



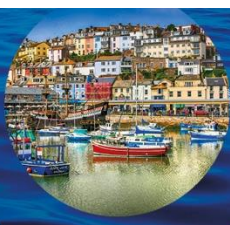
Marine
Management
Organisation

Channel demersal non-quota species fisheries management plan:

Species prioritisation

Working group paper

20 September
2022



...ambitious for our seas and coasts

NOTE: This document is as it was shown to the working group on the 20 September 2022. It was used to generate discussions with the group on which species to prioritise within the first iteration of the Channel demersal non-quota species Fisheries Management Plan. We will be sharing more of the data with the working group in the next meeting.

Introduction

There are 14 species in scope for the Channel demersal non-quota species (NQS) fisheries management plan (FMP):

Cephalopods	Finfish	
Cuttlefish	Red Gurnard	Lemon Sole
Squid	Grey Gurnard	Brill
Octopus	Tub Gurnard	Pout Whiting (Bib)
	Lesser Spotted Dogfish	Smoothhound
	John Dory	Turbot
	Red Mullet	

These species are caught in a variety of different fisheries and we cannot address all the issues at once; it is simply too complex. Therefore, to enable us to develop the fisheries management plan, we will need to focus on the most important stocks and fisheries first, with a view to incorporating more species in future versions of the FMP.

The below table outlines categories which are considered important when deciding which species to prioritise for the first iteration of the Channel demersal non-quota species (NQS) Fisheries Management Plan (FMP). An explanation of the categories is available below:

- **Species and stock class:** Species common, scientific name and stock class
- **Ecological risk of over-exploitation/ecosystem significance:** Information taken from scientific/grey literature and stakeholder engagement.
- **Economic value:** Data from MMO Statistics¹.
 - a. UK commercial fishing total value of landings in 7d & 7e (£000s, 2010- 2020).
 - b. EU commercial fishing total value of landings in 7d & 7e (2015 – 2019)
- **Social/community value:** Data from MMO Statistics¹
 - a. UK commercial fishing total live weight landings in 7d & 7e (t, 2010 – 2020).
 - b. EU commercial fishing total live weight landings in 7d & 7e (t, 2015 – 2019).
 Data from Cefas² c. Recreational angling total catch estimates in 7d & 7e (t, 2016 – 2021)
- **Stakeholder interest:** This has been taken from initial stakeholder engagement during face-to-face engagement with the commercial industry in June 2022 and engagement with recreational anglers in July and August 2022 through an Angling Trust forum and follow up survey.
- **Other considerations:** Data from MMO Statistics¹. Percentage of UK and EU landings by gear in 7d & 7e (2015 – 2019). Other information taken from MMO/Defra intel.

¹ This data relates to the published UK Sea Fisheries Statistics https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1020837/UK_Sea_Fisheries_Statistics_2020_-_AC_checked.pdf

² The data relates the citizen science project undertaken by Cefas <https://www.gov.uk/government/publications/sea-angling-in-the-uk-report-2018-and-2019>

Not Government Policy

Species in the below table are listed in no particular order.

MMO suggestion

Prioritise cuttlefish, squid and octopus in this FMP iteration.

Reasoning: For cuttlefish and squid there is high commercial interest across many areas and UK landings (particularly cuttlefish), with moderate/high EU landings. There is an emerging recreational fishery for cuttlefish and squid although not mentioned by recreational anglers during our engagement. Octopus is an emerging commercial industry which may be significant in the near future. There is concern over ecological risk of exploitation for all species.

Although cephalopods are suggested to be prioritised for the first iteration of this FMP, there is ongoing policy work on species which are in scope of this FMP running in parallel. Such examples include: the fly seining consultation, in addition to overlapping fisheries which are the focus of other frontrunner FMPs. Government will consider how this work will be integrated as part of ongoing FMP iterations.

