

Marine Management Organisation



UK Sea Fisheries Statistics 2018















UK SEA FISHERIES STATISTICS 2018

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Cover photograph © Guy Ellis the cover photo shows a mural in Hull to celebrate Lillian Bilocca and the headscarf revolutionaries who in 1968, following the loss at sea of three trawlers and 58 lives, successfully lobbied the Harold Wilson government to improve safety at sea.

This document is available on the MMO website.

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Preface

UK Sea Fisheries Statistics 2018 provides a broad picture of the UK fishing industry and its operations. This publication includes data on the structure, activity and landings of the UK fleet alongside additional information on overseas trade, exploitation of stocks and the world fishing industry.

Several tables in this publication have been fully revised to reflect the latest data available. Please see Appendix 5 for details. Tables in this publication are produced in accordance with National Statistics guidelines; however, data sourced externally are official statistics and are not certified as National Statistics. Such data are marked clearly throughout the publication.

The tables shown in this publication along with more detailed tables can be found on the MMO website. Please see https://www.gov.uk/government/collections/uk-sea-fisheries-annual-statistics for details.

We recommend that you refer to the explanatory notes and glossary of terms which are important in interpreting some of the data.

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Explanatory notes

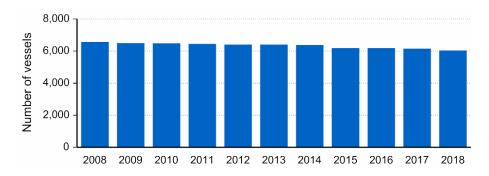
- 1. The tables refer, as far as possible, to the United Kingdom, including the Isle of Man and the Channel Islands, with separate figures for England, Wales, Scotland and Northern Ireland. In some cases figures for the various parts of the United Kingdom are not strictly comparable and differences are explained in the headings and footnotes of the tables.
- 2. The figures in the tables in Chapters 3 and 6 for landings are given in terms of live weight. Those in Chapter 4 are for landed weight.
- 3. Landings by foreign vessels into the UK include landings by fishing vessels and carriers (if first point of sale of fish).
- 4. Landings figures include a quantity caught by UK vessels but not actually landed at UK ports. These quantities are transhipped to foreign vessels in coastal waters and are later recorded as exports.
- 5. The following symbols apply throughout:
 - means "nil"
 - .. means "negligible" (less than half the last digit shown)
 - nd means "no data available"
 - na means "not applicable"
 - R means "revision"

1 Overview of the UK fishing industry

Fleet size and employment

In 2018, the UK fishing industry had 6,036 fishing vessels, 112 vessels fewer than in the previous year. The fleet in 2018 comprised 4,760 10 metre and under vessels and 1,276 over 10 metre vessels.

Chart 1.1: UK fleet size: 2008 to 2018



There were an estimated 11,961 fishermen in 2018, down 5 per cent since 2008 and 269 more than in 2017. Of these, 5,057 were based in England, 1,193 in Wales, 4,857 in Scotland and 854 in Northern Ireland. Part-time fishermen accounted for 20 per cent of the total in 2018 compared with 17 per cent a decade ago. Further details can be found in Chapter 2.

Chart 1.2: Number of fishermen in the UK: 2008 to 2018 16,000 14.000 12,000 Fishermen 10,000 8,000 6,000 4,000 2,000 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 England Wales Scotland Northern Ireland UK

Catch by UK vessels

Chapter 3 presents information on quantity (live weight), value and area of capture for all UK vessels landing into the UK and abroad as well as for foreign vessels landing into the UK. Landings by member states against individual European Commission quotas for each fish stock targeted by the UK are also provided.

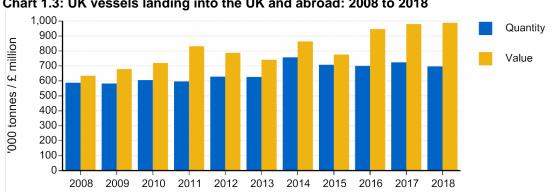


Chart 1.3: UK vessels landing into the UK and abroad: 2008 to 2018

In 2018, UK vessels landed 698 thousand tonnes of sea fish (including shellfish) into the UK and abroad with a value of £989 million. This represents a 4 per cent decrease in quantity and a 1 per cent increase in value compared with 2017. Landings abroad by the UK fleet fell by 7 per cent.

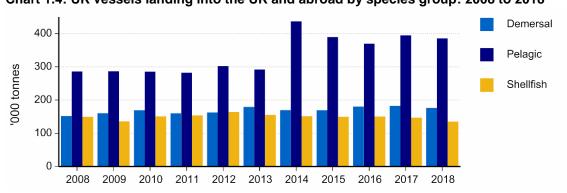
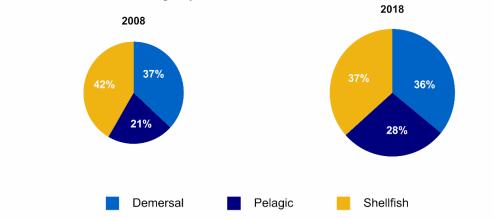


Chart 1.4: UK vessels landing into the UK and abroad by species group: 2008 to 2018

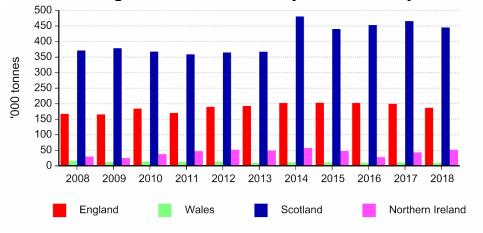
The quantity of pelagic fish landed fell by 2 per cent in 2018, 12 per cent lower than in 2014 when mackerel quotas were at their peak. However, mackerel landings, and consequently pelagic landings, are still far higher than they were a few years ago. Demersal and Shellfish landings are 3 and 9 per cent lower respectively than in 2017.

Chart 1.5: Value of landings by UK vessels into the UK and abroad



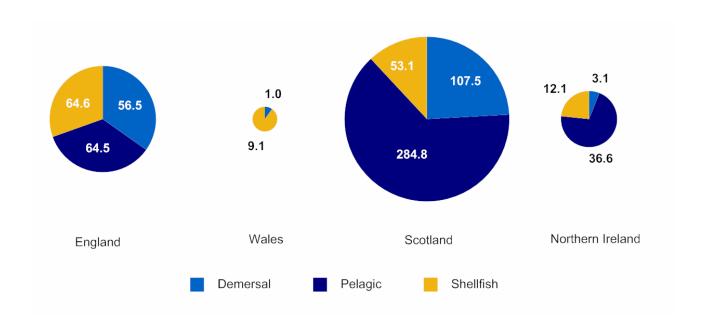
The share of the value of pelagic landings has increased by 7 percentage points over the last ten years to 28 per cent, largely at the expense of shellfish landings. Despite this, shellfish still account for the largest share - 37 per cent.

Chart 1.6: Landings into the UK and abroad by vessel nationality: 2008 to 2018



Landings by Scottish vessels were well over 400 thousand tonnes in each of the last four years, a result of increased mackerel landings. In 2018, the Scottish fleet's share of total landings was 64 per cent, compared with 27 per cent for the English fleet.

Chart 1.7: Landings into the UK and abroad by vessel nationality and species group: 2018 ('000 tonnes)

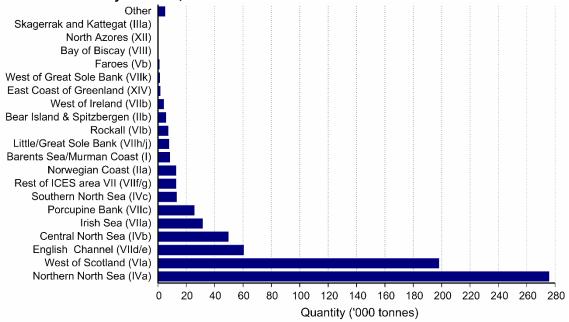


In terms of quantity, around two thirds of the Scottish fleet's landings were pelagic fish. Pelagic species have replaced shellfish as the major species group for Northern Ireland. Shellfish species accounted for the largest share of English fleet landings, although there were significant shares in pelagic and demersal too. A large majority of the Welsh fleet's landings were shellfish.

Catch by sea area

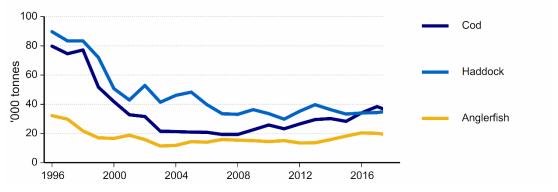
In 2018, almost two thirds of all landings by UK vessels were caught from Northern North Sea and West of Scotland (ICES divisions IVa and VIa – see Appendix 3 for a map of fishing areas).

Chart 1.8: Catch by sea area, UK vessels: 2018



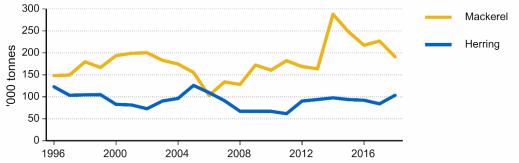
Catch by individual species

Chart 1.9: Landings of key demersal species into the UK and abroad by UK vessels: 1996 to 2018



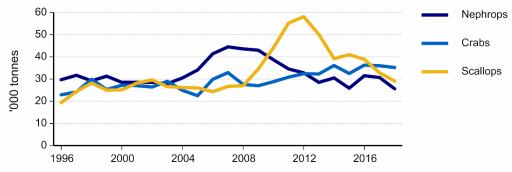
Falling catches of cod and haddock have contributed to the large reduction in demersal landings since 1996. In 2018, the UK fleet landed 35 thousand tonnes of cod (down 57 per cent since 1996) and 36 thousand tonnes of haddock (down 60 per cent since 1996). This represents a combined decrease of 99 thousand tonnes. Anglerfish is now the third highest demersal species in terms of live weight quantity landed.

Chart 1.10: Landings of key pelagic species into the UK and abroad by UK vessels: 1996 to 2018



In 2018, mackerel landings fell to 191 thousand tonnes much lower than the 288 thousand tonne peak of 2014. Landings of herring rose by 23 per cent in the year.

Chart 1.11: Landings of key shellfish species into the UK and abroad by UK vessels: 1996 to 2018



In 2018, 26 thousand tonnes of nephrops (langoustines) were landed, a 42 per cent decrease since the high point of 2007. Landings of crabs have increased by 54 per cent since 1996 to 35 thousand tonnes. The quantity of scallops landed was 29 thousand tonnes, 50 per cent lower than the peak in 2012.

Landings into UK ports

Table 1.1 shows landings figures for three key ports in each UK country. In 2018, Peterhead, Lerwick and Fraserburgh accounted for 52 per cent by quantity and 35 per cent by value of all landings by UK vessels into the UK.

TABLE 1.1 Landings by UK vessels into key ports: 2018

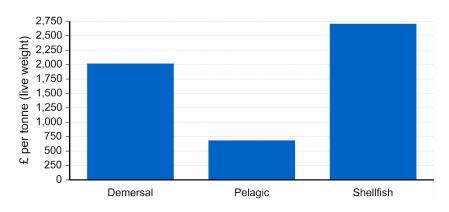
	Quantity ('000 tonnes)				Value (£ million)			
	Demersal	Pelagic	Shellfish	Total	Demersal	Pelagic	Shellfish	Total
England								
Newlyn	6.2	5.5	2.4	14.1	19.0	2.2	8.5	29.8
Brixham	4.8	1.3	6.4	12.4	17.0	0.4	18.5	35.8
Shoreham	0.4	-	7.2	7.7	1.2	-	15.7	16.9
Wales								
Milford Haven	0.5	-	1.0	1.6	1.3	-	2.6	4.0
Fishguard	-	-	1.4	1.4	-	-	2.1	2.1
Holyhead	-	-	1.1	1.1	-	-	2.1	2.1
Scotland								
Peterhead	50.3	100.5	2.7	153.6	87.5	72.9	8.9	169.3
Lerwick	12.4	29.1	0.3	41.9	24.8	19.9	1.2	46.0
Fraserburgh	10.4	11.1	5.7	27.1	16.1	7.6	18.3	42.0
Northern Ireland								
Belfast	-	7.6	-	7.6	-	4.1	-	4.1
Kilkeel	1.9	-	2.6	4.5	2.6	-	5.9	8.5
Portavogie	0.5	-	2.0	2.5	0.7	-	4.6	5.3

Source: Fisheries Administrations in the UK

Note: Additional data on the UK fishing industry are available for download from the MMO website as supplementary Table 1.2.

Average value

Chart 1.12: Average live weight value, UK vessels landing into the UK: 2018



In 2018, the average value of shellfish landed by UK vessels into the UK was around £2,700 per tonne (live weight) compared with £2,500 per tonne in 2017. For demersal species, the average price stayed at around £2,000 per tonne in 2018. Pelagic prices rose from an average of £670 per tonne to £690 per tonne. Figures for key species are shown below.

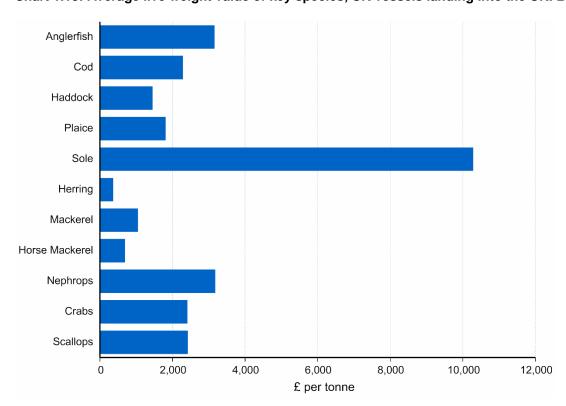


Chart 1.13: Average live weight value of key species, UK vessels landing into the UK: 2018

Catch by sector

In 2018, 99 per cent of the pelagic fish and 97 per cent of the demersal fish landed by the UK fleet were caught by vessels in a producer organisation. In contrast, only 43 per cent of all shellfish were landed by vessels in a producer organisation.

Chapter 2 shows the membership of fish producer organisations for vessels over 10 metres in length. An overview of the landings by each producer organisation, as well as for the non-sector and the 10 metres and under pool, is given in Chapter 3.

Fishing effort

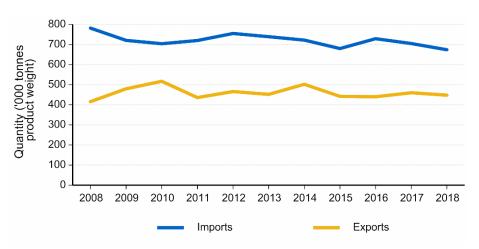
An overview of fishing effort (kW days) in recovery areas is given in Chapter 2. In 2018:

- UK fishing effort by the over 10 metre fleet is 39 per cent lower than in 2003.
- Fishing effort with regulated whitefish trawls (TR1) is 29 per cent lower than when the Cod Recovery Zone was implemented in 2003, despite a rise in each of the last five years.
- Activity in the Sole Recovery Zone with regulated beam trawls is 4 per cent lower than when
 it was created in 2004. Effort fell sharply between 2006 and 2010 but has risen in each of the
 last four years.
- Effort on fishing trips targeting scallops in ICES sub-area VII has increased by 34 per cent since 2002, while effort on similar trips in ICES sub-areas V and VI has decreased by 60 per cent.

Imports and exports

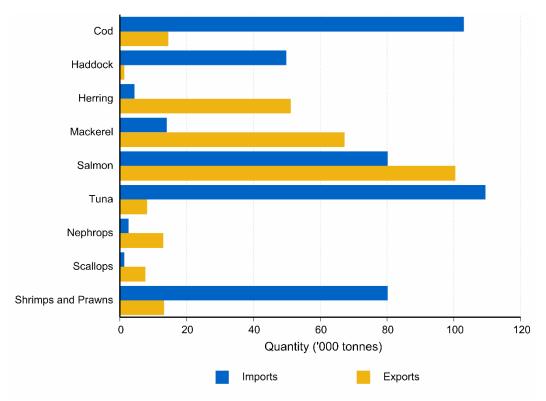
In 2018, imports of fish and fish preparations fell by 31 thousand tonnes to 674 thousand tonnes. Exports also fell by 12 thousand tonnes to 448 thousand tonnes.

Chart 1.14: UK imports and exports: 2008 to 2018



In 2018, imports were highest for tuna, cod, shrimps and prawns and salmon. The UK's main exports were salmon, mackerel and herring.

Chart 1.15: UK imports and exports by key species: 2018



In 2018, imports into the UK were highest from China (63 thousand tonnes), Iceland (62 thousand tonnes), Germany (49 thousand tonnes) and Denmark (43 thousand tonnes). Of the UK exports, the largest amounts went to France (79 thousand tonnes), the Netherlands (64 thousand tonnes), Spain (42 thousand tonnes) and the USA (27 thousand tonnes). Full details on imports and exports are in Chapter 4.

Chapter 5 provides summary information on the scientific assessment of key fish stocks. Chapter 6 compares the UK fishing industry with other European countries and the rest of the world.

2 Structure and activity of the UK fishing industry

Introduction

In 2018 the UK had 6,036 registered fishing vessels, 112 fewer than in the previous year. There were 11,961 fishermen on UK registered vessels, an increase of 269 in the year. The number of kW days spent at sea by vessels over 10 metres in length has fallen by 1 per cent since 2017.

This chapter brings together information on:

- Size and composition of the UK fishing fleet
- Number of fishermen on UK registered fishing vessels
- Accidents involving fishing vessels and fishermen
- Fishing effort by UK vessels, including coverage of effort in the Cod and Sole Recovery Zones and the Western Waters

All tables presented here are available to download as spreadsheets from the MMO website. Supplementary tables showing more detail can also be found on the website.

The EU fishing fleet

In 2018, the highest number of fishing vessels in the European Union was in Greece (14,934) while the UK was seventh with 6,036 (see Chart 2.1). Spain's capacity (332 thousand GT) is by far the largest, with the UK in second place with 191 thousand GT. The UK has the fourth most powerful fleet (0.75 million kW).

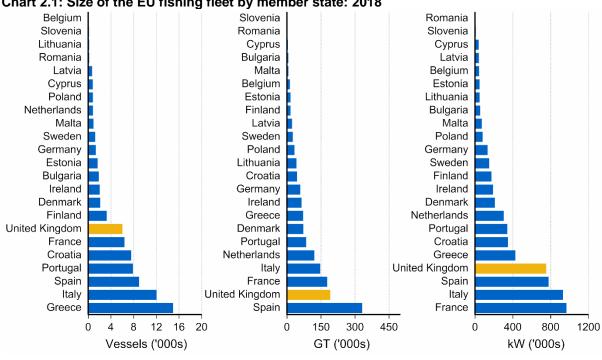


Chart 2.1: Size of the EU fishing fleet by member state: 2018

Note: Data for Chart 2.1 are available for download from the MMO website as supplementary Table 2.12.

The UK fishing fleet

The number of registered UK fishing vessels has fallen by 30 per cent since 1996. Capacity (GT) and power (kW) have decreased by 30 per cent and 29 per cent respectively over the same period (see Table 2.1). As well as an underlying downward trend in the size of the fleet associated with reduced fishing opportunities, UK fisheries administrations have operated decommissioning exercises in 2001-2002, 2003, 2007 and 2008-2009. The decommissioning exercises aimed to withdraw some capacity and effort from UK fisheries to help ensure a sustainable future, and to allow vessel owners to take a business decision on whether to remain in the fishery under the terms of fishery management plans.

TABLE 2.1 Size of the UK fishing fleet: 1996 to 2018^(a)

At year end:

	Number	GT ^(b)	Power
1996	8,667	274,532	1,054,927
1997	8,458	272,421	1,026,542
1998	8,271	270,644	1,006,071
1999	8,039	264,453	978,644
2000	7,818	262,406	980,636
2001	7,721	263,040	1,001,648
2002	7,578	240,898	947,964
2003	7,096	227,449	907,340
2004	7,022	222,529	897,398
2005	6,716	217,617	876,479
2006	6,752	214,181	863,496
2007	6,763	212,816	858,011
2008	6,573	207,423	836,485
2009	6,500	208,025	832,284
2010	6,477	207,424	826,668
2011	6,444	202,048	808,887
2012	6,406	200,697	804,208
2013	6,399	197,283	797,661
2014	6,383	195,121	789,714
2015	6,187	187,371	769,532
2016	6,191	185,734	765,810
2017	6,148	187,014	757,899
2018	6,036	191,178	752,146

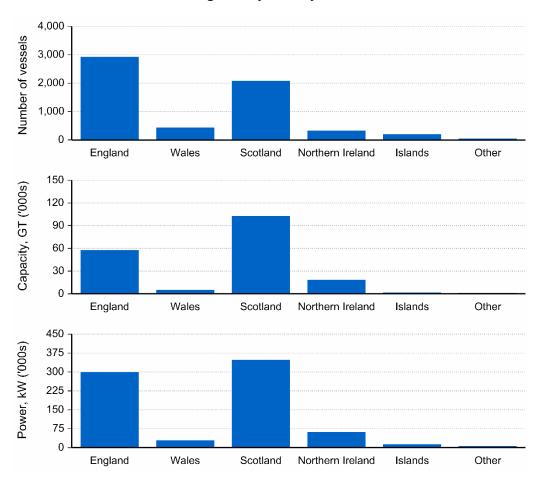
Source: Maritime and Coastguard Agency and Fisheries Administrations in the UK

⁽a) Includes Channel Islands, the Isle of Man and vessels without an administration port. Excludes mussel dredgers.

⁽b) The series for GT is on the basis of GT at the end of 2003.

The UK fishing fleet by country

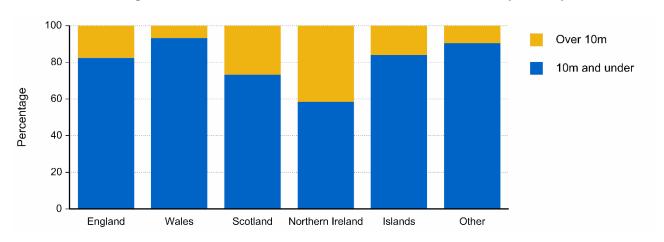
Chart 2.2: Size of the UK fishing fleet by country: 2018



Just under half of all vessels were English. Scottish vessels accounted for 35 per cent of the UK fleet. However, Scotland has the highest share of capacity (GT), 57 per cent, and power (kW), 47 per cent, compared with 30 per cent and 39 per cent respectively in England (see Chart 2.2).

To understand why England has a larger number of vessels than Scotland and yet has a smaller share of capacity and power requires a more detailed analysis of the fleet composition based on vessel length (see Table 2.3). This difference can partly be explained by the higher proportion of vessels of 10 metres and under in length in the English fleet (82 per cent) compared with 73 per cent in Scotland (see Chart 2.3).

Chart 2.3: Percentage of vessels in the 10m and under and over 10m sectors by country: 2018



The overlapping areas of interest of the fleets make it difficult to provide a simple explanation of the differences in fleet structure across the UK. One relevant factor is the different fishing opportunities the fleets are engaged in. Key elements of the Scottish fleet are engaged in several fisheries that are high volume but lower priced, such as herring and mackerel caught in the North Sea and West of Scotland waters. The Scottish fleet has moved towards having higher capacity vessels, which, for economic viability, cover large sea areas and can catch several hundred tonnes of fish per trip.

Compared with this, the English fleet is involved in several key fisheries that are typically lower volume but higher priced, such as the Channel fisheries for sole and plaice. In addition, a greater proportion of the fisheries pursued by the English fleet cover inshore areas. Together these factors have allowed the English fleet to develop with a greater proportion of smaller vessels that are able to be economically viable through catching smaller quantities of more valuable fish. Changes over time in the nature of fishing opportunities available to the different elements of the UK fleet have also been key drivers for the development of the fleet.

Table 2.2 shows the number, capacity (GT) and power (kW) of registered UK fishing vessels by vessel nationality and sector, i.e. over 10 metres and 10 metres and under in length.

TABLE 2.2 Size of the UK fishing fleet, by country of administration: 2015 to 2018^(a)

At year end:

			England	Wales	Scotland	Northern Ireland	Islands ^(b)	Other ^(c)	Total
2015	10m and under vessels	No.	2,598	412	1,434	201	182	36	4,863
		GT	8,772	1,044	5,198	833	525	100	16,472
		kW	147,874	20,950	78,405	11,285	10,070	2,104	270,688
	Over 10m vessels	No.	541	32	573	148	27	3	1,324
		GT	53,906	4,064	99,082	12,570	1,109	167	170,899
		kW	164,797	8,362	276,471	43,890	4,634	691	498,844
	Total	No.	3,139	444	2,007	349	209	39	6,187
		GT	62,679	5,108	104,280	13,403	1,634	267	187,371
		kW	312,671	29,312	354,876	55,175	14,704	2,794	769,532
2016	10m and under vessels	No.	2,569	419	1,456	202	181	49	4,876
		GT	8,672	1,028	5,284	851	516	129	16,479
		kW	147,745	20,892	80,606	11,513	9,513	2,427	272,696
	Over 10m vessels	No.	529	32	575	149	27	3	1,315
		GT	50,140	4,159	100,112	13,065	1,109	670	169,255
		kW	155,969	8,500	277,306	45,337	4,634	1,368	493,114
	Total	No.	3,098	451	2,031	351	208	52	6,191
		GT	58,813	5,186	105,395	13,916	1,625	799	185,734
		kW	303,714	29,392	357,912	56,850	14,147	3,795	765,810
2017	10m and under vessels	No.	2,512	417	1,493	193	176	43	4,834
		GT	8,594	1,003	5,374	767	501	123	16,362
		kW	146,145	19,998	82,818	10,441	9,011	2,424	270,837
	Over 10m vessels	No.	522	33	576	145	28	10	1,314
		GT	49,067	4,121	97,558	17,566	1,121	1,219	170,652
		kW	152,801	8,737	265,089	51,921	4,811	3,703	487,062
	Total	No.	3,034	450	2,069	338	204	53	6,148
		GT	57,661	5,124	102,933	18,333	1,622	1,342	187,014
		kW	298,946	28,735	347,908	62,362	13,822	6,127	757,899
2018	10m and under vessels	No.	2,409	410	1,527	194	173	47	4,760
		GT	8,341	976	5,456	775	497	144	16,190
		kW	140,292	19,995	85,694	10,130	9,045	2,779	267,934
	Over 10m vessels	No.	514	30	556	138	33	5	1,276
	2.31 10111 1000010	GT	49,280	3,847	102,951	17,192	1,283	434	174,988
		kW	151,713	7,642	266,203	50,987	5,900	1,767	484,212
	Total	No	2,923	440	2,083	332	206	52	6,036
	IUlai	No. GT	57,621	4,823	108,407	17,966	1,780	579	191,178
		kW	292,005	27,637	351,897	61,117	14,945	4,546	752,146

Source: Maritime and Coastguard Agency and Fisheries Administrations in the UK

Note: Additional data on the UK fishing fleet are available for download from the MMO website as supplementary Table 2.2a

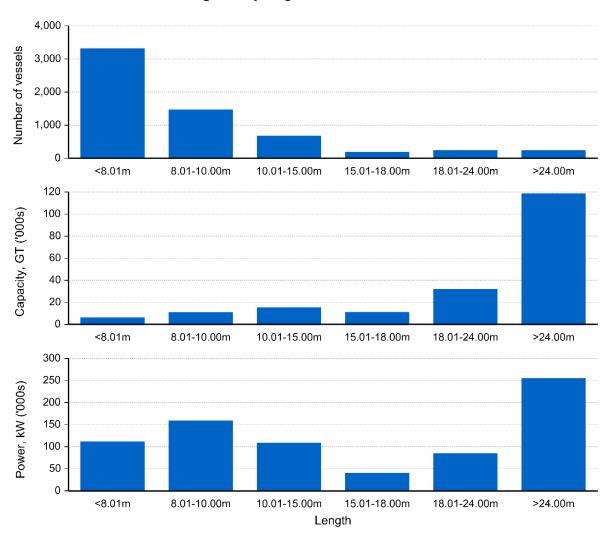
⁽a) Excludes Mussel Dredgers.

⁽b) Islands include Guernsey, Jersey and the Isle of Man.

⁽c) Vessels which are registered but not administered by a port; typically new vessels and vessels changing administrations.

The UK fishing fleet by length

Chart 2.4: Size of the UK fishing fleet by length: 2018



Almost four fifths of the UK fleet is made up of vessels of 10 metres and under in length. These vessels account for 8 per cent of the fleet's capacity and 36 per cent of the fleet's power. However, vessels over 24 metres in length account for just 4 per cent of the total number but for three fifths of total capacity and a third of total power (see Chart 2.4).

Table 2.3 shows the number, capacity (GT) and power (kW) of registered UK fishing vessels by vessel nationality and vessel length.

Scotland and Northern Ireland have higher proportions of large vessels than England. For example, 16 per cent of the Scottish fleet and 29 per cent of the far smaller - in number - Northern Irish fleet exceed 15 metres in length compared with 5 per cent in England. The capacity of the 343 Scottish vessels over 15 metres in length (6 per cent of all UK vessels) equals the capacity of the rest of the UK fleet combined.

TABLE 2.3 UK fishing fleet by vessel length and country of administration: 2018

At year end:

	Overall length	8.00m and	8.01 -	10.01 -	15.01 -	18.01 -	Over	Total
		under	10.00m	15.00m	18.00m	24.00m	24.00m	
England	Number	1,656	753	357	34	48	75	2,923
	Gross tonnage	2,758	5,583	8,039	1,971	6,121	33,150	57,621
	Engine power	56,500	83,792	61,095	7,027	14,324	69,267	292,005
Wales	Number	323	87	23	2	1	4	440
	Gross tonnage	429	547	1,032	92	97	2,626	4,823
	Engine power	11,200	8,794	3,158	382	221	3,881	27,637
Scotland	Number	1,021	506	213	100	122	121	2,083
	Gross tonnage	1,938	3,518	4,074	6,564	18,924	73,388	108,407
	Engine power	32,895	52,799	32,413	23,913	49,724	160,153	351,897
Northern	Number	124	70	42	27	51	18	332
Ireland	Gross tonnage	249	526	1,021	1,447	6,021	8,703	17,966
	Engine power	3,270	6,860	6,650	5,547	18,932	19,858	61,117
Islands (a)	Number	145	28	20	11	2	-	206
	Gross tonnage	273	225	589	553	140	-	1,780
	Engine power	5,292	3,753	3,328	2,208	365	-	14,945
Other (b)	Number	35	12	2	_	1	2	52
	Gross tonnage	60	84	14	-	86	334	579
	Engine power	1,237	1,541	517	-	375	875	4,546
Total	Number	3,304	1,456	657	174	225	220	6,036
	Gross tonnage Engine power	5,707 110,395	10,483 157,539	14,770 107,161	10,627 39,077	31,390 83,941	118,201 254,033	191,178 752,146

Source: Maritime and Coastguard Agency and Fisheries Administrations in the UK

Note: Additional data on the UK fishing fleet are available for download from the MMO website as supplementary Table 2.3a.

The UK fishing fleet by administration port

Charts 2.5 to 2.7 show the fleet size by number of vessels, capacity (GT) and power (kW) for each administration port in the UK. Each chart shows the relative size of the fleet broken down into the over 10 metres and 10 metres and under sectors.

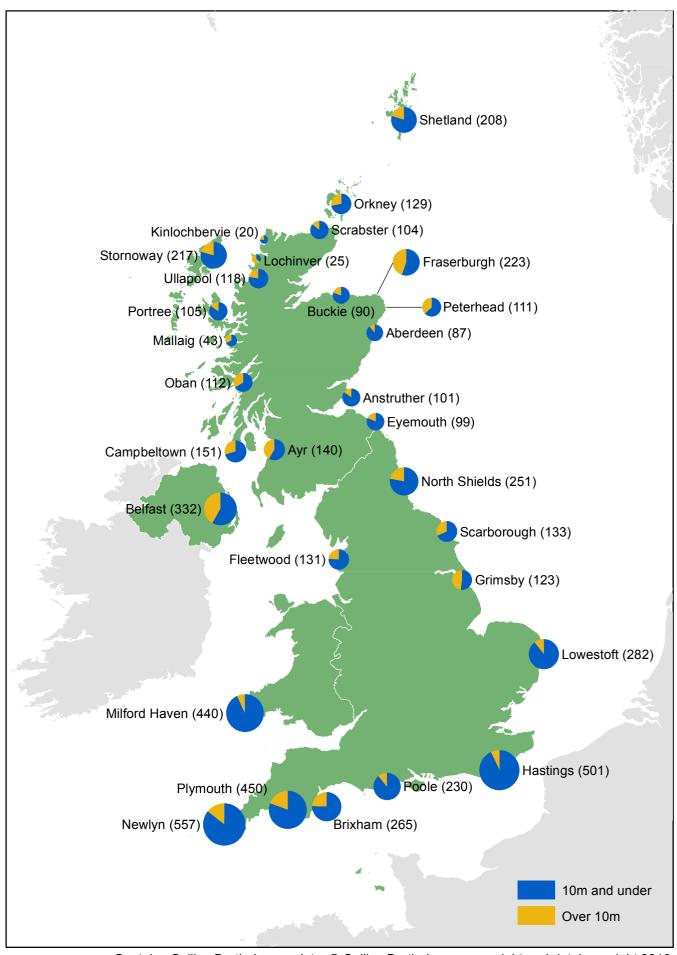
In 2018:

- Newlyn had the largest number (557) of vessels in its administration. 86 per cent of these were of 10 metres and under in length.
- The fleet administered by Fraserburgh had by far the largest capacity (33,764 GT) and power (85,373 kW).
- The largest proportions of 10 metre and under vessels were in Milford Haven (93 per cent) and Hastings (93 per cent). Lochinver had the highest proportion of over 10 metre vessels (64 per cent).

⁽a) Islands include Guernsey, Jersey and the Isle of Man.

