

Species Matrix Methodology

SUSTAINABLE FISH STOCKS AND MARINE ENVIRONMENTS

To guarantee a thriving global fishing industry in 100 years time, we have to ensure that today's fishing actively supports the sustainability of fish stocks and the environments they live in.

To do so, we had to create a market that actively rewards sustainable fishing - so that your purchases drive the necessary changes at the base of the chain.

HOW CAN I KNOW WHETHER THE FISH I BUY IS SUSTAINABLE?

To determine the sustainability of a particular fish - let alone the species as a whole - we have to review the most current scientific data relating to three specific areas:

I. Species Population

Is the species abundant at a national level and/or are there local fisheries where stocks are in decline or endangered?

II. Size and age of a fish

How large must a fish be in order to have reproduced and contributed to the species population?

III. The fishing method used to catch them

How are the majority of this species caught and do their catch methods have damaging effects on other species or marine environments?

As a result, we have now profiled every major fish species in the UK against these three criteria of sustainability - meaning you will only ever be able to source a fish on the Pesky market if it has been validated to be:



From an abundant stock



Large enough to have reproduced



Caught using a low impact fishing method

METHOD

Our sustainability index takes a 4-stage approach to indicate what species, sizes, stocks and capture methods should be made available on the market.

I. Species Population

IUCN Red List

We do not supply any species which are listed as Endangered or above.

RAG (Red Amber Green) rating matrix

A score out of 20 for each species, using a meta-analysis of advice from the primary data sources:

- MCS (Marine Conservation Society) Good Fish Guide
- SWERA (Seafish SW Ecological Risk Assessment),
- RASS (Seafish Risk Assessment for Sourcing Seafood)
- ICES (International Council for the Exploration of the Sea, specifically whether a species is being harvested at MSY, Maximum Sustainable Yield)

II. Size at maturity

Profiling the estimated minimum size that a fish would need to be in order to have achieved sexual maturity. This provides a minimum weight for each species, ensuring that we never market immature fish which have not had the opportunity to reproduce and contribute to future stocks.

III. Capture method

We have developed an impact assessment to determine which capture methods and gear types we should purchase fish from. The assessment considers two criteria:

- By-catch: What is the risk of by-catch, including ghost fishing if gear is lost?
- Environmental interaction: What, if any, interaction does the gear type have with the seabed and surrounding habitats?

The result is a list of species, sizes, locations and capture methods we have validated for supply to our customers.

