: Anchored nets/lines; pelagic fishing; traps; diving

Natural England agrees with the approach taken and conclusions of this screening exercise. We note that bottom towed fishing gear has been screened out for the Poole Rocks and Southbourne Rough MCZs due to this activity being prohibited across the entirety of these sites via SIFCA's Bottom Towed Fishing Gear Byelaw 2023. This activity is screened in for Purbeck Coast MCZ as the Byelaw covers the majority (92%) but not all of the site.

#### Black Seabream MCZ Assessments – Part A

The Part A assessments apply Natural England's published Advice on Operation to each relevant gear type to activity to determine relevant pressures and assess the potential for likely significant impact. We have reviewed these assessments and agree with the approach taken and conclusions

## Black Seabream MCZ Assessment Package

Natural England has provided comments on each relevant section of the Assessment Package below.

#### 3.1 Defining principles:

To facilitate the progression of management considerations a series of legislative, evidence and spatial principles were developed as part of a series of Member Working Groups in which Natural England participated. During this process Natural England questioned the definition of the breeding season as 1<sup>st</sup> April to 31<sup>st</sup> July as this is inconsistent with the seasonality tables provided in the relevant Conservation Advice packages – which state 1<sup>st</sup> March to 31<sup>st</sup> July. We note that the Site-Specific Evidence Packages refer to peer-reviewed literature on seasonality which is implied to support an April-July season. However, we recommend that

further justification is provided in the Assessment Package as to why March has been omitted from the defined breeding season; particularly as some of the sources referenced in the Literature Review make reference to black seabream being present on the south coast during this month. It would also be beneficial to outline the implications and relative risk to black seabream of omitting March within the Assessment Package.

During the Member Working Groups, Natural England also highlighted the limitations of using best available evidence to identify nest locations and 'Indicative Habitat Areas', namely that: (i) the data used does not fully capture all the nest sites within the MCZ; (ii) the location of nest sites may move over time to alternative areas of suitable substrate; and (iii) by focusing upon nest sites only, there is a risk that this approach does not adequately protect pre-spawning (i.e. aggregation) behaviour as per the conservation objectives. Our advice on this matter still stands with respect to the defining principles presented in the Assessment Package.

#### 3.2 Gear risk assessment:

An assessment of the risk posed by relevant gear types has been undertaken which considers site-specific information in addition to Natural England's published Conservation Advice. The stated purpose of this assessment is to fully explore the level of risk posed by each relevant gear type and how this would contribute to the consideration of appropriate mitigation to meet Southern IFCA's duties under MaCAA (s.154) under a Part B Assessment.

We note that bottom towed fishing gear (BTFG) is categorised as high risk; recreational rod and line angling as medium risk; and pots, nets, lines and commercial rod and line angling as low risk. While Natural England does not disagree that the risks posed by BTFG are likely to be greater than recreational rod and line angling, we have some observations around how these risk categories relate to the Policy Objectives and associated management solutions (see below).

## 3.3 Policy Objectives

The assessment identifies a primary policy objective to manage black seabream as a designated feature of MCZs – thereby fulfilling SIFCAs duties under MaCAA (s.154). The management of bottom towed fishing gear, as a high-risk activity, is considered with respect to this objective.

Additionally, a secondary policy objective is identified to explore additional management solutions for black seabream under the following drivers:

- To improve understandings of BSB behaviours, fisheries and ecosystem management, recognising that these are currently data poor.
- To be proportionate in the application of precaution, complementing existing statutory measures for lower impact fisheries (adaptive management approach).
- To be precautionary, as despite evidence suggesting that current effort is not having an impact, this remains data poor. Additionally, potential future impact also remains unknown.

We note that this secondary policy objective is applied under Section 153(2) of MaCAA rather than Section 154; and applies to 'lower risk' activities including recreational angling. As such, it is our interpretation that any management measures presented under this secondary

Page 3 of 6

objective are deemed to be beneficial to black seabream but not necessary to further the conservation objectives of the three Dorset MCZs.

Given the risk of disturbance to black seabream posed by recreational angling, it is unclear from the Assessment Package document why the management of this activity is being considered under the secondary policy objective. It is Natural England's view that it should be considered under the primary policy objective given the direct relevance of the disturbance pressure to the conservation objectives.

## 3.4 Management solutions

The assessment identifies three existing measures that provide protection to black seabream in the Dorset MCZs:

- The Southern IFCA Bottom Towed Fishing Gear Byelaw 2023: which prohibits the use of towed gear within the entirety of the Poole Rocks and Southbourne Rough MCZs, and across 93% of the Purbeck Coast MCZ.
- The Southern IFCA Minimum Conservation Reference Size Byelaw: which stipulates a MCRS of 23cm for black seabream within the SIFCA district.
- 3) Ministry of Defence restrictions for the Lulworth Firing Ranges: which prohibit all vessels from operating within the Inner Ranges and Outer Ranges during specified periods. The area of the Inner Ranges and Outer Ranges covers 32.8% and 21% of the Purbeck Coast MCZ respectively.

The contribution of these measures to satisfying the primary policy objective are considered within the Part-B assessment with respect to pre-defined spatial principles.

Natural wrote to SIFCA on 28 February 2025 to clarify our advice on the designation, conservation objectives and protection of the black seabream feature. In this correspondence, we welcomed SIFCA's commitment to prohibit bottom towed fishing gear within the Purbeck Coast, Poole Rocks and Southbourne Rough MCZs, as these activities have the potential to cause disturbance to black seabream and affect the condition of their spawning habitat during the breeding season. However, it was (and remains) our position that current recreational angling activities continued to risk hindering the achievement of the conservation objectives of the sites; and that these objectives would be best furthered through spatial closures to ensure black seabream are not significantly disturbed during the breeding season. Natural England's position on spatial closures is consistent with our advice to the offshore wind and aggregate sectors regarding impacts on black seabream in Kingmere MCZ, in addition to our advice to Sussex IFCA on the management of fishing activities within this site.

We note that the introduction of seasonal spatial closures to recreational angling within the three Dorset MCZs are not proposed. Given that spatial closures were previously explored within the Member Working Groups, it would be helpful to clarify why this approach is no longer deemed appropriate.

It is acknowledged that temporary spatial closures associated the Lulworth Firing Ranges will reduce recreational angling pressure within the Purbeck Coast MCZ. Additionally, the following voluntary co-developed principles (to be applied to each MCZ during the period 1st April – 31st July) are proposed under the secondary policy objective:

Page 4 of 6

- Minimum Conservation Reference Size: 28cm
- Maximum Conservation Reference Size: 38cm
- Recreational Bag Limit: 6 fish person per day
- Guidance: Good practice fishing & handling
- · Data collection: Year-round, all sectors

While Natural England is supportive of these measures, our previous comments regarding seasonality (section 3.1) remain applicable. Furthermore, consistent with our comments under section 3.3, it is unclear why these measures are being proposed under the secondary policy objective and as such are not considered applicable to SIFCA's duties under Section 154 of MaCAA.

#### 3.5 Part-B Assessment outcomes

The Part-B assessment concludes that "...appropriate mitigative measures are in place through spatial restrictions on BTFG and other gear types and an MCRS applied across the supply chain to further the Conservation Objectives for Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ with regard to the feature black seabream".

Natural England is currently unable to agree with this conclusion based on the information provided. We note that information pertaining to the risks and potential impact of recreational angling is provided in the Literature Review. However, it is our view that the rationale for why additional management of recreational angling is not required to meet SIFCA'S primary policy objective is underdeveloped.

As noted in sections 3.3. and 3.4 we recommend that further information is provided in the Assessment Package on why the categorisation of recreational angling as medium risk means that management of this activity is not required to fulfil SIFCA's duties under MaCAA (s.154). More specifically, this information should demonstrate why disturbance resulting from recreational angling is not likely to significantly affect the survival of black seabream or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding – as per the conservation objectives.

Additionally, it would be helpful to expand on how data collected via the co-developed principles will be used for the purposes of adaptive management; for example, whether it will be used to identify increased/emerging risks and trigger a review of the current management approach.