Questions to prompt discussion

1. Are the suggested species the correct prioritisation for the first iteration of FMP?
2. Do you think it is preferable to focus on one/limited types of stock class? E.g. cephalopod
3. Do you think we should have categories which we focus on more than others? E.g. stakeholder interest greater than ecological risk
4. Are there certain fisheries we should focus on in particular? E.g. beam/otter trawls, recreational

Not Government Policy

Species and stock class	Ecological risk of over-exploitation/ ecosystem significance	Economic value	Social/ community value	Stakeholder interest	Other considerations
Cuttlefish, <i>Sepia officinalis</i> Cephalopod	Yes, short-lived, potential of high exploitation. High recruitment in Channel – management could concentrate around peak spawning periods. Highly sensitive to pollution; seasonal fishery of potentially mixed ages; MCS ranking 5 (to avoid). ICES working group described the fishery as close to overexploited in the English Channel. IUCN status: Data deficient (Elegant Cuttlefish)	a. 113,580 b. 33,332	a. 44,714 b. 10,522 c. no data	Significant eNGO and commercial fishing interest (Plymouth, Newlyn, Brixham, Mevagissey, Lyme Regis, Weymouth, Hastings, Eastbourne, Newhaven, Selsey, Gosport, WPO). Suggested management measures (Brixham, Mevagissey, Brighton). Emerging recreational fishery (Barrett et al, 2022, Cefas).	Inshore and offshore fishery. Majority caught by beam trawl, otter trawls, otter twin trawls, traps/pots (UK 97%, EU 92%). Links with the Crab and Whelk FMPs as some caught in traps/pots. Shared stock with EU fleets (French, Belgian, Dutch). Sentient animals-implications for capture/handling/killing methods.
Squid, <i>Loligo vulgaris</i> , <i>Alloteuthis subulata</i> Cephalopod	Yes, short-lived, potential of high exploitation. IUCN status: Data deficient. (European and Common Squid).	a. 24,333 b. 45,689	a. 4,737 b. 7,955 c. no data	Emerging recreational jig (fishing with lamps) fishery (Barrett et al, 2022, Cefas). Squid caught by commercial industry in Exmouth & Plymouth. Interest from Newlyn, Mevagissey, Weymouth, Rye, Newhaven, SWPO. Caught as bycatch in Shoreham.	Inshore and offshore fishery. Majority caught by otter trawl, Scottish seines, otter twin trawls, beam trawls (UK 96%, EU 90%). Fly-seining consultation proposing removing 40mm mesh size in a directed squid fishery. 2 species of squid in Channel, <i>Alloteuthis subulata</i> has small max length.
Octopus, <i>Octopus vulgaris</i> ,	Trend for a decrease in the overall annual abundance of <i>Eledone cirrhosa</i> (Belcari et al. 2002). Recent reports of	a. 2,212 b. 135.7	a. 1,940 b. 127.9 c. no data	Emerging commercial fishery (Plymouth, Weymouth, Shoreham), likely to be significant in the future (Newlyn) but don't have concern	Inshore and offshore fishery. Majority caught by beam trawl and otter trawl (UK 94%, EU 94%).