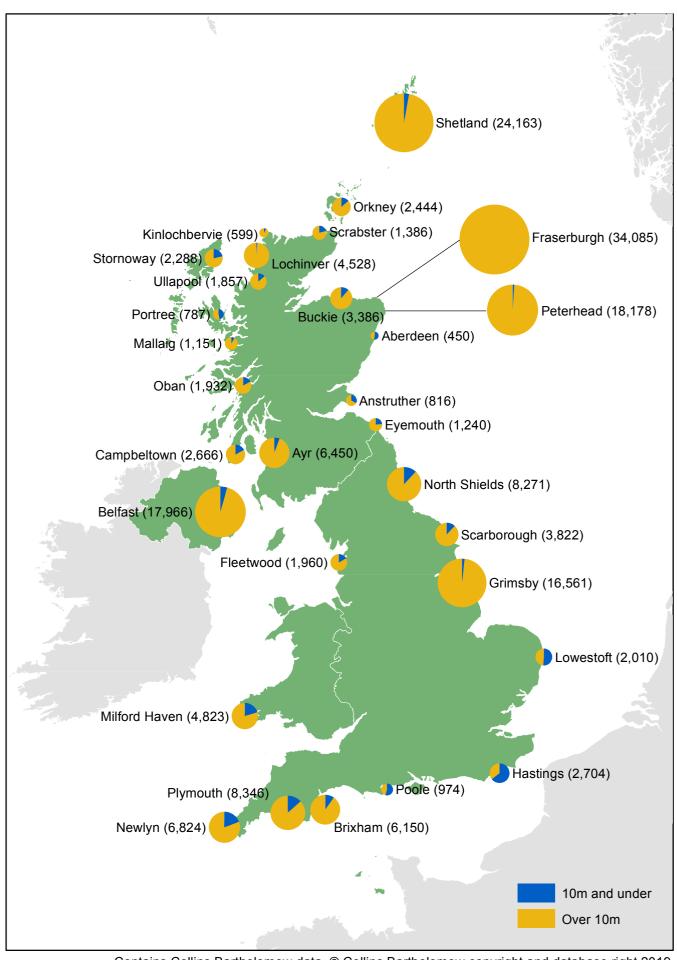
⁽b) Vessels which are registered but not administered by a port; typically new vessels and vessels changing administrations.

Chart 2.5: Number of vessels by administration port: 2018



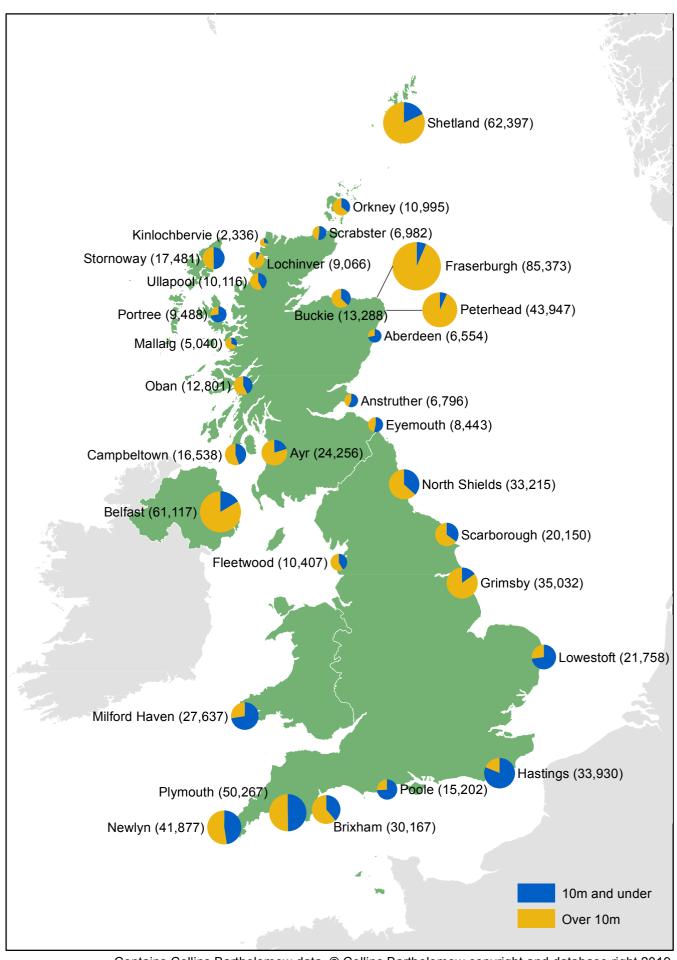
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Chart 2.6: Capacity (GT) of fleet by administration port: 2018



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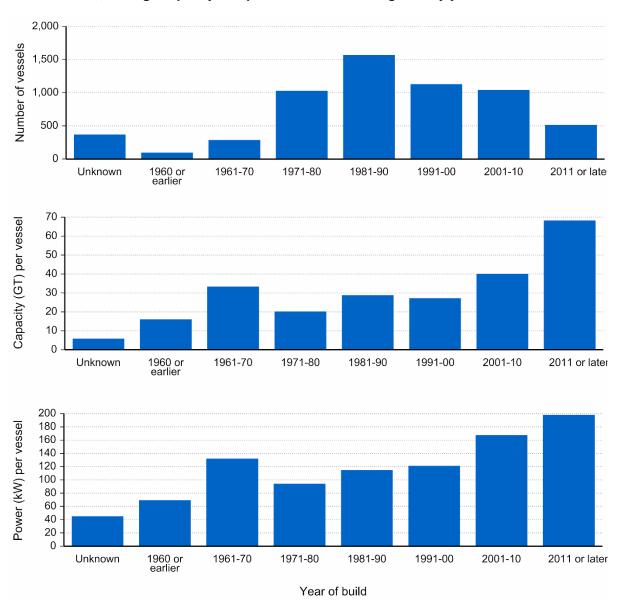
Chart 2.7: Power (kW) of fleet by administration port: 2018



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The UK fishing fleet by age

Chart 2.8: Size, average capacity and power of the UK fishing fleet by year of construction: 2018



More than half of all vessels in the UK fleet (whose age is known) were built before 1991. While the number of vessels being built since the 1980s has decreased, the average capacity and power of vessels built since 2000 has increased significantly (see Chart 2.8).

Table 2.4 shows a breakdown of the fleet by age in each country within the UK.

TABLE 2.4 Age of UK vessels by country of administration: 2018

					Year o	of constructi	on			
		Unknown	1960 or	1961-	1971-	1981-	1991-	2001-	2011 or	Total
			earlier	1970	1980	1990	2000	2010	later	
England	Number	148	45	135	498	746	569	538	244	2,923
_	Gross tonnage	657	526	3,947	7,290	20,453	7,691	9,596	7,461	57,621
	Engine power (kW)	7,387	2,778	16,752	39,318	80,228	53,034	61,449	31,058	292,005
Wales	Number	48	7	7	53	121	79	78	47	440
	Gross tonnage	161	65	133	227	2,374	448	635	781	4,823
	Engine power (kW)	1,807	235	403	2,512	8,602	4,413	5,595	4,070	27,637
Scotland	Number	132	37	96	354	564	361	341	198	2,083
	Gross tonnage	988	793	3,203	8,907	18,860	18,548	25,157	31,953	108,407
	Engine power (kW)	5,427	2,842	12,222	38,416	73,769	61,853	84,581	72,786	351,897
Northern	Number	19	4	33	74	81	68	43	10	332
Ireland	Gross tonnage	373	231	1,625	3,460	3,050	2,287	2,153	4,788	17,966
	Engine power (kW)	1,697	960	6,213	11,954	12,777	9,801	8,783	8,932	61,117
Islands (a)	Number	17	3	16	43	43	44	34	6	206
	Gross tonnage	35	7	419	530	251	266	220	53	1,780
	Engine power (kW)	501	34	1,677	3,268	2,262	2,895	3,324	985	14,945
Other (b)	Number	7	-	-	7	13	9	7	9	52
	Gross tonnage	16	_	-	26	463	14	32	28	579
	Engine power (kW)	208	-	-	258	1,776	327	507	1,469	4,546
Total	Number	371	96	287	1,029	1,568	1,130	1,041	514	6,036
	Gross tonnage Engine power (kW)	2,229 17,026	1,621 6,850	9,326 37,266	20,440 95,726	45,451 179,415	29,254 132,323	37,794 164,239	45,064 119,300	191,178 752,146

Source: Maritime and Coastguard Agency and Fisheries Administrations in the UK

Note: Additional data on the UK fishing fleet are available for download from the MMO website as supplementary Tables 2.4a, 2.4b and 2.4c.

⁽a) Islands include Guernsey, Jersey and the Isle of Man.

⁽b) Vessels which are registered but not administered by a port; typically new vessels and vessels changing administrations.

Membership of Fish Producer Organisations

On 1 January 2018, 37 per cent of vessels over 10 metres in length were not members of a Fish Producer Organisation (FPO), i.e. they were members of the over 10 metre or Isle of Man non-sectors. The Scottish FPO had the highest membership (155 vessels), followed by Northern Ireland FPO (111 vessels).

TABLE 2.5 Fish Producer Organisation (FPO) membership^(a): 2017 to 2018

Membership as at 1 January for each year

	201	7 ^(b)	201	3 ^(b)
	Vessels in	Members as	Vessels in	Members as
	membership	a % of total	membership	a % of total
Scottish FPO Ltd	174	13%	155	12%
Northern Ireland FPO Ltd	132	10%	111	9%
Cornish FPO Ltd	92	7%	96	8%
South Western FPO Ltd	89	6%	82	6%
Anglo Northern Irish FPO Ltd	47	3%	55	4%
Anglo Scottish FPO Ltd	40	3%	33	3%
Shetland FPO Ltd	35	3%	33	3%
West of Scotland FPO Ltd	39	3%	29	2%
Fife FPO Ltd	36	3%	29	2%
Eastern England FPO Ltd	31	2%	26	2%
Isle of Man Non-Sector	22	2%	25	2%
North East of Scotland FO Ltd	24	2%	24	2%
Northern Producers Organisation Ltd	24	2%	21	2%
Aberdeen FPO	23	2%	18	1%
Orkney FPO Ltd	13	1%	17	1%
North Sea FPO Ltd	14	1%	15	1%
Interfish	11	1%	11	1%
The FPO Ltd	10	1%	8	1%
Wales and West Coast FPO Ltd	6	0%	6	0%
Lunar Group	5	0%	4	0%
Lowestoft FPO Ltd	4	0%	4	0%
Klondyke	3	0%	2	0%
North Atlantic FPO Ltd	2	0%	2	0%
Non-sector vessels (c)	479	35%	470	37%
Total	1,374	100%	1,276	100%

⁽a) Vessels over 10 metres only. Excludes vessels 10 metres and under in FPO membership.

⁽b) Includes some Channel Islands and Isle of Man vessels.

⁽c) Over 10m vessels not in FPO membership.

⁽d) Fleetwood FPO Ltd has now merged with Anglo Northern Irish FPO Ltd

Number of fishermen

Statistics on the number of fishermen are drawn from surveys carried out by the Marine Management Organisation in England, the Welsh Assembly Government, the Department of Agriculture, Environment and Rural Affairs in Northern Ireland and Marine Scotland. Details of the survey methodology are provided in Appendix 4.

The number of fishermen on UK registered vessels has decreased by 5 per cent since 2008 from 12,614 to 11,961 in 2018. The number of regular fishermen has decreased by 7 per cent and the number of part-time fishermen has decreased by 8 per cent over this period (see Chart 2.9). The decrease in fishermen numbers may be associated with reductions in fleet size as well as decreased fishing opportunities.

14,000 Total 12,000 10,000 Regular Fishermen 8,000 Part Time 6.000 4,000 2.000 0 2009 2010 2011 2012 2013 2014 2015 2016 2017

Chart 2.9: Number of fishermen on UK registered vessels: 2008 to 2018

Since 2008, the numbers of fishermen on English and Scottish administered vessels have both decreased by 12 and 9 per cent respectively. However, in Northern Ireland and Wales fishermen numbers have increased by 37 per cent but rose by 36 per cent respectively (see Chart 2.10).

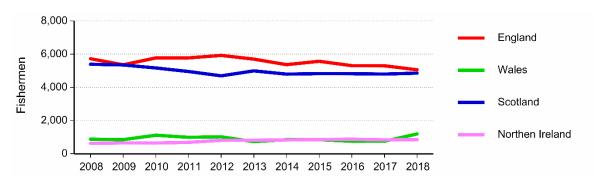


Chart 2.10: Number of fishermen by country of administration: 2008 to 2018

Over the last twenty years, the proportion of part-time fishermen has fluctuated between 16 and 22 per cent. In 2018, they accounted for 20 per cent of all fishermen. Fifty nine per cent of fishermen on vessels administered in Wales were part-time compared with 13 per cent for vessels administered in England, 17 per cent in Scotland and 20 per cent inNorthern Ireland (see Chart 2.11).

Chart 2.11: Number of regular and part-time fishermen by country of administration: 2017

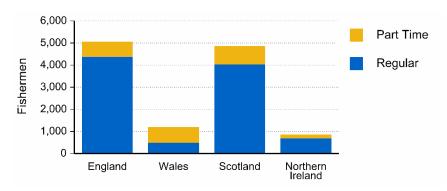


Table 2.6 shows a breakdown of the number of regular and part-time fishermen by country in the UK from 1938 to 2018. Since 1938:

- The number of fishermen on UK registered vessels has decreased by 75 per cent.
- The proportion of fishermen in each country of administration hasn't changed dramatically. In 1938 fishermen numbers in England and Wales represented 61 per cent of the UK total, while Scotland represented 37 per cent. In 2018, the proportions were 52 per cent and 41 per cent respectively.

TABLE 2.6 Number of UK fishermen: 1938 to 2018

	ENGLA	ND & WA	ALES ^{(a)(b)}	(COTLAN	D	NORT	HERN IRE	LAND	UNI	TED KING	DOM
	Regular	Part- time	Total	Regular	Part- time	Total	Regular	Part- time	Total	Regular	Part- time	Total
1938	26,062	2,949	29,011	12,976	4,939	17,915	342	556	898	39,380	8,444	47,824
1948	25,946	3,373	29,319	12,080	5,148	17,228	800	300	1,100	38,826	8,821	47,647
1960	12,712	3,646	16,358	8,795	2,451	11,246	500	150	650	22,007	6,247	28,254
1965	11,064	4,045	15,109	8,057	2,088	10,145	480	140	620	19,601	6,273	25,874
1970	9,424	2,382	11,806	7,656	1,441	9,097	400	140	540	17,480	3,963	21,443
1975	9,016	3,447	12,463	7,507	1,341	8,848	538	285	823	17,061	5,073	22,134
1980	8,455	5,135	13,590	7,561	1,138	8,699	780	240	1,020	16,796	6,513	23,309
1981	8,450	5,992	14,442	7,376	1,085	8,461	775	312	1,087	16,601	7,389	23,990
1982	8,258	5,465	13,723	7,247	937	8,184	841	263	1,104	16,346	6,665	23,011
1983	8,022	5,355	13,377	7,173	902	8,075	811	324	1,135	16,006	6,581	22,587
1984	8,142	4,571	12,713	7,198	899	8,097	764	295	1,059	16,104	5,765	21,869
1985	7,984	5,036	13,020	7,170	932	8,102	808	294	1,102	15,962	6,262	22,224
1986	8,801	4,461	13,262	7,244	992	8,236	861	275	1,136	16,906	5,728	22,634
1987 ^(c)	8,737	4,027	12,764	7,522	970	8,492	894	274	1,168	17,153	5,271	22,424
1988	8,467	4,039	12,506	7,672	891	8,563	956	295	1,251	17,095	5,225	22,320
1989	nd	nd	nd	7,862	803	8,665	950	283	1,233	nd	nd	nd
1990	nd	nd	nd	7,550	766	8,316	1,050	316	1,366	nd	nd	nd
1991	nd	nd	nd	7,303	792	8,095	1,081	288	1,369	nd	nd	nd
1992	nd	nd	nd	7,181	865	8,046	1,036	296	1,332	nd	nd	nd
1993 ^(d)	nd	nd	nd	7,675	1,347	9,022	957	272	1,229	nd	nd	nd
1994	7,542	3,425	10,967	7,160	1,410	8,570	938	228	1,166	15,640	5,063	20,703
1995	8,240	2,192	10,432	6,889	1,506	8,395	933	226	1,159	16,062	3,924	19,986
1996	7,867	2,130	9,997	6,689	1,395	8,084	815	148	963	15,371	3,673	19,044
1997	7,253	2,176	9,429	6,729	1,465	8,194	850	131	981	14,832	3,772	18,604
1998	7,149	1,962	9,111	6,395	1,376	7,771	892	115	1,007	14,436	3,453	17,889
1999	6,977	1,654	8,631	6,042	1,288	7,330	845	90	935	13,864	3,032	16,896
2000	6,193	1,868	8,061	5,594	1,308	6,902	612	74	686	12,399	3,250	15,649
2001	6,279	1,483	7,762	5,353	1,284	6,637	513	46	559	12,145	2,813	14,958
2002	6,505	1,382	7,887	4,369	1,338	5,707	568	43	611	11,442	2,763	14,205
2003	5,778	1,570	7,348	3,968	1,308	5,276	458	40	498	10,204	2,918	13,122
2004	6,364	1,195	7,559	4,124	1,151	5,275	535	84	619	11,023	2,430	13,453
2005	6,026	1,081	7,107	3,952	1,203	5,155	514	55	569	10,492	2,339	12,831
2006	5,702	1,414	7,116	4,109	1,096	5,205	547	66	613	10,358	2,576	12,934
2007	5,340	1,514	6,854	4,408	951	5,359	557	101	658	10,305	2,566	12,871
2008	4,911	1,686	6,597	4,585	807	5,392	532	93	625	10,028	2,586	12,614
2009	5,185	1,024	6,209	4,403	946	5,349	541	113	654	10,129	2,083	12,212
2010 ^(e)	5,380	1,509	6,889	4,257	909	5,166	535	113	648	10,172	2,531	12,703
2011	5,386	1,378	6,764	4,076	877	4,953	578	110	688	10,040	2,365	12,405
2012 ^(f)	5,877	1,067	6,944	3,752	941	4,693	654	154	808	10,283	2,162	12,445
2013 ^(g)	5,478	951	6,429	4,092	900	4,992	675	139	814	10,245	1,990	12,235
2014	5,109	1,108	6,217	3,980	816	4,796	683	149	832	9,772	2,073	11,845
2015	5,469	951	6,420	3,985	843	4,828	708	151	859	10,162	1,945	12,107
2016	4,934	1,125	6,059	3,834	989	4,823	700	175	875	9,468	2,289	11,757
2017	5,092	963	6,055	3,932	867	4,799	686	152	838	9,710	1,982	11,692
2018	4,870	1,380	6,250	4,032	825	4,857	686	168	854	9,588	2,373	11,961

⁽a) Prior to 1952 figures were based on information supplied by the Registrar General of Shipping and Seamen. Since 1952 figures have been supplied by the District Fishery Officers of Defra and now the MMO.

Note: Additional data on UK fishermen are available for download from the MMO website as supplementary Tables 2.6a and 2.6b.

⁽b) From 1966 these figures exclude 'hobby' fishermen, that is, fishermen who do not fish commercially. The corresponding figures for Scotland and Northern Ireland have never included 'hobby' fishermen.

⁽c) Includes 1986 figures for Newlyn and Plymouth.

⁽d) The apparent increase in fishermen in Scotland reflected the licensing of 10m and under vessels when more information became available on the numbers of such active vessels.

⁽e) From 2010, revised guidance was issued to ports in England and Wales on the classification of regular and part-time fishermen leading to improved recording of fishermen numbers.

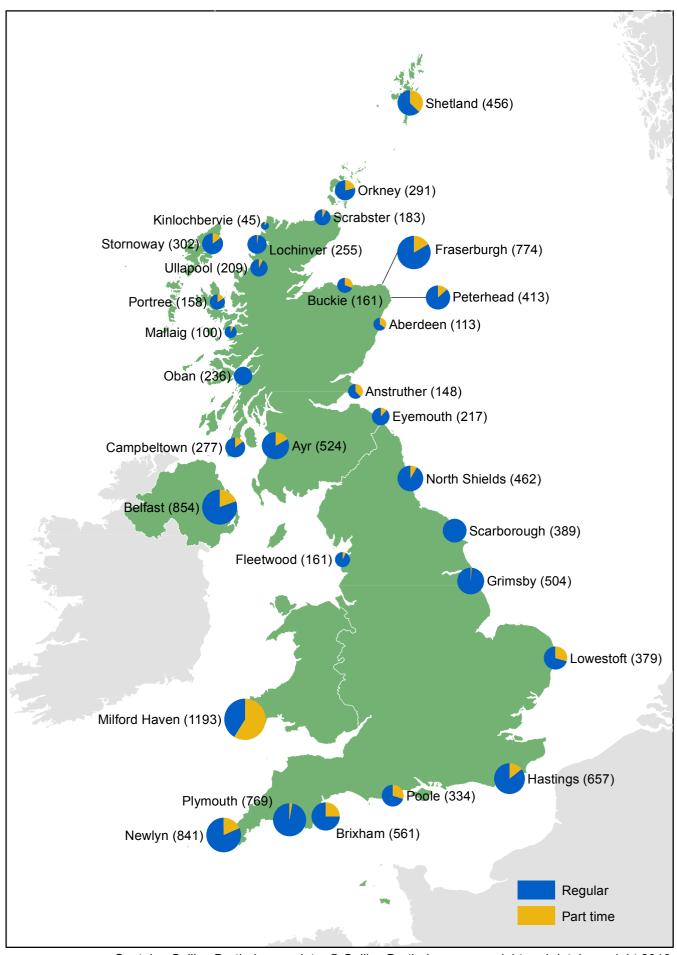
⁽f) Between 2011 and 2012 there was an increase in the number of fishermen in Northern Ireland due to the figures for two areas now including local coastal activity (mainly pot fishing).

⁽g) Amendments to fishermen numbers for England, which are reflected in England & Wales and UK figures.

Chart 2.12 shows the total number of fishermen for each administration port in the UK. In 2018:

- Milford Haven is the administration port with the largest number of fishermen in the UK (1193).
- The largest number of part-time fishermen is found on vessels administered by Milford Haven (700).
- Fraserburgh has the largest number of fishermen in Scotland (774).
- Ports with higher numbers of vessels tend to have higher numbers of fishermen (see Chart 2.5).
- Ports with greater total vessel power tend to have a higher number of fishermen (Chart 2.7).

Chart 2.12: Fishermen numbers by administration port: 2018



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Accidents, lost vessels and fatalities

Figures on accidents involving fishing vessels and fishermen are provided by the Marine Accident Investigation Branch, part of the Department for Transport (see Table 2.7).

TABLE 2.7 Number of accidents, lost vessels and fatalities involving UK fishing vessels: 2008 to 2018

Accident type	2008	2009 ^(a)	2010	2011	2012	2013	2014	2015	2016	2017	2018
Capsize/Listing	2	2	6	7	5	3	3	2	-	2	6
Collision	17	10	15	11	16	12	14	14	10	14	5
Contact	2	6	4	4	4	3	3	1	4	2	-
Fire/Explosion	11	7	10	15	11	5	1	2	2	3	6
Flooding/Foundering	34	31	25	26	23	22	15	6	18	10	8
Grounding	28	26	16	25	21	23	13	19	15	10	19
Heavy Weather Damage	-	3	1	1	1	-	-	-	-	-	-
Machinery Failure ^(b)	156	140	184	195	174	180	104	69	114	105	90
Missing Vessel	-	-	-	-	-	-	-	1	-	-	-
Person Overboard	7	13	9	15	5	8	4	3	7	5	4
Other	-	-	2	-	-	-	-	1	-	-	-
Total accidents	257	238	272	299	260	256	157	118	170	151	138
Vessel losses	21	15	14	24	9	18	12	13	8	6	8
Injuries	60	75	45	58	50	33	46	35	40	32	38
Fatalities ^(c)	8	13	5	8	6	4	8	7	9	5	6

Source: Marine Accident Investigation Branch

Note: The data in this table are official statistics but are not subject to National Statistics accreditation.

⁽a) From 2009 these figures include workers on board vessels who are not crew members.

⁽b) For the Marine Accident Investigation Branch Annual Report 2013 accidents by machinery failure are now sepearated into two categories, Damage to ship and equipment or Loss of control. Further details can be found on their webiste (www.maib.gov.uk).

⁽c) Number of crew deaths on UK registered fishing vessels.

UK over 10m fishing fleet effort

The effort data table relating to activity in the Western Waters (WW) Regime contained within this publication was updated in 2013 to incorporate more information on effort limits and percentage uptake. Table 2.10 now includes information on other Member States for comparative purposes. This approach reflects that of the quota table (Table 3.12) in Chapter 3. The data shown in the tables, unless indicated otherwise, reflect the data held on the Commission's database (FIDES). Table 2.8 relating to activity in the Sole Recovery Zone (SRZ) has retained the same format as these data are not submitted to the European Commission on an annual basis like other effort schemes, and instead are requested by the Commission on an ad hoc basis in line with their requirements. This means that comparable data for other Member States related to the sole recovery regime are not available.

Since 2003, fishing effort (in kW days) by the over 10 metre fleet has decreased by 39 per cent. (Chart 2.13). This reduction is primarily due to a decline in effort in the demersal trawl and seine segment of 46 per cent (Chart 2.14). The beam trawl segment, which has relatively lower levels of effort, fell by 59 per cent. Falls in effort over this period were recorded for all other gear types except those using dredges, hooks, pots and traps and the rarely used purse seine.

This reduction in effort in the demersal trawl and seine segment was largely due to decommissioning exercises carried out by UK fisheries administrations in 2001-2002 and 2003. The latter focussed on removing fleet capacity targeting cod in the Cod Recovery Zone (a combination of North Sea, West of Scotland and Irish Sea fishing areas), and was particularly focussed on vessels that used demersal trawls fishing for whitefish. A further exercise was carried out to remove excess beam trawl fishing capacity in the Western Channel fishing area (ICES division VIIe), as part of the recovery regime for sole. This removed 8 active vessels in this area.

More information on the control of fishing effort under the cod and sole recovery regimes, and in the Western Waters, is given below.

Chart 2.13: UK fishing fleet effort in kW days at sea: 2003 to 2018

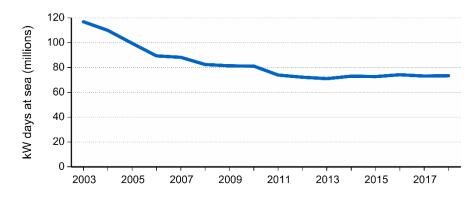
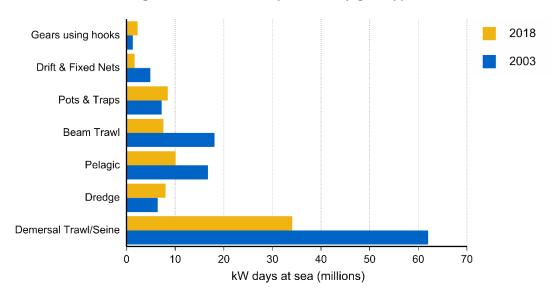


Chart 2.14: UK fishing fleet effort in kW days at sea by gear type: 2003 and 2018



Note: Data for Charts 2.13 and 2.14 are available for download from the MMO website as supplementary Table 2.11.

Effort of vessels fishing in the Sole Recovery Zone (SRZ)

As part of the measures for recovery of sole stocks, a Sole Recovery Zone was established from February 2004 to apply effort controls to vessels of 10 metres or over using certain gears in the Western Channel (ICES division VIIe). The regimes which applied in 2010 are described in Annex IIC of Council Regulations (EC) Nos 43/2009 and 53/2010.

Limits apply on the number of days spent at sea by vessels fishing with beam trawls of mesh size greater than or equal to 80mm and by vessels using static nets (including gill nets, trammel nets and tangle nets) with mesh size less than 220mm. The Marine Management Organisation controls effort in the Western Channel by allocating days for fishing with these gears to eligible vessels.

Table 2.8 shows the number of vessels fishing with regulated beam trawls in the Western Channel and the effort exerted.

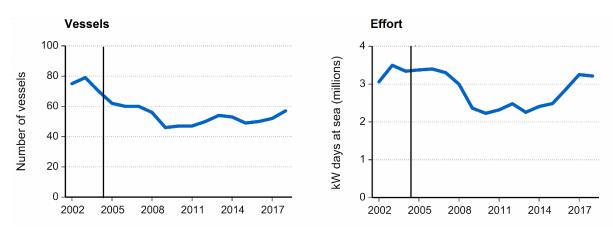
Table 2.8 Beam Trawl activity in the Sole Recovery Zone: 2002 to 2018

Year	Vessels	Days at sea	kW days
2002	75	6,474	3,059,302
2003	79	7,205	3,497,479
2004	70	6,285	3,341,233
2005	62	6,309	3,375,415
2006	60	6,224	3,398,988
2007	60	6,665	3,302,943
2008	56	6,319	2,997,036
2009	46	4,963	2,363,694
2010	47	5,071	2,227,990
2011	47	5,685	2,318,843
2012	50	6,652	2,480,724
2013	54	6,121	2,255,310
2014	53 R	6,116	2,407,901
2015	49	6,246	2,485,062
2016	50	6,786	2,859,242
2017	53 R	7,535 R	3,243,843 ^ℝ
2018	57	7,507	3,214,075

Source: Fisheries Administrations in the UK

From 2002 to 2004 the number of vessels beam trawling in the Western Channel decreased by 7 per cent; however, fishing effort (kW days) increased by 9 per cent. Since the implementation of the SRZ, the number of vessels beam trawling in the Western Channel fell dramatically, as did effort, before stabalising. Reasons for this may include the effect of decommissioning schemes as well as reduced fishing opportunities owing to effort and quota controls. However, the number of vessels and effort has increased considerably in recent years (Chart 2.15), approaching pre-2008 levels.

Chart 2.15: Fleet size and effort (kW days) of vessels using beam trawls in the Sole Recovery Zone: 2002 to 2018



Note: The Sole Recovery Regime was established in 2004.

Effort of vessels fishing in the Cod Recovery Zone (CRZ)

As part of the measures for recovery of cod stocks, a Cod Recovery Zone was established from February 2003 to apply effort controls to vessels of 10 metres or over using specified gears in the North Sea and West of Scotland. The regime was extended in 2004 to include the Irish Sea (ICES division VIIa) and the Eastern Channel (ICES division VIId). The effort controls of the CRZ were repealed in November 2016 by EU Parliament and Council regulation No 2016/2094. Under this amended regulation an individual vessel's effort with regulated gears is unlimited but the combined engine power capacity of the fleet is capped at 2006 or 2007 levels in each of the four management areas.

The regime in operation during 2016 (before repeal) was established by Council Regulation (EC) No 1342/2008. The CRZ included four sea areas: Kattegat, Irish Sea (ICES division VIIa), North Sea (ICES division IIIa excluding Kattegat; ICES sub-area IV; EU waters of ICES division IIa; ICES division VIId) and West of Scotland (ICES division VIa and EU waters of ICES division Vb). Nine regulated gears were defined in the CRZ regulations, identified as causing significant cod mortality. Up to repeal UK Fisheries Administrations operated schemes to limit the number of days spent fishing with these gears in each sea area. Effort was allocated to each gear type in each area based on the member state's historic track record in that gear/area combination.

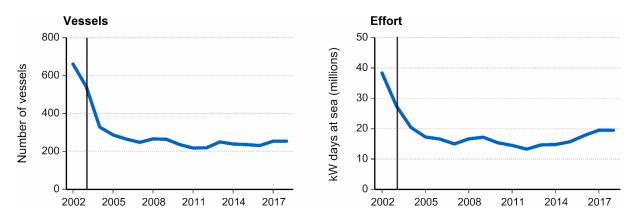
Surplus effort for one gear type was transferable to other gear groups in the same CRZ area. Transfers of effort between CRZ areas were prohibited. Any inter-gear transfers of effort required an adjustment to account for the differences in the levels of cod mortality between the gears in question. The TR1 and TR2 gear groups were merged into a single group in the North Sea under Implementing Regulation No 2324/2015 in 2015. This merger removed the cod mortality adjustments previously required to transfer surplus TR2 effort to TR1. This merger increased available TR1 effort, as TR2 effort was consistently underutilised when compared with TR1 effort. The overall trends for these important gear groups are discussed below.

Gear type TR1

Gear type TR1 includes bottom trawls, Danish seines and similar towed gear, excluding beam trawls, of mesh size greater than or equal to 100 mm. Gears of this type are typically used to target whitefish, including cod.

From 2002 to the end of 2003 the number of vessels fishing in the CRZ using gear type TR1 fell by 18 per cent (Chart 2.16). Over the same period, effort (kW days) decreased by 29 per cent, in part due to decommissioning schemes targeting the demersal fleet. Since the implementation of the CRZ, the number of vessels using gear type TR1 has decreased by 53 per cent and effort (kW days) by 29 per cent.

Chart 2.16: Fleet size and effort (kW days) of vessels using gear type TR1 in the Cod Recovery Zone: 2002 to 2018



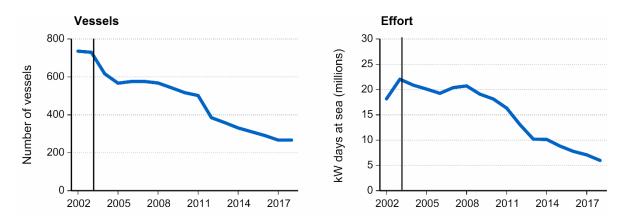
Note: The Cod Recovery Regime was established in 2003, initially limited to the North Sea and West of Scotland, but was expanded in 2004 to include the Irish Sea (ICES division VIIa) and the Eastern Channel (ICES division VIId).

Gear type TR2

Gear type TR2 includes bottom trawls, Danish seines and similar towed gear, excluding beam trawls, of mesh size greater than or equal to 70 mm and less than 100 mm. Gears of this type are typically used to target langoustines (*nephrops*), but may also catch significant amounts of cod.

From 2002 to the end of 2003 the number of vessels fishing in the CRZ using gear type TR2 decreased by 1 per cent while effort (kW days) increased by 21 per cent. Since the implementation of the CRZ, the number of vessels using gear type TR2 has decreased by 63 per cent and effort (kW days) decreased by 73 per cent (Chart 2.17).

Chart 2.17: Fleet size and effort (kW days) of vessels using gear type TR2 in the Cod Recovery Zone: 2002 to 2018



Note: The Cod Recovery Regime was established in 2003, initially limited to the North Sea and West of Scotland, but was expanded in 2004 to include the Irish Sea (ICES division VIIa) and the Eastern Channel (ICES division VIId).

Table 2.9 Effort of UK 10m and over vessels fishing in the Cod Recovery Zone: 2018

kW days

			West of	All CRZ
Gear	Irish Sea	North Sea	Scotland	Areas
	VIIa	IIa, IV, VIId	Vla, Vb	
BT1	=	268,147	-	268,147
BT2	290	2,333,545	-	2,333,835
GN1	2,282	231,863	25,520	259,665
GT1	-	8,285	-	8,285
LL1	6,223	948,250	537,941	1,492,414
TR1	517,523	16,740,986	2,217,314	19,475,822
TR2	1,973,665	2,367,807	1,653,040	5,994,511
Total Regulated Gears	2,499,982	22,898,882	4,433,815	29,832,679

Effort of vessels fishing in the Western Waters

To prevent growth in fishing activity in the sea areas to the west of the UK, Ireland, Spain, Portugal and Morocco an area (the 'Western Waters') was established from November 2003 in which fishing effort is limited. The regime was established by Council Regulation (EC) No 1954/2003 and remains in force.