## 4. Black seabream Site Specific Evidence Packages and Literature Review

Natural England welcomes the provision of the Evidence Packages and Literature Review se documents to support the MCZ Assessment Package. We do not have any specific comments relating to these documents but have made several broader recommendations within this letter around how this evidence is used to support the conclusions of the Assessment Package.

## Summary

Natural England welcomes SIFCA's commitment to manage fishing impacts upon black seabream in the Purbeck Coast, Poole Rocks and Southbourne Rough MCZs. In reviewing the MCZ Assessment Package and supporting documents we have identified several areas

Page 5 of 6

where we feel further justification is required to support the conclusions. We would be happy to provide further advice to SIFCA on these aspects if that would be helpful.

Should you have any queries, please contact me using the details provided below.

Yours sincerely

Richard Morgan Marine Senior Officer Wessex Seas Team

R.D. Margen.

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Page 6 of 6

# Annex 5: Southern IFCA Response to NE Letter, 20<sup>th</sup> Nov 2025

A copy of the response letter provided by Southern IFCA to NE in response to the letter seeking additional clarity on specific points related to the Conservation Assessment Package.

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20th November 2025

#### BY FMAIL ONLY

Ref: request for further rationale re: Formal Advice on Black Seabream

#### Dear Richard

In response to your email dated the 10<sup>th of</sup> November 2025, where you have asked for further information on several matters, I am pleased to provide the following information. Please note that in the absence of a specific list of questions, the responses have been summarised around the following points:

#### Length of Breeding Season: 1st April - 31st July

 To provide further justification as to why March has been omitted from the defined breeding season and to outline the implications and relative risk to black seabream as a result of this.

In accordance with the best available evidence, the recognised breeding season for black sea bream (BSB) is 1st April – 31st July. The details of the Best Available Evidence (BAE) used to inform this position are provided in the documents 'Black Seabream Site Specific Evidence Packages' relevant to each MCZ and in Section 1.2.1 of the 'Black Seabream Literature Review', this information being used to inform a Member Working Group in February 2024 where the breeding season was discussed and agreed to be taken forward by Members as 1st April – 31st July.

For ease and in order to expand further on this matter, the literature on seasonality used in the Literature Review includes six references to seasonality either along the south coast of England (3 studies), specific to the Dorset MCZs (2 studies) or specific to the Kingmere MCZ (1 study). The study for the Kingmere MCZ represents the most up to date published literature on BSB seasonality, reflecting that 92% of tagged BSB were detected at known nesting areas between April to June in 2022 and almost exclusively within this period in 2023 (Davies et al., 2024). Studies specific to the Dorset MCZs reference nest presence between May and June (Collins and Mallinson, 2012) and nesting within June, extending into July (Doggett, 2018). Studies for the south coast of England more widely reference the period April to July (Wilson, 1958; Lythgoe and Lythgoe, 1971; Pawson, 1995; Collins and Mallinson, 2012). The start of the breeding season in April is also consistent with the breeding season applied in the Sussex IFCA District to the Kingmere MCZ, with 'Bream Season Management' defined for the period 1st April to 30th June. Furthermore, the Purbeck Coast, Poole Rocks and Southbourne Rough Factsheets developed by Defra list the breeding season as April to July. The seasonality information provided by Natural England as part of the Conservation Advice is included in supporting documents for the BSB Conservation Assessment Package, however it is noted that the advice also states that any assessment of potential impacts on the features must be based on up-to-date data and take account of population trends evidence from any other available information as well as the Conservation Advice.

With consideration of the information provided in the above paragraphs, the Authority consider the BAE referenced in the Literature Review, to provide the most accurate temporal determination of the breeding season, and as such do not consider there to be any risk associated with the breeding season by omitting March.

It is prudent to reiterate that the fishing activity which poses the highest risk (Bottom Towed Fishing Gear [BTFG]) has already been removed across all three MCZs at a near site level, across the entirety of the calendar year. Therefore, the protections afforded to BSB by the BTFG Byelaw 2023 alone are considered by the Authority to exceed the scope of the Conservation Objectives (COs), when reflecting that the measures are applicable and actively enforced beyond the scope of the recognised breeding season. Further, existing measures in place which are applicable across all gear types across a 12-month temporal scale (MCRS & Lulworth Ranges) further mitigate the relative risk to BSB.

Southern Inshore Fisheries and Conservation Authority

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#### Clarification on matters specific to Recreational Angling

To clarify why spatial closures are not being proposed for Recreational Angling (RA), despite this option being explored by the Authority during Member Working Groups.

In order to gather information about the BSB fishery operating in the 3 x Dorset MCZ's, Members initially proposed that a seasonal closure be considered for 13 Indicative Habitat Areas (IHAs) for all fishing activity (recreational and commercial [pots/traps, nets and lines]) between 1st April-31st July. The aim of this initial proposal was to gain an understanding of the potential impact that the introduction of 'no take zones' could have, if applied across the 13 IHAs, as an initial iteration of possible draft measures.

Using this proposal as a starting point, a Quantification of Impact Exercise (QIE) was undertaken with the stakeholder community to understand more about the BSB fishery at a site level. IFCAs' are required by Defra to ensure that any potential impacts are identified and considered in all decision-making processes to ensure that any subsequent management intervention is proportionate to the risk being addressed.

The outcomes of the QIE instigated a three-month review of the BSB work that had been undertaken to date. The catalyst for this review was recognition that, whilst the draft spatial management proposal could satisfy 154 of the MaCAA in isolation, based on the crudest outcomes of the QIE, it was apparent that there could be significant unintended consequences associated with the introduction of such spatial management. As such, the Members resolved to undertake a wider analysis of the fishery to help inform the subsequent decision-making process. This work explored all relevant Material Considerations, including (but not limited to) consideration of gear risk site specific profiling, quantification of existing measures, socio-economic impact and the exploration the BSB designation process (specifically that BSB were not designated under MaCAA 117[4] as rare or threatened due to limited numbers or limited locations where present, rather, they were designated under MaCAA 117[5] to conserve diversity, due to ecological significance...where if not protected the BSB would be affected at population or subpopulation level & persistence [where they occur at high densities in contrast to surrounding areas]). Further details of the relevant Material Considerations and their role in the decision-making process will be available in the agenda papers accompanying the Technical Advisory Committee on the 4th of December.

The above-mentioned work was undertaken during a three-month period of 'Review & Refocus'. Following this period, the Members determined to split the BSB Review into two parallel streams of work, each having independent policy objectives and legislative underpinnings - one specific to MaCAA 154 duties and one specific to MaCAA 153 duties, with the Secondary Policy Objective to consider lower risk fishing activities, in accordance with the Policy Drivers and Headline Objective set by the Authority.

It is important to note that specific to RA, as part of the outcomes of the 'Review & Refocus', it was identified that the MOD actively enforce exclusion zones in the largest of the Dorset MCZ's (Purbeck), the footprint of which can be quantified at c.33% of the MCZ during a defined c.32% of the breeding season with additional closures able to be applied to a further c.21% (giving a total coverage of c.54% of the MCZ). The BAE suggests that 57% of known nesting areas in the Purbeck MCZ are found within the MOD exclusion zone. The Authority deem that these spatial closures, applicable to RA (and all other gear types) are actively furthering the COs.

3. To clarify why RA is being considered under the Secondary Policy Objective and not considered applicable to the IFCA duties under Section 154; demonstrating why disturbance resulting from RA is not likely significantly to affect the survival of BSB or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding – as per the conservation objectives.

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Recreational Angling is already subject to active management across the 3 x MCZ's (and at a District wide level) via the Southern IFCA MCRS Byelaw and via application of MOD exclusion zones in the largest of the Dorset MCZs (covering a quantified 33% of the Purbeck MCZ during 32% of the breeding season with the potential for an increased coverage up to 54%). These mechanisms are and will continue to further the COs of the sites and therefore have direct relevance to the Section 154 duties.