Not Government Policy

<i>Eledone cirrhosa</i> Cephalopod	high catches in SW (Fishing News).			about fishery currently (Brixham). Recent spike in abundance (Mevagissey).	2 species in UK waters.
Red mullet, <i>Mullus surmuletus</i> , <i>Mullus barbatus</i> coastal /demersal aggregate spawners	<i>M. surmuletus</i> heavily exploited in northeast Atlantic (Vogiatzi et al. 2012). Eastern English Channel one of main areas where caught (Benzinou et al. 2013). Recent, rapid increase in the catch of <i>M. barbatus</i> in the U.K. attributed to global warming (H. Heessen pers. comm. 2014). Fishbase – Resilience: Medium, minimum population doubling time 1.4 - 4.4 years. Fishbase – Fishing Vulnerability: Moderate vulnerability.	a. 12,227 b. 18,588	a. 2,987 b. 4,138 c. no data	Limited UK offshore commercial fishery, concern with flyshooters (Brixham, Brighton, Eastbourne, Newhaven) and trawlers (Weymouth). Interest from Mevagissey, Weymouth, Eastbourne, Rye. Suggested MCRS from Eastbourne. Caught as bycatch in Shoreham	Majority caught by Scottish seines, otter trawls, beam trawls, Danish seines (UK 95%, EU 99%) Fly-seining consultation may review/address fly shooting concerns. 2 species in UK waters.
Brill, <i>Scophthalmus rhombus</i> flatfish	Relative biomass increased overall since low in 1997 and stabilized in most recent years. Fishing mortality below sustainability target since late 2000s and spawning stock biomass above target since late 1990s (ICES WGNSSK 2020). Fishbase – Resilience: Medium, minimum population doubling time 1.4 - 4.4 years. Fishbase – Fishing Vulnerability: Moderate to high vulnerability.	a. 15,020 b. 6,104	a. 2,428 b. 917 c. no data	Concern with fishery and suggested MCRS (Lyme Regis, Hastings, Eastbourne, Rye, Newhaven, Shoreham, Selsey, Gosport), interest from Weymouth, Shoreham, WPO. Recreational anglers target species (Weymouth). Caught as bycatch in Selsey.	Majority caught by beam trawl, otter trawl (UK 82%, EU 90%). Part of flatfish FMP. MMO considering MCRS introduction outside of FMP.

Not Government Policy

Lemon sole, <i>Microstomus kitt</i> flatfish	Age/length at maturity: 4.2 years, 29.3 cm Fishbase – Resilience: Medium, minimum population doubling time 1.4 - 4.4 years. Fishbase – Fishing Vulnerability: High vulnerability.	a. 42,478 b. 5,721	a. 10,603 b. 1,367 c. no data	Caught by commercial industry (Plymouth, Mevagissey, Shoreham, WPO), concern with fishery (Brixham, Brighton, Rye) and suggested MCRS (Plymouth, Brixham, Newlyn, Hastings, Eastbourne, Rye, Newhaven, Shoreham, Selsey, Gosport)	Majority caught by otter trawls, beam trawls and otter twin trawls (UK 97%, EU 94%). Part of flatfish FMP. MMO considering MCRS introduction outside of FMP
Turbot, <i>Scophthalmus maximus</i> flatfish	Age/length at maturity: 3.8 years, 40.8 cm Fishbase – Resilience: Medium, minimum population doubling time 1.4 - 4.4 years. Fishbase – Fishing Vulnerability: High vulnerability.	a. 25,375 b. 10,668	a. 2,610 b. 1,052 c. no data	Interest to commercial industry (Plymouth, Weymouth, Hastings, Eastbourne, Shoreham, WPO), concern with fishery (Rye) and suggested MCRS (Lyme Regis, Hastings, Eastbourne, Rye, Newhaven, Shoreham, Selsey, Gosport). Recreational anglers target species (Weymouth). Caught as bycatch in Selsey.	Majority caught by beam trawls, dredges, gillnets, otter trawls, trammel nets (UK 87%, EU 98%) Part of flatfish FMP. MMO considering MCRS introduction outside of FMP
John Dory, <i>Zeus faber</i> coastal/ demersal finfish	Age/length at maturity: 4.3 years, 35.1 cm IUCN status: Data deficient. Fishbase – Resilience: Medium, minimum population doubling time 1.4 - 4.4 years. Fishbase – Fishing Vulnerability: High vulnerability.	a. 9,214 b. 12,356	a. 1,497 b. 1,403 c. no data	Interest from commercial industry (Plymouth), opportunistic in Mevagissey. Caught as bycatch in Shoreham.	Majority caught by otter trawls, otter twin trawls and beam trawls (UK 95%, EU 93%).
Bib, <i>Trisopterus luscus</i> coastal/ demersal finfish	Age/length at maturity: 1.2 years, 22.1 cm Fishbase – Resilience: Medium, minimum population doubling time 1.4 - 4.4 years.	a. 2,921 b. 4,014	a. 7,405 b. 7,719 c. 2134	Low priority (Brighton). Caught but mostly too small, used for pot bait (Selsey).	Majority caught by beam trawl, otter trawl and Scottish seine (UK 95%, EU 94%).