The Western Waters regime covers nine sea areas. Regulated activity is permitted for UK registered vessels in four of these. Ceilings exist on the maximum fishing effort to be exerted by 15 metres and over vessels targeting certain species in ICES sub-areas V and VI; ICES sub-area VIII; and ICES sub-area VIII. The fourth area is a region to the south and west of Ireland with high concentrations of juvenile hake known as the Biologically Sensitive Area (BSA). Ceilings in this region apply to fishing effort exerted by 10 metres and over vessels.

The information included in this section represents that which is submitted to the Commission under the Western Waters regime. Within this reporting regime, the UK and other Member States are required to submit monthly reports on fishing effort.

Trips targeting crabs

Trips targeting edible crabs and spider crabs are covered by the Western Waters regime. From 2002 to 2018 the number of vessels targeting crabs in ICES sub-areas V and VI has fallen from 17 to 8 while the number in ICES sub-area VII has fluctuated between 16 vessels in 2002 and 15 vessels in 2018. Effort levels have also fluctuated over this period and were 30 per cent lower for ICES sub-areas V and VI and were 7 per cent higher for ICES sub-area VII (Chart 2.18).

Effort Vessels 25 0.8 kW days at sea (millions) 20 Number of vessels 0.6 15 0.4 10 0.2 5 0 0 2002 2002 2005 2008 2011 2014 2017 2005 2008 2011 2014 2017 **ICES V-VI ICES VII**

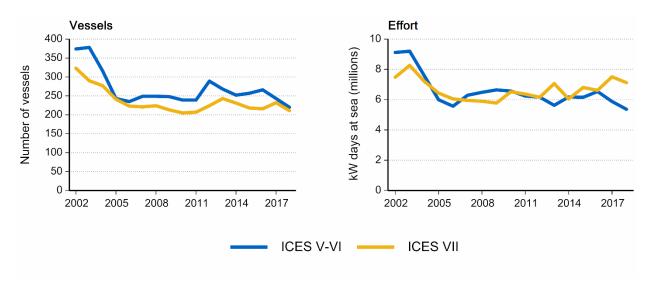
Chart 2.18: Fleet size and effort (kW days) of vessels targeting crabs in the Western Waters: 2002 to 2018

Trips targeting demersal species

The Western Waters regime places limits on the effort exerted on trips targeting demersal species excluding certain deep sea species.

From 2002 to 2018 the number of vessels and effort targeting demersal species in ICES sub-areas V and VI decreased by 41 per cent. The reductions may be partly attributed to decommissioning schemes and limited fishing opportunities due to effort and quota controls. For ICES sub-area VII, the number of vessels fell by 35 per cent although effort is now approaching 2002 levels.

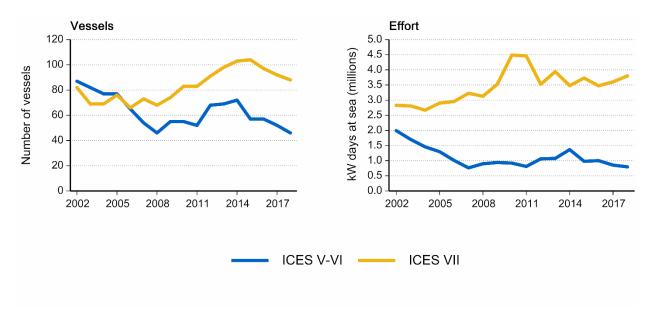
Chart 2.19: Fleet size and effort (kW days) of vessels targeting demersal species in the Western Waters: 2002 to 2018



Trips targeting scallops

From 2002 to 2018, the number of vessels targeting scallops in ICES sub-areas V and VI decreased by 47 per cent while the number in ICES sub-area VII increased by 7 per cent. Over the same period, effort in ICES sub-areas V and VI fell by 60 per cent, but effort in ICES sub-area VII increased by 34 per cent. This increase is partly due to diversion of activity from other sea areas as well as increased activity by vessels already fishing in ICES sub-area VII.

Chart 2.20: Fleet size and effort (kW days) of vessels targeting scallops in the Western Waters: 2002 to 2018



A summary of effort uptake by relevant member states is shown in Table 2.10 below.

Table 2.10 Effort of UK 15m and over vessels fishing in the Western Waters: 2018

											kW days
Species	ICES Area		UK	Belgium	Denmark	France	Germany	Ireland	Netherlands	Portugal	Spain
Crabs	V, VI	Limit	702,292	0	0	0	0	465,000	0	0	0
		Effort	481,022	0	0	0	0	130,833	0	0	0
		Uptake %	68%	-	-	-	-	28%	-	-	-
	VII	Limit	543,366	-	-	1,946,719	-	-	-	-	-
		Effort	491,767	-	-	316,975	-	-	-	-	-
		Uptake %	91%	-	-	16%	-	-	-	-	-
Demersal	V, VI	Limit	24,017,229	58,452	215,234	11,649,154	186,370	2,324,932	-	-	2,460,000
		Effort	5,364,832	-	-	3,413,092	nd	816,255	-	-	982,890
		Uptake %	22%	-	-	29%	-	35%	-	-	40%
	VII	Limit	25,786,266	7,246,910	-	40,657,844	233,560	7,424,120	980,279	-	17,957,785
		Effort	7,124,745	4,934,346	-	12,969,868	nd	4,135,891	979,631	-	5,069,669
		Uptake %	28%	68%	-	32%	-	56%	100%	-	28%
	VIII	Limit	218,406	742,465	-	24,963,097	4,952	-	403,327	2,552,222	33,100,000
		Effort	131,949	597,507	-	9,780,259	nd	-	-	nd	14,403,802
		Uptake %	60%	80%	-	39%	-	-	0%	-	44%
	BSA	Limit	3,061,485	175,432	-	9,559,653	8,326	7,114,490	-	-	5,642,215
	(Biologically	Effort	789,733	122,125	-	0	nd	2,888,073	-	-	1,987,508
	Sensitive Area)	Uptake %	26%	70%	-	-	-	41%	-	-	35%
Scallops	V, VI	Limit	1,974,425	-	-	-	-	-	-	-	-
		Effort	796,494	-	-	-	-	-	-	-	-
		Uptake %	40%	-	-	-	-	-	-	-	-
	VII	Limit	4,160,619	354,066	-	6,727,932	-	400,012	155,157	-	-
		Effort	3,801,964	80,283	-	2,431,734	-	232,911	-	-	-
		Uptake %	91%	23%	-	36%	-	58%	-	-	-

Source: European Commission

3 Landings

Introduction

In 2018, UK vessels landed 698 thousand tonnes of sea fish (including shellfish) into the UK and abroad with a value of £989 million. This is a 4 per cent decrease in quantity but a 1 per cent increase in value compared with the previous year.

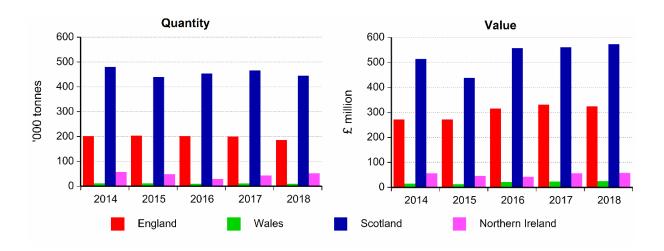
This chapter provides a comprehensive overview of the weight and value of landings by UK vessels into the UK and abroad and by foreign vessels into the UK. The publication includes breakdowns of landings data according to:

- Vessel nationality
- Port and country of landing
- · Area of capture and fishing gear used
- Vessel size and sectoral membership

Data are also provided on landings and quota uptake for all EU member states. All **landings data** are given in terms of live weight. The calculation of average prices excludes landings with zero value to better reflect the price of fish.

All tables presented here are available to download as spreadsheets from the MMO website. Supplementary tables showing more detail can also be found on the website. Also available for download is a summary report showing estimates of UK and non-UK landings by Exclusive Economic Zone of capture.

Chart 3.1: Quantity and value of landings into the UK and abroad by UK vessels by vessel nationality: 2014 to 2018



Landings by all UK vessels and by foreign vessels into the UK

Sixty-one per cent of fish caught by the UK fleet were landed in the UK (74 per cent in terms of value). Chart 3.1 shows the landings into the UK and abroad by vessel nationality. Table 3.1 shows that Scottish vessels accounted for 64 per cent of the weight of landings by UK vessels (58 per cent by value). English vessels accounted for 27 per cent of the weight (33 per cent by value). The Northern Irish fleet caught 7 per cent of the landings and 6 per cent of the value. Welsh vessels caught 1 per cent of the landings and 3 per cent of the value. Island fleets caught the remaining 1 per cent of landings and value.

Landings by UK vessels into the UK fell by 2 per cent to 426 thousand tonnes in 2018. Shellfish used to account for the largest share of UK fleet landings. But since 2014, with the increase in mackerel quota and resultant catch, pelagic landings now have the highest share (38 per cent) but only 15 per cent of the value. Relatively high value shellfish and demersal species each account for 28 and 34 per cent of landings and 45 and 40 per cent in terms of value respectively. This shows that average prices of shellfish are the highest overall while average prices of pelagic species are the lowest.

Chart 3.2 shows a breakdown of landings by species group into England, Wales, Scotland and Northern Ireland by UK vessels. The largest amount, 302 thousand tonnes, was landed into Scotland with a value of £468 million. Landings into England were 93 thousand tonnes (£209 million).

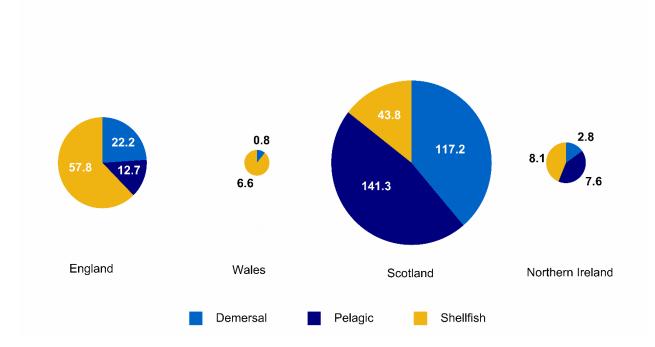


Chart 3.2: Landings into UK countries by UK vessels: 2018 ('000 tonnes)

Breakdowns by species of landings into the UK by UK vessels, landings into the UK by foreign vessels and landings abroad by UK vessels are given in Tables 3.2 to 3.6. In 2018:

- 39 per cent of all landings by the UK fleet were made abroad, down from 40 per cent in 2017 (see Tables 3.5 and 3.6). Forty one per cent of all our landings abroad were mackerel. Overall, 58 per cent of pelagic fish were landed abroad compared with 19 per cent of demersal fish and 9 per cent of shellfish.
- The UK fleet accounted for 89 per cent of all fish landed into the UK (see Tables 3.2 and 3.4). Foreign landings into the UK rose from 48 thousand tonnes in 2017 to 54 thousand tonnes in 2018. Key species were mackerel, hake and saithe.
- Shellfish, which are largely exempt from quotas, formed the majority of landings by the UK fleet into England, Wales and Northern Ireland. Pelagic fish had the highest share of landings into Scotland (see Tables 3.2a to 3.2d and Chart 3.2).

TABLE 3.1 Landings into the UK and abroad by UK vessels: 2014 to 2018

			Quant	ity ('000 to	nnes)			Val	ue (£ milli	on)	
		2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
(i)	Vessels administere	d in the UK									
()	Demersal	169.8	169.1	180.4	182.2 R	176.4	299.5	293.7	346.4	354.5 R	354.5
	Pelagic	436.6	389.8	369.8	394.8 R	385.8	271.5	206.6	261.2	257.2	272.8
	Shellfish	151.6	149.8	150.4	148.0 R	135.3	293.1	276.1	339.0	367.6 R	361.7
	Total Fish	757.9	708.7	700.6	724.9 R	697.5	864.1	776.4	946.7	979.3 R	989.0
(ii)	Vessels administered	Ü									
	Demersal	77.9	74.4	81.4	76.6 R	64.6	151.2	144.9	171.4	164.1 R	145.0
	Pelagic	66.2	68.5	65.2	67.1	64.5	25.3	30.3	31.7	38.5	47.5
	Shellfish	58.1	60.4	55.5	55.6	56.5	94.6	96.0	111.7	127.6 R	131.6
	Total Fish	202.1	203.3	202.0	199.3 R	185.6	271.2	271.2	314.8	330.2 R	324.1
(iii)	Vessels administered	in Wales									
` '	Demersal	1.2	1.3	1.1	1.0 R	1.0	2.8	2.9	3.1	2.9	3.9
	Pelagic										
	Shellfish	10.6	9.7	8.8	10.8 R	9.1	12.1	10.2	18.6	20.6	21.1
	Total Fish	11.8	11.1	9.9	11.9 R	10.1	14.9	13.1	21.7	23.5	25.0
(iv)	Vessels administered	in Scotland									
	Demersal	88.7	90.8	95.4	101.7 R	107.5	143.2	142.8	168.7	183.6 R	201.3
	Pelagic	330.4	291.5	294.4	301.3 R	284.8	220.2	160.1	222.3	197.1	201.5
	Shellfish	61.6	57.8	63.6	62.3 R	53.1	150.8	134.4	165.9	179.3 R	170.3
	Total Fish	480.7	440.1	453.3	465.4 R	445.4	514.1	437.4	556.9	560.0 R	573.1
(v)	Vessels administered	in Northern II	reland								
	Demersal	1.8	2.3	2.4	2.6 R	3.1	2.1	2.5	2.7	3.8	4.3
	Pelagic	40.0	29.8	10.2	26.3	36.6	26.0	16.1	7.3	21.6	23.8
	Shellfish	15.5	15.8	15.9	14.4	12.1	27.7	27.6	32.0	31.0 R	29.1
	Total Fish	57.3	47.9	28.5	43.4	51.8	55.8	46.2	42.0	56.4 R	57.2
(\/i\)	Vessels administered	in the Island	(a)								
(41)	Demersal	0.1	0.2	0.2	0.1	0.1	0.3	0.6	0.5	0.2	
	Paladic										
	Pelagic Shellfish	 5.7	 6.1	6.6	 4.8	 4.5	 7.9	8.0	10.8	9.1	9.6

Note: Additional data on UK vessel landings are available for download from the MMO website as supplementary Table 3.1a.

⁽a) Jersey, Guernsey and the Isle of Man

TABLE 3.2 Landings into the UK by UK vessels: 2014 to 2018 ^(a)

		Quant	ity ('000 tor	nnes)			Val	ue (£ millio	n)	
	2014	2015	2016	2017	2018	2014	2015	2016	2017	201
Bass	1.0	0.6	0.5	0.4	0.4	7.3	5.4	4.8	4.2	4 '
Brill										4.3
	0.3	0.3	0.4	0.3	0.3	1.6	1.6	2.0	2.0	2.2
Cod	14.0	15.4	20.7	21.6	24.6	27.8	29.5	41.7	48.0	56.3
Dogfish	0.7	1.6	1.7	1.5	2.1	0.1	0.3	0.4	0.4	0.7
Gurnard	1.3	1.6	1.8	1.5	1.8	0.9	1.0	1.2	1.2	1.4
Haddock	35.4	32.4	33.1	33.5 R	35.2	49.3	44.2	44.0	50.7 R	51.1
Hake	8.5	8.8	11.4	12.5 R	11.3	19.7	20.9	26.9	27.4	25.4
Halibut		0.1	0.1	0.2	0.2	0.4	0.4	0.9	1.4	1.7
Lemon Sole	2.3	1.8	2.0	1.6	1.4	7.9	7.3	8.3	7.3	6.8
Ling	4.4	4.1	4.9	5.3	5.6	5.4	5.3	7.0	8.7	8.7
Megrim	3.3	3.1	3.2	3.0	3.4	8.6	7.6	9.0	8.4	9.7
Monks or Anglers	11.4	14.3	16.4	16.2 R	15.1	31.4	34.8	46.8	46.8 R	47.4
Plaice	3.6	3.5	4.7	4.8	4.8	3.6	3.6	5.3	6.5	8.8
Pollack (Lythe)	1.9	1.6	1.9	1.5	1.4	3.4	3.1	4.3	3.9	4.0
Saithe	11.1	9.9	10.0	9.9 R	13.4	10.2	8.5	10.3	9.8	10.7
Sand Eels					0.6					0.1
Skates and Rays	2.4	2.4	2.4	2.4	2.9	2.7	2.8	3.0	3.0	3.6
Sole	1.8	1.4	1.5	1.5	1.6	12.4	10.4	13.3	14.0	16.0
Turbot	0.5	0.5	0.5	0.6	0.5	4.2	4.2	4.7	5.3	5.1
Whiting	11.1	10.7	10.3	9.8	11.4	11.8	11.0	10.8	12.3	14.4
Witch	0.8	0.6	0.8	1.0	1.2	0.7	0.7	1.0	1.1	1.4
Other Demersal (b)	4.2	3.4	3.6	3.5	3.7	5.7	6.2	9.0	6.2 R	8.5
Total Demersal	120.0	118.4	132.2	132.8 R	143.1	215.3	208.9	254.9	268.7	288.2
Blue Whiting	9.7	12.1	11.9	13.1	20.0	1.3	2.0	2.4	1.6	3.6
Herring	38.3	38.6	40.5	44.9	49.1	10.5	13.4	25.3	18.2	17.9
Horse Mackerel	3.1	2.9	0.9	0.1	1.2	1.1	1.3	0.3	0.1	0.8
Mackerel	126.2	94.8	103.9	95.5	80.9	104.1	60.6	88.8	86.4	84.7
Sardines	3.4	4.2	8.0	7.1	8.2	8.0	1.6	2.6	2.4	2.9
Other Pelagic	5.7	3.8	5.3	4.0 R	2.3	2.1	0.8	1.3	1.0	1.0
Total Pelagic	186.3	156.4	170.4	164.8 R	161.6	119.9	79.6	120.7	109.7	110.8
Cockles	10.2	11.2	5.0	6.0	8.0	7.9	5.7	3.5	4.3	6.2
Crabs	32.6	29.1	32.4	30.7	28.9	7.9 44.4	39.2	3.5 47.0	4.3 53.5 ^ℝ	
										69.5
Cuttlefish	3.1	6.0	5.0	7.0	3.9	6.5	10.6	14.0	25.5	14.9
Lobsters	3.4	3.1	3.3	3.4	3.0	33.5	32.2	39.6	44.4 R	44.1
Mussels	0.2	1.0	0.3	0.7	0.7	0.1	8.0	0.2	0.6	0.2
Nephrops	30.3	25.7	30.7	29.8 R	24.9	98.5	81.9	100.5	95.4 R	79.0
Scallops	38.6	40.8	38.5	32.4 R	28.8	58.3	64.3	74.1	73.9 R	69.7
Shrimps and Prawns	0.6	0.3	8.0	0.6	1.1	1.4	0.8	3.0	2.6	2.7
Squid	2.9	1.8	2.0	3.4	2.8	9.2	6.4	8.2	13.1 R	12.8
Whelks	19.8	20.9	22.7	20.7 R	17.9	16.2	18.6	22.9	22.7	21.9
	1.1	1.3	1.2	1.3	1.2	3.7	4.0	4.7	6.0	7.1
Other Shellfish										
Other Shellfish Total Shellfish	142.8	141.2	141.8	136.1 R	121.3	279.6	264.6	317.8	341.8 ^R	328.1

⁽a) Landings data include transhipments and Islands figures.

⁽b) Includes fish roes and livers.

TABLE 3.2a Landings into England by UK vessels: 2014 to 2018 ^(a)

Bass 0.9 0.6 0.5 0.4 0.4 0.4 6.7 4.9 4.3 3.7 Brill 0.3 0.3 0.3 0.3 0.3 0.3 1.5 1.6 1.9 1.9 Cod 1.0 1.3 4.2 3.5 2.8 1.8 2.2 7.3 6.0 Dogfish 0.3 1.0 1.2 0.9 1.4 0.1 0.2 0.3 0.3 Gurnard 0.9 1.0 1.2 1.1 1.1 0.7 0.7 0.9 1.0 Haddock 0.9 0.9 0.7 0.7 0.8 1.5 1.4 1.2 1.3 Hake 0.9 1.2 1.3 1.5 1.9 1.8 2.2 2.7 3.6 Hallbut 0.1 0.1 0.2 Lemon Sole 1.7 1.1 1.2 0.9 0.7 5.8 4.9 5.3 4.3 Ling 0.4 0.2 0.3 0.2 0.1 0.4 0.3 0.3 0.2 Megrim 1.0 1.0 0.9 0.7 0.8 2.4 2.3 2.3 2.2 Monks or Anglers 3.4 3.4 3.3 2.6 2.0 8.5 7.9 9.3 8.0 Palack (Lythe) 1.5 1.0 1.4 1.0 0.8 2.7 2.1 3.3 2.5 Saithe 0.1 0.2 0.1 0.1 0.1 0.1 0.2 Sada Eels 0.1 0.1 0.1 0.5 Salde Eas and Rays 1.6 1.5 1.6 1.16 1.8 1.9 1.9 2.0 2.1 Skates and Rays 1.8 1.4 1.5 1.5 1.5 1.2 1.3 1.1 1.1 0.9 Witch 0.1 0.1 0.1 0.1 Witch 0.1 0.1 0.1 0.1 Whiting 1.7 1.6 1.5 1.5 1.5 1.5 1.2 1.0 1.0 1.0 0.1 0.1 0.1 Whitch 0.1	
Brill	201
Brill	3.
Cod	2.
Dogfish 0.3 1.0 1.2 0.9 1.4 0.1 0.2 0.3 0.3 Gurnard 0.9 1.0 1.2 1.1 1.1 0.7 0.7 0.9 1.0 Haddock 0.9 0.9 0.7 0.7 0.8 1.5 1.4 1.2 1.3 Hake 0.9 1.2 1.3 1.5 1.9 1.8 2.2 2.7 3.6 Halibut 0. 0. 0. 0. 0. 0. 0. 0	5
Gurnard 0.9 1.0 1.2 1.1 1.1 0.7 0.7 0.9 1.0 Haddodck 0.9 0.9 0.9 0.7 0.7 0.8 1.5 1.4 1.2 1.3 Hake 0.9 1.2 1.3 1.5 1.9 1.8 2.2 2.7 3.6 Halibut 0.1 0.1 0.2 Lemon Sole 1.7 1.1 1.2 0.9 0.7 5.8 4.9 5.3 4.3 Ling 0.4 0.2 0.3 0.2 0.1 0.4 0.3 0.2 Megrim 1.0 1.0 0.9 0.9 0.8 2.4 2.3 2.3 2.2 Megrim 1.0 1.0 0.9 0.9 0.8 2.4 2.3 2.3 2.5 Pollack (Lythe) 1.5 1.0 1.4 1.0 0.8 2.7 2.1 3.3<	
Haddock	0.
Hake	1. 1.
Halibut	
Lemon Sole	4.
Ling	0
Megrim	
Monks or Anglers	0
Plaice	1.
Pollack (Lythe)	6.
Saithe 0.1 0.2 0.1 0.1 0.1 0.1 0.1 <	4.
Sand Eels .	2.
Skates and Rays 1.6	
Sole	
Turbot 0.5 0.5 0.5 0.5 0.5 0.4 3.7 3.6 4.2 4.7 Whiting 1.7 1.6 1.5 1.1 1.0 1.3 1.1 1.1 0.9 Witch	2.
Whiting Witch 1.7 1.6 1.5 1.1 1.0 1.3 1.1 1.1 0.9 Witch Other Demersal (b) 2.3 1.6 1.8 1.7 1.8 3.0 2.3 2.8 2.8 Total Demersal 23.4 21.6 26.0 22.9 22.2 58.7 52.5 65.7 63.7 Blue Whiting - - <td< td=""><td>15.</td></td<>	15.
Witch Other Demersal (b) 2.3 1.6 1.8 1.7 1.8 3.0 2.3 2.8 2.8 Total Demersal 23.4 21.6 26.0 22.9 22.2 58.7 52.5 65.7 63.7 Blue Whiting - - - -	4.
Other Demersal 2.3 1.6 1.8 1.7 1.8 3.0 2.3 2.8 2.8 Total Demersal 23.4 21.6 26.0 22.9 22.2 58.7 52.5 65.7 63.7 Blue Whiting - - - -	0.
Other Demersal 2.3 1.6 1.8 1.7 1.8 3.0 2.3 2.8 2.8 Total Demersal 23.4 21.6 26.0 22.9 22.2 58.7 52.5 65.7 63.7 Blue Whiting - - - - -	
Blue Whiting	3.
Herring 2.9 3.1 2.5 3.8 0.5 1.0 1.0 1.1 1.6 Horse Mackerel 2.3 2.2 0.9 0.1 1.0 0.7 0.8 0.3 0.1 Mackerel 1.8 2.6 2.3 2.6 0.7 1.6 2.0 1.9 2.4 Sardines 3.4 4.2 8.0 7.1 8.2 0.8 1.6 2.6 2.4 Other Pelagic 4.1 2.7 3.1 2.6 2.3 1.7 0.5 0.8 0.7 Total Pelagic 14.5 14.8 16.8 16.3 12.7 5.9 5.9 6.7 7.2 Cockles 10.2 11.2 5.0 6.0 8.0 7.9 5.7 3.5 4.3 Crabs 15.8 14.1 16.1 14.6 14.5 21.1 18.9 22.7 24.5 Cuttlefish 3.1 6.0 5.0 7.0 3.9	
Herring 2.9 3.1 2.5 3.8 0.5 1.0 1.0 1.1 1.6 Horse Mackerel 2.3 2.2 0.9 0.1 1.0 0.7 0.8 0.3 0.1 Mackerel 1.8 2.6 2.3 2.6 0.7 1.6 2.0 1.9 2.4 Sardines 3.4 4.2 8.0 7.1 8.2 0.8 1.6 2.6 2.4 Other Pelagic 4.1 2.7 3.1 2.6 2.3 1.7 0.5 0.8 0.7 Total Pelagic 14.5 14.8 16.8 16.3 12.7 5.9 5.9 6.7 7.2 Cockles 10.2 11.2 5.0 6.0 8.0 7.9 5.7 3.5 4.3 Crabs 15.8 14.1 16.1 14.6 14.5 21.1 18.9 22.7 24.5 Cuttlefish 3.1 6.0 5.0 7.0 3.9	
Horse Mackerel 2.3 2.2 0.9 0.1 1.0 0.7 0.8 0.3 0.1 Mackerel 1.8 2.6 2.3 2.6 0.7 1.6 2.0 1.9 2.4 Sardines 3.4 4.2 8.0 7.1 8.2 0.8 1.6 2.6 2.4 Other Pelagic 4.1 2.7 3.1 2.6 2.3 1.7 0.5 0.8 0.7 Total Pelagic 14.5 14.8 16.8 16.3 12.7 5.9 5.9 6.7 7.2 Cockles 10.2 11.2 5.0 6.0 8.0 7.9 5.7 3.5 4.3 Crabs 15.8 14.1 16.1 14.6 14.5 21.1 18.9 22.7 24.5 Cuttlefish 3.1 6.0 5.0 7.0 3.9 6.5 10.6 14.0 25.4 Lobsters 1.8 1.7 1.8 1.9 1.5	
Horse Mackerel 2.3 2.2 0.9 0.1 1.0 0.7 0.8 0.3 0.1 Mackerel 1.8 2.6 2.3 2.6 0.7 1.6 2.0 1.9 2.4 Sardines 3.4 4.2 8.0 7.1 8.2 0.8 1.6 2.6 2.4 Other Pelagic 4.1 2.7 3.1 2.6 2.3 1.7 0.5 0.8 0.7 Total Pelagic 14.5 14.8 16.8 16.3 12.7 5.9 5.9 6.7 7.2 Cockles 10.2 11.2 5.0 6.0 8.0 7.9 5.7 3.5 4.3 Crabs 15.8 14.1 16.1 14.6 14.5 21.1 18.9 22.7 24.5 Cuttlefish 3.1 6.0 5.0 7.0 3.9 6.5 10.6 14.0 25.4 Lobsters 1.8 1.7 1.8 1.9 1.5	0.:
Mackerel 1.8 2.6 2.3 2.6 0.7 1.6 2.0 1.9 2.4 Sardines 3.4 4.2 8.0 7.1 8.2 0.8 1.6 2.6 2.4 Other Pelagic 4.1 2.7 3.1 2.6 2.3 1.7 0.5 0.8 0.7 Total Pelagic 14.5 14.8 16.8 16.3 12.7 5.9 5.9 6.7 7.2 Cockles 10.2 11.2 5.0 6.0 8.0 7.9 5.7 3.5 4.3 Crabs 15.8 14.1 16.1 14.6 14.5 21.1 18.9 22.7 24.5 Cuttlefish 3.1 6.0 5.0 7.0 3.9 6.5 10.6 14.0 25.4 Lobsters 1.8 1.7 1.8 1.9 1.5 17.8 17.8 22.2 23.7 Mussels 0.1 0.1	0.
Sardines 3.4 4.2 8.0 7.1 8.2 0.8 1.6 2.6 2.4 Other Pelagic 4.1 2.7 3.1 2.6 2.3 1.7 0.5 0.8 0.7 Total Pelagic 14.5 14.8 16.8 16.3 12.7 5.9 5.9 6.7 7.2 Cockles 10.2 11.2 5.0 6.0 8.0 7.9 5.7 3.5 4.3 Crabs 15.8 14.1 16.1 14.6 14.5 21.1 18.9 22.7 24.5 Cuttlefish 3.1 6.0 5.0 7.0 3.9 6.5 10.6 14.0 25.4 Lobsters 1.8 1.7 1.8 1.9 1.5 17.8 17.8 22.2 23.7 Mussels 0.1 0.1	1.
Other Pelagic 4.1 2.7 3.1 2.6 2.3 1.7 0.5 0.8 0.7 Total Pelagic 14.5 14.8 16.8 16.3 12.7 5.9 5.9 6.7 7.2 Cockles 10.2 11.2 5.0 6.0 8.0 7.9 5.7 3.5 4.3 Crabs 15.8 14.1 16.1 14.6 14.5 21.1 18.9 22.7 24.5 Cuttlefish 3.1 6.0 5.0 7.0 3.9 6.5 10.6 14.0 25.4 Lobsters 1.8 1.7 1.8 1.9 1.5 17.8 17.8 22.2 23.7 Mussels 0.1 0.1	2.
Total Pelagic 14.5 14.8 16.8 16.3 12.7 5.9 5.9 6.7 7.2 Cockles 10.2 11.2 5.0 6.0 8.0 7.9 5.7 3.5 4.3 Crabs 15.8 14.1 16.1 14.6 14.5 21.1 18.9 22.7 24.5 Cuttlefish 3.1 6.0 5.0 7.0 3.9 6.5 10.6 14.0 25.4 Lobsters 1.8 1.7 1.8 1.9 1.5 17.8 17.8 22.2 23.7 Mussels 0.1 0.1 <	1.
Crabs 15.8 14.1 16.1 14.6 14.5 21.1 18.9 22.7 24.5 Cuttlefish 3.1 6.0 5.0 7.0 3.9 6.5 10.6 14.0 25.4 Lobsters 1.8 1.7 1.8 1.9 1.5 17.8 17.8 22.2 23.7 Mussels 0.1 0.1 <td< td=""><td>5.</td></td<>	5.
Crabs 15.8 14.1 16.1 14.6 14.5 21.1 18.9 22.7 24.5 Cuttlefish 3.1 6.0 5.0 7.0 3.9 6.5 10.6 14.0 25.4 Lobsters 1.8 1.7 1.8 1.9 1.5 17.8 17.8 22.2 23.7 Mussels 0.1 0.1 <td< td=""><td></td></td<>	
Cuttlefish 3.1 6.0 5.0 7.0 3.9 6.5 10.6 14.0 25.4 Lobsters 1.8 1.7 1.8 1.9 1.5 17.8 17.8 22.2 23.7 Mussels 0.1 0.1 <td< td=""><td>6.</td></td<>	6.
Lobsters 1.8 1.7 1.8 1.9 1.5 17.8 17.8 22.2 23.7 Mussels 0.1 0.1	33.
Mussels 0.1 0.1	14.
Nephrops 3.2 2.1 3.4 2.9 2.1 10.3 7.0 11.3 9.4 Scallops 13.4 14.3 11.6 15.2 14.9 22.0 25.9 24.1 35.3 Shrimps and Prawns 0.6 0.3 0.8 0.6 1.1 1.3 0.8 3.0 2.5 Squid 0.7 0.5 0.3 0.5 0.3 3.0 2.2 1.7 2.4 Whelks 13.8 13.8 13.3 11.1 10.8 11.4 12.2 13.3 11.9 Other Shellfish 0.5 0.8 0.6 0.6 0.5 1.2 1.8 1.6 1.8 Total Shellfish 63.3 64.9 58.0 60.3 57.8 102.5 103.0 117.5 141.2	21.
Scallops 13.4 14.3 11.6 15.2 14.9 22.0 25.9 24.1 35.3 Shrimps and Prawns 0.6 0.3 0.8 0.6 1.1 1.3 0.8 3.0 2.5 Squid 0.7 0.5 0.3 0.5 0.3 3.0 2.2 1.7 2.4 Whelks 13.8 13.8 13.3 11.1 10.8 11.4 12.2 13.3 11.9 Other Shellfish 0.5 0.8 0.6 0.6 0.5 1.2 1.8 1.6 1.8 Total Shellfish 63.3 64.9 58.0 60.3 57.8 102.5 103.0 117.5 141.2	
Scallops 13.4 14.3 11.6 15.2 14.9 22.0 25.9 24.1 35.3 Shrimps and Prawns 0.6 0.3 0.8 0.6 1.1 1.3 0.8 3.0 2.5 Squid 0.7 0.5 0.3 0.5 0.3 3.0 2.2 1.7 2.4 Whelks 13.8 13.8 13.3 11.1 10.8 11.4 12.2 13.3 11.9 Other Shellfish 0.5 0.8 0.6 0.6 0.5 1.2 1.8 1.6 1.8 Total Shellfish 63.3 64.9 58.0 60.3 57.8 102.5 103.0 117.5 141.2	7.
Squid 0.7 0.5 0.3 0.5 0.3 3.0 2.2 1.7 2.4 Whelks 13.8 13.8 13.3 11.1 10.8 11.4 12.2 13.3 11.9 Other Shellfish 0.5 0.8 0.6 0.6 0.5 1.2 1.8 1.6 1.8 Total Shellfish 63.3 64.9 58.0 60.3 57.8 102.5 103.0 117.5 141.2	
Whelks 13.8 13.8 13.3 11.1 10.8 11.4 12.2 13.3 11.9 Other Shellfish 0.5 0.8 0.6 0.6 0.5 1.2 1.8 1.6 1.8 Total Shellfish 63.3 64.9 58.0 60.3 57.8 102.5 103.0 117.5 141.2	2.
Other Shellfish 0.5 0.8 0.6 0.6 0.5 1.2 1.8 1.6 1.8 Total Shellfish 63.3 64.9 58.0 60.3 57.8 102.5 103.0 117.5 141.2	1.
Total Shellfish 63.3 64.9 58.0 60.3 57.8 102.5 103.0 117.5 141.2	13.
	1.
	138.
Total All Species 101.2 101.3 100.8 99.6 Pg.7 167.1 161.4 189.9 212.1	208.