The output of the gear risk assessment identified that for rod & line the applicable pressures were 'removal of target species' and 'removal of non-target species', with a medium rating which, subject to further consideration based on the specifics of this gear type, as per the information provided in Annex 2 of the Conservation Assessment Package, identifies that catch levels for removal are low with additional measures already employed by RA, including increased MCRS. Additionally, recent work in Dorset under the Angling for Sustainability Fisheries Industry Science Partnerships Project (AfS FISP), which used acoustic telemetry to monitor BSB movements in the three Dorset MCZs, provides an early indication that following tagging and release, BSB can return to nesting site areas with some fish then appearing to spend time in a small spatial area potentially indicative of returning to nesting behaviour. This data is currently unpublished and is in the early stages of analysis, therefore a full determination of this behaviour can only be made following the conclusion of all required analysis. However, in considering the measures which already apply in the form of MCRS and spatial closures through external mechanisms, and noting that the designation of BSB is not applicable to a population which is rare or threatened due to limited numbers or locations present, the Authority considers that any additional management to that already in place would be disproportionate to the risk being addressed.

The Authority are committed to ensuring that any additional management of fishing activity which is not classified as high risk must be proportionate and considered holistically via qualification of all relevant material considerations as part of the decision-making process. Recognising that (in combination), the Southern IFCA BTFG 2023 Byelaw, the Southern IFCA MCRS Byelaw and the MOD spatial closures are already satisfying the 154 MaCAA duty, the Authority subsequently determined to explore opportunities for management of all lower risk fishing activities under the legislative umbrella of MaCAA 153 (Primary Policy Objective) and in doing so, committed to explore management solutions best suited to achieve the Secondary Policy Objectives' Policy Drivers & Headline Objectives, as set by the Authority.

It is the Authority's view that any potential disturbance resulting from RA which is likely significantly to affect (a) the survival of BSB, and (b) the ability of BSB to aggregate, nest, or lay, fertilise or guard eggs during breeding, is mitigated via:

- the ongoing application of the Southern IFCA MCRS -this is a statutory measure that has been
  in place since 2001¹, with Southern IFCA compliance metrics demonstrating embedded
  community compliance with this established measure.
- In addition, many of the charter operators working in the MCZs are actively enforcing their own bag limits and across the RA sector, charter operators and individuals are working to an increased MCRS, recognising the importance of the sustainability of the BSB fishery via selfgovernance mechanisms.
- Further, recent BAE (2025) provided through the AfS FISP, indicates survivability of BSB following catch and release, with BSB returning to nesting site areas and gives a potential indication of the resumption of nesting behaviour based on spending time in a small spatial area following tagging (a more invasive & intensive activity than catch & release)
- Additional spatial measures enforced by the MOD further mitigate the potential impact of RA in 33% of the largest MCZ (Purbeck Coast), during 32% of the breeding season, with the potential for increased spatial coverage of closures up to 54%.

<sup>&</sup>lt;sup>1</sup> Under the Southern IFCA 'Minimum Fish Sizes' byelaw, subsequently revoked and replaced in 2021 by the 'Minimum Conservation Reference Size Byelaw'

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The Authority deem that these measures in combination, which are directly applicable to RAs, are (1) furthering the COs; specifically, that the mitigations reduce the potential for disturbance caused by RA, and therefore RA is not '...likely significantly\*...' to affect (a) or (b) as per above [\*to probably happen, by a large amount], and (2) accordingly are satisfied that there is no significant risk that RA will hinder the achievement of the COs.

Whilst Policy Objective 2 (153 duties) remains legislatively separate to Policy Objective 1 (154 duties) and therefore does not require formal consideration by Natural England (NE), it is of importance for NE to recognise that the application of management solutions relevant to Policy Objective 2 will contribute to the ongoing furthering of COs in a way which considers the wider complexities of the BSB fishery in Dorset, allowing understandings of the fishery to advance in collaboration with stakeholders, which will facilitate achievement of shared endeavours which are relevant to NE, Southern IFCA and the wider community. Affording BSB with proportionate and appropriate protections in an adaptive manner allows Southern IFCA, as a regulator, to robustly respond to BAE in a timely way to ensure the future sustainability of this fishery in Dorset. Southern IFCA's role as a regulator is not to inhibit fishing activity disproportionately and therefore must consider risk and proportion in its decision-making processes.

Through pragmatic application of Southern IFCA's legal functions, shared objectives (namely the overall sustainability of BSB) can be achieved via parallel delivery of 154 and 153 duties, which will facilitate co-management with a community who are committed to the ongoing protection of the BSB. The dual approach presented by Southern IFCA allows the management focus for lower risk fishing activities to be iterative and adaptive, as supported by improved understandings, and thus providing a more holistic approach to conservation and fisheries management which, in combination will achieve a furthering of conservation objectives, whilst remaining true to the wider functions of the IFCA. This provides a platform upon which Southern IFCA can continue to work collegiately with NE and the Dorset community to ensure that shared objectives are achieved in the long term at a community level for the benefit of both conservation and fisheries.

It is observed that the Drivers and Headline Objectives underpinning Policy Objective 2 align with NE's 2025 Strategy: Recovering Nature for Growth, Health and Security. It is understood that the driver for this Strategy recognises, in part, that previous NE management directives for protection and restoration alone cannot achieve shared endeavours, rather there is a need to consider economic growth, health (to include wellbeing via access to blue space) and food security (fisheries) alongside the recovery of nature

#### Further information on data collection and its role in adaptive management

4. To expand on how data collected via the co-developed principles will be used for the purposes of adaptive management; for example, whether it will be used to identify increased/emerging risks and trigger a review of the current management approach.

BSB populations and associated fisheries are considered data poor, the data collection programme, as one of the CoD Principles, will provide data at the spatial scale of the three MCZs, supporting wider external research on BSB, and will provide an evidence base to help inform ongoing management of relevant fisheries. The data collection programme will also provide data to the Seabreams FMP during the implementation phase helping to support local and national management through an aligned, evidence-based approach. Data will be sought across commercial fisheries (net, rod & line), recreational fisheries (rod & line) and charter vessel fisheries (rod & line) via multiple mechanisms to facilitate maximum participation.

An Annual Review of the CoD Principles will follow the conclusion of the recognised breeding season and will consider community feedback on the application of the CoD Principles & overall health of the BSB fisheries, analysis of data collected during the season, additional data collection (running year-round), IFCA compliance & enforcement metrics, data from external sources (other relevant

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authorities), BSB FMP outcomes (goals, actions, data gaps) and emerging evidence on BSB populations or fisheries (for exampled published outputs from the AfS FISP).

Following Annual Review, any changes proposed to the CoD Principles will be considered with the community prior to consideration by the Authority, with any changes implemented prior to the subsequent season. Following Annual Review, if singular or multiple CoD Principles are deemed not to be achieving the Policy Objectives, then consideration may be given to the development of fisheries relevant triggers in line with recognised practice. Southern IFCA recognise that this fishery is data poor, as such, an adaptive management approach, as facilitated under the Secondary Policy Objective, allows Southern IFCA to robustly respond to BAE in a timely way to ensure the future sustainability of this fishery in Dorset.

Southern IFCA welcome this opportunity to provide Natural England with more in-depth rationale to support the information provided in the Assessment Package, and would like to take this opportunity to draw together the following conclusions:

The Authority conclude that appropriate mitigative measures are already in place via a combination of spatial and technical statutory mechanisms, which are collectively furthering the Conservation Objectives relevant to BSB across three Dorset MCZs. This is primarily being achieved via the elimination of BTFG activity across the entirety of Poole Rocks MCZ (whole site) and Southbourne Rough MCZ (whole site) and via a BTFG spatial closure across  $93\%^2$  of the Purbeck MCZ, thus removing the highest risk fishing activity almost in its entirety across the three Dorset MCZs. Additionally, the furthering of the COs is being achieved via enforcement of a MCRS for BSB at a District wide level, applicable to commercial and recreational users, which is also applicable to the wider supply chain. Furthermore, spatial restrictions via an exclusion zone in the Purbeck MCZ, which equates to quantifiable closures for c.32% of the time (during the relevant season), across c.33% of the MCZ (which can be extended to c.54%), as enforced by the Ministry of Defence (MOD), are further enhancing protections to BSB in the Purbeck MCZ across the entirety of gear types (commercial and recreational) via closures applicable to all users.