Not Government Policy

Red gurnard, <i>Chelidonichthys cuculus</i> coastal /demersal finfish	Fast growth and early sexual maturity at a relatively large size (Quero et al., 1986). Fishbase – Resilience: Medium, minimum population doubling time 1.4 - 4.4 years. Fishbase – Fishing Vulnerability: Moderate to high vulnerability.	a. 1,172 b. 4,052	a. 996 b. 5,948 c. 117	Suggested management measures (Newlyn), concern with landing of small gurnards (Plymouth, Lyme Regis, Weymouth, Rye). Caught as bycatch in Shoreham.	Majority caught by otter trawls, beam trawls and Scottish seines (UK 89%, EU 93%).
Grey gurnard, <i>Eutrigla gurnardus</i> coastal /demersal finfish	Age/length at maturity: 3 - 4 years, 23 cm Fishbase – Resilience: Medium, minimum population doubling time 1.4 - 4.4 years. Fishbase – Fishing Vulnerability: High vulnerability.	a. 156 b. 32	a. 122 b. 75 c. 31	Suggested management measures (Newlyn), concern with landing of small gurnards (Plymouth, Lyme Regis, Weymouth, Rye). Caught as bycatch in Shoreham.	Majority caught by otter trawls, beam trawls and Scottish seines (UK 93%, EU 93%).
Tub gurnard, <i>Chelidonichthys lucerna</i> coastal /demersal finfish	Age/length at maturity: 3 years, 27.7 cm Fishbase – Resilience: Low, minimum population doubling time 4.5 - 14 years. Fishbase – Fishing Vulnerability: Moderate to high vulnerability.	a. 1,563 b. 6,970	a. 1,185 b. 5,772 c. 105	Suggested management measures (Newlyn), concern with landing of small gurnards (Plymouth, Lyme Regis, Weymouth, Rye). Caught as bycatch in Shoreham.	Majority caught by otter trawls, beam trawls and Scottish seines (UK 97%, EU 81%).
Lesser spotted dogfish, <i>Scyliorhinus canicula</i> elasmobranch	Lots of species on grounds (Brixham, Rye, Newhaven, Selsey) Fishbase – Resilience: Low, minimum population doubling time 4.5 - 14 years. Fishbase – Fishing Vulnerability: High vulnerability.	a. 1,591 b. 2,628	a. 5,916 b. 6,489 c. 6376	Low priority (Brighton). Avoid in Shoreham.	Majority caught by otter trawls, beam trawls, otter twin trawls, trammel nets (UK 93%, EU 94%). Dogfish often discarded but may be retained to optimise bass bycatch allowance in trawl fisheries, therefore could be linked to bass FMP.

Not Government Policy

Smoothhound, <i>Mustelus mustelus</i> , Elasmobranch*	Lots of species on grounds (Brixham, Newhaven) IUCN status: Endangered. Fishbase – Resilience: Very low resilience (14+ year population doubling time). Fishbase: High-very high vulnerability to fishing.	a. 1,381 b. 3,326	a. 2,190 b. 2,966 c. 3319	No value in Shoreham. Main summer species for recreational anglers	Majority caught by otter trawls, gill nets, trammel nets (UK 87%, EU unknown) Smoothhound often discarded but may be retained to optimise bass bycatch allowance in trawl fisheries, therefore could be linked to bass FMP.
Other species currently not listed: Flounder, flatfish Grey mullet, coastal/demersal aggregate spawners		Flounder a. 279 b. 71.8 Grey mullet a, b, c. no data	Flounder a. 668 b. 131 c. no data Grey mullet a, b, c. no data	Recreational anglers mentioned flounder as interest. Weymouth and recreational anglers thought grey mullet was species of interest. It has an inshore fishery and also targeted by recreational anglers/charter vessels. Well managed by IFCA currently.	Flounder is part of flatfish FMP.

* Smoothhound totals are taken from different species codes. EU vessels report under species code SDV which is an aggregated code containing multiple species of Smoothhound. UK vessels report under SMD which is the species we have used within the table.