⁽a) Landings data include transhipments

⁽b) Includes fish roes and livers.

TABLE 3.2b Landings into Wales by UK vessels: 2014 to 2018 ^(a)

	4	Quanti	ty ('000 tor	ines)			Val	ue (£ millio	n)	
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Bass	0.1	0.1	0.1	0.1	0.1	0.6	0.5	0.5	0.5	0.7
	0.1		0.1		0.1				0.5	0.7
Brill		••			••		••		••	••
Cod		••			••	0.1		••		
Dogfish		••	0.1		••	••		••		
Gurnard		••			••					
Haddock					••					
Hake	0.1	0.1	0.1		••	0.1	0.2	0.2	0.1	0.1
Halibut	-	-	-	-	-	-	-	-	-	-
Lemon Sole										
Ling										
Megrim	0.3	0.3	0.3	0.2	0.2	1.0	1.0	1.1	0.6	0.7
Monks or Anglers	0.2	0.3	0.3	0.1	0.1	0.8	1.2	1.2	0.5	0.4
Plaice										
Pollack (Lythe)										
Saithe										-
Sand Eels	-	-	-	-	-	-	-	-	-	-
Skates and Rays	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Sole						0.1	0.1	0.1	0.1	0.1
Turbot										
Whiting										
Witch							0.1	0.1		0.1
Other Demersal (b)	0.1	0.1	0.1			0.1	0.1	0.1	0.1	0.1
Total Demersal	1.0	1.2	1.2	0.7	8.0	3.1	3.6	3.8	2.1	2.3
Blue Whiting	-	-		-	-	-	-		-	-
Herring										
Horse Mackerel	-	-		-	-	-	-		-	-
Mackerel										
Sardines	-	-	-	-	-	-	-	-	-	-
Other Pelagic			-	-	-			-	-	-
Total Pelagic										
Cockles	-	-			-	-	-			-
Crabs	0.6	0.5	0.5	0.8	8.0	0.7	0.6	0.7	1.2	1.6
Cuttlefish										
Lobsters	0.2	0.2	0.2	0.2	0.2	1.8	1.9	2.0	2.1	2.5
Mussels	-	-	-			-	-	-		
Nephrops	0.1					0.3		0.1		0.1
Scallops	3.6	2.4	2.4	0.8	1.0	3.6	2.4	2.7	1.4	2.4
Shrimps and Prawns	-	-				-				
Squid										
Whelks	 4.5	 5.1	 6.5	6.9	 4.5	 3.6	 4.6	7.0	7.9	5.9
Other Shellfish	0.1					0.5	0.3	0.5	0.4	0.6
Total Shellfish	9.0	8.2	9.6	8.7	6.6	10.5	9.9	12.9	13.1	13.2
Total Ollellisii	3.0	0.2	3.0	0.7	0.0	10.5	3.3	12.3	13.1	13.2
Total All Species	10.0	9.4	10.9	9.4	7.5	13.6	13.5	16.7	15.3	15.5

⁽a) Landings data include transhipments.

⁽b) Includes fish roes and livers.

TABLE 3.2c Landings into Scotland by UK vessels: 2014 to 2018 ^(a)

		Quanti	ty ('000 tor	nnes)		Value (£ million)				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	201
Bass										
Brill										
Cod	 12.9	 14.0	 16.5	 18.1	 21.7	 25.9	 27.2	 34.3	 41.9	50.8
Dogfish	0.1	0.2	0.2	0.2	0.1					
Gurnard	0.1	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.3
Haddock	34.1	30.9	31.6	31.5 ^R	32.8	47.4	42.1	41.8	47.4 ^R	47.6
Hake	7.5	7.4	9.9	10.8 R	9.3	47.4 17.8	18.4	23.8	23.2	20.2
								0.7	1.2	
Halibut Lemon Sole	0.7	0.7	0.1 0.8	0.2 0.7	0.2 0.8	0.3 2.1	0.4 2.4	3.0	3.0	1.5 3.4
Ling	4.0	3.8	4.6	5.1	5.5	4.9	5.0	6.7	8.5 R	8.5
Megrim	2.0	1.8	2.1	1.9	2.4	5.2	4.2	5.6	5.6	7.1
Monks or Anglers	7.6	10.3	12.5	12.9	12.8	21.9	25.1	35.8	36.7 R	40.2
Plaice	1.4	1.7	2.2	2.1	2.4	1.1	1.2	2.2	2.6	4.1
Pollack (Lythe)	0.4	0.5	0.4	0.5	0.5	0.7	1.0	1.0	1.3	1.5
Saithe	11.0	9.8	9.8	9.9	13.3	10.0	8.4	10.2	9.8	10.7
Sand Eels	-	-	-	-	0.6	-	-	-	-	0.1
Skates and Rays	0.6	0.6	0.6	0.6	0.8	0.5	0.5	0.6	0.6	0.8
Sole										
Turbot		0.1	0.1	0.1	0.1	0.4	0.5	0.4	0.5	0.8
Whiting	9.3	9.1	8.8	8.7	10.4	10.5	9.8	9.7	11.4	13.6
Witch	0.7	0.5	0.7	0.9	1.1	0.6	0.6	0.8	1.0	1.3
Other Demersal (b)	1.7	1.7	1.7	1.7	1.8	2.6	3.7	6.0	3.3 ^R	5.3
Total Demersal	94.4	93.8	103.1	106.4 R	117.2	152.2	150.7	183.0	198.3 R	217.7
Blue Whiting	9.7	12.1	11.9	13.1	20.0	1.3	2.0	2.4	1.6	3.6
Herring	31.3	32.1	33.1	37.4	43.3	8.5	11.3	21.7	15.2	15.9
Horse Mackerel	0.8	0.7			0.2	0.4	0.5			0.2
Mackerel	122.1	90.6	99.2	90.3	77.8	99.9	57.5	85.3	81.5	81.4
Sardines	-	-	-	-	-	-	-	-	-	-
Other Pelagic	1.5	1.1	2.2	1.4 R		0.4	0.2	0.5	0.3	
Total Pelagic	165.4	136.6	146.4	142.1 R	141.3	110.5	71.5	109.8	98.7	101.1
Ocallan										
Cockles					-					
Crabs	14.3	12.8	13.9	13.5	11.6	20.5	18.1	21.7	25.5 R	31.2
Cuttlefish									0.1	
Lobsters	1.2	1.0	1.1	1.2	1.2	12.6	11.1	13.7	17.2 R	18.5
Mussels	0.1	-	-				-	-		
Nephrops	20.2	16.1	20.0	20.7 R	17.6	73.1	59.2	72.6	71.1 R	59.8
Scallops	13.8	14.1	16.2	10.9 R	8.7	23.6	24.7	33.2	25.6 R	21.8
Shrimps and Prawns									0.1	
Squid	2.2	1.3	1.7	2.9	2.6	6.2	4.2	6.5	10.7 R	11.1
Whelks	0.9	1.1	1.9	1.8	1.5	0.7	0.9	1.7	1.9	1.7
Other Shellfish	0.5	0.4	0.6	0.7	0.6	1.9	1.9	2.6	3.8	4.6
Total Shellfish	53.1	46.8	55.3	51.7 R	43.8	138.6	120.1	152.0	155.9 R	148.8

⁽a) Landings data include transhipments.

⁽b) Includes fish roes and livers.

TABLE 3.2d Landings into Northern Ireland by UK vessels: 2014 to 2018 ^(a)

•		Quantity ('000 tonnes)					Value (£ million)					
	2014	2015	2016	2017	2018	2014	2015	2016	2017	201		
Bass					_							
Brill									0.1	0.		
Cod	0.1	0.1			0.1	0.1	0.1	0.1	0.1	0.		
Dogfish	0.2	0.4	0.2	0.5	0.5		0.1		0.1	0.		
Gurnard										٠.		
Haddock	0.4	0.6	0.8	1.3	1.6	0.4	0.7	1.0	1.9	2.		
Hake		0.1	0.1	0.2	0.1		0.2	0.2	0.4	0.3		
Halibut												
Lemon Sole												
Ling												
Megrim												
Monks or Anglers	0.1	0.2	0.3	0.6	0.2	0.2	0.5	0.6	1.5	0.4		
Plaice												
Pollack (Lythe)			0.1		0.1		0.1	0.1	0.1	0.2		
Saithe												
Sand Eels	-	-	-	-	-	-	-	-	-			
Skates and Rays				0.1	0.1				0.1	0.		
Sole												
Turbot						0.1	0.1	0.1	0.1	0.		
Whiting	0.1					0.1						
Witch												
Other Demersal (b)												
Total Demersal	1.1	1.7	1.8	2.8	2.8	1.2	1.8	2.2	4.5	3.7		
Blue Whiting	-	-	-	-	-	-	-	-	-			
Herring	4.1	3.4	4.8	3.8	5.2	1.0	1.0	2.5	1.3	1.8		
Horse Mackerel		-	-	-			-	-	-			
Mackerel	2.3	1.6	2.3	2.6	2.4	2.5	1.1	1.6	2.5	2.3		
Sardines	-	-	-	-	-	-	-	-	-			
Other Pelagic	_	-		-	-	-	-		-			
Total Pelagic	6.4	5.0	7.1	6.3	7.6	3.5	2.1	4.1	3.8	4.		
Cockles	-	-	-	-	-	-	-	-	-			
Crabs	1.4	1.2	1.3	1.4	1.3	1.4	1.1	1.2	1.6	2.2		
Cuttlefish	-	-		••		-	-					
Lobsters	0.1	0.1	0.1	0.1	0.1	1.0	0.9	0.9	0.8	0.		
Mussels	-	0.9	0.3	0.7	0.7	-	0.7	0.2	0.5	0.2		
Nephrops	6.9	7.5	7.3	6.2	5.1	14.8	15.6	16.5	14.7	11.9		
Scallops	2.1	2.3	1.6	1.1	1.0	2.8	3.3	3.5	3.1	2.3		
Shrimps and Prawns												
Squid												
Whelks			0.1	0.1	0.1			0.1	0.1	0.		
Other Shellfish												
T. (-1 O) - 11C -1	10.5	12.1	10.6	9.6	8.1	20.1	21.8	22.5	20.9	17.4		
Total Shellfish												

⁽a) Landings data include transhipments.

⁽b) Includes fish roes and livers.

TABLE 3.3 Landings into the UK by foreign vessels: 2014 to 2018 ^(a)

		Quanti	ty ('000 tor	nnes)			Valu	ıe (£ millio	n)	
	2014	2015	2016	2017	2018	2014	2015	2016	2017	201
Bass						0.1	0.1	0.1		
Brill	0.1	0.1	0.1			0.2	0.3	0.3	0.2	0.2
Cod	0.7	1.4	0.9	0.8 R	 1.1	1.4	2.4	1.9	1.6 ^R	2.3
Dogfish	0.7	0.2	0.9	0.2	0.1		0.1	0.1	0.1	
Gurnard	0.1	0.2	0.1	0.1	0.1		0.1	0.1	0.1	0.1
Haddock	1.8	1.1	0.7	0.8	0.5	2.4	1.4	1.0	1.0	0.7
Hake	7.1	7.1	8.5	8.9 R	6.7	17.7	17.5	20.7	19.1 ^R	13.9
Halibut						0.1		0.1	0.1 ^R	0.1
Lemon Sole	0.3	0.2	0.2	0.2	0.2	0.7	0.9	0.7	0.5	0.3
Ling	1.6	1.7	2.1	2.3	2.7	2.2	2.4	3.3	3.7	4.1
Megrim	0.3	0.4	0.5	0.7	0.6	0.7	1.0	1.2	1.6	1.3
Monks or Anglers	1.3	1.5	2.3	3.0	2.3	3.7	4.1	6.0	5.6 ^R	3.8
Plaice	0.8	0.9	0.5	0.3	0.3	0.6	0.9	0.5	0.4	0.4
Pollack (Lythe)	0.0		0.1	0.1	0.5	0.2	0.3	0.3	0.4	0.2
Saithe	6.4	8.9	7.5	6.6 R	10.3	6.9	8.5	8.5	6.5 ^R	7.7
Sand Eels	-	-	-	4.7 R	3.6	-	-	-	0.8 ^R	0.8
Skates and Rays	0.7	0.8	0.7	0.6	0.6	0.8	1.2	1.1	0.9	0.3
Sole	0.7	0.7	0.6	0.5	0.5	4.1	5.4	5.2	4.8	4.8
Turbot	0.8	0.7	0.0	0.3	0.5	0.4	0.5	0.6	0.5	0.4
Whiting	0.1	0.1	0.7		0.1	0.4	0.6	0.6	0.5	0.4
Witch	0.5	0.6	0.7	0.5 0.1	0.2	0.5	0.6	0.6	0.5	0.2
Other Demersal (b)	7.6			4.2 ^R						
Total Demersal		5.7	6.4		3.9	11.8	7.7 55.2	9.2	5.6 R	4.9
Total Demersal	30.7	31.7	32.3	34.6 ^R	34.0	54.6	55.3	61.3	53.8 R	46.5
Blue Whiting		-	-	-	1.3		-	_	-	0.2
Herring	10.4	3.5	7.5	3.0 R	2.6	3.0	1.2	4.2	1.1 R	0.9
Horse Mackerel	0.6	0.4	0.8	0.4 R	0.5	0.5	0.2	0.5		
Mackerel	29.4	9.1	10.6	13.2 R	14.0	21.7	5.9	8.7	12.0 R	14.5
Sardines	-			-		-	-		-	
Other Pelagic			0.8		0.6			0.3	-	0.1
Total Pelagic	40.5	12.9	19.6	16.5 R	19.0	25.1	7.3	13.6	13.2 R	15.8
Cockles	-	=	=	=	-	=	-	-	-	-
Crabs	0.1	0.2	0.2	0.1		0.4	0.5	0.6	0.5	
Cuttlefish		0.2	0.1	0.2	0.1		0.3	0.4	0.6	0.3
Lobsters										
Mussels	-	-	-	=	-	-	-	-	-	
Nephrops	0.1	0.2	0.1	0.1		0.3	0.3	0.3	0.1	0.1
Scallops	1.1	0.7	1.0	0.9	0.9	1.9	1.4	1.9	2.2	2.2
Shrimps and Prawns	-	-	-	=	-	-	-	-	-	
Squid		0.1		0.1	0.1	0.1	0.1	0.1	0.2	0.1
Whelks										
Other Shellfish										
Total Shellfish	1.5	1.4	1.5	1.4	1.2	2.8	2.7	3.4	3.6	2.7
Total All Cassins	70.7	40.0	E2 4	E2 F R	E4 0	90.5	er o	70.0	70 C R	CE C
Total All Species	72.7	46.0	53.4	52.5 ^R	54.2	82.5	65.3	78.3	70.6 R	65.0

⁽a) Landings data include transhipments and exclude landings abroad by foreign vessels.

⁽b) Includes fish roes and livers.

TABLE 3.4 Landings into the UK by UK and foreign vessels: 2014 to 2018 ^(a)

		Quanti	ty ('000 tor	nnes)		Value (£ million)					
	2014	2015	2016	2017	2018	2014	2015	2016	2017	20 ⁻	
Bass	1.0	0.7	0.5	0.4	0.4	7.4	5.4	4.9	4.2	4	
Brill	0.3	0.7	0.5		0.4						
				0.4		1.8	1.9	2.3	2.3	2	
Cod	14.7	16.7	21.7	22.4	25.7	29.3	31.9	43.6	49.6	58	
Dogfish	0.8	1.8	1.9	1.7	2.2	0.2	0.5	0.5	0.5	0	
Gurnard	1.4	1.9	1.9	1.6	1.9	0.9	1.1	1.2	1.3	1	
Haddock	37.2	33.5	33.9	34.4	35.7	51.7	45.6	45.0	51.6 R	51	
Hake	15.6	15.9	19.9	21.4 R	18.1	37.4	38.4	47.6	46.5 R	39	
Halibut		0.1	0.1	0.2	0.2	0.4	0.4	0.9	1.5	1	
Lemon Sole	2.7	2.1	2.2	1.7	1.6	8.6	8.2	9.0	7.8	7	
Ling	6.1	5.8	7.0	7.6	8.3	7.6	7.7	10.3	12.4	12	
Megrim	3.7	3.5	3.7	3.6	4.1	9.4	8.7	10.2	10.0	11	
Monks or Anglers	12.7	15.8	18.7	19.2	17.3	35.1	38.8	52.9	52.5 R	51	
Plaice	4.3	4.4	5.2	5.1	5.1	4.1	4.5	5.9	6.8 R	9	
Pollack (Lythe)	2.0	1.7	2.0	1.6	1.5	3.6	3.2	4.5	4.1 R	4	
Saithe	17.5	18.8	17.4	16.5 R	23.6	17.0	17.0	18.8	16.4 R	18	
Sand Eels				4.7 R	4.2				0.8 R	0	
Skates and Rays	3.1	3.2	3.1	3.0	3.5	3.5	4.0	4.1	3.8 R	3	
Sole	2.6	2.1	2.1	2.0	2.1	16.5	15.7	18.6	18.8	20	
Turbot	0.6	0.6	0.6	0.7	0.5	4.6	4.7	5.3	5.7	5	
Whiting	11.7	11.3	11.0	10.3	11.6	12.3	11.6	11.4	12.8	14	
Witch	0.8	0.7	0.9	1.1	1.3	0.8	0.8	1.1	1.2	1	
Other Demersal (b)	11.8	9.0	10.1	7.7 R	7.6	17.5	13.9	18.2	11.8 R	13	
Total Demersal	150.7	150.1	164.4	167.4 R	177.1	269.8	264.1	316.2	322.5 R	334	
Blue Whiting	9.7	12.1	11.9	13.1	21.3	1.3	2.0	2.4	1.6	3	
Herring	48.8	42.0	47.9	47.9 R	51.6	13.5	14.6	29.5	19.3 R	18	
Horse Mackerel	3.7	3.2	1.7	0.5 R	1.7	1.6	1.5	0.8	0.1	0	
Mackerel	155.6	103.9	114.5	108.7 R	94.9	125.7	66.5	97.5	98.5 R	99	
Sardines	3.4	4.2	8.0	7.1	8.2	0.8	1.6	2.6	2.4	2	
Other Pelagic	5.7	3.8	6.1	4.0 R	2.9	2.1	0.8	1.6	1.0	1	
Total Pelagic	226.9	169.3	190.0	181.3 R	180.6	145.1	86.9	134.3	122.8 R	126	
<u> </u>											
Cockles	10.2	11.2	5.0	6.0	8.0	7.9	5.7	3.5	4.3	6	
Crabs	32.8	29.4	32.5	30.8	28.9	44.8	39.8	47.6	53.9 R	69	
Cuttlefish	3.1	6.2	5.2	7.2	4.1	6.5	10.9	14.4	26.0	15	
Lobsters	3.4	3.1	3.3	3.4	3.0	33.5	32.2	39.6	44.4 R	44	
Mussels	0.2	1.0	0.3	0.7	0.7	0.1	0.8	0.2	0.6	0	
Nephrops	30.5	25.9	30.9	29.9 R	24.9	98.8	82.3	100.8	95.5 R	79	
Scallops	39.7	41.5	39.4	33.4 R	29.7	60.3	65.7	76.0	76.1 R	71	
Shrimps and Prawns	0.6	0.3	0.8	0.6	1.1	1.4	0.8	3.0	2.6	2	
Squid	2.9	1.9	2.0	3.5	2.9	9.3	6.6	8.3	13.2	13	
Whelks	19.8							22.9	22.7	21	
		20.9	22.7	20.8	17.9	16.2	18.6				
Other Shellfish	1.1	1.3	1.2	1.4 ^R	1.2	3.7	4.0	4.7	6.0 R	220	
Total Shellfish	144.3	142.6	143.3	137.5 R	122.5	282.4	267.3	321.2	345.4 R	330	

⁽a) Landings data include transhipments and exclude landings abroad.

⁽b) Includes fish roes and livers.

TABLE 3.5 Landings abroad by UK vessels: 2014 to 2018 ^(a)

		Quant	ty ('000 to	nnes)		Value (£ million)					
	2014	2015	2016	2017	2018	2014	2015	2016	2017	201	
Dana						0.0	0.0	0.0	0.4		
Bass						0.3	0.3	0.2	0.1	•	
Brill	0.1	0.1	0.1	0.1	0.1	0.7	0.5	0.7	0.6	0.0	
Cod	16.3	12.9	13.4	16.8	10.0	22.1	19.6	21.0	29.9	18.4	
Dogfish			0.1								
Gurnard	0.5	0.5	0.7	0.6	0.4	0.5	0.6	8.0	0.6	0.4	
Haddock	0.9	0.9	0.9	0.7	0.5	1.1	1.0	1.0	0.8	0.6	
Hake	2.8	3.8	2.9	2.2 R	1.3	6.3	8.4	6.9	4.4 R	2.3	
Halibut									0.1	0.1	
Lemon Sole	0.5	0.4	0.5	0.4	0.3	1.5	1.5	1.5	1.2	0.9	
Ling	0.4	0.5	0.5	0.4	0.2	0.5	0.6	0.7	0.6	0.2	
Megrim	1.6	1.7	1.7	1.7	1.5	5.8	5.5	5.8	5.4	5.1	
Monks or Anglers	4.5	3.9	4.1	3.9	3.6	14.4	11.9	13.2	11.7 R	11.9	
Plaice	15.6	15.3	16.5	12.9 R	7.5	17.1	19.0	22.9	18.0	14.7	
Pollack (Lythe)	0.6	0.5	0.4	0.4	0.3	0.6	0.6	1.0	0.7	0.1	
Saithe	1.6	3.1	2.4	1.9	2.6	2.0	3.2	2.5	1.9	2.2	
Sand Eels		2.0	-	3.3	1.2		0.4	-	0.4	0.1	
Skates and Rays	0.4	0.4	0.4	0.3	0.4	0.6	0.7	0.7	0.3	0.3	
Sole	0.6	0.6	0.5	0.3	0.3	4.4	4.7	4.7	2.9	2.7	
Turbot	0.3	0.2	0.3	0.3	0.3	2.6	1.9	2.4	2.2	2.2	
Whiting	0.7	0.7	0.4	0.5	0.3	0.6	0.6	0.4	0.4	0.2	
Witch	0.2	0.3	0.3	0.3	0.3	0.5	0.6	0.7	0.6	0.7	
Other Demersal (b)	2.2	2.7	2.2	2.4 ^R	2.1	2.6	3.3	4.3	3.1	2.6	
Total Demersal	49.7	50.7	48.3	49.3 R	33.3	84.3	84.9	91.5	85.8 ^R	66.3	
Total Defficisal	43.1	30.7	40.3	43.3	33.3	04.3	04.3	91.5	05.0	00.0	
Blue Whiting	18.1	19.6	26.4	53.3	52.9	3.9	4.6	6.3	9.9	11.7	
Herring	59.3	55.2	51.8	39.1	54.5	18.2	19.6	31.1	17.6	27.4	
Horse Mackerel	9.7	4.7	5.6	5.3	6.0	4.4	2.3	2.4	2.8	4.1	
Mackerel	161.8	153.2	113.8	131.4	110.2	123.1	99.2	99.7	117.0	117.4	
Sardines	0.5	0.1	1.4	0.5		0.2		0.5	0.2		
Other Pelagic	0.8	0.6	0.4	0.4	0.7	1.7	1.3	0.6	0.2	1.4	
Total Pelagic	250.2	233.4	199.4	230.0	224.2	151.5	127.0	140.6	147.6	161.9	
Cockles		-			-		-	0.1			
Crabs	3.5	3.5	4.4	5.3	6.3	5.5	4.9	6.0	8.2	11.3	
Cuttlefish						0.1	0.1	0.1	0.1	0.1	
Lobsters						0.3	0.3	0.2	0.5	0.6	
Mussels	-	-	-	-	=	-	-	-	-		
Nephrops	0.2	0.2	0.8	0.7	0.7	1.0	1.1	3.2	3.6	4.4	
Scallops	0.7	0.3	0.4	0.2	0.3	0.9	0.3	0.7	0.3	0.4	
Shrimps and Prawns		_	_		1.3		-	-	0.1	3.8	
Squid	4.0	4.4	2.7	5.0 R	5.0	5.3	4.5	10.5	12.5 R	12.7	
Whelks	0.3	0.1	0.1	0.4	0.2	0.2	0.1	0.1	0.4	0.2	
Other Shellfish	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.1	0.1	
Total Shellfish	8.8	8.7	8.6	11.9 R	14.0	13.5	11.5	21.2	25.8	33.6	
Total All Species	308.8	292.7	256.2	291.2 R	271.5	249.3	223.4	253.3	259.2 R	261.8	

⁽a) Landings data include transhipments and exclude landings abroad by foreign vessels.

⁽b) Includes fish roes and livers.

TABLE 3.6 Landings into the UK and abroad by UK vessels: 2014 to 2018 $^{\rm (a)}$

		Quant	ity ('000 ton	nes)		Value (£ million)					
	2014	2015	2016	2017	2018	2014	2015	2016	2017	201	
Bass	1.0	0.7	0.6	0.4	0.4	7.6	5.7	5.1	4.3	4.	
Brill	0.4	0.7	0.5	0.4	0.4	2.3	2.2	2.7	2.6	2.	
Cod	30.2	28.3	34.1	38.4	34.6	49.9	49.1	62.6	77.9	74.	
Dogfish	0.7	20.3 1.6	1.8	1.5	2.1	49.9 0.1	0.4	0.4	0.5	0.	
Gurnard	1.8	2.2	2.5	2.1	2.1	1.4	1.6	2.0	1.8	1.	
Haddock	36.3	33.3	34.0	34.3	35.7	50.5	45.1	45.0	51.5	51.	
Hake	11.3	12.7	14.3	34.3 14.7 ^R	12.7	26.0	29.4	33.9	31.8 R	27.	
Halibut		0.1	0.1	0.2	0.2	0.4	0.4	0.9	1.5	1.	
Lemon Sole	2.8	2.3	2.5	2.0	1.8	9.4	8.8	9.8	8.5	7.	
Ling	4.9	4.6	5.4	5.7	5.8	5.9	5.9	7.8	9.3	8.	
Megrim	5.0	4.8	4.9	4.6	5.0	14.5	13.1	14.8	9.5 13.7 ^R	14.	
Monks or Anglers	15.8	18.2	20.4	20.1	18.7	45.9	46.7	60.0	58.6 R	59.	
Plaice	19.1	18.9	20.4 21.2 ^R	17.7 R	12.4	20.6	22.5	28.3	24.5 R	23.	
Pollack (Lythe)	2.5	2.1	2.3	1.9	1.7	4.0	3.7	5.3	4.6	4.	
Saithe	12.8	13.0	12.4	11.8	16.0	12.2	11.8	12.8	11.7	13.	
Sand Eels		2.0		3.3	1.9		0.4		0.4	0.	
Skates and Rays	 2.8	2.8	2.8	2.7	3.3	3.3	3.6	3.7	3.3	3.	
Sole	2.3	2.0	2.0	1.8	1.9	16.8	15.1	18.0	17.0	18.	
Turbot	0.8	0.8	0.9	0.9	0.8	6.8	6.1	7.1	7.5	7.	
Whiting	11.8	11.4	10.7	10.3	11.7	12.5	11.6	11.2	12.7	7. 14.	
Witch	1.0	0.9	1.1	1.3	1.5	12.5	1.3	1.6	12.7	2.	
Other Demersal (b)	6.4	6.0	5.8	5.9 R	5.7	8.3	9.4	13.3	9.3 ^R	2. 11.	
Total Demersal	169.8	169.1	180.4	182.2 R	176.4	299.5	293.7	346.4	354.5 R	354.	
Total Demersal	103.0	103.1	100.4	102.2	170.4	233.3	233.1	340.4	334.3	334.	
Blue Whiting	27.8	31.8	38.3	66.4	72.9	5.1	6.6	8.7	11.4	15.	
Herring	97.7	93.7	92.2	84.1	103.5	28.8	32.9	56.3	35.8	45.	
Horse Mackerel	12.7	7.6	6.5	5.4	7.2	5.5	3.6	2.8	2.9	4.	
Mackerel	288.0	248.0	217.6	226.9	191.1	227.2	159.8	188.5	203.4	202.	
Sardines	3.9	4.3	9.4	7.6	8.2	1.0	1.6	3.1	2.5	2.	
Other Pelagic	6.5	4.4	5.7	4.4 R	3.0	3.9	2.0	1.8	1.2	2.	
Total Pelagic	436.6	389.8	369.8	394.8 R	385.8	271.5	206.6	261.2	257.2	272.	
Cockles	10.2	11.2	5.1	6.0	8.0	7.9	5.7	3.6	4.3	6.	
Crabs	36.1	32.6	36.8	36.0	35.2	49.8	44.2	53.0	4.3 61.7 ^R	80.	
Cuttlefish	3.1	6.1	5.1	7.1	4.0	6.6	10.7	14.2	25.5	14.	
Lobsters	3.4	3.1	3.3	3.4	3.1	33.8	32.5	39.9	23.5 ^R	44.	
Mussels	0.2	1.0	0.3	0.7	0.7	0.1	0.8	0.2	0.6	0.	
Nephrops	30.5	25.9	31.5	30.6 R	25.6	99.5	83.0	103.7	99.0 ^R	83.	
Scallops	39.2	41.0		30.6 R	29.1		64.6	74.8	99.0 74.2 ^R	70.	
· ·			38.9			59.3					
Shrimps and Prawns	0.6	0.3	0.8	0.6	2.4	1.4	0.8	3.0	2.6	6.	
Squid	6.9	6.2	4.7	8.4 ^R	7.8	14.5	10.9	18.8	25.6	25.	
Whelks	20.1	20.9	22.8	21.1	18.1	16.4	18.7	23.0	23.1 R	22.	
Other Shellfish	1.2	1.4	1.3	1.5 R	1.4	4.0	4.3	5.0	6.1	7.	
Total Shellfish	151.6	149.8	150.4	148.0 R	135.3	293.1	276.1	339.0	367.6 R	361.	

⁽a) Landings data include transhipments and exclude landings abroad by foreign vessels.

⁽b) Includes fish roes and livers.

Information on all landings into the UK, by UK and foreign vessels, going back as far as 1938 is shown in Table 3.7. In 2018, landings of demersal fish were just over a fifth of the quantity landed in 1970. The decline in landings of demersal fish has a number of causes, including reductions in fleet size, declining fish stocks and restricted fishing opportunities. EU and UK regulations have limited demersal fishing activity in recent decades, through decommissioning of fishing vessels, reductions in quotas and fishing effort limits and other provisions of stock management plans.

Landings of pelagic species have fluctuated over the same period but in 2018 were 11 per cent lower than in 1970. Many pelagic species are under stock management plans with quotas set by the European Commission, but pelagic landings have not seen the same reduction as demersal species.

However, since 1970, reported landings of shellfish into the UK have increased by a factor of 2.2. When compared with 1960, the factor rises to 4.3. The increase in shellfish landings into the UK may partly be explained by diversion of fishing activity into this sector, in which there are often fewer restrictions. For shellfish, quotas currently only apply to nephrops. Another factor in the perceived increase is improved reporting. A large proportion of shellfish landings are made by vessels 10 metres or under in length, for which there is no statutory obligation to complete a fishing logbook or landing declaration. Successive improvements in data collection for this sector in recent years, including the introduction of mandatory reporting of first sales of fish, may account for some of the increase in reported landings.

TABLE 3.7 Landings into the UK by UK and foreign vessels: 1938 to 2018 (a)

	1938	1948	1960	1970	1980	1990	2000	2010	2018
Demersal									
Quantity ('000 tonnes)	807.8	923.5	758.8	778.6	484.2	336.7	246.4	149.0	177.1
Value (£ million)	14.6	46.4	52.0	67.5	194.4	327.7	304.3	262.1	334.7
Pelagic									
Quantity ('000 tonnes)	295.0	287.6	127.8	204.0	319.2	267.8	152.1	229.5	180.6
Value (£ million)	2.0	6.0	3.0	5.8	30.1	32.1	23.7	139.3	126.6
Shellfish									
Quantity ('000 tonnes)	32.1	28.7	28.1	56.4	70.2	97.5	127.7	141.0	122.5
Value (£ million)	0.5	1.4	2.1	6.7	34.5	105.1	154.5	250.9	330.9
Total									
Quantity ('000 tonnes)	1,134.9	1,239.8	914.7	1,039.1	873.6	702.0	526.3	519.5	480.2
Value (£ million)	17.2	53.8	57.0	80.0	259.0	464.8	482.5	652.3	792.2

⁽a) Landing data include transhipments. Blue whiting treated as demersal prior to 1994 and as pelagic from 1994 onwards.

Demersal, pelagic and shellfish landings

In 2018, the UK fleet landed 176 thousand tonnes of demersal species, 3 per cent less than in 2017. Over the same period, the value of demersal landings stayed the same at £355 million. Although pelagic landings fell by 2 per cent to 386 thousand tonnes, the market value rose by 6 per cent to £273 million. Mackerel prices in particular were up.

Shellfish landings fell slightly to 135 thousand tonnes and their overall value decreased by 1 per cent to £362 million.

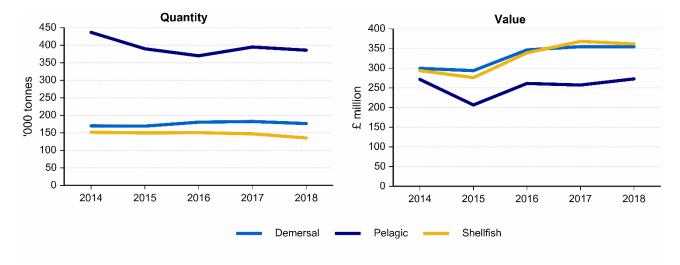


Chart 3.3: Landings into the UK and abroad by UK vessels: 2014 to 2018

Demersal fish

Cod, haddock and plaice have traditionally been the three main demersal species landed by the UK fleet in terms of weight, accounting for half the quantity of all demersal species landed in 2018 (see Table 3.6). Anglerfish has now overtaken plaice in terms of landings and achieves much higher prices at market.

Cod landings have fallen considerably since 1996 although the 35 thousand tonnes landed in 2018 was the second highest since 2000 and the second highest of any demersal species. This is a result of increases in some of the quotas for cod stocks. Twenty nine per cent of landings were made abroad. In 2018, cod was sold for a total value of £75 million.