Collectively, the Southern IFCA statutory measures (as well as those enforced by the MOD) are already providing protections to BSB beyond the 3 x MCZ's collective footprint, at a temporal scale beyond that of the breeding season. As such, these statutory measures are providing protections to BSB nesting sites and populations at a level which exceeds the scope of the Conservation Objectives. In combination, these measures are furthering the Conservation Objectives for BSB across the Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ.

Please note that we will be incorporating the above requested information into the Assessment Package as required in due course, for completeness. In the meantime, we ask that Natural England consider this letter alongside the Southern IFCA Black Seabream Conservation Assessment Package (sent on the 13th of October 2025) in order to avoid any unnecessary delay in provision of Natural England's final conclusions.

Kind Regards,

Pia Bateman

Chief Executive Officer, Southern Inshore Fisheries and Conservation Authority

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<sup>&</sup>lt;sup>2</sup> The remainder of the Purteck Coast MCZ is subject to feature data which has been deemed unreliable in terms of location and/or extent by Natural England and is therefore not suitable as a basis for making management determinations. The feature data does not relate directly to BSB and it has been confirmed by NE through the Part A Assessment process for the BTFG Review Phase I that the area of the MCZ which remains open to BSB poses no risk to BSB as a designated feature.

Date: 10 November 2025

Our ref: 530485

Your ref: Black Seabream Conservation Assessment Package



County Hall Colliton Park Dorchester Dorset DT1 1XJ

Sarah Birchenough Southern Inshore Fisheries & Conservation Authority Unit 3 Holes Bay Park Sterte Avenue West Poole Dorset BH15 2AA

#### BY EMAIL ONLY

Dear Sarah

#### **Southern IFCA Black Seabream Conservation Assessment Package**

Thank you for your consultation on the above which was received on 13 October 2025. The following constitutes Natural England's formal statutory response.

Purbeck Coast, Poole Rocks and Southbourne Rough MCZs are designated to protect black seabream (*Spondyliosoma cantharus*) during the breeding stage of their lifecycle (encompassing aggregating, nesting, laying, fertilising and guarding eggs) when they are particularly vulnerable to anthropogenic impacts. While the Purbeck Coast and Southbourne Rough sites were designated through the second tranche of the MCZ process in 2019, Poole Rocks was designated through the first tranche in November 2013 – with black seabream subsequently designated as an additional feature in 2019.

SIFCA has duties under section 154 of the Marine and Coastal Access Act 2009 (MaCAA) to ensure that the conservation objectives of any MCZ in the district are furthered. Section 125 of the Act also requires that public authorities (including IFCAs) exercise their functions in a manner which best furthers (or, if not possible, least hinders) the conservation objectives for MCZs.

The conservation objectives for the three Dorset MCZs are that, in relation to black seabream:

- (1) the habitat used by individuals of that species for the purposes of spawning (spawning habitat);
  - (a) are maintained in favourable condition if they are already in favourable condition; or
  - (b) be brought into favourable condition if they are not already in favourable condition.
- (2) the population (whether temporary or otherwise) of that species occurring in the zone be free of disturbance likely to significantly affect the survival of its members or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding.

In order to demonstrate that their duties under MaCAA are being fulfilled, SIFCA has undertaken an assessment of fishing activities within the three Dorset MCZs with respect to the black seabream feature. The assessment comprises the following documents that have been provided to Natural England:

- Black Seabream Site Activity Screening Document
- Black Seabream MCZ Assessments Part A
- Black Seabream MCZ Assessment Package
- Black Seabream Site-Specific Evidence Packages
- Black Seabream Literature Review

As requested, Natural England has reviewed these documents with respect to their content and conclusions. Please find our advice detailed below.

#### 1. Black Seabream Site Activity Screening Document

The Site Activity Screening Document identifies the following activities that occur, or have the potential to occur, within each MCZ and are therefore taken forward for Part-A assessment:

- Purbeck Coast MCZ: Anchored nets/lines; pelagic fishing; traps; diving; demersal trawl
- Poole Rocks MCZ: Anchored nets/lines; pelagic fishing; traps
- Southbourne Rough MCZ: Anchored nets/lines; pelagic fishing; traps; diving

Natural England agrees with the approach taken and conclusions of this screening exercise. We note that bottom towed fishing gear has been screened out for the Poole Rocks and Southbourne Rough MCZs due to this activity being prohibited across the entirety of these sites via SIFCA's Bottom Towed Fishing Gear Byelaw 2023. This activity is screened in for Purbeck Coast MCZ as the Byelaw covers the majority (92%) but not all of the site.

#### 2. Black Seabream MCZ Assessments – Part A

The Part A assessments apply Natural England's published Advice on Operation to each relevant gear type to activity to determine relevant pressures and assess the potential for likely significant impact. We have reviewed these assessments and agree with the approach taken and conclusions.

#### 3. Black Seabream MCZ Assessment Package

Natural England has provided comments on each relevant section of the Assessment Package below.

#### 3.1 Defining principles:

To facilitate the progression of management considerations a series of legislative, evidence and spatial principles were developed as part of a series of Member Working Groups in which Natural England participated. During this process Natural England questioned the definition of the breeding season as 1<sup>st</sup> April to 31<sup>st</sup> July as this is inconsistent with the seasonality tables provided in the relevant Conservation Advice packages – which state 1<sup>st</sup> March to 31<sup>st</sup> July. We note that the Site-Specific Evidence Packages refer to peer-reviewed literature on seasonality which is implied to support an April-July season. However, we recommend that

further justification is provided in the Assessment Package as to why March has been omitted from the defined breeding season; particularly as some of the sources referenced in the Literature Review make reference to black seabream being present on the south coast during this month. It would also be beneficial to outline the implications and relative risk to black seabream of omitting March within the Assessment Package.

During the Member Working Groups, Natural England also highlighted the limitations of using best available evidence to identify nest locations and 'Indicative Habitat Areas', namely that: (i) the data used does not fully capture all the nest sites within the MCZ; (ii) the location of nest sites may move over time to alternative areas of suitable substrate; and (iii) by focusing upon nest sites only, there is a risk that this approach does not adequately protect pre-spawning (i.e. aggregation) behaviour as per the conservation objectives. Our advice on this matter still stands with respect to the defining principles presented in the Assessment Package.

#### 3.2 Gear risk assessment:

An assessment of the risk posed by relevant gear types has been undertaken which considers site-specific information in addition to Natural England's published Conservation Advice. The stated purpose of this assessment is to fully explore the level of risk posed by each relevant gear type and how this would contribute to the consideration of appropriate mitigation to meet Southern IFCA's duties under MaCAA (s.154) under a Part B Assessment.

We note that bottom towed fishing gear (BTFG) is categorised as high risk; recreational rod and line angling as medium risk; and pots, nets, lines and commercial rod and line angling as low risk. While Natural England does not disagree that the risks posed by BTFG are likely to be greater than recreational rod and line angling, we have some observations around how these risk categories relate to the Policy Objectives and associated management solutions (see below).

#### 3.3 Policy Objectives

The assessment identifies a primary policy objective to manage black seabream as a designated feature of MCZs – thereby fulfilling SIFCAs duties under MaCAA (s.154). The management of bottom towed fishing gear, as a high-risk activity, is considered with respect to this objective.

Additionally, a secondary policy objective is identified to explore additional management solutions for black seabream under the following drivers:

- 1) To improve understandings of BSB behaviours, fisheries and ecosystem management, recognising that these are currently data poor.
- 2) To be proportionate in the application of precaution, complementing existing statutory measures for lower impact fisheries (adaptive management approach).
- 3) To be precautionary, as despite evidence suggesting that current effort is not having an impact, this remains data poor. Additionally, potential future impact also remains unknown.

We note that this secondary policy objective is applied under Section 153(2) of MaCAA rather than Section 154; and applies to 'lower risk' activities including recreational angling. As such, it is our interpretation that any management measures presented under this secondary

objective are deemed to be beneficial to black seabream but not necessary to further the conservation objectives of the three Dorset MCZs.

Given the risk of disturbance to black seabream posed by recreational angling, it is unclear from the Assessment Package document why the management of this activity is being considered under the secondary policy objective. It is Natural England's view that it should be considered under the primary policy objective given the direct relevance of the disturbance pressure to the conservation objectives.