Species Matrix

SPECIES (Common Name)	SPECIES (Scientific Name)	IUCN rating	MCS rating	2014 SWERA 'mitigated consequence score'	RASS rating	Harvested at or below MSY	PESKY RAG rating (● best choice ● recommended ● avoid, do not supply)	Length at sexual maturity	Weight at sexual maturity
Anchovy (European)	Engraulis encrasicolus	Least Concern	3	2.6	-	-	● 5.6 /10	14cm	20g
Brill	Scophthalmus rhombus	Least Concern	3	3.7	-	Y	● 7.7 /15	33cm	500g
Cod (Atlantic)	Gadus morhua	Least Concern	5	4	-	N	● 14 /15	68cm	4000g
Coley	Pollachius virens	Least Concern	3	2.6	-	N	● 10.6 /15	39cm	750g
Conger Eel	Conger conger	Least Concern	5	-	-	-	● 5 /5	79cm	1500g
Cuttlefish	Sepia officinalis	Least Concern	4 Pot 5 Trawled	2.2 Pots 3.6 Trawl	10/20 Pot 13/20 Trawl	-	● 8.7 /15 Potted 11.85/15 Trawled	12cm	300g
Dab	Limanda limanda	Least Concern	3 Otter 4 Beam	-	-	Y	● 4 /10 Otter 5/10 Beam	25cm	175g
Dogfish COMMON SMOOTHHOUND	Mustelus mustelus	Vulnerable	5	2.9	-	-	● 10/10	80cm	2kg
Dogfish BLACKMOUTH CATSHARK	Galeus melastomus	Least Concern	-	-	-	-	● No data	45cm	450g
Dogfish NURSEHOUND	Scyliorhinus stellaris	Near Threatened	5	3.5	-	-	● 8.5/10	No data	No data
Dogfish SMALL SPOTTED CATSHARK	Scyliorhinus caniola	Least Concern	-	3.5	-	-	● 3.5/5	65cm	1kg
Dogfish SPINY DOGFISH / SPURDOG	Squalus acanthias	Endangered	5	3.4	-	Y	● Do not supply - Endangered	82cm	2kg
Dogfish STARRY SMOOTHHOUND	Mustelus aserias	Near Threatened	5	2.9	-	-	● 7.9/10	91cm	2.5kg
Dogfish TOPE	Galeorhinus galeus	Vulnerable	5	3	-	-	● 8/10	185cm	15kg
Dover Sole	Solea solea	Least Concern	2	3.7	-	Y	● 6.7 /15	30cm	300g
Flounder	Platichthys flesus	Least Concern	3	<3	-	Y	● 6 /10	24cm	200g
Grey Mullet GOLDEN GREY	Chelon aurata	Least Concern	-	<3	-	-	● 3/5	34cm	500g
Grey Mullet THICK LIPPED	Chelon labrosus	Least Concern	4 Beach Seine 5 Fixed Nets	<3	-	-	● 7 /10 Cornwall (VIle, West of Plymouth; VIIf & g) 8/10 Devon (VIle, East of Plymouth) and VIId	29.5cm	500g
Grey Mullet THIN LIPPED	Liza ramada	Least Concern	-	<3	-	-	● 3/5	26cm	500g
Gurnard GREY	Eutrigla gurnardus	Least Concern	3	>3	-	-	● 10 /15	19cm	200g
Gurnard RED	Chelidonichthys / Aspitrigla cuculus	Least Concern	3 Otter 4 Beam	>3	-	-	● 10 /15 Otter 11/15 Beam	27cm	200g
Gurnard YELLOW	Triglia lucerna	Least Concern	5	-	-	-	● 8 /10	25cm	200g
Haddock	Melanogrammus aeglefinus	Least Concern	Fixed Nets 3 Trawl 4	3	-	N	● 11 /15 Fixed Nets ● 12/15 Trawl	35cm	500g
Hake (European)	Merluccius merluccius	Least Concern	Trawl 2	2.6	-	Y	● 5.6 /15	43cm	500g
Herring (Atlantic)	Clupea harengus	Least Concern	5	<3	-	-	● 11 /15	17cm	35g
Horse Mackerel (Atlantic)	Trachurus trachurus	Least Concern	4 Seine 5 Pelagic Trawl	2.4	-	N	● 11.4 /15 Seine 12.4/15 Trawl	24cm	200g
John Dory	Zeus faber	Data deficient	4	2.4	-	-	● 9.4 /15	36cm	500g
Lemon Sole	Microstomus kitt	Least Concern	4	2.9	-	Y	● 7.9 /15	31.5cm	300g
Ling	Molva molva	Least Concern	3 Otter 4 Beam	2.9	-	-	● 5.9 /10 Otter 6.9/10 Beam	90cm	5kg
Mackerel (Atlantic)	Scomber scombrus	Least Concern	2	1.7	10/20	Y	● 6.2 /20	29cm	200g
Megrim	Lepidorhombus whiffiagonis	Least Concern	3	3.7	-	Y	● 7.7 /15	26cm	200g
Monkfish BLACK	Lophius budegassa	Least Concern	4	3	11/20	Y	● 9.75 /20	42.5cm	500g tail