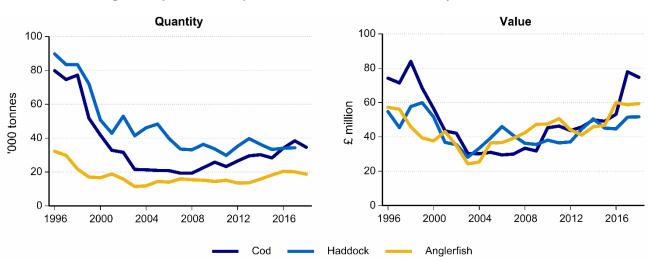


Chart 3.4: Landings of key demersal species into the UK and abroad by UK vessels: 1996 to 2018

Haddock landings rose slightly to 36 thousand tonnes while the value remained at £52 million. Just 1 per cent of haddock landings were made abroad.

Last year anglerfish replaced plaice in Chart 3.4 as their landings rose by 40 per cent since 2010 and the value to the UK fleet is the second highest for demersal species as it remained in 2018. Close to one fifth of all Anglerfish landings were made abroad.

Bass commands the highest price of demersal species landed by the UK fleet – almost £10 per kilo – possibly down to reduced supply following restrictions placed on vessels since 2015.

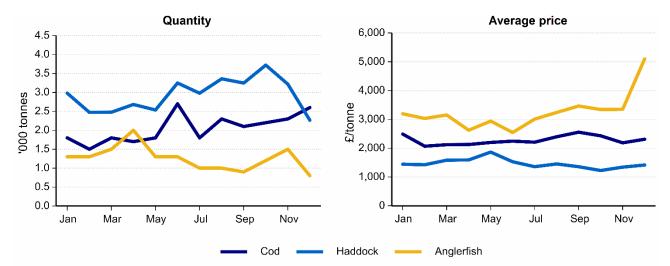


Chart 3.5: Landings of key demersal species into the UK by UK vessels by month: 2018

Landings of cod by UK vessels into the UK fluctuated between around 1,500 and 2,700 tonnes per month during 2018 (Chart 3.5). The majority of these landings are captured in the North Sea (area IV). Average prices for cod landed into the UK by the UK fleet peaked in September at £2.55 per kilo. The lowest prices (£2.07 per kilo) were achieved in February when supply was at its highest.

Haddock landings by UK vessels into the UK ranged from a peak of 3,700 tonnes in October to a low of 2,300 tonnes in December. The best average price of £1.86 per kilo was achieved in May.

Landings of Anglerfish by UK vessels into the UK peaked in April, when average prices were low. Prices rose in the second half of the year and spiked in December to £5.10 per kilo.

Chart 3.6 shows that the largest amounts of demersal fish landed abroad by the UK fleet were into Norway and the Netherlands (both with 9 thousand tonnes). France tops the list of foreign vessels landing into the UK, with 21 thousand tonnes of demersal fish.

Chart 3.6: Landings of demersal species abroad by UK vessels and landings into the UK by foreign vessels: 2018

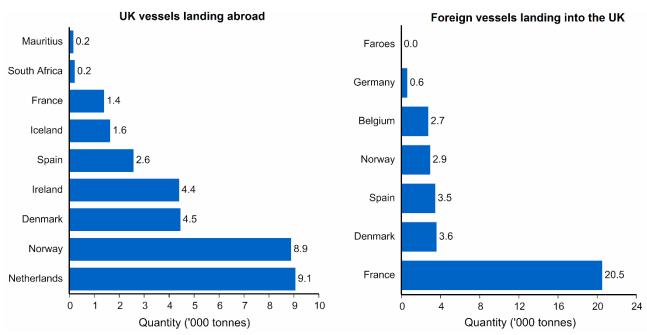


Chart 3.7 shows landings of demersal species by the UK fleet in 2018 by ICES rectangle of capture. Large quantities of demersal species were captured to the north-east of Scotland, in the central North Sea and in the English Channel. These fishing grounds also yielded the highest total value of demersal species per rectangle. However, demersal species with the highest average prices were captured from waters to the south and west of the UK and Ireland, as well as in the southern North Sea.

Chart 3.7: Demersal landings by UK vessels by ICES rectangle: 2018

Chart 3.7a: Quantity of landings by ICES rectangle

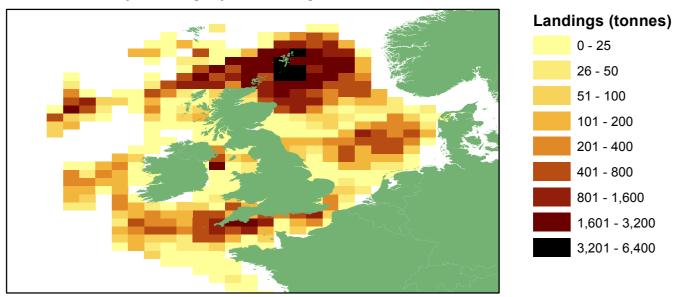


Chart 3.7b: Value of landings by ICES rectangle

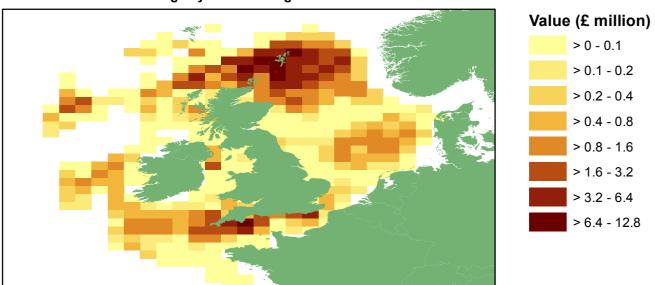
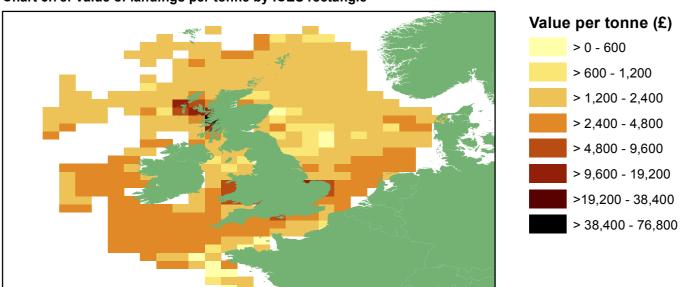


Chart 3.7c: Value of landings per tonne by ICES rectangle



Pelagic fish

Mackerel and herring are the two main pelagic species landed by the UK fleet. These species accounted for 76 per cent by weight and 91 per cent by value of total pelagic landings in 2018. Their share of all UK fleet landings was 42 per cent in 2018, down from 51 per cent in 2014 when mackerel quotas were at their highest.

The UK fleet catches more mackerel than any other species. In 2014, landings of mackerel by UK vessels rose by 76 per cent to 288 thousand tonnes but with reduced quotas fell to 191 thousand tonnes in 2018. Almost three in every five tonnes were landed abroad.

The amount of herring landed by UK vessels fell by 9 per cent in 2017, in 2018 however the amount of herring landed increased by 23 per cent to 104 thousand tonnes. However, the value of the mackerel fell by 1 per cent to £202 million in 2018 – due to a sharp drop in the average price of mackerel.

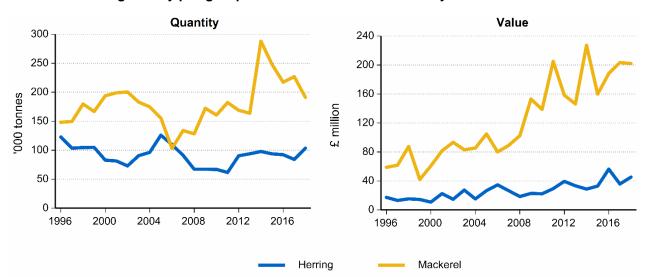


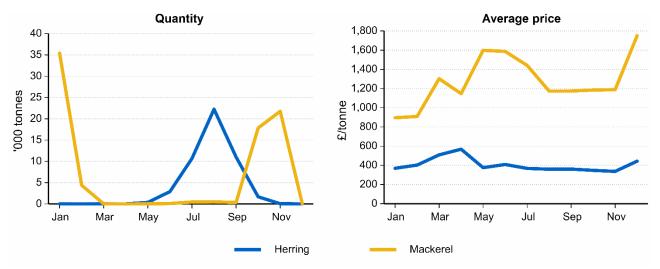
Chart 3.8: Landings of key pelagic species into the UK and abroad by UK vessels: 1996 to 2018

Longer-term trends in mackerel and herring landings by the UK fleet show much fluctuation (see Chart 3.8).

UK fleet landings of sardines fell from 24 thousand tonnes in 2010 (see Sea Fisheries Statistics 2014) to 4 thousand tonnes in 2015 but now stand at 8 thousand tonnes. Landings of blue whiting have increased by a factor of three over the last four years. This species is generally used for fish meal but it is also exported to provide a relatively low priced source of food. Blue whiting provides the pelagic industry with a useful source of income between the mackerel and herring fisheries.

Mackerel has a winter fishery so large landings were seen in January and then later in the year in October and November. Quotas had more or less been exhausted by then and so catches were low in December. Ninety three per cent of all mackerel landings into the UK by the UK fleet in 2018 were in those three peak months. The sources of these two peaks are different: the January peak is derived almost entirely from landings captured off the West of Scotland (area VIa), while the mackerel landings later in the year come from a fishery in the Northern North Sea (area IVa). This fishery tends to attract higher prices.

Chart 3.9: Landings of key pelagic species into the UK by UK vessels by month: 2018



A four month period (June to September) accounts for 95 per cent of herring landed into the UK by the UK fleet. Landings over the summer came primarily from the Northern North Sea (area IVa) and were supplemented in August and September by fisheries in the West of Scotland and the Irish Sea (areas VIa and VIIa).

The largest quantities of pelagic species landed by the UK fleet abroad were into Norway and the Netherlands at 97 and 47 thousand tonnes respectively (Chart 3.10). Irish vessels landed 4 thousand tonnes into the UK in 2018 and Norwegian vessels landed 11 thousand tonnes.

Chart 3.10: Landings of pelagic species abroad by UK vessels and landings into the UK by foreign vessels: 2018

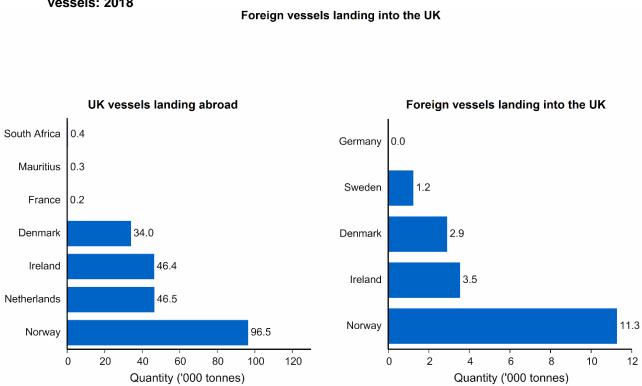


Chart 3.11 shows that large quantities and values of pelagic species were captured from rectangles near Shetland and from the north coast of Scotland down to the north-west coast of Ireland.

Chart 3.11: Pelagic landings by UK vessels by ICES rectangle: 2018

Chart 3.11a: Quantity of landings by ICES rectangle

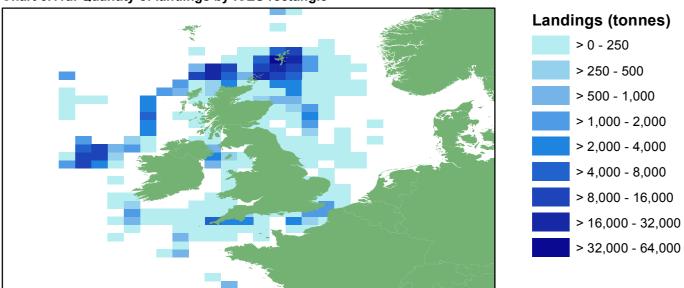
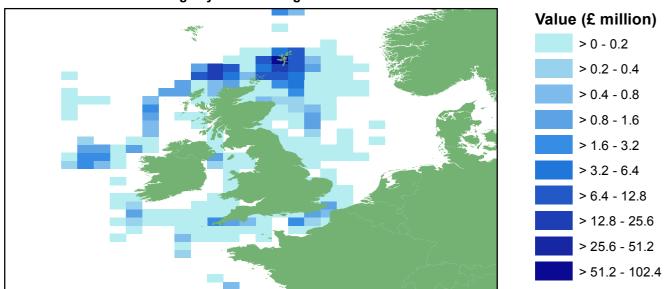
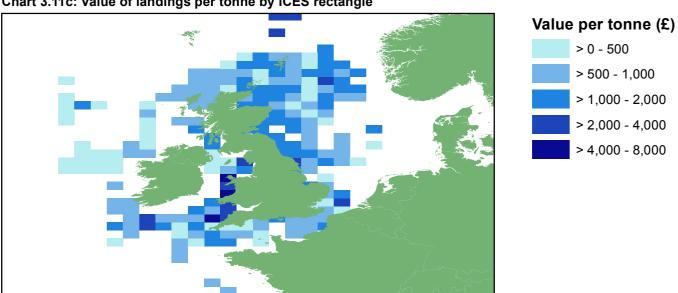


Chart 3.11b: Value of landings by ICES rectangle



^{*}Note: Legend has been adapted to account for high values and so is not directly comparable with value charts for years prior to 2017.

Chart 3.11c: Value of landings per tonne by ICES rectangle



Contains Collins Bartholomew and ICES data. © Collins Bartholomew copyright and database right 2019. © ICES Statistical Rectangles dataset 2015. ICES, Copenhagen.

Shellfish

Crabs, scallops and nephrops (langoustines) are the three main species of shellfish landed by UK vessels into the UK and abroad, accounting for around two thirds of the quantity and value landed in 2018.

Landings of crabs by the UK fleet totalled 35 thousand tonnes with a value of £81 million. Around 18 per cent of these landings were outside the UK. Overall, landings of crabs by the UK fleet have increased since 1996 although this could be down to better recording of shellfish catches.

Scallop landings more than doubled between 2008 and 2012, rising to a peak of 58 thousand tonnes. But landings have fallen in recent years to 29 thousand tonnes as some vessels have diversified into other fisheries. Very little was landed abroad.

Nephrops landings stood at 26 thousand tonnes and £83 million. Almost all of this was landed into the UK. Nephrops are not as abundant as they have been and landings by the UK fleet have fallen back in recent years.

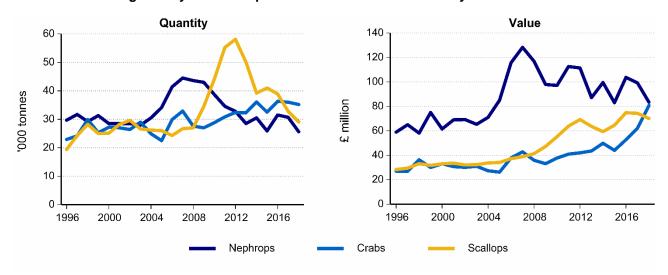


Chart 3.12: Landings of key shellfish species into the UK and abroad by UK vessels: 1996 to 2018

For other shellfish species:

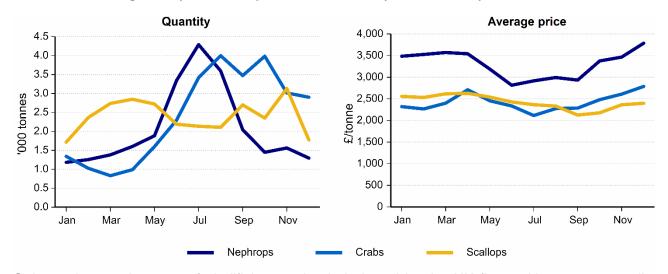
- Lobsters commanded the highest average price of all species landed by the UK fleet at over £14 a kilo in 2018. While lobsters accounted for only 2 per cent of the weight of shellfish landings by the UK fleet, they formed 12 per cent of the value.
- Landings of cuttlefish more than doubled between 2014-17, however in 2018 they fell to 4 thousand tonnes. Over this period, the average price has doubled as well.

Landings of crab by the UK fleet into the UK went from a low of 800 tonnes in March and rose steadily to a peak of 4,000 tonnes in August. Typical prices increase to around £2.40 per kilo.

Landings of scallops were highest in November (3,100 tonnes) and were lowest in January (1,700 tonnes). Typical prices were around £2.40 per kilo.

The largest landings of nephrops occurred during summer months with average prices over the period of around £3.30 per kilo.

Chart 3.13: Landings of key shellfish species into the UK by UK vessels by month: 2018



Only 14 thousand tonnes of shellfish were landed abroad by the UK fleet, with an even smaller amount - 1,200 tonnes - landed by foreign vessels into the UK in 2018. Chart 3.14 shows the largest amounts of shellfish landed abroad by the UK fleet were into the Netherlands (4 thousand tonnes). Ireland landed the largest amount of any country into the UK (700 tonnes, of mostly scallops).

Chart 3.14: Landings of shellfish species abroad by UK vessels and landings into the UK by foreign vessels: 2018

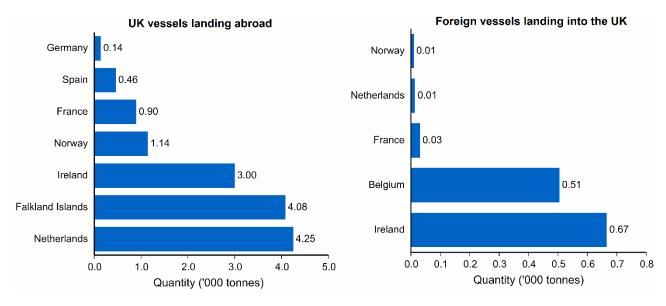


Chart 3.15 shows landings of shellfish by the UK fleet in 2018 by ICES rectangle of capture. In 2018, both the largest quantity and value of shellfish were captured in rectangles relatively close to the coast of the UK. However, shellfish species with high prices were typically captured in rectangles away from coastal areas.

Chart 3.15: Shellfish landings by UK vessels by ICES rectangle: 2018

Chart 3.15a: Quantity of landings by ICES rectangle

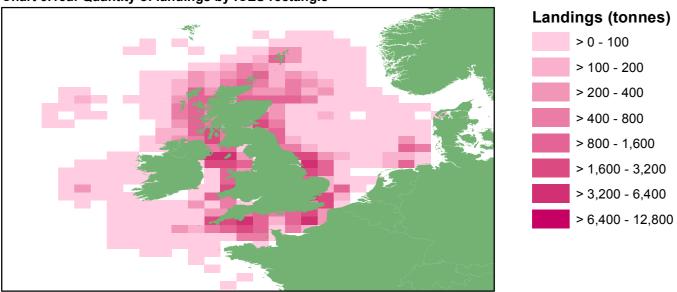


Chart 3.15b: Value of landings by ICES rectangle

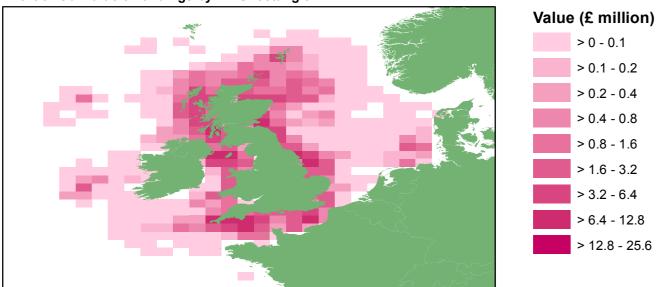
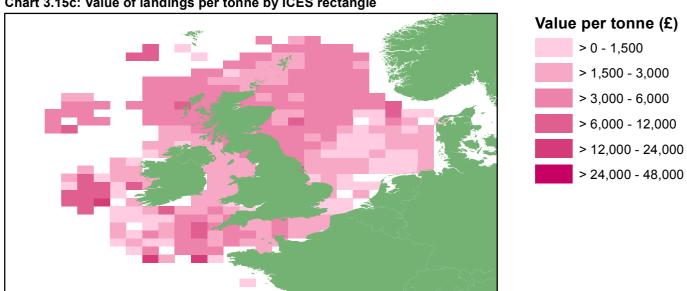


Chart 3.15c: Value of landings per tonne by ICES rectangle



Contains Collins Bartholomew and ICES data. © Collins Bartholomew copyright and database right 2019. © ICES Statistical Rectangles dataset 2015. ICES, Copenhagen.

Landings into major ports by the UK fleet

Chart 3.16 shows the top twenty UK ports based on the quantity and value landed by UK vessels in 2018. Peterhead remains the port with by far the highest landings - 154 thousand tonnes, with a value of £169 million. Lerwick is still in second place with 42 thousand tonnes, this is up by two thousand tonnes on 2017 landings. Fraserburgh remains third highest with landings of 27 thousand tonnes.

In 2018, Newlyn overtook Brixham as the port with the largest quantity of landings in England (14 thousand tonnes to Brixham's 12 thousand tonnes). However, Brixham saw more value (£36 million to Newlyn's £30 million). Both ports' landings comprise mainly high value shellfish and demersal species.

Chart 3.16: Landings into the top 20 UK ports by UK vessels: 2018

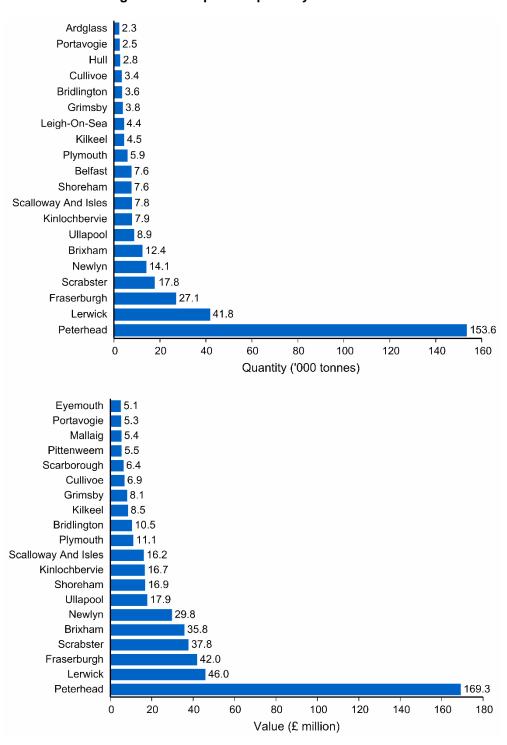
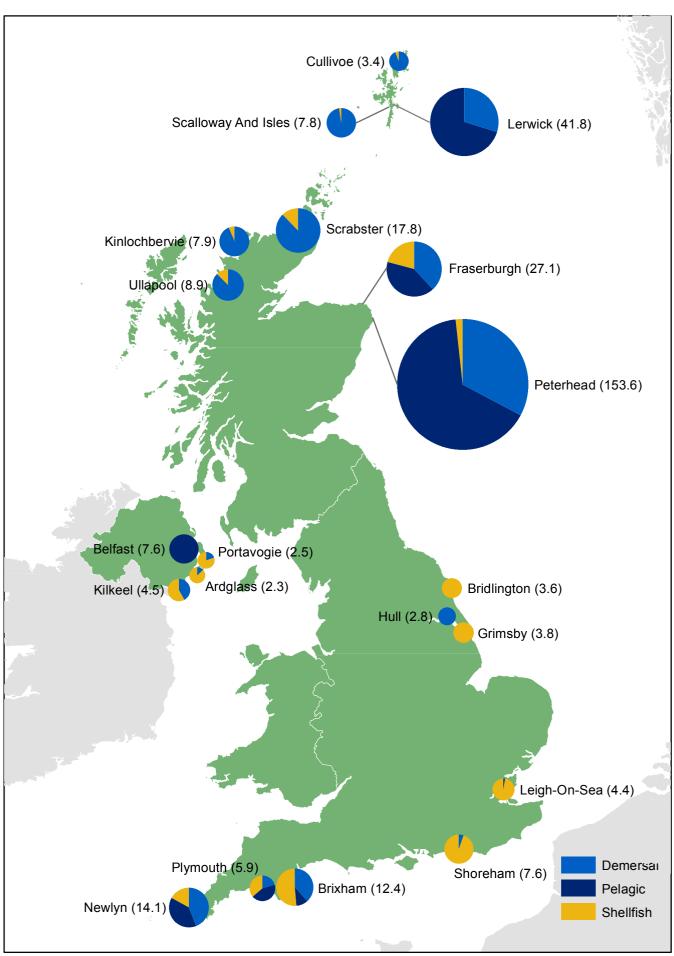


Chart 3.17: Landings into the top 20 UK ports^(a) by UK vessels by species type: 2018 ('000 tonnes)



⁽a) Shows the top 20 major ports based on the quantity of fish landed by UK vessels at each port in 2018. Contains Collins Bartholomew data. © Collins Bartholomew copyright and database right 2019.

The difference in species composition of landings is illustrated in Chart 3.17. The relatively low value per tonne of landings into Peterhead, Lerwick, Fraserburgh and Plymouth is because these are ports which specialise in relatively lower value pelagic species. These four ports alone account for 89 per cent of all UK landings of pelagic species into the UK.

Landings into the top three ports in Scotland account for 72 per cent of all landings by UK vessels into Scotland by quantity. In contrast, landings into Plymouth, Brixham and Newlyn form only 40 per cent of landings into England, with remaining landings more evenly spread around the English coast. The low number of English ports in Charts 3.16 and 3.17 is explained by the broad distribution of landings across English ports.

Landings abroad by the UK fleet

In 2018, UK vessels landed 272 thousand tonnes of fish abroad. Of this, 107 thousand tonnes of mostly mackerel and herring were landed into Norway. Sixty thousand tonnes were landed by UK vessels into the Netherlands and 54 thousand tonnes into Ireland. A small sector of the UK registered fishing fleet is in Dutch economic ownership; landings by these vessels contribute to the large quantities of fish landed into the Netherlands. Chart 3.18 shows the quantity of fish landed into each country, where this exceeds one thousand tonnes.

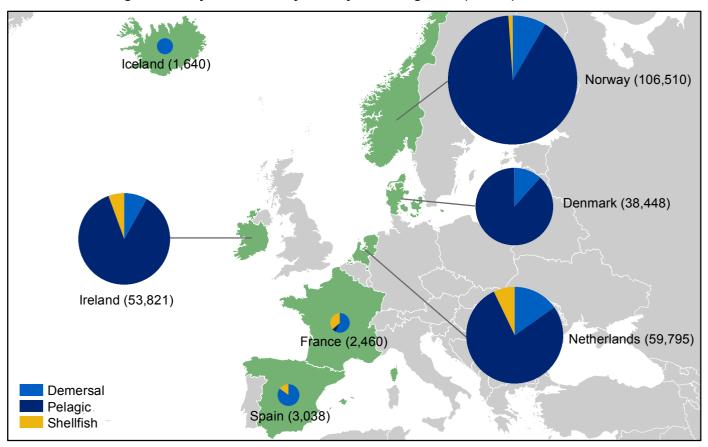
Eighty two per cent of fish landed abroad by UK vessels were pelagic and 12 per cent were demersal. Different countries receive different species: the majority of fish landed into the Netherlands, Ireland and Denmark were pelagic while most fish landed into France and Spain were demersal. Almost all landings into the Falkland Islands were squid. The species landed into each country is typically determined by market conditions and consumer tastes.

Landings into the UK by foreign vessels

In 2018, 54 thousand tonnes of fish were landed into the UK by foreign vessels, up 2 thousand tonnes on 2017, largely a result of a increase in saithe landings. Chart 3.19 shows the quantities landed by vessel nationality, where these exceed one thousand tonnes.

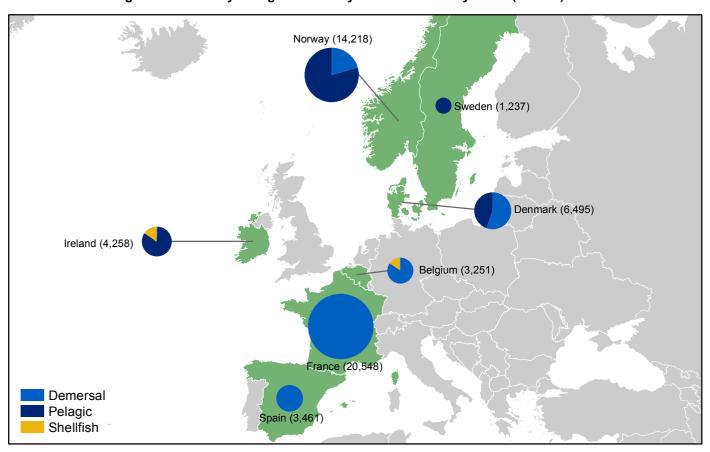
French and Norwegian registered vessels landed the largest quantity of fish into the UK in 2017 (21 and 14 thousand tonnes respectively). Almost two thirds of all fish landed into the UK are demersal with the large majority of the remainder being pelagic.

Chart 3.18: Landings abroad by UK vessels by country of landing: 2018 (tonnes)



Note: Only landings over 1,000 tonnes are shown. Excludes Falklands Islands (4,187 tonnes).

Chart 3.19: Landings into the UK by foreign vessels by vessel nationality: 2018 (tonnes)



Note: Only landings over 1,000 tonnes are shown. Contains Collins Bartholomew data. © Collins Bartholomew copyright and database right 2019.

Landings by the UK fleet by area of capture

Table 3.8 and Chart 3.20 show that 43 per cent (300.3 thousand tonnes) of the quantity of fish landed by UK vessels in 2018 was caught in the Northern North Sea (area IVa). Landings have drop in the West of Scotland (area VIa) from 198 thousand tonnes in 2017 to 134 thousand tonnes in 2018. Landings from the English Channel (area VIId/e) were 56 thousand tonnes.

Different sea areas yield different proportions of species. The North Sea (areas IVa, IVb and IVc) provided 63 per cent of the demersal fish landed by the UK fleet, while the Northern North Sea and the West of Scotland were the source of 74 per cent of pelagic fish landed by UK vessels in 2018. The Irish Sea (area VIIa), the West of Scotland and the English Channel provided 51 per cent of the shellfish landed by the UK fleet. Typically, shellfish landings form a high proportion of landings from enclosed sea areas with large coastal stretches (Irish Sea, Bristol Channel, English Channel and the Southern North Sea), while pelagic species form the majority of landings from open waters such as the West of Scotland, Northern North Sea, West of Ireland (area VIIb) and Porcupine Bank (area VIIc).

TABLE 3.8 Landings into the UK and abroad by UK vessels by area of capture: 2018

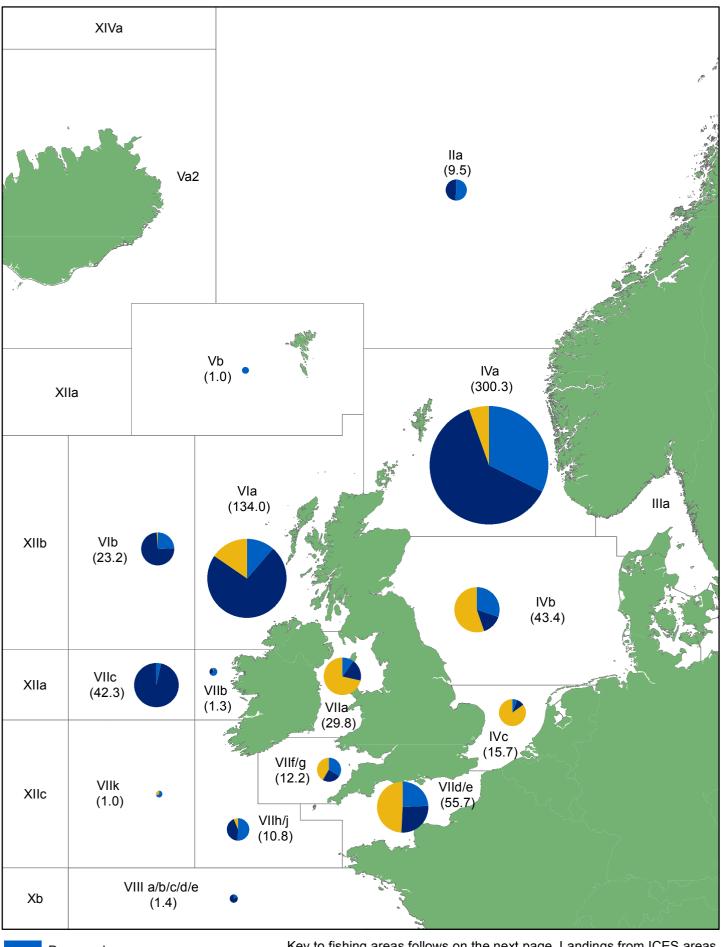
	Deme	ersal	Pela	ıgic	Shel	lfish	To	tal
-	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	('000t)	(£ million)						
Barents Sea/Murman Coast (I)	5.9	10.9	-	-	1.3	3.9	7.2	14.7
Norwegian Coast (IIa)	4.9	7.9	4.6	6.6	-	-	9.5	14.5
Bear Island & Spitzbergen (IIb)	2.4	4.3	-	-	-	-	2.4	4.3
Skagerrak and Kattegat (IIIa)	-	-	-	-	-	-	-	-
Northern North Sea (IVa)	97.0	178.3	186.9	156.4	16.4	50.5	300.3	385.2
Central North Sea (IVb)	13.1	23.7	6.3	3.4	24.0	74.8	43.4	101.9
Southern North Sea (IVc)	0.9	2.7	1.4	0.9	13.4	14.7	15.7	18.4
Faroes (Vb)	1.0	2.1		-			1.0	2.2
West of Scotland (VIa)	15.2	30.1	98.1	76.4	20.7	71.0	134.0	177.6
Rockall (VIb)	5.6	9.8	17.4	3.3	0.2	1.0	23.2	14.1
Irish Sea (VIIa)	3.0	4.0	5.5	1.9	21.3	42.9	29.8	48.9
West of Ireland (VIIb)	0.8	3.1	0.4	0.1	0.1	0.2	1.3	3.5
Porcupine Bank (VIIc)	1.4	4.0	40.8	8.5	0.1	0.9	42.3	13.4
English Channel (VIId/e)	13.5	42.4	14.8	8.2	27.4	72.1	55.7	122.6
Little/Great Sole Bank (VIIh/j)	5.5	15.6	4.7	3.3	0.7	1.4	10.8	20.3
West of Great Sole Bank (VIIk)	0.7	1.4	-	-	0.3	2.6	1.0	4.0
Rest of ICES area VII (VIIf/g)	4.1	12.2	3.0	1.4	5.1	14.1	12.2	27.7
Bay of Biscay (VIII)	0.2	0.4	1.2	0.9			1.4	1.3
East Coast of Greenland (XIV)	0.5	1.0	-	-	-	-	0.5	1.0
North Azores (XII)	-	-	-	-	-	-	-	-
Other Areas (a)	0.6	0.6	0.7	1.4	4.4	11.6	5.6	13.6
Total UK	176.4	354.5	385.8	272.8	135.3	361.7	697.5	989.0

Source: Fisheries Administrations in the UK

(a) Includes areas outside ICES areas such as the Indian Ocean and the North West and South West Atlantic.