#### 3.4 Management solutions

The assessment identifies three existing measures that provide protection to black seabream in the Dorset MCZs:

- 1) The Southern IFCA Bottom Towed Fishing Gear Byelaw 2023: which prohibits the use of towed gear within the entirety of the Poole Rocks and Southbourne Rough MCZs, and across 93% of the Purbeck Coast MCZ.
- 2) The Southern IFCA Minimum Conservation Reference Size Byelaw: which stipulates a MCRS of 23cm for black seabream within the SIFCA district.
- 3) Ministry of Defence restrictions for the Lulworth Firing Ranges: which prohibit all vessels from operating within the Inner Ranges and Outer Ranges during specified periods. The area of the Inner Ranges and Outer Ranges covers 32.8% and 21% of the Purbeck Coast MCZ respectively.

The contribution of these measures to satisfying the primary policy objective are considered within the Part-B assessment with respect to pre-defined spatial principles.

Natural wrote to SIFCA on 28 February 2025 to clarify our advice on the designation, conservation objectives and protection of the black seabream feature. In this correspondence, we welcomed SIFCA's commitment to prohibit bottom towed fishing gear within the Purbeck Coast, Poole Rocks and Southbourne Rough MCZs, as these activities have the potential to cause disturbance to black seabream and affect the condition of their spawning habitat during the breeding season. However, it was (and remains) our position that current recreational angling activities continued to risk hindering the achievement of the conservation objectives of the sites; and that these objectives would be best furthered through spatial closures to ensure black seabream are not significantly disturbed during the breeding season. Natural England's position on spatial closures is consistent with our advice to the offshore wind and aggregate sectors regarding impacts on black seabream in Kingmere MCZ, in addition to our advice to Sussex IFCA on the management of fishing activities within this site.

We note that the introduction of seasonal spatial closures to recreational angling within the three Dorset MCZs are not proposed. Given that spatial closures were previously explored within the Member Working Groups, it would be helpful to clarify why this approach is no longer deemed appropriate.

It is acknowledged that temporary spatial closures associated the Lulworth Firing Ranges will reduce recreational angling pressure within the Purbeck Coast MCZ. Additionally, the following voluntary co-developed principles (to be applied to each MCZ during the period 1<sup>st</sup> April – 31<sup>st</sup> July) are proposed under the secondary policy objective:

- Minimum Conservation Reference Size: 28cm
- Maximum Conservation Reference Size: 38cm
- Recreational Bag Limit: 6 fish person per day
- Guidance: Good practice fishing & handling
- Data collection: Year-round, all sectors

While Natural England is supportive of these measures, our previous comments regarding seasonality (section 3.1) remain applicable. Furthermore, consistent with our comments under section 3.3, it is unclear why these measures are being proposed under the secondary policy objective and as such are not considered applicable to SIFCA's duties under Section 154 of MaCAA.

#### 3.5 Part-B Assessment outcomes

The Part-B assessment concludes that "...appropriate mitigative measures are in place through spatial restrictions on BTFG and other gear types and an MCRS applied across the supply chain to further the Conservation Objectives for Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ with regard to the feature black seabream".

Natural England is currently unable to agree with this conclusion based on the information provided. We note that information pertaining to the risks and potential impact of recreational angling is provided in the Literature Review. However, it is our view that the rationale for why additional management of recreational angling is not required to meet SIFCA'S primary policy objective is underdeveloped.

As noted in sections 3.3. and 3.4 we recommend that further information is provided in the Assessment Package on why the categorisation of recreational angling as medium risk means that management of this activity is not required to fulfil SIFCA's duties under MaCAA (s.154). More specifically, this information should demonstrate why disturbance resulting from recreational angling is not likely to significantly affect the survival of black seabream or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding – as per the conservation objectives.

Additionally, it would be helpful to expand on how data collected via the co-developed principles will be used for the purposes of adaptive management; for example, whether it will be used to identify increased/emerging risks and trigger a review of the current management approach.

#### 4. Black seabream Site Specific Evidence Packages and Literature Review

Natural England welcomes the provision of the Evidence Packages and Literature Review se documents to support the MCZ Assessment Package. We do not have any specific comments relating to these documents but have made several broader recommendations within this letter around how this evidence is used to support the conclusions of the Assessment Package.

#### 5. Summary

Natural England welcomes SIFCA's commitment to manage fishing impacts upon black seabream in the Purbeck Coast, Poole Rocks and Southbourne Rough MCZs. In reviewing the MCZ Assessment Package and supporting documents we have identified several areas

where we feel further justification is required to support the conclusions. We would be happy to provide further advice to SIFCA on these aspects if that would be helpful.

Should you have any queries, please contact me using the details provided below.

Yours sincerely

Richard Morgan Marine Senior Officer Wessex Seas Team

R.D. Morgan.

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BY EMAIL ONLY

Ref: request for further rationale re: Formal Advice on Black Seabream

Dear Richard,

In response to your email dated the 10<sup>th of</sup> November 2025, where you have asked for further information on several matters, I am pleased to provide the following information. Please note that in the absence of a specific list of questions, the responses have been summarised around the following points:

#### **Length of Breeding Season: 1st April – 31st July**

1. To provide further justification as to why March has been omitted from the defined breeding season and to outline the implications and relative risk to black seabream as a result of this.

In accordance with the best available evidence, the recognised breeding season for black sea bream (BSB) is 1st April – 31st July. The details of the Best Available Evidence (BAE) used to inform this position are provided in the documents 'Black Seabream Site Specific Evidence Packages' relevant to each MCZ and in Section 1.2.1 of the 'Black Seabream Literature Review', this information being used to inform a Member Working Group in February 2024 where the breeding season was discussed and agreed to be taken forward by Members as 1st April – 31st July.

For ease and in order to expand further on this matter, the literature on seasonality used in the Literature Review includes six references to seasonality either along the south coast of England (3 studies), specific to the Dorset MCZs (2 studies) or specific to the Kingmere MCZ (1 study). The study for the Kingmere MCZ represents the most up to date published literature on BSB seasonality, reflecting that 92% of tagged BSB were detected at known nesting areas between April to June in 2022 and almost exclusively within this period in 2023 (Davies et al., 2024). Studies specific to the Dorset MCZs reference nest presence between May and June (Collins and Mallinson, 2012) and nesting within June, extending into July (Doggett, 2018). Studies for the south coast of England more widely reference the period April to July (Wilson, 1958; Lythgoe and Lythgoe, 1971; Pawson, 1995; Collins and Mallinson, 2012). The start of the breeding season in April is also consistent with the breeding season applied in the Sussex IFCA District to the Kingmere MCZ, with 'Bream Season Management' defined for the period 1st April to 30th June. Furthermore, the Purbeck Coast, Poole Rocks and Southbourne Rough Factsheets developed by Defra list the breeding season as April to July. The seasonality information provided by Natural England as part of the Conservation Advice is included in supporting documents for the BSB Conservation Assessment Package, however it is noted that the advice also states that any assessment of potential impacts on the features must be based on up-to-date data and take account of population trends evidence from any other available information as well as the Conservation Advice.

With consideration of the information provided in the above paragraphs, the Authority consider the BAE referenced in the Literature Review, to provide the most accurate temporal determination of the breeding season, and as such do not consider there to be any risk associated with the breeding season by omitting March.

It is prudent to reiterate that the fishing activity which poses the highest risk (Bottom Towed Fishing Gear [BTFG]) has already been removed across all three MCZs at a near site level, across the entirety of the calendar year. Therefore, the protections afforded to BSB by the BTFG Byelaw 2023 alone are considered by the Authority to exceed the scope of the Conservation Objectives (COs), when reflecting that the measures are applicable and actively enforced beyond the scope of the recognised breeding season. Further, existing measures in place which are applicable across all gear types across a 12-month temporal scale (MCRS & Lulworth Ranges) further mitigate the relative risk to BSB.

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#### Clarification on matters specific to Recreational Angling

2. To clarify why spatial closures are not being proposed for Recreational Angling (RA), despite this option being explored by the Authority during Member Working Groups.