Monkfish WHITE	Lophius piscatorius	Least Concern	2 Otter 3 Beam	3	-	Y	● 6 /15 Otter 7/15 Beam	42.5cm	500g tail
Plaice (European)	Pleuronectes platessa	Least Concern	3	3.7	14/20 Beam 13/20 Otter	Y (VIId, f & g) N (VIle)	● 14.95/20 Otter trawl (VIle) 10.95/20 Otter trawl (VIId, f & g) 15.2/20 Beam Trawl (VIle)	31cm	250g
Pollack	Pollachius pollachius	Least Concern	3	2.9	-	-	● 8.9 /15	41cm	500g
Pout	Trisopterus luscus	Least Concern	4	3	-	-	● 7 /10	22cm	250g
Red Mullet STRIPED / SURMULLET	Mullus surmuletus	Least Concern	3 Otter 4 Beam	3.5	17/20	-	● 13.75 /20 Otter 14.75/20 Beam	16cm	160g
Red Mullet	Mullus barbatus	Least Concern	-	3.5	-	-	● 3.5/5	11cm	160g
Sardine (European)	Sardina pilchardus	Least Concern	3	3.6	10/20	-	● 9.1 /15	15cm	30g
Scallops	Pecten maximus	Not available	3 Hand Gathered	3.5	-	-	● 9.5 /15	100mm	n/a
Seabass (European)	Dicentrarchus labrax	Least Concern	3 Rod 4 Trawl & Fixed Nets	3.1	-	Y	● 7.1 /15 Rod ● 8.1/15 Trawls	32cm	500g
Sea Bream BLACK	Spondylisoma cantharus	Least Concern	4 Rod 5 Trawl	2.4	-	-	● 6.4 /10 Rod 7.4/10 Trawls	20cm	300g
Sea Bream GILTHEAD	Sparus aurata	Least Concern	3 Rod 4 Net/Trawl	-	-	-	● 3 /5 Rod 4/5 Nets	33cm	500g
Sea Bream COMMON	Pagrus pagrus	Least Concern	-	-	-	-	● No data	27cm	500g
Sprat (European)	Sprattus sprattus	Least Concern	3	2.4	10/20	-	● 7.9 /15	10cm	15g
Squid (European)	Loligo vulgaris, fLoligo forbesii	Data deficient	3	2.2	-	-	● 5.2 /10	23cm	200g estimate
Turbot	Psetta maxima / Scophthalmus maximus	Vulnerable	4	3.9	16/20 Beam 15/20 Otter	Y	● 11.65 /15	35cm	1kg
Torbay Sole	Glyptocephalus cynoglossus	Least Concern	4	-	-	Y	● 4 /5	30cm	200g
Whiting	Merlangius merlangus	Least Concern	5	3.2	-	Y	● 8.2 /10	28cm	250g
Wings ATLANTIC TORPEDO RAY	Tetronarce nobiliana	Least Concern	-	-	-	-	● No data	No data	No data
Wings BLUE SKATE	Dipturus batis	Critically Endangered	-	-	-	-	● Do not supply - Critically Endangered	123cm	1.4kg
Wings BLONDE RAY	Raja brachyura	Near Threatened	5	3.7	16/20	-	● 12.7 /15	80cm	2.5kg
Wings COMMON EAGLE RAY	Myliobatis aquila	Vulnerable	-	-	-	-	● No data	60cm	3.5kg
Wings COMMON STING RAY	Dasyatis pastinaca	Vulnerable	-	4.5	-	-	● 4.5/5	41cm	1.5kg
Wings CUCKOO RAY	Leucoraja naevus	Least Concern	4	3.1	13/20	-	● 10.35 /15	60cm	500g wing
Wings FLAPPER SKATE	Dipturus intermedius	Critically Endangered	-	-	-	-	● Do not supply - Critically Endangered	197cm	No data
Wings MARBLED TORPEDO RAY	Torpedo marmorata	Least Concern	-	4.5	-	-	● 4.5/5	40cm	1.75kg
Wings SHAGREEN RAY	Leucoraja fullonica	Vulnerable	5	3.4	-	-	● 8.4/10	82cm	1kg
Wings SMALL EYED RAY	Raja microocellata	Near Threatened	5	3.4	15/20	-	● 12.15/15	58cm	1.3kg
Wings SPOTTED RAY	Raja montagui	Least Concern	3 (VIIf) 4 (VIle)	3.7	14/20	-	● 11.2 /15 (VIle) 10.2/15 (VIIf)	40cm	500g wing
Wings STARRY RAY	Amblyraja radiata	Least Concern	5	3.1	16/20	-	● 12.1/15	46cm	900g
Wings THORNBACK RAY	Raja clavata	Near Threatened	3 (VIIf) 5(VIle)	3.7	14/20	-	● 10.2/15 (VIIf) ● 12.2 /15 (VIle)	60cm	500g wing
Wings UNDULATE RAY	Raja undulata	Near Threatened	4	4.4	-	-	● 8.4/10	84cm	4.5kg
Wings WHITE SKATE	Rostroraja alba	Critically Endangered	5	4.5	-	-	● Do not supply - Critically Endangered	130cm	3kg