Note: Additional data on UK vessel landings are available for download from the MMO website as supplementary Table 3.8a.

Chart 3.20: Landings into the UK and abroad by UK vessels by area of capture: 2018 ('000 tonnes)



Demersal
Pelagic
Shellfish

Key to fishing areas follows on the next page. Landings from ICES areas I, IIb, and XIV are excluded from chart but can be found in Table 3.8. Contains Collins Bartholomew and ICES data. © Collins Bartholomew copyright and database right 2019. ICES Statistical Areas dataset 2015. ICES, Copenhagen.

Key to fishing areas

I. Barents Sea and Murman Coast

II. Northward of the Norwegian Coast

IIa. Norwegian Coast

Ilb. Bear Island and Spitzbergen

III. Skagerrak, Kattegat, The Sound, Belts and Baltic

IIIa. Skagerrak and Kattegat

IV. North Sea

IVa. Northern North Sea

IVb. Central North Sea

IVc. Southern North Sea

V. Iceland and Faroes

VI. West of Scotland and Rockall

VIa. West of Scotland

VIb. Rockall

VII. West of Ireland and Channels

VIIa. Irish Sea

VIIb. West of Ireland

VIIc. Porcupine Bank

VIId, VIIe. English Channel (East, West)

VIIf, VIIg. Bristol Channel, South East of Ireland

VIIh, VIIj. Little Sole Bank, Great Sole Bank

VIIk. West of Great Sole Bank

VIII. Biscay

Landings by the UK fleet by sector

Eighty eight per cent of the quantity of all landings by the UK fleet in 2018 was landed by vessels in a producer organisation. Table 3.9 shows the quantity and value of landings by the different sectors of the UK fleet.

Vessels in the Scottish FPO accounted for 20 per cent of the quantity and 18 per cent of the value of fish landed by the UK fleet (138 thousand tonnes, £177 million).

There is clear specialisation among producer organisations with regard to species targeted. For example, vessels in North Atlantic FPO, Lunar Group, Interfish and Klondyke primarily target pelagic species.

Over a third of UK vessels over 10 metres in length were in the non-sector (vessels without producer organisation membership). These vessels typically have limited access to fishing quota and primarily target shellfish species, which are mostly non-quota stocks. In 2018 they caught over a third of all shellfish landed by the UK fleet. Vessels in the non-sector landed only small quantities of demersal and pelagic species.

TABLE 3.9 Landings into the UK and abroad by UK vessels by sector: 2018 (a)

	Deme	ersal	Pela	gic	Shell	fish	Tot	al
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	('000t)	(£ million)						
Scottish FPO Ltd	42.0	76.0	84.6	63.1	11.8	38.3	138.4	177.4
Shetland FPO Ltd	18.1	36.9	64.5	48.6		1.4	83.1	86.9
Lunar Group	2.7	4.6	64.4	34.3			67.1	38.9
Interfish	0.5	2.3	43.8	35.7		0.7	44.5	38.7
Klondyke	-	-	44.1	29.2	-	-	44.1	29.2
Anglo Northern Irish FPO Ltd	8.5	18.7	32.3	22.4	2.7	7.4	43.5	48.5
North Atlantic FPO Ltd	0.6	1.5	37.4	31.4			38.0	33.0
South Western FPO Ltd	4.5	16.0	4.4	1.5	12.6	30.9	21.5	48.4
Cornish FPO Ltd	12.0	28.1	2.8	1.0	3.8	12.7	18.6	41.9
The FPO Ltd	16.6	27.4			1.4	4.2	18.1	31.5
Northern Ireland FPO Ltd	6.0	9.2	4.6	2.8	6.6	17.8	17.1	29.8
North East of Scotland FO Ltd	14.7	26.2			1.2	4.0	15.9	30.2
Eastern England FPO Ltd	9.8	16.9			1.7	5.0	11.5	21.9
Fife FPO Ltd	3.6	7.1			3.8	9.9	7.5	17.1
Aberdeen FPO	7.0	12.3				1.3	7.4	13.7
North Sea FPO Ltd	4.5	10.7			2.7	7.0	7.2	17.7
Anglo Scottish FPO Ltd	4.7	7.3			1.8	5.7	6.5	13.0
Northern Producers Organisation Ltd	4.2	6.6			1.3	3.0	5.8	9.6
Orkney FPO Ltd	4.0	7.6			1.1	3.3	5.1	10.8
Wales and West Coast FPO Ltd	3.6	11.5					3.7	11.6
Lowestoft FPO Ltd	2.6	5.4					2.9	5.7
West of Scotland FPO Ltd		0.7			2.1	7.2	2.5	7.9
Isle of Man Non-Sector			-	-	2.4	5.1	2.4	5.1
Fleetwood FPO Ltd	-	-	-	-	-	-	-	
Non-sector vessels	0.8	1.6	••	·-	49.8	109.3	50.5	110.9
10m and under pool	5.2	20.0	2.3	2.4	27.2	87.2	34.6	109.
Commercial non-vessel landings	-	-	-	-	-	-	-	
otal All Sectors	176.4	354.5	385.8	272.8	135.3	361.7	697.5	989.0

Source: Fisheries Administrations in the UK

Vessels 10 metres and under in length without producer organisation membership (the '10m and under pool') also landed relatively small quantities of demersal and pelagic species. Four fifths of their catch is shellfish. The fishing methods used by this sector and the different species targeted mean that they typically gain higher than average prices for their catch.

⁽a) Landings by vessels 10 metres and under with membership of a producer organisation are attributed to that organisation and not the 10m and under pool

Landings by the UK fleet by vessel length

Seventy four per cent of the quantity of landings by the UK fleet in 2018 was caught by vessels over 24 metres in length (see Table 3.10). At the end of 2018, these vessels constituted just 4 per cent of the UK fleet by number, yet their landings of pelagic species formed 97 per cent of the annual total for the UK fleet.

Ninety three per cent of all landings of demersal species by the UK fleet were by vessels over 18 metres in length. In contrast, landings of shellfish are much more evenly distributed across the fleet, with vessels 10 metres and under in length (including those in producer organisations) accounting for 21 per cent of the quantity of landings.

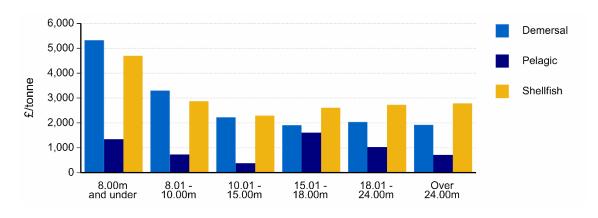
TABLE 3.10 Landings into the UK and abroad by UK vessels by vessel length: 2018

Overall Length	Deme	ersal	Pela	gic	Shell	fish	Tot	al
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	('000t)	(£ million)						
8.00m and under	1.4	7.3	1.3	1.7	5.2	24.3	7.8	33.3
8.01 - 10.00m	3.9	12.8	1.0	0.8	23.5	67.6	28.4	81.2
10.01 - 15.00m	4.8	10.6	10.1	3.8	44.1	100.7	59.0	115.1
15.01 - 18.00m	2.7	5.1			16.4	42.8	19.1	47.9
18.01 - 24.00m	39.0	79.5			25.0	68.0	64.0	147.5
Over 24.00m	124.7	239.2	373.3	266.4	21.2	58.3	519.2	564.0
Total	176.4	354.5	385.8	272.8	135.3	361.7	697.5	989.0

Source: Fisheries Administrations in the UK

Although on average longer vessels land much greater quantities of fish than their smaller counterparts, they typically achieve a lower average price for the fish landed (Chart 3.21). For example, the average price of demersal fish landed by vessels over 24 metres is £1.92 per kilo, while for the 8 metre and under fleet it is £5.32 per kilo. Differences, albeit less marked, apply for shellfish, with an average price of £4.69 per kilo for landings by the 8 metre and under fleet, compared with £2.79 per kilo for the over 24 metre fleet. The difference in prices is partly due to differences in species targeted, fishing methods used and choice of markets.

Chart 3.21: Average price of landings into the UK and abroad by UK vessels by vessel length: 2018



Landings by the UK fleet by gear used

Eighty nine per cent of fish landed by UK vessels in 2018 was captured using mobile gears, such as beam trawls, demersal trawls and seines, pelagic seines and dredges (see Table 3.11). Almost all landings of pelagic fish and 91 per cent of all demersal fish were caught using mobile gears. Passive gears such as pots and traps were used to catch 44 per cent of the shellfish landed by the UK fleet.

A large majority of demersal and pelagic fish landed by UK vessels in 2018 were caught using demersal trawls and seines. This broad category includes otter, nephrops, shrimp and pair trawls, and all demersal seines. Pots and traps accounted for 42 per cent of shellfish landings, with demersal trawl/seine and dredges catching 26 per cent each.

The type of gear used can make a difference to the average price of fish. For demersal species, the average price of fish captured using passive gears is £2.62 per kilo compared with £1.95 per kilo for mobile gears. Price differentials are also observed between different gears of the same class. For example, shellfish caught using dredges were sold at an average price of £2.09 per kilo, while shellfish caught using demersal trawls and seines were sold at an average price of £3.05 per kilo.

This variation in prices partly reflects the different species caught by different gears. For example, demersal trawls and seines capture the majority of the nephrops landed by the UK fleet, while the bulk of the landings from dredges are scallops, which sell at a lower average price. However, there can also be a premium attached to the method by which the fish are captured.

TABLE 3.11 Landings into the UK and abroad by UK vessels by gear used: 2018

	Deme	ersal	Pela	gic	Shell	fish	Tot	al
_	Quantity ('000t)	Value (£ million)	Quantity ('000t)	Value (£ million)	Quantity ('000t)	Value (£ million)	Quantity ('000t)	Value (£ million)
	· · · · · ·		· · · · · · · · · · · · · · · · · · ·		<u> </u>		· · · · · · · · · · · · · · · · · · ·	<u> </u>
Beam trawl	11.7	37.5			4.9	15.8	16.6	53.4
Demersal trawl/seine (a)	148.8	274.8	366.8	255.4	35.3	107.6	550.9	637.8
Dredge		1.0			34.8	72.6	35.0	73.6
Pelagic seine			14.1	12.9			14.1	12.9
Other mobile gears					1.3	1.2	1.3	1.2
Total Mobile Gears	160.7	313.3	380.9	268.2	76.3	197.2	617.9	778.8
Drift and fixed nets	8.8	22.1	2.7	1.0		1.2	11.9	24.4
Gears using hooks	6.8	15.8	2.2	3.4			9.0	19.5
Pots and traps		3.3			57.3	157.1	57.4	160.4
Other passive gears			-	-	1.2	5.9	1.2	5.9
Total Passive Gears	15.7	41.1	5.0	4.5	59.0	164.5	79.6	210.2
Total All Sectors	176.4	354.5	385.8	272.8	135.3	361.7	697.5	989.0

Source: Fisheries Administrations in the UK

⁽a) includes midwater trawl gears (for example otter and pair trawls) which, depending on the mesh size, are used to target both demersal and pelagic species.

Uptake of quotas by EU member states

Table 3.12 shows the quota held by EU member states at the end of 2018 (after international quota transfers) for each stock, together with landings by each member state during 2018. The shares of the quota held by each member state vary considerably across stocks, with different countries landing different quantities of each stock as a consequence.

Chart 3.22 illustrates the difference in landings by member states for stocks of major importance to the UK and other EU countries. In 2018, the UK landed 93 per cent of all North Sea haddock (26 thousand tonnes) and 83 per cent of all North Sea nephrops (11 thousand tonnes). This dominance is not seen across all stocks. For example, Danish vessels landed 92 per cent of all North Sea sprats, Dutch vessels landed 78 per cent of all North Sea sole and French vessels landed 53 per cent of Anglers in area 7.

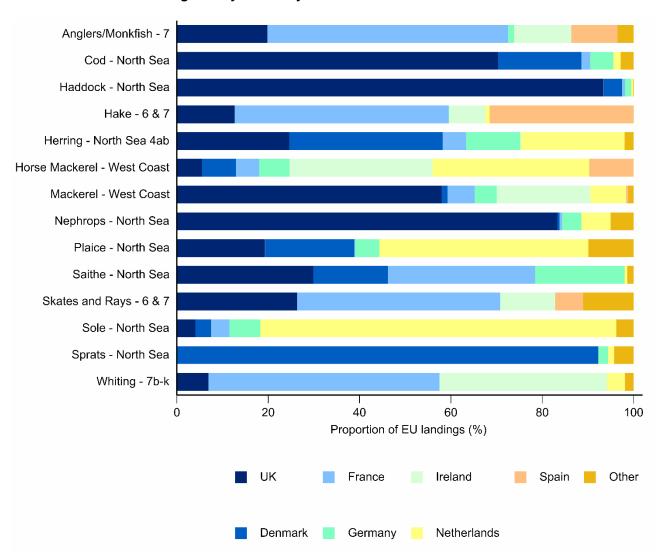


Chart 3.22: Share of landings of key stocks by EU member states: 2018

Note: The data in this chart are official statistics and not subject to National Statistics accreditation.

The figures here are derived from reports to the European Commission by each member state. These had to be submitted to the Commission by 15 February 2019. The landings data for the UK may therefore differ from those reported earlier in this chapter, which are based on more recent figures.

TABLE 3.12 Quota, catch and uptake by EU Member States: 2018

Species	Area		UK	Denmark	France	Germany	Ireland	Netherlands	Spain	Other	Tot
Alfonsinos	3-10, 12 & 14	Quota	5	-	19	-	-	-	80	179	28
	III, IV, V, VI, VII, VIII, IX,	Catch	1	-	15	-	-	-	72	184	27
	X, XII, XIV (EC & Int)	Uptake %	11	-	78	-	-	-	90	103	9
Anglers /	North Sea	Quota	13,646	1,417	168	696	-	561	-	576	17,06
Monkfish	IIa (EC), IV (EC)	Catch	10,032	958	144	574	-	84	-	157	11,94
		Uptake %	74	68	86	82	-	15	-	27	7
	4 (Norwegian	Quota	194	1,358	-	58	-	91	-	-	1,70
	waters)	Catch	125	1,243	-	39	-	89	-	-	1,49
	IV (Norway)	Uptake %	65	92	-	69	-	98	-	-	
	West of Scotland	Quota	3,442	-	4,236	349	1,125	210	360	188	9,9
	Vb (EC), VI, XII, XIV	Catch	3,053	-	1,294	314	888		242	-	5,7
		Uptake %	89	-	31	90	79		67	-	
	7	Quota	7,420	-	19,272	382	3,690	1	3,156	2,767	36,6
	VII	Catch	5,246	-	13,912	339	3,322	1	2,661	935	26,4
		Uptake %	71	-	72	89	90	95	84	34	
Black Scabbard	5-7 & 12	Quota	168	-	2,426	32	2	-	295	-	2,9
1511	V,VI, VII and XII (EC	Catch	65	-	1,605	-	-	-	259	-	1,9
	and International)	Uptake %	39	-	66	-	-	-	88	-	
Blue Ling	2 & 4	Quota	15	4	30	4	-	-	-	-	
	II and IV (EC and	Catch	4		7		-	-	-	-	
	International)	Uptake %	29	5	24		-	-	-	-	
	6 & 7	Quota	2,234	-	8,777	120	33	-	397	19	11,5
	VI and VII (EC and	Catch	737	-	1,324	-	-	-	135	-	2,1
No 18/1-141	International)	Uptake %	33	-	15		-	-	34	-	
Blue Whiting	Northern	Quota	74,895	90,001	17,746	50,714	54,900	133,762	853	13,600	436,4
	I,II,III,IV,V,VII,VIIIabde,	Catch	72,884	86,686	16,289	45,646	49,903	119,837	767	12,356	404,3
\f:_L	XII,XIV (EC and Int)	Uptake %	97	96	92	90	91	90	90	91	
Boarfish	6-8	Quota	1,499	5,791	30	11	16,077	171	-	-	23,5
	VI, VII and VIII (EC and	Catch		94	12	2	9,513	171		-	9,7
\d	International)	Uptake %		2	40	17	59	100	n/a	-	
Cod	1 & 2 (Norwegian	Quota	6,964	-	2,852	4,239	228	-	4,803	3,922	23,0
	waters)	Catch	6,960	-	2,754	4,194	-	-	4,803	3,996	22,7
	I, II (Norway) 1 & 2b	Uptake %	100	-	97	99	-	-	100	102	
		Quota	4,861	-	3,999	5,636	-	-	8,760	5,043	28,3
	I, IIb	Catch	4,817	294	3,844	5,573	-	-	8,341	5,358	28,2
	North Sea	Uptake %	99	n/a	96	99	-	-	95	106	1
		Quota	23,417	7,783	1,603	2,899	-	1,691	-	1,595	38,9
	Ila (EC), IV	Catch	21,127	5,492	588	1,515	-	476	-	856	30,0
	West of Scotland	Uptake %	90	71	37	52	-	28	-	54	
	VIb, XII, XIV	Quota	50	-	13	1	18	-	-	-	
	VID, XII, XIV	Catch	49	-	-	-	14	-	-	-	
	7a	Uptake %	99	-	-	-	80	-	-	-	
		Quota	206	-	26	-	467	2	-	9	7
	VIIa	Catch	128	-	-	-	106	-	-	2	2
	7d	Uptake %	62	-	- 1 010	-	23	- 10	-	19	
	VIId	Quota	186	-	1,642	-	-	49	-	84	1,9
	VIIU	Catch	39	-	35	-	-	8	-	8	
	7b-c, e-k	Uptake %	21	-	2 202	-	927	17 1	-	122	
	VII (ex VIIa, VIId), VIII, IX,	Quota	248		2,202		837			122	3,4
	X; CECAF 34.1.1 (EC)	Catch	133	-	520	-	729			49	1,4
	Greenland waters	Uptake %	53	-	24	1 600	87	45	n/a	40	
	NAFO 1F and XIV	Quota	498 512	-	-	1,602	-	-	-		2,1
	(Greenland)	Catch	512	-	-	1,602	-	-	-	-	2,1
od and Haddock	k 5b (Faroese waters)	Uptake %	103 822	<u> </u>	114	100			-	<u> </u>	1
ou and Haddock	Vb (Faroes)	Quota		-	114	14	-	-	-	-	
	VD (I aloes)	Catch	702	-	-	-	-	-	-	-	7
Tatfish	5b (Faroese waters)	Uptake %	85	-	7	9		-			
iatiisii	Vb (Faroes)	Quota	34	-		9	-	-	-	-	
	. D (1 a1000)	Catch	5 15	-	2		-	-	-	-	
Freater Forkbeard	d 1-4	Uptake %	15	-	9	9	-	-	-	-	
I OINDEAL	I, II, III, IV (EC and	Quota	15 2	- 1			-	-	-	-	
	International)	Catch		1	1	1	-	-	-	-	
	5-7	Uptake %	13	n/a	15	1	455	- 10	-	-	2.4
		Quota	784	-	653	11	155	13	555	-	2,1
					100				4 4 0		
	V, VI, VII (EC and	Catch	142	-	469	-	10	-	448	-	
Prostor Cilvor	V, VI, VII (EC and International)	Catch Uptake %	18	-	72	-	6	-	81	-	1,0
Greater Silver Smelt	V, VI, VII (EC and	Catch								- - 1	

TABLE 3.12 Quota, catch and uptake by EU Member States: 2018 (cont.)

Species	Area		UK	Denmark	France	Germany	Ireland	Netherlands	Spain	Other	Tota
Greenland Halibut	1 & 2 (Norwegian	Quota	22			14		_		14	5
	waters)	Catch	24	-	18	13	-	-	28	11	9
	I, II (Norway)	Uptake %	111	-	n/a	89	-	-	n/a	78	18
	2a, 4 & 6	Quota	1,071	18	363	30	1	3	69		1,55
	Ila (EC), IV, VI (EC	Catch	65		190	-	-	1	30	-	28
	and International)	Uptake %	6		52	-	-	56	44	-	1
Haddock	1 & 2 (Norwegian	Quota	393	-	158	323	35	20	138	133	1,20
	waters)	Catch	391	-	130	297	3	-	50	132	1,00
	I, II (Norway)	Uptake %	100	-	82	92	7	-	37	100	8
	North Sea	Quota	30,920	1,797	920	987	-	194		448	35,26
	Ila (EC), IV	Catch	25,894	1,118	203	372	-	100	-	37	27,72
		Uptake %	84	62	22	38	-	52	-	8	7
	West of Scotland	Quota	3,922	1	270	7	841	18	31	-	5,09
	5b & 6a	Catch	3,422	1	66	-	758	17	27	-	4,29
	Vb (EC), Vla	Uptake %	87	56	25	-	90	99	88	-	8
	West of Scotland 6b	Quota	4,234	-	599	44	494	-	-		5,37
	VIb, XII, XIV	Catch	3,418	-	-	-	433	-	-	-	3,85
		Uptake %	81	-	-	-	88	-	-	-	7
	7a	Quota	1,810	-	202	-	1,356	-	-	55	3,42
	VIIa	Catch	1,585	-	-	-	954	-	-	4	2,54
		Uptake %	88	-	-	-	70	-	-	8	7
	7b-k	Quota	649	-	5,009	-	1,588	7	-	103	7,35
	VII (ex VIIa), VIII, IX,	Catch	582		4,595	-	1,455	7		89	6,72
	X; CECAF 34.1.1 (EC)	Uptake %	90	n/a	92	-	92	99	n/a	87	9
Hake	North Sea	Quota	5,903	2,363	2,979	304	-	125	-	58	11,73
	Ila (EC), IV	Catch	5,234	561	2,691	71	-	48	-	37	8,64
		Uptake %	89	24	90	23	-	39	-	63	7
	6 & 7	Quota	8,263	3	29,083	22	3,816	1,485	20,861	213	63,74
	Vb (EC), VI, VII, XII,	Catch	5,356	3	19,815	18	3,360	430	13,288	29	42,29
	XIV	Uptake %	65	84	68	84	88	29	64	13	6
Herring	Atlanto Scandian	Quota	2,601	17,810		1,982	2,699	4,369	35	1,498	30,99
	I, II	Catch	2,582	17,052	-	1,922	2,428	4,146	-	1,419	29,54
	December 4 9 7d	Uptake %	99	96	-	97	90	95	-	95	9:
	By-catch 4 & 7d	Quota	199	10,386	54	59	-	103	-	151	10,95
	Ila (EC), IV, VIId	Catch	24	8,549	-	57	-	32	-	123	8,78
	No di Contail	Uptake %	12	82	-	97	-	31	-	82	8
	North Sea 4ab	Quota	84,695	130,414	19,510	41,026	573	83,660	-	7,406	367,28
	IV (EC and Norway	Catch	84,740	115,718	17,531	41,026	515	78,157	-	6,665	344,35
	North of 53° 30'N)	Uptake %	100	89	90	100	90	93	-	90	9.
	4c & 7d	Quota	6,786	938	17,905	11,743	-	30,988	-	41	68,40
	IVc (exB/W), VIId	Catch	6,573	2	13,783	10,819	-	30,988	-	32	62,19
	West Coast	Uptake %	97		77	92	-	100	-	78	9
	West Coast	Quota	3,157	42	5	21	62	1,240	-	-	4,520
	Vb (EC), Vla (North	Catch	2,910	42	4	16	56	1,008	-	-	4,03
	of 56° 30' N), VIb	Uptake %	92	99	93	79	91	81	-	-	8:
	7a (Manx and	Quota	5,585	-	-	-	1,850	-	-	-	7,43
	Mourne)	Catch	5,508	-	-	-	1,980	-	-	-	7,48
	VIIa (Manx & Mourne) 7ef	Uptake %	99	-	- -	-	107	-	-	-	10
		Quota	517	-	514	-	-	-	-	2	1,03
	VIIe, f	Catch	14	-	380	-	-	-	-		39
	7mhile	Uptake %	3	-	74	-	- 10.100	-	-	16	3
	7ghjk VIIg, h, j, k	Quota	51		680		10,180	829	-	-	11,74
	viig, ii, j, k	Catch		-	2	-	4,188	439	-	-	4,62
Horse Mackerel	North Sea	Uptake %		745	0.440		41	53	-	-	44.22
I IOI SE IVIACKETEI	IVb, IVc, VIId	Quota	3,624	745	2,119	2,669	1	4,998	-	68	14,22
	IVO, IVO, VIIU	Catch	3,001	604	1,448	2,359	-	4,534	-	44	11,99
	West Coast	Uptake %	83	81	68	88	- 00.400	91	0.700	64	400.00
		Quota	7,674	11,399	6,527	8,846	28,163	36,350	9,790	152	108,90
	(ex VIId), VIIIabde, XII, XIV	Catch Uptake %	4,439	6,051	4,084	5,389	25,347	27,759	7,878	4	80,95
Lemon Sole and	North Sea		58	53	63	61	90	76	80	472	7 02
Lemon Sole and Witches	Ila (EC), IV (EC)	Quota	3,894	1,033	287	139	-	1,205	-	473	7,03
	110 (LO), IV (EO)	Catch	2,087	413	10	59	-	288	-	386	3,24
ina	Doon Son 1 8 2	Uptake %	54	40	3	43	-	24	-	82	4
Ling	Deep Sea 1 & 2	Quota	9	9	9	8	-	-	-	-	3
	I, II	Catch		-	9	1	-	-	-	-	1
	4/50	Uptake %	1	-	100	17	-	-	-	-	2
		Chicks	3,176	346	334	75	-	8	2	25	3,96
	4 (EC waters) IV (EC)	Quota Catch	2,785	282	296	43		ŭ	_	9	3,41

TABLE 3.12 Quota, catch and uptake by EU Member States: 2018 (cont.)

Species	Area		UK	Denmark	France	Germany	Ireland	Netherlands	Spain	Other	То
ing (continued)	4 (Norwegian waters)	Quota	172	1,025	13	130		3	_	7	1,3
	IV (Norway S of 62°N)	Catch	153	736	-	108	_	2	-	-	1,0
		Uptake %	89	72	-	83	-	73	-	-	
	6-10, 12 & 14	Quota	4,754	9	4,197	210	1,042	1	3,900	63	14,1
	VI, VII, VIII, IX, X,	Catch	2,781	-	1,887	2	488	1	1,802	16	6,9
	XII, XIV (EC)	Uptake %	58	-	45	1	47	100	46	26	
ing and Blue	5b (Faroese waters)	Quota	114	-	1,300	586	-	-	-	-	2,
ing	Vb (Faroes)	Catch	55	-	-	-	-	-	-	-	
		Uptake %	48	-	-	-	-	-	-	-	
lackerel .	North Sea	Quota	3,180	13,930	2,132	2,746	-	2,564	-	4,291	28,
	IIa (EC), IV	Catch	3,065	13,870	1,851	2,723	9,795	2,564	-	4,171	38,
		Uptake %	96	100	87	99	n/a	100	-	97	
	West Coast	Quota	186,253	4,299	21,825	16,062	66,541	26,987	1,512	4,117	327,
	II (ex EC), Vb (EC), VI,	Catch	189,645	4,226	19,414	15,925	66,966	25,610	1,311	4,039	327,
	VII, VIIIabde, XII,XIV	Uptake %	102	98	89	99	101	95	87	98	
egrims	North Sea	Quota	2,639	64	82	8	-	14	-	9	2,
	IIa (EC), IV (EC)	Catch	1,525	44	69	1	-	4	-	5	1,
		Uptake %	58	69	84	14	-	32	-	56	
	West of Scotland	Quota	1,900	-	2,645	-	822	-	688	-	6,
	Vb (EC), VI, XII, XIV	Catch	941	-	117	-	741	-	323	-	2,
		Uptake %	50	-	4	-	90	-	47	-	
	7	Quota	2,722	-	5,362	2	2,487	-	2,863	435	13,
	VII	Catch	2,488	-	4,128	-	2,239	-	2,476	348	11
		Uptake %	91	-	77	-	90	-	86	80	
ephrops	North Sea	Quota	21,596	1,395	163	887	-	1,165	-	1,472	26
	IIa (EC), IV (EC)	Catch	10,731	59	72	542	-	826	-	650	12
		Uptake %	50	4	44	61	-	71	-	44	
	4 (Norwegian	Quota	42	758	-	-	-	-	-	-	
	waters)	Catch		43	-	-	-	_	-	-	
	IV (Norway)	Uptake %		6	-	-	-	-	-	-	
	West of Scotland	Quota	13,539	-	113	-	189	-	110	-	13
	Vb (EC), VI	Catch	8,874	-	-	_	65	-		-	8
		Uptake %	66	-	-	-	35	_		-	
	7	Quota	10,588	-	7,743	-	11,771	50	1,694	17	31
	VII	Catch	5,917	-	285	-	7,209	_	186	2	13
		Uptake %	56	-	4	-	61	_	11	9	
orthern Prawn	North Sea	Quota	423	1,655	-	-	-	83	-	67	2
	IIa (EC), IV (EC)	Catch		3	-	_	_	-	-	-	
		Uptake %			-	-	-	_	-	-	
laice	North Sea	Quota	27,469	23,678	1,364	6,827	-	51,467	-	7,388	118
	IIa (EC), IV	Catch	9,550	9,670	112	2,627	-	22,658	-	4,890	49
		Uptake %	35	41	8	38	_	44	-	66	
	West of Scotland	Quota	431	-	10	-	290	_	-	-	
	Vb (EC), VI, XII, XIV	Catch	293	_		-	35	_	-	_	
		Uptake %	68	_		-	12	_	-	_	
	7a	Quota	489	-	21	-	1,335	1	-	69	1
	VIIa	Catch	64	_	-	-	320	_	-	52	
		Uptake %	13	_	_	_	24	_	_	75	
	7de	Quota	2,922		5,909	-	4	105	-	2,517	11
	VIId, e	Catch	2,212	_	2,289	_	3	94	_	2,019	6
		Uptake %	76	_	39	_	81	90	_	80	
	7fg	Quota	61	-	160	_	81	-		237	
	VIIf, g	Catch	40	_	126	_	51	_	_	205	
		Uptake %	66	_	79	_	62	_	_	86	
	7hjk	Quota	14	_	35		53	17	_	22	
	VIIh, j, k	Catch	12	_	35	-	35	-	_	17	
	•	Uptake %	85	_	98	-	65	_	_	76	
ollack	West of Scotland	Quota	160		209		62	-	7	-	
	Vb (EC), VI, XII, XIV	Catch	29	_	200	_	30	_	-	_	
	• // /	Uptake %	18	_		_	48	-	_	_	
	7	Quota	2,258		9,582		959	45	80	391	13
	VII	Catch	1,249	-	819	-	739	9	13	21	2
		Uptake %		-	9	-	739	19	16	5	
edfishes	1 & 2 (Norwegian	Quota	55 98	<u> </u>	177	379	- 11	- 19	60	752	1
	waters)	Catch	98	-	48	379 205	-	-	54	752 740	1
	I, II (Norway)			-			-	-			'
	5b (Faroese waters)	Uptake % Quota	100	<u> </u>	27 6	54	-	-	90	98	
			7	-	6	92	-	-	-	1	
	Vb (Faroes)	Catch	1		1						

TABLE 3.12 Quota, catch and uptake by EU Member States: 2018 (cont.)

Species	Area		UK	Denmark	France	Germany	Ireland	Netherlands	Spain	Other	Tota
Red	6-8	Quota	2	-	23	-	-	-	115	-	14
Seabream	VI, VII and VIII (EC	Catch	1	-	23	-		-	108	-	13
	and International)	Uptake %	70	-	99	-	n/a	-	94	-	9
Roundnose and	5b, 6 & 7	Quota	169	-	2,883	7	35	-	397	1	3,49
Roughead	Vb, VI, VII	Catch	21	-	188	-		-	286	-	49
Grenadier		Uptake %	12	-	7	-		-	72	-	1
Saithe	1 & 2 (Norwegian	Quota	460	4	101	1,460	7	1	60	458	2,55
	waters)	Catch	464	3	100	1,436	6	-	60	456	2,52
	I, II (Norway)	Uptake %	101	83	99	98	91	-	100	100	9
	North Sea	Quota	13,537	7,756	24,226	9,030	-	211	-	680	55,43
	IIa (EC), IV	Catch	12,466	6,844	13,434	8,180	-	265	-	569	41,75
	West of October 1	Uptake %	92	88	55	91	-	126	-	84	7
	West of Scotland	Quota	3,606	2	6,204	248	366	117	19	-	10,56
	Vb (EC), VI, XII, XIV	Catch	2,764	1	3,653		231	100	7	-	6,75
	5b (Faroese waters)	Uptake %	77	79	59		63	86	35	-	6
	Vb (Faroes)	Quota	723	-	1,691	274	-	56	-	56	2,80
	VD (I aloes)	Catch	214	-		-	-	-	-	-	21
	7	Uptake % Quota	30 482		1,372	-	1,655	-	10	7	3,52
	VII, VIII, IX, X;	Catch	482 77	-	1,372	-	350			1	3,52 49
	COPACE 34.1.1(EC)	Uptake %	16	-	4	-	21	100		22	149
Sandeels	North Sea	Quota	4,386	223,713	-	7,154	-	- 100	-	18,079	253,33
	IIa (EC), IIIa (EC), IV (EC)	Catch	1,849	176,380	_	5,938	_	_	_	15,912	200,079
	(), (-), ()	Uptake %	42	79	_	83	_	-	_	88	79
Skates and Rays	North Sea	Quota	896	12	61	57	_	341	-	288	1,654
•	IIa (EC), IV (EC)	Catch	826	5	37	55	_	316	-	279	1,51
		Uptake %	92	42	60	97	-	93	-	97	92
	7d	Quota	192	-	1,013	-	-	26	-	111	1,342
	VIId	Catch	187	-	904	-	-	18	-	105	1,214
		Uptake %	97	-	89	-	-	70	-	95	90
	6 & 7	Quota	2,596	-	4,737	2	1,190	4	610	1,045	10,18
	VI (EC), VII (EC) (ex	Catch	2,305	-	3,891	1	1,051	1	534	969	8,752
	VIId)	Uptake %	89	-	82	24	88	24	88	93	86
Sole	North Sea	Quota	735	679	682	1,129	-	12,853	-	1,358	17,437
	II, IV	Catch	432	367	432	723	-	8,336	-	405	10,694
		Uptake %	59	54	63	64	-	65	-	30	6′
	West of Scotland	Quota	12	-	-	-	51	-	-	-	6
	Vb (EC), VI, XII, XIV	Catch	3	-	-	-	16	-	-	-	20
		Uptake %	26	-	-	-	32	-	-	-	3
	7a	Quota	8	-	-	-	17	-	-	15	40
	VIIa	Catch	6	-		-	16	-	-	14	36
	7d	Uptake %	67	-	n/a	-	99	-	-	93	90
		Quota	474	-	2,172	-	-	-	-	1,068	3,714
	VIId	Catch	393	-	1,265	-	-	-	-	651	2,309
	7e	Uptake %	83	-	58 334	-	-	-	-	61 85	62
	VIIe	Quota Catch	889			-	1	-	-		1,308
	VIIC		791	-	217	-	1	-	-	68	1,076
	7fg	Uptake % Quota	89 194	-	65 65	-	99	-	-	80 679	969
	VIIf, g	Catch	194	-	44	-	28	-	-	607	850
	, 5	Uptake %	88	-	67	-	90	-	-	89	88
	7hjk	Quota	47		143		118	2		114	424
	VIIh, j, k	Catch	33	-	91	-	63	-	-	96	283
		Uptake %	68	-	64	-	53	_	-	85	67
Sprats	North Sea	Quota	3,324	165,917	229	4,654	-	2,487		8,593	185,203
	IIa (EC), IV (EC)	Catch	69	161,865	-	3,806	-	2,274	-	7,512	175,526
		Uptake %	2	98	-	82	_	91	-	87	9
	7de	Quota	3,053	125	264	16	-	262	-	16	3,73
	VIId, e	Catch	1,776	-	1	-	-	-	-	-	1,777
		Uptake %	58	-						-	4
Spurdog	West Coast	Quota	100	-	83	4	53	-	10	20	270
	I, V, VI, VII, VIII, XII	Catch	38	-	-	-	1			-	40
	and XIV (EC and Int)	Uptake %	38		-		2	n/a	1		15
Turbot and Brill	North Sea	Quota	933	1,171	145	470	-	4,282	-	655	7,65
	IIa (EC), IV (EC)	Catch	462	310	33	388	-	2,571	-	366	4,130
		Uptake %	49	26	23	83		60		56	54
Tusk	1, 2 & 14	Quota	6	-	6	6	-	-	-	-	18
	I, II, XIV (EC	Catch	1	-	2		-	-	-	-	;
	and International)	Uptake %	11	_	29	3	_	_			14

TABLE 3.12 Quota, catch and uptake by EU Member States: 2018 (cont.)