In order to gather information about the BSB fishery operating in the 3 x Dorset MCZ's, Members initially proposed that a seasonal closure be considered for 13 Indicative Habitat Areas (IHAs) for all fishing activity (recreational and commercial [pots/traps, nets and lines]) between 1st April-31st July. The aim of this initial proposal was to gain an understanding of the potential impact that the introduction of 'no take zones' could have, if applied across the 13 IHAs, as an initial iteration of possible draft measures.

Using this proposal as a starting point, a Quantification of Impact Exercise (QIE) was undertaken with the stakeholder community to understand more about the BSB fishery at a site level. IFCAs' are required by Defra to ensure that any potential impacts are identified and considered in all decision-making processes to ensure that any subsequent management intervention is proportionate to the risk being addressed.

The outcomes of the QIE instigated a three-month review of the BSB work that had been undertaken to date. The catalyst for this review was recognition that, whilst the draft spatial management proposal could satisfy 154 of the MaCAA in isolation, based on the crudest outcomes of the QIE, it was apparent that there could be significant unintended consequences associated with the introduction of such spatial management. As such, the Members resolved to undertake a wider analysis of the fishery to help inform the subsequent decision-making process. This work explored all relevant Material Considerations, including (but not limited to) consideration of gear risk site specific profiling, quantification of existing measures, socio-economic impact and the exploration the BSB designation process (specifically that BSB were not designated under MaCAA 117[4] as rare or threatened due to limited numbers or limited locations where present, rather, they were designated under MaCAA 117[5] to conserve diversity, due to ecological significance...where if not protected the BSB would be affected at population or subpopulation level & persistence [where they occur at high densities in contrast to surrounding areas]). Further details of the relevant Material Considerations and their role in the decision-making process will be available in the agenda papers accompanying the Technical Advisory Committee on the 4th of December.

The above-mentioned work was undertaken during a three-month period of 'Review & Refocus'. Following this period, the Members determined to split the BSB Review into two parallel streams of work, each having independent policy objectives and legislative underpinnings - one specific to MaCAA 154 duties and one specific to MaCAA 153 duties, with the Secondary Policy Objective to consider lower risk fishing activities, in accordance with the Policy Drivers and Headline Objective set by the Authority.

It is important to note that specific to RA, as part of the outcomes of the 'Review & Refocus', it was identified that the MOD actively enforce exclusion zones in the largest of the Dorset MCZ's (Purbeck), the footprint of which can be quantified at c.33% of the MCZ during a defined c.32% of the breeding season with additional closures able to be applied to a further c.21% (giving a total coverage of c.54% of the MCZ). The BAE suggests that 57% of known nesting areas in the Purbeck MCZ are found within the MOD exclusion zone. The Authority deem that these spatial closures, applicable to RA (and all other gear types) are actively furthering the COs.

3. To clarify why RA is being considered under the Secondary Policy Objective and not considered applicable to the IFCA duties under Section 154; demonstrating why disturbance resulting from RA is not likely significantly to affect the survival of BSB or their ability to aggregate, nest, or lay, fertilise or guard eggs during breeding – as per the conservation objectives.

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Recreational Angling is already subject to active management across the 3 x MCZ's (and at a District wide level) via the Southern IFCA MCRS Byelaw and via application of MOD exclusion zones in the largest of the Dorset MCZs (covering a quantified 33% of the Purbeck MCZ during 32% of the breeding season with the potential for an increased coverage up to 54%). These mechanisms are and will continue to further the COs of the sites and therefore have direct relevance to the Section 154 duties.

The output of the gear risk assessment identified that for rod & line the applicable pressures were 'removal of target species' and 'removal of non-target species', with a medium rating which, subject to further consideration based on the specifics of this gear type, as per the information provided in Annex 2 of the Conservation Assessment Package, identifies that catch levels for removal are low with additional measures already employed by RA, including increased MCRS. Additionally, recent work in Dorset under the Angling for Sustainability Fisheries Industry Science Partnerships Project (AfS FISP), which used acoustic telemetry to monitor BSB movements in the three Dorset MCZs, provides an early indication that following tagging and release, BSB can return to nesting site areas with some fish then appearing to spend time in a small spatial area potentially indicative of returning to nesting behaviour. This data is currently unpublished and is in the early stages of analysis, therefore a full determination of this behaviour can only be made following the conclusion of all required analysis. However, in considering the measures which already apply in the form of MCRS and spatial closures through external mechanisms, and noting that the designation of BSB is not applicable to a population which is rare or threatened due to limited numbers or locations present, the Authority considers that any additional management to that already in place would be disproportionate to the risk being addressed.

The Authority are committed to ensuring that any additional management of fishing activity which is not classified as high risk must be proportionate and considered holistically via qualification of all relevant material considerations as part of the decision-making process. Recognising that (in combination), the Southern IFCA BTFG 2023 Byelaw, the Southern IFCA MCRS Byelaw and the MOD spatial closures are already satisfying the 154 MaCAA duty, the Authority subsequently determined to explore opportunities for management of all lower risk fishing activities under the legislative umbrella of MaCAA 153 (Primary Policy Objective) and in doing so, committed to explore management solutions best suited to achieve the Secondary Policy Objectives' Policy Drivers & Headline Objectives, as set by the Authority.

It is the Authority's view that any potential disturbance resulting from RA which is likely significantly to affect (a) the survival of BSB, and (b) the ability of BSB to aggregate, nest, or lay, fertilise or guard eggs during breeding, is mitigated via:

- the ongoing application of the Southern IFCA MCRS -this is a statutory measure that has been in place since 2001<sup>1</sup>, with Southern IFCA compliance metrics demonstrating embedded community compliance with this established measure.
- In addition, many of the charter operators working in the MCZs are actively enforcing their own bag limits and across the RA sector, charter operators and individuals are working to an increased MCRS, recognising the importance of the sustainability of the BSB fishery via selfgovernance mechanisms.
- Further, recent BAE (2025) provided through the AfS FISP, indicates survivability of BSB following catch and release, with BSB returning to nesting site areas and gives a potential indication of the resumption of nesting behaviour based on spending time in a small spatial area following tagging (a more invasive & intensive activity than catch & release)
- Additional spatial measures enforced by the MOD further mitigate the potential impact of RA in 33% of the largest MCZ (Purbeck Coast), during 32% of the breeding season, with the potential for increased spatial coverage of closures up to 54%.

<sup>&</sup>lt;sup>1</sup> Under the Southern IFCA 'Minimum Fish Sizes' byelaw, subsequently revoked and replaced in 2021 by the 'Minimum Conservation Reference Size Ryelaw'

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The Authority deem that these measures in combination, which are directly applicable to RAs, are (1) furthering the COs; specifically, that the mitigations reduce the potential for disturbance caused by RA, and therefore RA is not '…likely significantly\*…' to affect (a) or (b) as per above [\*to probably happen, by a large amount], and (2) accordingly are satisfied that there is no significant risk that RA will hinder the achievement of the COs.

Whilst Policy Objective 2 (153 duties) remains legislatively separate to Policy Objective 1 (154 duties) and therefore does not require formal consideration by Natural England (NE), it is of importance for NE to recognise that the application of management solutions relevant to Policy Objective 2 will contribute to the ongoing furthering of COs in a way which considers the wider complexities of the BSB fishery in Dorset, allowing understandings of the fishery to advance in collaboration with stakeholders, which will facilitate achievement of shared endeavours which are relevant to NE, Southern IFCA and the wider community. Affording BSB with proportionate and appropriate protections in an adaptive manner allows Southern IFCA, as a regulator, to robustly respond to BAE in a timely way to ensure the future sustainability of this fishery in Dorset. Southern IFCA's role as a regulator is not to inhibit fishing activity disproportionately and therefore must consider risk and proportion in its decision-making processes.

Through pragmatic application of Southern IFCA's legal functions, shared objectives (namely the overall sustainability of BSB) can be achieved via parallel delivery of 154 and 153 duties, which will facilitate co-management with a community who are committed to the ongoing protection of the BSB. The dual approach presented by Southern IFCA allows the management focus for lower risk fishing activities to be iterative and adaptive, as supported by improved understandings, and thus providing a more holistic approach to conservation and fisheries management which, in combination will achieve a furthering of conservation objectives, whilst remaining true to the wider functions of the IFCA. This provides a platform upon which Southern IFCA can continue to work collegiately with NE and the Dorset community to ensure that shared objectives are achieved in the long term at a community level for the benefit of both conservation and fisheries.