Species	Area		UK	Denmark	France	Germany	Ireland	Netherlands	Spain	Other	Total
Tusk (continued)	4 (EC waters)	Quota	113	75	52	22	_	-	_	8	269
	IV (EC and	Catch	50	3	6	1	-	-	-		61
	International)	Uptake %	45	4	11	7	-	-	-		23
	4 (Norwegian	Quota	6	163	-	1	-	-	-	-	170
	waters)	Catch	3	35	-		-	-	-	-	38
	IV (Norway S of 62°N)	Uptake %	42	22	-	41	-	-	-	-	22
	5-7	Quota	369	-	766	18	71		68	-	1,293
	V, VI, VII (EC and	Catch	91	-	152	-	3		61	-	308
	International)	Uptake %	25	-	20	-	5	100	90	-	24
Whiting	North Sea	Quota	14,988	1,953	3,084	449	-	1,189		470	22,132
	IIa (EC), IV	Catch	10,646	238	918	99	-	649	-	75	12,625
		Uptake %	71	12	30	22	-	55	-	16	57
	West of Scotland	Quota	124	-	17		81	-		-	223
	Vb (EC), VI, XII, XIV	Catch	139	2	2	-	81	4	-	-	229
		Uptake %	112	n/a	11	-	100	n/a	-	-	103
	7a	Quota	34	-	3	-	51	-	-	1	89
	VIIa	Catch	19	-	-	-	44	-	-	1	63
		Uptake %	56	-	-	-	86	-	-	87	71
	7b-k	Quota	1,853	1	15,439	-	6,977	553	-	339	25,162
	VII (ex VIIa)	Catch	877	1	6,386	-	4,634	494	-	241	12,633
		Uptake %	47	79	41	-	66	89	-	71	50
Other Species	1 & 2 (Norwegian	Quota	96	-	87	76	-	8	50	33	350
	waters)	Catch	82	-	65	54	-	-	19	-	221
	I, II (Norway)	Uptake %	86	-	75	72	-	-	38	-	63
	4 (Norwegian	Quota	3,143	5,189	232	1,240	-	196	-	-	10,000
	waters)	Catch	2,534	4,855	-	1,112	-	-	-	83	8,583
	IV (Norway S of 62°N)	Uptake %	81	94	-	90	-	-	-	n/a	86
	5b (Faroese waters)	Quota	260	-	253	187	-	-	-	-	700
	Vb (Faroes)	Catch	59	-	2	-	-	-	-	-	61
		Uptake %	23	-	1	-	-	-	-	-	9

4 Supplies, overseas trade and marketing

Introduction

In 2018, the UK imported 674 thousand tonnes of fish (excluding fish products), with a value of £3,194 million. It exported 448 thousand tonnes, leaving a trade gap of 226 thousand tonnes. Landed prices of fish rose by an average of 3 per cent on 2017 and the fish component of the retail price index rose by 3.3 per cent. Fishing accounted for 6.4 per cent of gross value added for agriculture, hunting, forestry and fishing, compared with 6.5 per cent in 2017.

This chapter brings together information on:

- Imports and exports of fish and fish products
- Household expenditure on fish and inflation of fish prices
- The contribution of fishing to GDP

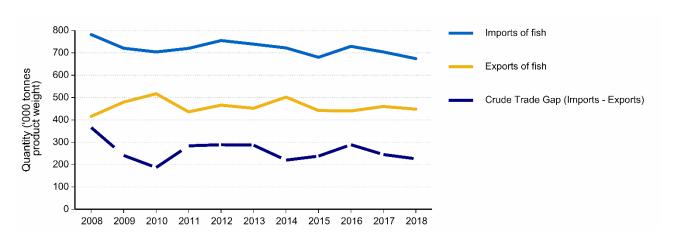
The data on imports, exports, household consumption and GDP include information on fish from freshwater fisheries and aquaculture, as well as from sea fisheries. This differs from the rest of the publication, which focuses exclusively on sea fisheries. Note that in this chapter, landings data are given in terms of landed weight for comparison with the trade data, which are shown in terms of actual product weight.

All tables presented here are available to download as spreadsheets from the MMO website. Supplementary tables showing more detail can also be found on the website.

Imports and Exports

The UK is a net importer of fish, with imports exceeding exports. In 2018, imports fell by 30 thousand tonnes while exports decreased by 12 thousand tonnes. This resulted in the crude trade gap (imports minus exports) narrowing by 19 thousand tonnes to 226 thousand tonnes.

Chart 4.1: International trade of fish: 2008 to 2018



In addition to imports from abroad, supplies of fish to the UK include aquaculture, catches from inland fisheries, and landings by UK vessels from sea fisheries. Data on aquaculture and catches from freshwater fisheries are not included in this publication and hence total UK supplies of fish are not estimated.

Landings by UK vessels into the UK (based on landed weight) fell by 7 thousand tonnes in 2018 (see Table 4.1). Combining this with the 19 thousand tonne fall in the crude trade gap results in a reduction of 26 thousand tonnes of fish available for use in 2018 (621 thousand tonnes in 2018 compared with 646 thousand tonnes in 2017).

TABLE 4.1 Fish trade flows for the UK: 2008 to 2018

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Imports ^(a)	('000 tonnes)	782	721	704	720	755	739	722	680	729	704 ^R	674
Imports	(£ million)	2,210	2,177	2,255	2,559	2,570	2,757	2,738	2,672	3,069	3,197 ^ℝ	
Exports ^(a)	('000 tonnes)	416	480	517	436	466	452	502	442	440	460	448
•	(£ million)	1,009	1,166	1,346	1,464	1,344	1,460	1,566	1,337	1,638	1,904 R	1,791
Crude trade gap	('000 tonnes)	366	241	187	284	289	287	220	238	289	245	226
Landings by UK vessels	into the UK (b) (c)											
	('000 tonnes)	375	360	379	372	366	379	422	390	413	402	395
	(£ million)	517	520	548	621	568	549	615	553	693	721	727

⁽a) Excludes fish products

More detailed landings data (based on live weight) are in Chapter 3.

Tables 4.2 and 4.3 present information on imports and exports by species. Note that while imports typically include landings into the UK by foreign-registered vessels, there may be cases where imports are less than the landings shown in Table 3.3; see Appendix 4 (UK fisheries statistics methodology) for further details.

There were 674 thousand tonnes of fish (excluding fish products) imported into the UK in 2018. This is down by over 4 per cent on 2017. Imports of key species (tuna, cod, salmon and shrimps and prawns) all fell. Imports total 797 thousand tonnes when fish products, such as fish meal and oils, are included.

2018 exports of fish fell by 2.5 per cent to 448 thousand tonnes. There was a large decrease in exports for salmon (nearly 16 thousand tonnes). Mackerel exports fell by 13 per cent (10 thousand tonnes). Including fish products total exports amounted to 484 thousand tonnes.

⁽b) Landings are given in terms of landed weight equivalent (i.e. head on, gutted for most species).

⁽c) Landings include transhipments of mackerel.

TABLE 4.2 Imports of fish, fish preparations, meals, flours and oils into the UK: 2014 to 2018 (a)

<u>-</u>		Quantit	y ('000 tor	nnes)			Val	ue (£ milli	on)	
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Fish (excluding Shellfish)										
Bass	6.8	8.5	8.5	8.9	9.3	28.5	35.5	38.4	37.3 R	38.7
Blue Whiting				0.3			0.1	0.1	0.1	
Cod	116.4	115.4	120.5	110.0	103.0	410.0	440.1	491.1	493.5 R	495.5
Haddock	35.9	41.0	44.9	47.0	49.8	111.1	119.9	113.7	129.9 R	159.2
Hake	4.7	3.2	3.5	2.5	2.8	11.1	9.4	10.4	8.2	8.2
Halibut	1.3	1.0	1.0	1.2	1.2	7.2	6.1	6.8	7.5	7.2
Herring	11.9	9.4	10.2	7.0	4.4	15.2	15.1	15.4	13.3	10.6
Ling	1.2	0.9	1.5	1.0	0.9	1.2	1.3	2.1	1.6	1.5
Mackerel	33.2	19.0	19.0	26.4 R	14.0	53.2	38.9	42.9	52.3 R	40.6
Megrim	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.3
Monks or Anglerfish	1.7	1.1	1.7	1.7	1.4	6.3	3.5	5.6	5.9 R	5.2
Plaice	4.2	4.4	4.2	4.5	3.3	12.9	12.4	12.4	15.2	13.2
Pollack	38.3	29.3	31.1	29.8	34.0	71.8	57.8	66.1	63.4	72.6
Saithe	3.2	2.0	2.9	2.6	2.6	9.5	6.6	9.2	7.2	7.7
Salmon (b)	78.3	71.8	85.8	74.0 R	80.2	393.1	345.8	488.7	489.5 R	543.2
Sardines	12.9	12.9	13.5	13.8	12.4	33.8	30.6	34.4	34.7	33.6
Sole	0.2	0.4	0.5	0.3	0.3	0.8	2.8	3.8	2.2	2.6
Trout (b)	11.4	10.4	12.2	12.0	9.4	60.8	55.4	66.2	81.4	59.8
Tuna	91.8	119.0	122.7	114.1	109.5	287.8	357.4	390.8	428.6 R	437.8
Whiting	3.3	2.6	3.9	4.4	2.1	2.6	2.2	3.3	4.2 R	2.3
Other Fish (c)	146.3	117.7	123.0	128.7 R	119.1	460.3	368.3	421.7	452.8 R	423.9
Total	603.1	570.2	610.9	590.5 R	559.7	1,977.2	1,909.5	2,223.3	2,329.2 R	
Shellfish (Crustaceans and	d Mollusc					,	,		•	
Crabs	3.9	2.2	2.8	2.9	3.9	23.3	18.4	19.9	20.5 R	23.6
Lobsters	2.3	3.0	2.7	2.1	2.0	23.4	35.9	37.6	31.3 ^R	30.6
Mussels	6.0	5.1	5.5	4.3	5.8	15.1	13.9	15.3	14.6	14.6
Nephrops	3.7	3.0	3.0	2.6	2.6	15.7	10.6	10.3	10.0 R	12.0
Scallops	2.1	2.4	3.7	1.3	1.3	24.4	27.6	41.4	20.3	19.7
Shrimps and Prawns	82.3	77.4	81.8	81.0	80.2	593.8	593.6	644.5	684.1 R	640.5
Squid	7.0	6.3	6.0	9.3	7.1	13.9	14.0	19.8	39.7	29.8
Other Crustaceans	3.6	3.0	2.3	1.5	2.6	27.8	23.0	20.9	14.7	24.4
Other Molluscs	7.9	8.0	10.5	8.6	9.0	23.2	25.1	36.3	32.7 R	35.2
Total	118.8	110.3	118.3	113.6 R	114.6	760.6	762.1	845.9	868.0	830.3
Total	110.0	110.5	110.5	110.0	114.0	700.0	702.1	040.0	000.0	050.5
Total Imports of Fish	721.9	680.4	729.2	704.2 R	674.2	2,737.8	2,671.6	3,069.3	3,197.2 R	3,194.0
Fish Products										
Meals and Flours	71.1	63.4	77.5	83.1 R	95.3	77.7	70.5	97.8	95.7 R	118.1
Oils	13.3	29.0	22.4	21.2 R	27.5	28.5	41.1	47.8	38.7	41.6
Total	84.4	92.4	99.9	104.3 R	122.7	106.2	111.7	145.6	134.4 R	159.6
Total Imports										
Total Imports (inc. fish products)	806.3	772.8	829.1	808.5 R	797.0	2,844.0	2,783.3	3,214.8	3,331.6 R	3,353.6
Source: H.M. Revenue and Co						,	,	-,	-,	-,

Note: Additional data on UK imports by exporting country are available from the MMO website as supplementary Table 4.2a.

⁽a) 2018 data are provisional.

⁽b) Freshwater species.

⁽c) Includes other freshwater species.

TABLE 4.3 Exports of fish, fish preparations, meals, flours and oils from the UK: 2014 to 2018 (a)

		Quantit	y ('000 ton	nes)			Valu	e (£ milli	on)	
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Fish (excluding Shellfish)										
Bass	0.4	0.4	0.3	0.3	0.3	3.0	2.6	3.1	2.6	2.6
Blue Whiting	4.4	1.8	2.7	0.4	11.0	1.2	0.6	1.0	0.2	3.5
Cod	15.5	16.0	17.2	16.7 R	14.5	52.7	53.1	58.9	63.2 R	58.7
Haddock	1.0	0.9	1.2	1.2	1.3	2.6	2.5	3.7	3.5	3.9
Hake	3.9	5.0	7.6	8.1	6.6	13.1	17.4	25.1	33.1 R	29.5
Halibut	0.5	0.4	0.4	0.3	0.3	2.0	1.5	1.3	1.3	0.9
Herring	63.5	64.8	44.1	41.6	51.2	40.7	35.6	38.4	37.2 R	34.2
Ling	2.3	2.0	2.1	2.2 R	1.8	4.7	4.2	4.8	5.9	4.2
Mackerel	120.3	80.3	83.7	77.5 R	67.3	128.5	67.7	81.0	87.4	81.1
Megrim	3.5	3.3	3.6	3.8	4.1	13.7	12.6	15.2	16.5 R	19.1
Monks or Anglerfish	2.8	3.1	4.2	4.5	3.8	14.2	15.9	24.4	31.0	30.3
Plaice	0.3	0.4	1.1	1.6	2.2	0.5	0.6	1.6	3.0	5.2
Pollack	3.9	3.6	2.0	2.1	2.4	10.4	7.6	6.0	6.9	8.5
Saithe	4.7	4.8	5.4	5.5	6.7	8.6	9.2	12.8	13.5 R	14.1
Salmon (b)	124.8	113.7	105.3	116.1 R	100.4	625.9	493.6	580.7	725.6 R	639.3
Sardines	3.9	4.5	7.6	7.3	9.8	7.1	7.6	9.4	9.8	13.1
Sole	0.9	0.6	0.9	0.9	1.1	7.2	4.8	7.8	8.9	10.8
Trout (b)	2.8	4.0	7.8	8.4	6.4	11.2	18.3	48.4	52.2	43.2
Tuna	5.1	5.3	5.9	4.8	8.2	18.7	19.2	22.6	20.0 R	25.5
Whiting	1.6	0.3	0.5	0.4	0.5	1.2	0.6	0.8	0.8	1.1
Other Fish (c)	51.5	45.7	46.9	69.9 ▫	68.3	134.7	120.5	134.6	179.4 R	186.5
Total	417.6	361.2	350.5	373.7 R	368.4	1,101.8	895.8	1,081.3	1,301.9 R	
Shellfish (Crustaceans and						,		, , , , , , , , , , , , , , , , , , , ,	,	
Crabs	15.5	14.5	16.7	15.3	16.6	56.7	48.5	65.9	71.8 ^R	99.8
Lobsters	3.8	3.2	3.9	4.9	4.2	40.5	35.2	47.3	62.0 R	60.5
Mussels	4.8	5.2	3.6	3.6	3.7	5.3	4.2	3.3	5.0	4.4
Nephrops	14.8	13.0	13.9	13.3 R	13.0	107.3	93.2	113.4	119.7 R	108.2
Scallops	11.1	11.7	12.9	8.3 R	7.6	91.7	100.2	127.7	102.2 R	88.9
Shrimps and Prawns	13.5	11.7	12.6	14.2	13.2	75.5	71.4	86.5	106.3 R	88.8
Squid	2.9	3.3	3.1	10.6	8.2	10.2	14.5	13.8	48.8 R	39.6
Other Crustaceans	2.9	1.9	2.3	2.0	2.2	16.5	13.3	17.9	14.8	15.8
Other Molluscs	14.9	16.4	20.4	13.6 R	11.1	60.7	60.4	81.4	71.3	69.9
Total	84.2	80.8	89.4	85.8 R	79.6	464.5	440.9	557.2	601.9 R	575.9
Total Exports of Fish	501.8	442.0	439.9	459.5 R	448.0	1,566.3	1,336.7	1,638.4	1,903.8 ^R	1 791 2
Fish Products	001.0		.00.0		. 1010	.,000.0	.,000.1	.,000.7	.,500.0	.,. • 112
Meals and Flours	27.0	45.4	47.0	31.4	24.0	<i>1</i>	EE 2	60.7	40.9	246
Oils	37.9 6.4	45.4 10.8	47.2 10.8		24.9	45.2 17.0	55.3	60.7		34.6
Total	44.3	56.2		12.4 43.8	11.1 36.0	17.0	19.3 74.6	26.4 87.2	33.4 ^R	27.0
IUIAI	44.3	30.∠	58.0	43.0	36.0	62.1	74.0	01.2	14.3 *	61.6
Total Exports		455 -	40		40.1-			4 === =	4.6	4.5=-
(inc. fish products)	546.1	498.3	497.9	503.3 ^ℝ	484.0	1,628.4	1,411.3	1,725.6	1,978.1 凡	1,852.8

Note: Additional data on UK exports by importing country are available from the MMO website as supplementary Table 4.3a.

⁽a) 2018 data are provisional.

⁽b) Freshwater species.

⁽c) Includes other freshwater species.

Imports and exports by species

Fish (excluding shellfish) accounted for 70 per cent of fish imports (including fish products) by weight in 2018, a total of around 560 thousand tonnes. Shellfish (molluscs and crustaceans) accounted for 14 per cent of imports by weight and 25 per cent by value. The share of fish products is 15 per cent. These are relatively low priced and so account for just 5 per cent of the value of all imports.

The UK exported 368 thousand tonnes of fish (excluding shellfish) in 2018, down 1 per cent on 2017. In addition, nearly 80 thousand tonnes of shellfish were exported from the UK. Fish (excluding shellfish) account for 76 per cent of all exports, a similar share to imports. Shellfish account for around 17 per cent of all exports. Exports of fish products, which again fell significantly compared with the previous year, account for over 7 per cent.

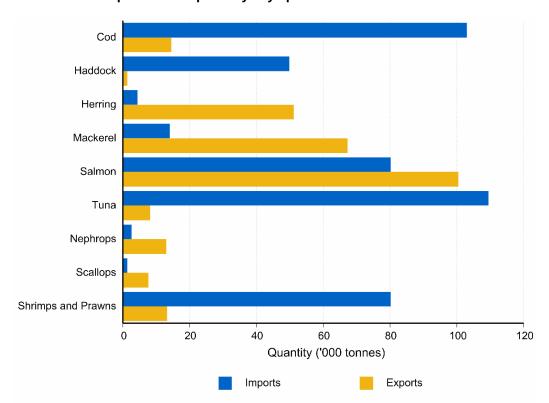


Chart 4.2: UK imports and exports by key species: 2018

In 2017, tuna remained the highest imported fish by weight - 109 thousand tonnes, albeit 4 per cent down on 2017 – closely followed by cod at 103 thousand tonnes. Shrimps and prawns and salmon were equal third place (80 thousand tonnes)

Exports were highest for salmon at 100 thousand tonnes, a fall of over 13 per cent. This was followed by mackerel, with 67 thousand tonnes exported in 2018. This continues the fall from the 2014 peak and is likely to be down to lower mackerel catches following reductions in mackerel quota. 51 thousand tonnes of herring were also exported.

Cod

The UK is a net importer of cod. Imports of cod in 2018 stood at 103 thousand tonnes, down 7 thousand tonnes on the previous year, while 14.5 thousand tonnes were exported, a fall of over 13 per cent on the previous year. Landings of cod by UK vessels into the UK rose by 3 thousand tonnes to 20 thousand tonnes in 2018. As a result, the amount of cod available for domestic use fell by 2 thousand tonnes.

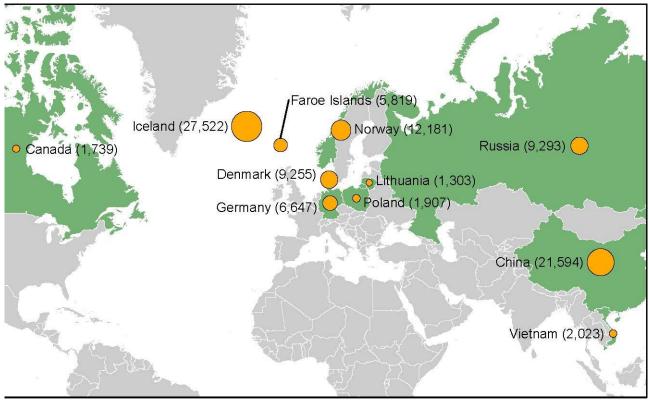
TABLE 4.4a Balance sheet for cod for the UK: 2014 to 2018

		Quantit	y ('000 t	tonnes)			Value (£ million)					
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018		
Landings by UK vessels into the UK ^(a)	12.0	13.2	16.0	17.0	19.8	27.8	29.5	41.7	48.0	56.3		
Imports (b)	116.4	115.4	120.5	110.0	103.0	410.0	440.1	491.1	493.5 R	495.5		
Total supplies (c)	128.4	128.5	136.6	126.9 R	122.8	437.8	469.7	532.7	541.5 ^R	551.8		
Exports (b)	15.5	16.0	17.2	16.7 R	14.5	52.7	53.1	58.9	63.2 R	58.7		
Total available for domestic use (c)	112.9	112.5	119.4	110.2	108.3	385.2	416.6	473.9	478.3	493.1		

Source: H.M. Revenue and Customs and Fisheries Administrations in the UK

The largest exporter of cod to the UK is Iceland (nearly 28 thousand tonnes), followed by China (22 thousand tonnes) and Norway (12 thousand tonnes). EU member states accounted for 22 per cent of all cod imported to the UK in 2018.

Chart 4.3a: Imports to the UK of cod by exporting country: 2018 (tonnes)



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⁽a) Landings are given in terms of landed weight.

⁽b) Excludes fish products.

⁽c) Excludes sources of fish other than imports and landings into the UK by UK vessels from sea fisheries.

Haddock

As with cod, the UK is heavily reliant on imports of haddock to meet consumer demand. Imports accounted for 61 per cent of the supply, although this is lower than the 84 per cent share for cod. Very little is exported. In 2018, the amount available for domestic use was nearly 80 thousand tonnes.

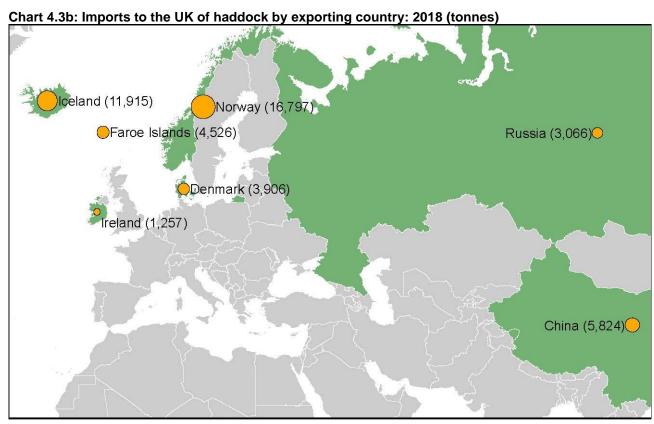
TABLE 4.4b Balance sheet for haddock for the UK: 2014 to 2018

		Quantit	y ('000 t	onnes)		Value (£ million)					
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	
Landings by UK vessels into the UK ^(a)	31.5	28.6	29.1	29.7	31.0	49.3	44.2	44.0	50.7	51.1	
Imports (b)	35.9	41.0	44.9	47.0	49.8	111.1	119.9	113.7	129.9 R	159.2	
Total supplies (c)	67.4	69.6	74.0	76.7	80.8	160.4	164.1	157.7	180.6	210.3	
Exports (b)	1.0	0.9	1.2	1.2	1.2	2.6	2.5	3.7	3.5	3.9	
Total available for domestic use (c)	66.4	68.7	72.8	75.5	79.6	157.9	161.6	154.1	177.1 R	206.4	

Source: H.M. Revenue and Customs and Fisheries Administrations in the UK

- (a) Landings are given in terms of landed w eight.
- (b) Excludes fish products.
- (c) Excludes sources of fish other than imports and landings into the UK by UK vessels from sea fisheries.

In 2018, more than half (58 percent) of all haddock imported into the UK came from Norway and Iceland (nearly 17 and 12 thousand tonnes respectively). China also exported nearly 6,000 tonnes of haddock to the UK.



Contains Collins Bartholomew data. © Collins Bartholomew copyright and database right 2019. *Note: Only countries from which the UK imported more than 1,000 tonnes of haddock are shown.*

Shrimps and prawns

UK vessels land only small amounts of shrimps and prawns into the UK: 1,100 tonnes in 2018. The vast majority of shrimps and prawns available for domestic use are imported. In 2018, 80 thousand tonnes of shrimps and prawns were imported into the UK, although 13 thousand tonnes are then exported.

TABLE 4.4c Balance sheet for shrimps and prawns for the UK: 2014 to 2018

		Quantit	y ('000 t	onnes)		Value (£ million)					
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	
Landings by UK vessels into the UK ^(a)	0.6	0.3	0.8	0.6	1.1	1.4	0.8	3.0	2.6	2.7	
Imports (b)	82.3	77.4	81.8	81.0	80.2	593.8	593.6	644.5	684.1 R	640.5	
Total supplies (c)	82.9	77.7	82.6	81.6	81.4	595.2	594.4	647.5	686.7 R	643.2	
Exports (b)	13.5	11.7	12.6	14.2	13.2	75.5	71.4	86.5	106.3 R	88.8	
Total available for domestic use (c)	69.5	66.0	70.0	67.4	68.2	519.7	523.0	561.0	580.4 R	554.5	

Source: H.M. Revenue and Customs and Fisheries Administrations in the UK

- (a) Landings are given in terms of landed weight.
- (b) Excludes fish products.
- (c) Excludes sources of fish other than imports and landings into the UK by UK vessels from sea fisheries.

Over half the shrimps and prawns imported into the UK were from Asia. In 2018, the largest exporters of shrimps and prawns to the UK were Vietnam (19 thousand tonnes) and India (13 thousand tonnes). Denmark was next largest, with exports of nearly 9 thousand tonnes.

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Note: Only countries from which the UK imported more than 1,000 tonnes of shrimps and prawns are shown.

Tuna

Virtually all tuna available for use in the UK is from abroad. In 2018, the UK imported 109 thousand tonnes of tuna of which 8 thousand tonnes were re-exported. This left 101 thousand tonnes available for domestic use.

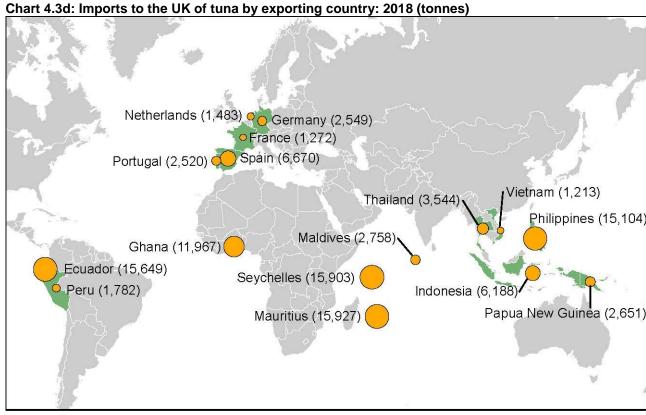
TABLE 4.4d Balance sheet for tuna for the UK: 2014 to 2018

		Quantit	y ('000 t	onnes)		Value (£ million)					
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	
Landings by UK vessels into the UK ^(a)											
Imports (b)	91.8	119.0	122.7	114.1	109.5	287.8	357.4	390.8	428.6 R	437.8	
Total supplies (c)	91.8	119.0	122.7	114.1	109.5	287.8	357.4	390.8	428.6 R	437.8	
Exports (b)	5.1	5.3	5.9	4.8	8.2	18.7	19.2	22.6	20.0 R	25.5	
Total available for domestic use (c)	86.7	113.6	116.8	109.3	101.4	269.1	338.2	368.2	408.6 R	412.3	

Source: H.M. Revenue and Customs and Fisheries Administrations in the UK

- (a) Landings are given in terms of landed w eight.
- (b) Excludes fish products.
- (c) Excludes sources of fish other than imports and landings into the UK by UK vessels from sea fisheries.

In 2018, the largest tuna exporters to the UK were Mauritius, the Seychelles and Ecuador (nearly 16 thousand tonnes each), followed by the Philippines (15 thousand tonnes) and Ghana (12 thousand tonnes). Most imported tuna from Europe came from Spain (nearly 7 thousand tonnes).



Contains Collins Bartholomew data. © Collins Bartholomew copyright and database right 2019. *Note: Only countries from which the UK imported more than 1,000 tonnes of tuna are shown.*

Mackerel

The UK is a net exporter of mackerel. UK vessels landed 81 thousand tonnes of mackerel into the UK in 2018. Mackerel imports fell to 14 thousand tonnes and exports fell to 67 thousand tonnes. The amount available for domestic use fell to nearly 28 thousand tonnes. This means that less than a third of the supply of mackerel remains in the UK.

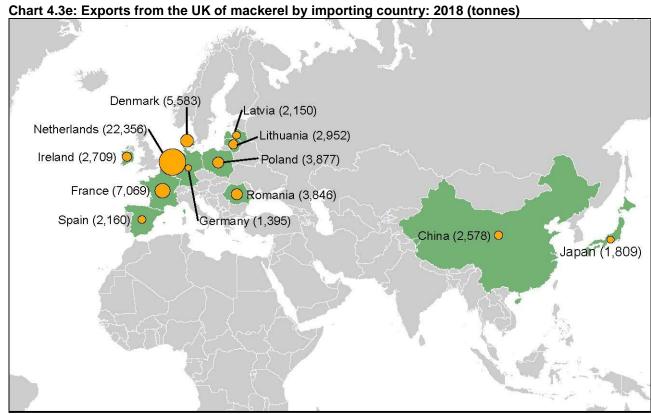
TABLE 4.4e Balance sheet for mackerel for the UK: 2014 to 2018

		Quantit	y ('000 t	tonnes)		Value (£ million)					
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	
Landings by UK vessels into the UK $^{\mathrm{(a)}}$	126.2	94.8	103.9	95.5	80.9	104.1	60.6	88.8	86.4	84.7	
Imports (b)	33.2	19.0	19.0	26.4 R	14.0	53.2	38.9	42.9	52.3 R	40.6	
Total supplies (c)	159.4	113.8	122.9	121.8 R	94.9	157.3	99.4	131.7	138.8 R	125.3	
Exports (b)	120.3	80.3	83.7	77.5 R	67.3	128.5	67.7	81.0	87.4	81.1	
Total available for domestic use (c)	39.1	33.6	39.1	44.3	27.6	28.8	31.7	50.7	51.4 R	44.3	

Source: H.M. Revenue and Customs and Fisheries Administrations in the UK

- (a) Landings are given in terms of landed weight.
- (b) Excludes fish products.
- (c) Excludes sources of fish other than imports and landings into the UK by UK vessels from sea fisheries.

The largest share of mackerel exports in 2018 went to the Netherlands (over 22 thousand tonnes), partly for Dutch consumption but also for processing for African customers. France received 7 thousand tonnes and Denmark nearly 6 thousand tonnes.

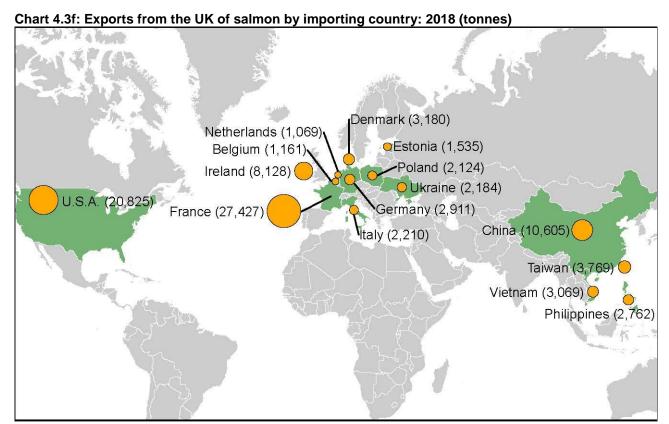


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Salmon

In 2018, the UK exported 100 thousand tonnes of salmon. This species is mostly sourced from UK aquaculture and inland fisheries, as well as from imports. The UK imported 80 thousand tonnes of salmon in 2018, making the UK a net exporter.

In 2018, half of all salmon exports went to EU member states, in particular France, which imported over 27 thousand tonnes. The USA was the second largest importer (nearly 21 thousand tonnes), followed by China (nearly 11 thousand tonnes).