It is observed that the Drivers and Headline Objectives underpinning Policy Objective 2 align with NE's 2025 Strategy: Recovering Nature for Growth, Health and Security. It is understood that the driver for this Strategy recognises, in part, that previous NE management directives for protection and restoration alone cannot achieve shared endeavours, rather there is a need to consider economic growth, health (to include wellbeing via access to blue space) and food security (fisheries) alongside the recovery of nature.

#### Further information on data collection and its role in adaptive management

4. To expand on how data collected via the co-developed principles will be used for the purposes of adaptive management; for example, whether it will be used to identify increased/emerging risks and trigger a review of the current management approach.

BSB populations and associated fisheries are considered data poor, the data collection programme, as one of the CoD Principles, will provide data at the spatial scale of the three MCZs, supporting wider external research on BSB, and will provide an evidence base to help inform ongoing management of relevant fisheries. The data collection programme will also provide data to the Seabreams FMP during the implementation phase helping to support local and national management through an aligned, evidence-based approach. Data will be sought across commercial fisheries (net, rod & line), recreational fisheries (rod & line) and charter vessel fisheries (rod & line) via multiple mechanisms to facilitate maximum participation.

An Annual Review of the CoD Principles will follow the conclusion of the recognised breeding season and will consider community feedback on the application of the CoD Principles & overall health of the BSB fisheries, analysis of data collected during the season, additional data collection (running year-round), IFCA compliance & enforcement metrics, data from external sources (other relevant

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authorities), BSB FMP outcomes (goals, actions, data gaps) and emerging evidence on BSB populations or fisheries (for exampled published outputs from the AfS FISP).

Following Annual Review, any changes proposed to the CoD Principles will be considered with the community prior to consideration by the Authority, with any changes implemented prior to the subsequent season. Following Annual Review, if singular or multiple CoD Principles are deemed not to be achieving the Policy Objectives, then consideration may be given to the development of fisheries relevant triggers in line with recognised practice. Southern IFCA recognise that this fishery is data poor, as such, an adaptive management approach, as facilitated under the Secondary Policy Objective, allows Southern IFCA to robustly respond to BAE in a timely way to ensure the future sustainability of this fishery in Dorset.

Southern IFCA welcome this opportunity to provide Natural England with more in-depth rationale to support the information provided in the Assessment Package, and would like to take this opportunity to draw together the following conclusions:

The Authority conclude that appropriate mitigative measures are already in place via a combination of spatial and technical statutory mechanisms, which are collectively furthering the Conservation Objectives relevant to BSB across three Dorset MCZs. This is primarily being achieved via the elimination of BTFG activity across the entirety of Poole Rocks MCZ (whole site) and Southbourne Rough MCZ (whole site) and via a BTFG spatial closure across 93%² of the Purbeck MCZ, thus removing the highest risk fishing activity almost in its entirety across the three Dorset MCZs. Additionally, the furthering of the COs is being achieved via enforcement of a MCRS for BSB at a District wide level, applicable to commercial and recreational users, which is also applicable to the wider supply chain. Furthermore, spatial restrictions via an exclusion zone in the Purbeck MCZ, which equates to quantifiable closures for c.32% of the time (during the relevant season), across c.33% of the MCZ (which can be extended to c.54%), as enforced by the Ministry of Defence (MOD), are further enhancing protections to BSB in the Purbeck MCZ across the entirety of gear types (commercial and recreational) via closures applicable to all users.

Collectively, the Southern IFCA statutory measures (as well as those enforced by the MOD) are already providing protections to BSB beyond the 3 x MCZ's collective footprint, at a temporal scale beyond that of the breeding season. As such, these statutory measures are providing protections to BSB nesting sites and populations at a level which exceeds the scope of the Conservation Objectives. In combination, these measures are furthering the Conservation Objectives for BSB across the Purbeck Coast MCZ, Poole Rocks MCZ and Southbourne Rough MCZ.

Please note that we will be incorporating the above requested information into the Assessment Package as required in due course, for completeness. In the meantime, we ask that Natural England consider this letter alongside the Southern IFCA Black Seabream Conservation Assessment Package (sent on the 13th of October 2025) in order to avoid any unnecessary delay in provision of Natural England's final conclusions.

Kind Regards,

Pia Bateman

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<sup>&</sup>lt;sup>2</sup> The remainder of the Purbeck Coast MCZ is subject to feature data which has been deemed unreliable in terms of location and/or extent by Natural England and is therefore not suitable as a basis for making management determinations. The feature data does not relate directly to BSB and it has been confirmed by NE through the Part A Assessment process for the BTFG Review Phase I that the area of the MCZ which remains open to BSB poses no risk to BSB as a designated feature.



#### **EXECUTIVE SUMMARY**

Marked C

## **Black Seabream: Secondary Policy Objective**

Report by the CEO & DCO Birchenough

#### A. Purpose

For Members to consider the adoption of the Co-Developed Principles as an additional management opportunity to complement existing protections and improve understandings of BSB fisheries, above and beyond the remit of the COs, in collaboration with the Dorset community.

#### B. Recommendation

1. That, the CoD Principles are approved for application across the 3 x Dorset MCZ's in 2026.

#### C. Annexes

- 1. Black Seabream Fishery Guidance
- 2. Data Collection Programme Data Logs

#### 1.0 Background

Members determined to consider whether there were any additional management opportunities relevant to the BSB fishery in the MCZs, which could both complement the protections already afforded by existing management, as well as advance understandings of the health of the BSB fishery over time.

Recognising the absence of a Natural England Condition Assessment for the three MCZs at the point of designation and up to present day; coupled with recognition of the concurrent development of a national Seabreams Fisheries Management Plan (FMP), Members committed to exploring the development of a Shared Principles Model of management with the Dorset community.

Consideration of the development of additional management opportunities is underpinned by Southern IFCA's legislative duties under Section 153(2) of the Marine and Coastal Access Act 2009 (MaCAA).

#### 2.0 Policy Drivers & Headline Objectives

The exploration of a Shared Principles Model is underpinned by a set of **Policy Drivers** and **Headline Objectives**, the latter providing the rationale for the exploration of additional management solutions.

- (1) To improve understandings of BSB behaviors, fisheries and ecosystem management, recognising that these are currently data poor.
- (2) To be proportionate in the application of precaution, complementing existing statutory measures for lower impact fisheries (adaptive management approach).
- (3) To be precautionary, as despite evidence suggesting that current effort is not having an impact, this remains data poor. Additionally, potential future impact also remains unknown.
- (1) To ensure current and future sustainability of BSB populations for the benefit of the marine environment and all sectors.
- (2) To improve understanding via data collection.
- (3) to monitor and review measures (adaptive management).
- (4) include users in policy development and ongoing management interventions.

#### 3.0 Co-Development of Shared Principles

The co-development of shared principles followed a five-stage process, as detailed in Policy Document: **Process Document 2 – Decision Making & Roadmap** (see Annex 2, agenda item Marked A, Section 4.5).

At the meeting of the TAC in August 2025, Members discussed the outcomes of the consultation (Stage 5), focussing on five discussion areas, and subsequently resolved to take forward the Co-Developed (CoD) Principles with no amendments.



#### **EXECUTIVE SUMMARY**

Application of CoD Principles:							
Voluntary, applying within the 3 Dorset MCZs, and in force during the period 1st April to 31st July.							
Proposed CoD Principles:							
Minimum Conservation Reference Size	28cm						
Maximum Conservation Reference Size	38cm						
Recreational Bag Limit	6 fish per person per day						
Guidance	Good practice fishing & handling						
Data Collection	Year-round, all sectors						

Annex 1 provides a draft of the **Black Seabream Fishery Guidance** and Annex 2 provides examples of the data collection logs designed to support fisher-dependent and fisher-independent data collection. Data will be sought from commercial fisheries (net, rod & line) (Annex 2, Figure 1), recreational fisheries (rod & line) and charter vessel fisheries (rod & line) (Annex 2, Figure 2) via multiple platforms as described in the Policy Document: **Process Document 3 – Management Tools, Application & Review** (see Annex 1, agenda item Marked A).

#### 4.0 Satisfying the Secondary Policy Objective

The introduction of the CoD Principles across the entire footprint of the 3 Dorset MCZs during the recognised BSB breeding period, provides a suitable management mechanism by which Southern IFCA can both **satisfy** and **facilitate** progress towards the overarching goal, which is to **advance understandings of BSB fisheries over time**. This approach provides a mechanism which satisfies both the Policy Drivers and Headline Objectives which frame the Secondary Policy Objective.

#### 5.0 Management Intentions & Review Process

The focus of Year 1 (2026) will be **engagement**, **raising awareness and seeking compliance** with the CoD Principles. Further details on how, can be found in Policy Document: **Process Document 3 – Management Tools**, **Application & Review** (see Annex 3, agenda item Marked A, Section 2.3).

Southern IFCA recognise that BSB fisheries are data poor, as such an adaptive management approach, as facilitated under the Secondary Policy Objective, allows Southern IFCA to robustly respond to BAE in a timely way to ensure the future sustainability of the fisheries in Dorset.

The **first Annual Review** of the CoD Principles will follow conclusion of the recognised breeding season in Year 1 (2026) and incorporate the following information:

- community feedback following on the application of the CoD Principles & overall health of BSB fishery
- analysis of data collected during the applicable season & additional data collected (running all year-round)
- IFCA compliance & enforcement metrics
- data from external sources (other relevant authorities)
- BSB FMP outcomes (goals, actions and data gaps)
- **emerging evidence on BSB populations or fisheries** (for example published outputs from the Angling for Sustainability Project).

An Annual Review will then be carried out for years 2027-2029, with a commitment to undertake a Wider Review in 2030, which will consider any necessary revisions to the MCZ Conservation Package Assessment, via inclusion of any updated Formal Advice & provision of Condition Assessments from Natural England.

Information can be found in Annex 3 of agenda item Marked A, Section 2.4 detailing the process by which Southern IFCA will consider proposed changes to the CoD Principles.

#### 6.0 Next Steps

- To implement the CoD Principles prior to the start of the breeding season (1st April) in 2026, in accordance with a comprehensive engagement programme, as outlined in the the Policy Document: Process Document 3 Management Tools, Application & Review.
- To commence the first annual review post 31st July 2026 in line with the defined process.

# Southern IFCA Black Seabream Fishery Guidance Marked C - Annex 1



The following voluntary guidance applies to black seabream fisheries within the Purbeck Coast, Poole Rocks and Southbourne Rough MCZs between 1st April and 31st July, both days inclusive.









## **Recommended Equipment**

## **Use Weighing Slings**

handing instead of fish directly on a scale



## Chose circle and barbless hooks

to reduce foul hooking



**Use a Landing Net** preferably one with knotless, soft mesh.



Utilise unhooking tools such as T-bars



### Keep a large bucket of seawater

onboard for temporarily holding fish that aren't released immediately



## **Handling Techniques**



**Bring Fish Up Slowly** to minimise stress and potential injury

## Minimise handling

avoid touching fish when possible. If necessary, keep contact away from gills and underbelly and limit air exposure



Always handle with wet hands or a wet cloth or towels to preserve the protective slime layer

## Allow time to recover before releasing gently

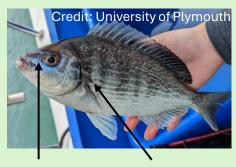
using a net or holding area can help to place fish back gently



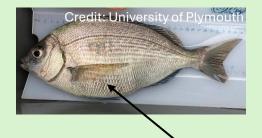
## **Avoid high-grading**

if fish are retained utilise handling and equipment guidance to support survivability

## **Care and Ethics**



**Return males displaying** breeding colours. Such as a dark colour or blue highlighting with vertical white bars

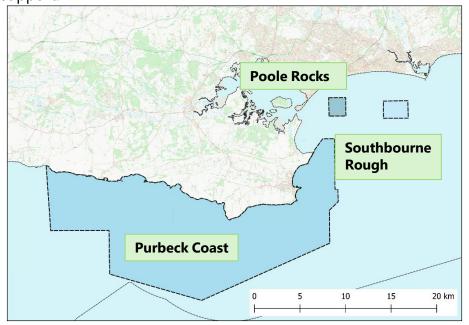


**Return roed females,** typically shown by a swollen abdomen.

## Southern IFCA Black Seabream Fishery Guidance

Black seabream (BSB) are a designated feature of 3 MCZs within the Southern IFCA District- **Poole Rocks, Southbourne Rough and Purbeck Coast.** Co-Developed (CoD) Principles have been developed to complement existing spatial management and support advancing understandings of the health of the BSB fishery over time with community support.





Southern IFCA has worked closely with the Dorset community to develop CoD Principles that support the long-term sustainability of black seabream populations for marine benefit of both the environment and fishing sectors. One of these Principles is 'Guidance' focusing on good fishing practice and handling within BSB fisheries.



# Importance of black seabream fishery guidance



Black seabream are an important **recreational and commercial species** during the spring and summer months, supporting local economies, and coastal communities.



This guidance includes recommendations on fishing gear, handling techniques, and care practices designed to **improve survivability**, through minimal handling time and air exposure.





By supporting breeding success and ensuring released fish have the best chance of survival, these measures help maintain healthy population levels and secure the future of the fishery for both the marine environment and fishing communities.



Consistent handling practices will also support the gathering of improved data for the fishery over time, helping to deepen **our understanding of black seabream populations** and the effectiveness of management tools.



Responsible fishing practices today will ensure black seabream continue to thrive and **support vibrant coastal fisheries and communities** in the future.

#### **Commercial Black Seabream Bream Data Collection**

Vessel Name: Vessel PLN:



Basic Data								
Date								
Method of Fishing (Netting or Rod and Line)								
Location (Coordinates)								
Duration of trip/ soak time (indicate hours or days)								
Number of Rods/ Net Total Length								
Bream Targeted or Bycatch?								
Weight of Bream Retained								
Number of under Min CRS (28cm) caught								
Number of over Max CRS (38 cm) Bream caught								
		Additional Data						
Number of bream displaying breeding colours caught								
Number of roed bream caught								
Additional Comments								

Please return to the Southern IFCA office either by:

**email:** enquiries@southern-ifca.gov.uk **or post:** Unit 3 Holes Bay Park, Sterte Avenue West, Poole, Dorset, BH15 2AA.

To submit a photo of your catch return by email, follow the QR code to the right



Figure 2: Example of data collection form for fisher-dependent data for recreational fishers

**Vessel Name:** 

**Recreational Black Seabream Bream Data Collection** 

Please Tick (	Charter: 🗆 Priv	ate: 🗆		Conservation Authority						
Basic Data										
Date										
Location										
(Coordinates)										
Duration of trip										
Number of Anglers										
Number of Rods										
Bream Targeted										
or Bycatch?										
Number of										
<b>Bream Retained</b>										
Number of under										
Min CRS (28cm)										
Bream caught										
Number of over										
Max CRS (38 cm) Bream caught										
Method (lure,										
bait type etc.)										
<b>,</b>										
		Additional Data								
Number of bream										
displaying breeding colours										
caught										
Number of roed										
bream caught										
Weight of										
retained fish										
Additional										
Comments										

Please return to the Southern IFCA office either by:

email: enquiries@southern-ifca.gov.uk or post: Unit 3 Holes Bay Park, Sterte Avenue West, Poole, Dorset, BH15 2AA.

Southern

To submit a photo of your catch return by email, follow the QR code to the right

Figure 3: Example of data collection form for fisher-independent data collected by Southern IFCA Officers through monitoring

## Southern IFCA Fisher-Independent Black Seabream Data Collection



Datas		PLN/ Vessel Name	Location fi	How long has vessel been fishing OR how long have nets been soaked	Total Length of Net/ Number of Rods	Number of Anglers	Please Tick					Number		
	Fishery Code						BSB Target Species	BSB Bycatch	Number of BSB retained	Number BSB over Max CRS retained or caught	Number BSB under MCRS retained or caught	of BSB with breeding colours or roed retained or caught	Angling Method (lure, bait type etc.)	Fisher aware of CoD Principles ?