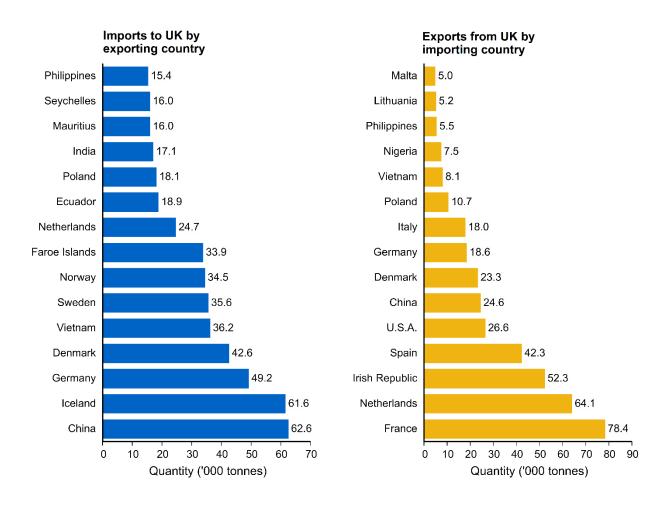
Contains Collins Bartholomew data. © Collins Bartholomew copyright and database right 2019. *Note: Only countries to which the UK exported more than 1,000 tonnes of salmon are shown.*

Imports and exports by country

The largest exporters to the UK in 2018 were China (63 thousand tonnes) and Iceland (62 thousand tonnes). They were followed by Germany (49 thousand tonnes), Denmark (43 thousand tonnes) and Vietnam (36 thousand tonnes).

The UK exported the largest amounts to France (78 thousand tonnes), the Netherlands (64 thousand tonnes), Ireland (52 thousand tonnes) Spain (42 thousand tonnes), and the USA (27 thousand tonnes).

Chart 4.4: Imports and exports by country: 2018



Household consumption and inflation

Household consumption of fish increased slightly to 477 thousand tonnes in 2017. Consumer expenditure on fish rose by 6 per cent to £4.7 billion. Household expenditure on fish as a proportion of overall expenditure on food increased slightly from 5.3 per cent in 2016 to 5.4 per cent in 2017.

TABLE 4.5 Household consumption and inflation: 2008 to 2018

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Household consumption											
('000 tonnes)	510	501	483	472	467	481	479	489	476	477	nd
Population ('000 persons) (a)	60,816	60,907	61,464	61,528	61,946	63,421	63,879	64,188	65,648	66,040	66,436
Consumers expenditure											
on fish (£ million)	3,650	3,711	3,742	3,866	3,998	4,271	4,309	4,512	4,423	4,687	nd
on food (£ million) (b)	67,635	70,143	72,587	73,744	77,523	81,291	80,669	79,906	83,921	86,542	nd
Fish as a % of food (b)	5.4%	5.3%	5.2%	5.2%	5.2%	5.3%	5.3%	5.6%	5.3%	5.4%	nd
Landed Price Index (c)	141.1	141.7	152.2	163.7	153.9	149.3	150.8	146.5	171.9	182.9	188.1
Retail Price Index (d)	123.9	130.3	138.2	151.0	157.4	163.4	168.2	163.2	159.9	171.3	176.9
Consumer Price Index (e)	126.8	131.5	140.1	153.0	158.5	163.6	167.8	161.9	158.2	172.2	178.7

Source: Fisheries Administrations in the UK, Expenditure and Food Survey, Office for National Statistics

Note: Additional data on household purchases are available from the MMO website as supplementary Tables 4.5a and 4.5b.

The landed price index (LPI) measures the average change in the prices of fish landed by UK vessels into the UK at first sale. It provides a measure of domestic inflation in the price of fish landed by UK vessels into the UK. The LPI rose by 3 per cent in 2018.

The consumer price index (CPI) measures the average change in the prices of goods and services bought for the purpose of consumption in the UK. It includes a component for prices of fish, based on a 'basket' of six items: fresh white fish fillets, fresh salmon fillets, frozen prawns, canned tuna, fish fingers, and frozen breaded/battered white fish. The retail price index (RPI) is a similar inflation measure, calculated according to a different formula (see Appendix 4, UK fisheries statistics methodology). The RPI uses the same 'basket' of items for fish.

In 2018, the fish components of the RPI and CPI rose by nearly 3 and 4 per cent respectively compared with 2017.

⁽a) The population estimates have been updated to be consistent with the Living Costs and Food Survey figures, which provide the basis for the household consumption and consumers' expenditure figures given in this table.

⁽b) Including non-alcoholic beverages.

⁽c) The landed price index has been calculated on an annual basis with 2000 = 100.

⁽d) The fish component of the RPI which includes canned and processed fish. The index has been re-based such that 2000 = 100.

⁽e) The fish component of the CPI which includes canned and processed fish. The index has been re-based such that 2000 = 100.

GDP for fishing

The gross value added (GVA) for fishing has fluctuated in recent years. GVA for fishing now stood at £784 million in 2018, a decrease increase of 2 per cent in the year.

There has been some fluctuation in the GVA in the wider agriculture, forestry and fishing sector over the past decade, with fishing forming 6.4 per cent of GVA in this sector in 2018, a small decrease compared with 2017.

UK gross domestic product increased in each of the last nine years and stood at £1,919 billion in 2018.

TABLE 4.6 GDP for fishing: 2008 to 2018

f million	(unless	otherw ise	specified)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
GDP for Fishing (a)(b)											
Current price gross value added at basic prices (KK37)	452	466	577	490	539	491	581	569	718	796	784
Output index (chain volume measures) (L2KO) (2016=100)	86.1	88.1	91.0	91.4	91.3	91.0	103.3	99.9	100.0	97.3	90.9
GDP for Agriculture, Forestry a	nd Fish	ing ^(b)									
Current price gross value added at basic prices (KKD5)	9,961	8,467	10,469	10,015	10,233	11,554	11,820	11,177	11,448	12,289	12,260
Output index (chain volume measures) (L2KL) (2016=100)	96.4	90.6	90.2	100.0	93.1	93.5	104.9	106.0	100.0	103.0	100.6
GDP at Market Prices (b)											
Current price GDP at market prices (KKP5) (£ billion)	1,430	1,400	1,430	1,468	1,515	1,573	1,646	1,692	1,756	1,844	1,919
Chain volume measures index (YBEZ) (2016=100)	91.0	87.1	88.6	90.1	91.4	93.2	96.0	98.2	100.0	101.8	103.2
Percentage contribution of GV	A from	fishing	to GVA	for agr	iculture	, huntin	g, fore	stry and	d fishind	a	
Current prices (%)	4.5%	5.5%	5.5%	4.9%	5.3%	4.2%	4.9%	5.1%	6.3%	6.5%	6.4%

Source: Office for National Statistics

⁽a) GDP for fishing includes landings abroad and aquaculture, according to the KK37 index.

⁽b) GDP figures compiled in line with ESA2010 since September 2014. All values have been recalculated since the last publication.

5 Main stocks and their level of exploitation

Commentary provided by Dr Carl M. O'Brien CBE, Defra Chief Fisheries Science Adviser

The management of stocks

Fisheries are managed using a Total Allowable Catch or TAC (corresponding to a particular harvesting rate), and technical measures (mainly mesh sizes and minimum landing sizes, but sometimes closed areas, which determine the smallest fish that can be caught and landed) based on scientific advice.

In the EU, the TAC is set each year by the Council of Ministers following negotiations on catch options that are provided by the Advisory Committee (ACOM) of the International Council for the Exploration of the Sea (ICES), an independent scientific body. For the main North Sea stocks these options take into account the terms of a management agreement between the EU and Norway. Once a TAC is agreed for each stock and fishing area, it is allocated as quotas to Member States in accordance with fixed percentages based on historic fishing rights.

In past years, some seriously depleted stocks have become the subject of emergency measures and recovery plan proposals. Since 2003, the TAC and fishing mortality for some of these stocks have been linked to effort control measures that restrict the number of fishing days at sea per annum permitted for fleets capturing recovery species.

Scientific assessment and advice

ICES advice is based on stock assessments carried out at international working groups, where fishery scientists from the UK and the other nations compile fisheries data, biological data and survey data for use in fisheries science models. The age structure of a stock (the relative proportion of the different age groups) is largely determined by the fishing rate and by the numbers of young fish that enter the stock each year. When information on age structure is combined with data on landings, fishing effort, and the results of standardised stock surveys carried out by research vessels, the models are able to estimate the historical trend in fishing rate and stock abundance, up to the last full year of data. The assessment is then used to forecast the expected catch in an upcoming TAC year for a range of fishing rate options, taking into account the number of young fish that are expected to enter the stock, based either on survey data, or a recent historic average.

This chapter mainly summarises the present state of the main stocks based on advice from ACOM released during 2018, which evaluated stock assessments using fisheries data for years up to and including 2017, and survey data up to and including 2018. The 2018 ACOM advice formed the basis for the EU proposals that led to the TACs and other measures agreed for 2019 by the EU Council of Ministers.

Details are contained within Council Regulation (EU) No 2019/124 of 30 January 2019 fixing for 2019 the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union vessels, in certain non-Union waters, and amending Regulation (EU) 2019/529 of 28 March 2019. Subsequently, changes may be made during 2019.

The fisheries zones used to base ICES' stock assessments on are sometimes different from those used to allocate TACs. Table 5.1 below shows the generic title of each fishing zone and the specific areas included for ICES' stock assessments and EU TAC allocations.

TABLE 5.1 Fishing areas used for ICES stock assessments and EU TAC allocations

		F	ishing areas included in:
Species	Title	ICES Stock Assessments	EU TAC/Quota allocations
Cod	North Sea	IV, VIId, IIIa	IIa (EC), IV ^(a)
	West of Scotland	VIa	Vb (EC), Vla
	Irish Sea	VIIa	VIIa
	Celtic Sea	VIIe-k	VII (ex VIIa, VIId), VIII, IX, X; CECAF 34.1.1 (EC)
Haddock	North Sea, Skagerrak	IV, IIIa, VIa	IIa (EC), IV
	and West of Scotland	iv, ma, via	Vb (EC), Vla
Plaice	North Sea	IV	IIa (EC), IV
	Irish Sea	VIIa	VIIa
Sole	North Sea	IV	II, IV
	Irish Sea	VIIa	VIIa
	Eastern Channel	VIId	VIId
	Western Channel	VIIe	VIIe
Herring	North Sea	IV, VIId, IIIa	IV (EC and Norway North of 53° 30'N) (a)
Mackerel	North East Atlantic	All ICES sub-areas	II (ex EC), Vb (EC), VI, VII, VIIIabde, XII, XIV (a)

Source: ICES and the European Commission

Summary stock presentation

For the main fish stocks, a summary of ICES' data and assessments, where available, has been provided. These comprise four charts (a to d) showing total removals or landings, fishing mortality rates (F), recruitment and spawning stock biomass (SSB) since 1998 and exceptionally, since either 1996 or 1997. The data are official statistics and not subject to National Statistics accreditation. ICES' stock assessments since 2008 for each of these fisheries are also shown, with the exception of the recently combined stock North Sea, Skagerrak and West of Scotland haddock whose assessments begin in 2014. The location of the relevant areas for each stock is shown in Appendix 3.

It is important to note that the figures shown are, for each stock, the time series of estimates of abundance and fishing mortality mainly provided by ICES in 2018. These are based on fishery and survey data collected up to the most recent year, unless otherwise commented upon in the narrative provided.

Total removals or landings - Chart a

Total removals equals total reported fish landings plus an estimate for discards and may include estimates of non-attributive losses. Landings are used where total removal figures are not available and charts are headed accordingly.

⁽a) Only largest stock shown. TACs have been set for other fishing areas covered by the stock assessment.

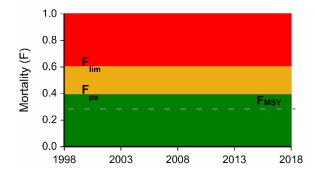
Fishing Mortality (F) - Chart b

Fishing mortality rate (F) is a measure of the proportion of fish taken from a stock each year by fishing activity. Fishing mortality rates are calculated from mathematical models used to assess fish stocks. An F value of 1 indicates that approximately 60 per cent of a stock is removed by fishing activity.

ICES provides fisheries advice that is consistent with the broad international policy norms of the precautionary approach, maximum sustainable yield (MSY), and an ecosystem approach while at the same time responding to the specific needs of the management bodies requesting advice as clients of ICES.

Since 1999 the ICES' advice has identified which catch options meet precautionary criteria. These criteria aim to ensure sustainability by keeping the fishing rate below a maximum precautionary level, F_{pa} (set low enough to allow a margin of error sufficient to keep F below an **upper limit** level, F_{lim}). The nature of ICES' fisheries advice has evolved over time and that evolution included options for a transition process to attain full implementation of the MSY approach by 2015 where possible and, on a progressive, incremental basis at the latest by 2020. Ecosystem limitations on fisheries have typically not yet been identified in management policies in the ICES' area. However, as the EU Marine Strategy Framework Directive (MSFD) is implemented, such limits will be recognized to achieve environmental objectives, especially regarding biodiversity, sea floor integrity, and food webs. In advance of this, ICES continues to strive towards providing advice that includes a greater range of information on fisheries and the marine ecosystem. For the first time in 2012, and then subsequently in the following years to date, ICES presented options that incorporate technical interactions for mixed demersal fisheries in the North Sea – options are given as scenarios based on single-stock assessments combined with knowledge on the species composition of catches in North Sea fisheries. In this way, for example, harvests may be further limited in consideration of potential fishery impacts on marine ecosystems beyond the impact on target fish stocks. Recently, ICES' options have incorporated MSY ranges where available. Additionally, ICES now provides similar options for mixed demersal fisheries in the Celtic Sea.

For each of the main stocks a time series of F will be plotted against a colour coded background highlighting the precautionary levels set by ICES as shown below, for example. In addition, the value of F_{MSY} , presented as a grey hashed line, is shown when available.



Green: Harvested sustainably - where F is below F_{pa} the stock is deemed to be fished in a sustainable way and fishing pressure is below the level recommended by ICES.

Amber: At risk of being harvested unsustainably - where F is above F_{pa} and below F_{lim} then fishing pressure is higher than the maximum level recommended by ICES. If it is not reduced it could lead to depletion of the stock in the future.

Red: Harvested unsustainably - where F is above F_{lim} fishing pressure is much higher than the maximum level recommended by ICES and if continued is likely to deplete the stock, if it has not done so already.

For some stocks ICES may have given only a level for F_{pa} . In these cases, no amber region will appear on the chart. Additionally, in exceptional stock cases, ICES may review the data and modelling approaches for which the previously adopted precautionary fishing rates (F_{pa} and F_{lim}) are no longer appropriate, for example. In such cases, no coloured regions will appear on the chart; but this is not the case for any stock in this year's update.

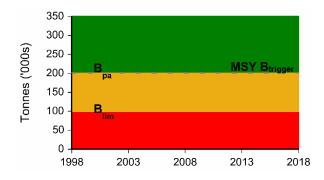
Recruitment - Chart c

Recruitment is the number of fish becoming available to a fishery stock in a year.

Spawning Stock Biomass (SSB) - Chart d

Spawning Stock Biomass (SSB) is the total estimated weight of all sexually mature fish in a stock. Since 1999 the ICES' advice has identified which catch options meet precautionary criteria. These criteria aim to ensure sustainability by keeping SSB above a **minimum precautionary** level, B_{pa} (set high enough to allow a margin of error sufficient to keep SSB above a **lower limit** level, B_{lim}).

For each of the main stocks a time series of SSB will be plotted against a colour coded background highlighting the precautionary levels set by ICES as shown below. In addition, the value of MSY $B_{trigger}$, presented as a grey hashed line, is shown when available. MSY $B_{trigger}$ is a biomass reference point that triggers a cautious response to reduce fishing mortality and is intended to safeguard against a low SSB when fishing at F_{MSY} .



Green: Full reproductive capacity - where SSB is above B_{pa} the fish stock is deemed to be in a healthy state and above the minimum level recommended by ICES.

Amber: At risk of suffering reduced reproductive capacity - where SSB is below B_{pa} but above B_{lim} the stock has been classified as not being so low that it could be classed as being depleted. However, the amount of adult fish has fallen to a level where there is a risk that production is likely to be reduced.

Red: Reduced reproductive capacity - where SSB is below B_{lim} the stock has been classified as depleted and the stock is unlikely to be as productive as it could be. This indicates that fishing pressure needs to be reduced in order to give the stock a chance to rebuild.

For some stocks ICES has only supplied a level for B_{pa}. In these cases no amber region will appear on the chart.

Further information

More information on ICES' precautionary levels and the details of F_{MSY} and MSY $B_{trigger}$ can be found on the ICES web site www.ices.dk.

ICES stock assessments

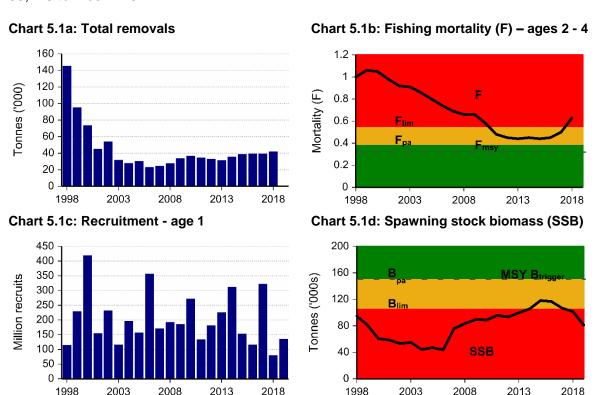
The fish stock assessments presented here are derived from annual ACOM reports, and are categorized according to the ICES' definition of the state of the stock. The ICES' advice on the state of stocks is based on assessments carried out using the most up to date data available in that year.

It is important to note that assessments for previous years have not been updated using more recent data. The comparison of SSB with B_{pa} is done using the value of SSB at the beginning of the year in which the assessment was carried out. Where no B_{pa} value exists, the stock is treated as unknown.

Code	Assessment description
	Indicates stocks which are suffering reduced reproductive capacity
	Indicates stocks which are at risk of suffering reduced reproductive capacity
	Indicates stocks which are at full reproductive capacity but are either at risk of being harvested unsustainably or are being harvested unsustainably
	Indicates stocks which are at full reproductive capacity and are being harvested sustainably
	Indicates stocks where the current stock status is unknown

North Sea Cod – in ICES Sub-area IV (North Sea), ICES Division VIId (Eastern Channel) and ICES Division IIIa (Skagerrak)

The international fishing rate has been high since the 1980s, and has shown a decline since 2000. The number of young cod (recruitment) has been low since 1987, and even lower since 1998, causing serious concern. Since 2000, ICES advised that the TAC should be very low, or zero, and the EU reduced the TAC from 81,000 tonnes in 2000 to 48,600 tonnes in 2001, 49,300 tonnes in 2002, and 27,300 tonnes in 2003, 2004 and 2005. The minimum mesh size in the directed fisheries for cod was also increased to 120 mm in 2003. Agreement was reached in 2004 within the EU on a formal recovery plan that was operational during the TAC and management decision processes of 2004, effectively rendering the plan operational in 2005. Subsequently, this was repealed and replaced by Council Regulation (EC) No 1342/2008 to establish a long-term plan for cod stocks. The 2018 ICES' assessment indicates that generally fishing mortality has been declining since 2000 but remains above F_{MSY} and that SSB has significantly increased from the historic low in 2006 but is still below MSY $B_{trigger}$. The TAC for 2019 is 29, 437 tonnes, compared with 43,156 tonnes in 2018 and 39,220 tonnes in 2017.



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: North Sea Cod

The cod stock in the North Sea has been assessed as suffering reduced reproductive capacity by ICES since 2008. The spawning stock biomass has increased from the historic low in 2006 and is now above B_{lim} in the vicinity of MSY B_{trigger}. In 2015 and 2016, it was assessed as at risk of suffering reduced reproductive capacity; whilst in 2017 the stock was assessed as being at full reproductive capacity and being harvested sustainably and in 2018 it was assessed as at risk of suffering reduced reproductive capacity.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Stock Assessments												

West of Scotland Cod - in ICES Division VIa

Previously, the cod stocks west of Scotland have been assessed as heavily over-exploited with respect to the rate that would lead to high long-term yields (F_{MSY}). SSB has increased slowly from an all time low in 2006 but remains well below B_{lim} . ICES called for a recovery plan in 2000, with low or zero catches, and the EU has since cut the cod TACs significantly, implemented two small closed areas, and in 2003 increased the main whitefish mesh size to 120 mm in line with the North Sea. Subsequently, the European Commission enacted Council Regulation (EC) No 423/2004 that established measures for the recovery of cod stocks; this was repealed and replaced by Council Regulation (EC) No 1342/2008 to establish a long-term plan for cod stocks which includes a west of Scotland management line that follows the 200 m depth contour – the plan was further modified in 2016. The TAC for 2019 is a by-catch provision only, the same as in the seven previous years since 2012.

Chart 5.2a: Total removals

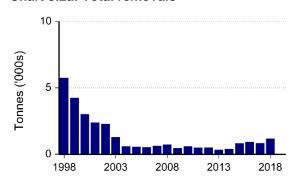


Chart 5.2b: Total mortality - ages 2 - 5

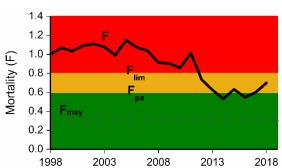


Chart 5.2c: Recruitment - age 1

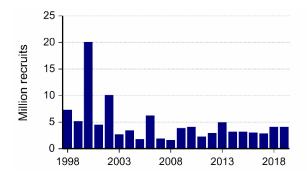
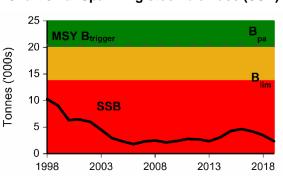


Chart 5.2d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: West of Scotland Cod

Cod stocks in the West of Scotland have been assessed as suffering reduced reproductive capacity from 2008 to 2017.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Stock Assessments	(a,b)	(a,b)	(a,b)	(a,b)							

- (a) Total mortality cannot be accurately partitioned into F and M.
- (b) Status uncertain in terms of F relative to F_{pa}, but suffering reduced reproductive capacity.

Irish Sea Cod - in ICES Division VIIa (Irish Sea)

The cod stocks in the Irish Sea were depleted, and landings fell rapidly during the 1980s and 1990s. Historically, the fishing rate has been very high, spawning stocks have fallen below both the precautionary and the lower limit level, and the abundance of young cod has been in decline since 1990. After 2000, the EU significantly reduced the cod TAC, closed the cod spawning area in the western Irish Sea during the spawning season, and increased the main whitefish mesh size to 100 mm. The European Commission enacted a Council Regulation (EC) No 423/2004 that established measures for the recovery of cod stocks which was repealed and replaced by Council Regulation (EC) No 1342/2008 to establish a long-term plan for cod stocks. The assessment was benchmarked by ICES in 2017 and provides a significant change in perception showing that the fishing mortality rate has been below $F_{\rm MSY}$ since 2013 and very low in 2016 and 2017. The cod TAC agreed for 2019 is 807 tonnes, compared with 695 tonnes in 2018; and 146 tonnes in both 2017 and 2016.

Chart 5.3a: Total landings

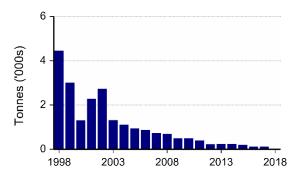


Chart 5.3b: Fishing mortality (F) - ages 2 - 4

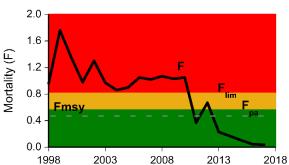


Chart 5.3c: Recruitment - age 0

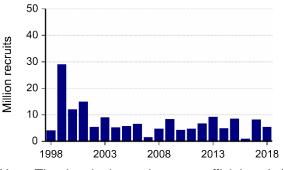
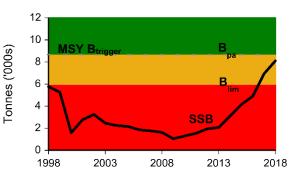


Chart 5.3d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: Irish Sea Cod

Irish Sea cod has been assessed to be suffering reduced reproductive capacity between 2008 and 2016; whilst in 2017 the stock was assessed as being at full reproductive capacity and being harvested sustainably, although in 2018 it was assessed as at risk of suffering reduced reproductive capacity.



Celtic Sea Cod – in ICES Divisions VIIe-k

Internationally, cod in ICES Divisions VIIe-k is caught in a range of fisheries including gadoid trawlers, *Nephrops* trawlers, otter trawlers, beam trawlers and gill-netters. This species is managed within a wider area; namely, ICES Divisions VIIb-k (excluding ICES Division VIId from 2009), ICES Sub-areas VIII, IX, X and CECAF 34.1.1, but ICES' advice applies only to ICES Divisions VIIe-k. The Celtic Sea cod stock was excluded from the EU's 2004 cod recovery plan. In 2012 the ICES' cod assessment revised the time series estimates of fishing rate, spawning stock and recruitment, following a review of data and modelling approaches for which the previously adopted precautionary fishing rates (F_{pa} and F_{lim}) were no longer appropriate. In 2015 the ICES' cod assessment revised the precautionary fishing rates and the assessment in 2018 shows that the fishing mortality has been above F_{MSY} for the entire time-series.

Chart 5.4a: Total landings

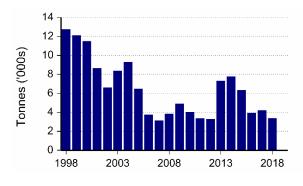


Chart 5.4b: Fishing mortality (F) - ages 2 - 5

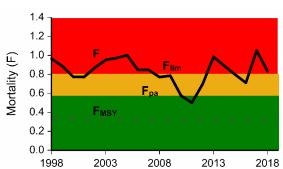


Chart 5.4c: Recruitment - age 1

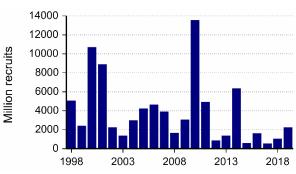
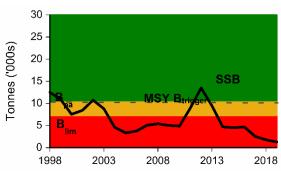


Chart 5.4d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: Celtic Sea Cod

In 2008, cod in the Celtic Sea was assessed as at risk of suffering reduced reproductive capacity and in 2009 and 2010 an assessment was unable to be made. Subsequently in 2011, cod in the Celtic Sea was assessed as being at full reproductive capacity and being harvested sustainably, and in 2012, 2013 and 2014 it was assessed as remaining at full reproductive capacity but with fishing rate unknown with respect to precautionary values F_{pa} and F_{lim} . In 2015 and 2016, it was assessed as at risk of suffering reduced reproductive capacity; whilst in 2017 and 2018 the stock was assessed as suffering reduced reproductive capacity.



North Sea, Skagerrak and West of Scotland Haddock – in ICES Sub-area IV (North Sea) and ICES Divisions IIIa (Skagerrak – Kattegat) and VIa (West of Scotland)

The haddock stock in the North Sea and Skagerrak is managed under an EU-Norway long-term management plan which is intended to constrain harvesting within safe biological limits and to provide for sustainable fisheries. Recruitment has been characterized by occasional large year-classes, the last of which was the strong 1999 year-class. Since the 2014 assessment, this haddock stock has been combined with haddock in the Northern Shelf and assessed as a single stock by ICES.

The 2018 assessment shows that the fishing mortality rate has been fluctuating above F_{MSY} for most of the time series and that SSB has been mostly above MSY $B_{trigger}$ since 2002; and that apart from the relatively strong 2005 and 2009 year-classes recent recruitment has been poor.

In the North Sea, the haddock TAC was set at 33,643 tonnes in 2017, 41,767 tonnes in 2018 and 28,950 tonnes in 2019.

In the West of Scotland, the TAC for 2019 is 3,226 tonnes, compared with 4,654 tonnes in 2018 and 3.697 tonnes in 2017.

Chart 5.5a: Total removals

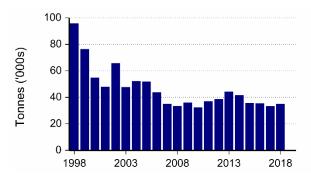


Chart 5.5b: Fishing mortality (F) - ages 2 - 4

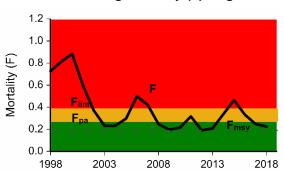


Chart 5.5c: Recruitment - age 0

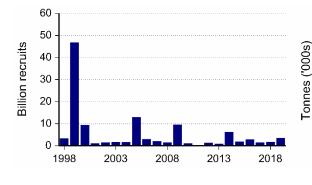
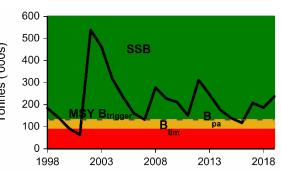


Chart 5.5d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: North Sea, Skagerrak and West of Scotland

In 2014 and 2015, ICES has assessed the new combined area haddock stock as being at full reproductive capacity and being harvested sustainably. In 2016, however, it was assessed as at risk of suffering reduced reproductive capacity; whilst in 2017 and 2018 the stock was again assessed as being at full reproductive capacity and being harvested sustainably.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Stock Assessments											

North Sea Plaice – in ICES Sub-area IV (North Sea)

The plaice assessments have included estimates of discards since 2004. This has changed the perception of the plaice stock relative to precautionary values. It shows landings and SSB falling steeply after 1990 as the fishing rate increased to a peak in 1998, with SSB currently well above MSY $B_{trigger}$, and with the fishing rate estimated to have decreased to below F_{pa} and consistent with high long-term yields (F_{MSY}). The TAC for 2019 is 125,435 tonnes, compared with 112,643 tonnes in 2018 and 129,917 tonnes in 2017.

Chart 5.6a: Total removals

200 180 -160 -140 -120 -100 -80 -60 -40 -20 -0

2008

2013

2018

Chart 5.6b: Fishing mortality (F) - ages 2 - 6

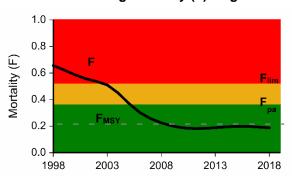


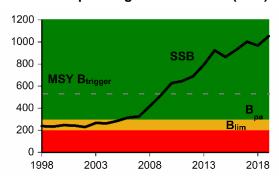
Chart 5.6c: Recruitment - age 1

2003

1998

2000 1800 1600 Million recruits 1400 1200 1000 800 600 400 200 1998 2003 2008 2013 2018

Chart 5.6d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: North Sea Plaice

The North Sea plaice assessment in 2007 was that the stock was at risk of suffering reduced reproductive capacity. Subsequent assessments have improved and since 2008 the stock is assessed to be at full reproductive capacity and being harvested sustainably.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Stock Assessments												

Irish Sea Plaice - in ICES Division VIIa (Irish Sea)

The fishing rate on Irish Sea plaice has shown a declining trend since the early 1990s and the SSB trend show an increase in stock size since the mid-1990s. Discards are included in the ICES' assessment; together with discard survivability estimates. The assessment was benchmarked by ICES in 2017 and precautionary boundaries provided; together with values for F_{MSY} and MSY $B_{trigger}$. The plaice TAC agreed for 2019 is 3,075 tonnes, compared with 1,793 tonnes in 2018 and 1,098 tonnes in the three previous years (2017, 2016 and 2015).

Chart 5.7a: Total landings

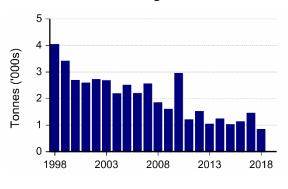


Chart 5.7b: Fishing mortality (F) – ages 3 – 6

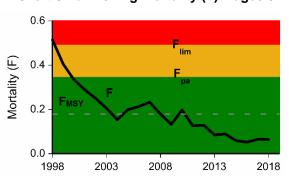


Chart 5.7c: Recruitment - age 2

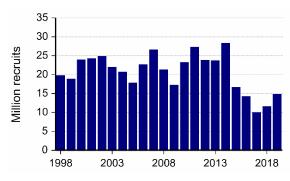
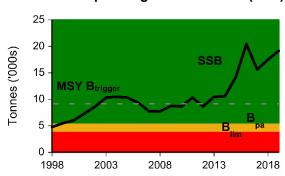


Chart 5.7d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: Irish Sea Plaice

In 2008 and 2009 Irish Sea plaice has been assessed as being at full reproductive capacity and being harvested sustainably. Since 2010 the available information has been inadequate to determine stock status relative to precautionary boundaries until 2017 when the stock was again assessed as being at full reproductive capacity and being harvested sustainably.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Stock Assessments												

North Sea Sole – in ICES Sub-area IV (North Sea)

The fishing rate for North Sea sole has fluctuated above the precautionary level in the past, declining since 1999 and close to the rate that would lead to high long-term yields (F_{MSY}) in 2017. Periodic good year-classes have raised SSB above the precautionary level from time to time. SSB has been increasing since 2007 and has been estimated at above MSY $B_{trigger}$ since 2012. The TAC agreed for 2019 is 12,555 tonnes, compared with 15,694 tonnes in 2018 and 16,123 tonnes in 2017.

Chart 5.8a: Total landings

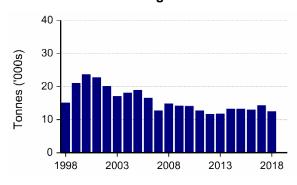


Chart 5.8b: Fishing mortality (F) - ages 2 - 6

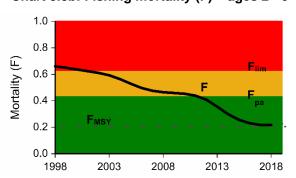


Chart 5.8c: Recruitment - age 1

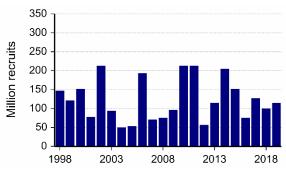
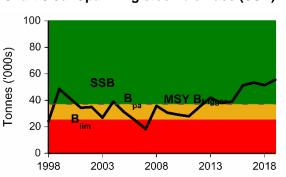


Chart 5.8d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: North Sea Sole

North Sea sole assessments have varied widely since 2008. However, since 2011 North Sea sole has been assessed as being at full reproductive capacity and being harvested sustainably.



Irish Sea Sole - in ICES Division VIIa (Irish Sea)

The Irish Sea sole fishing rate is presently well below the rate that would lead to high long-term yields (F_{MSY}) . SSB has declined since the mid-1980s to low levels and has been below Blim since 2004. The sole TAC agreed for 2019 is 414 tonnes, compared with 40 tonnes in the three previous years (2018, 2017 and 2016).

Chart 5.9a: Total landings

1.6 1.2 0.8 0.4 0.0 1998 2003 2008 2013 2018

Chart 5.9b: Fishing mortality (F) - ages 4 - 7

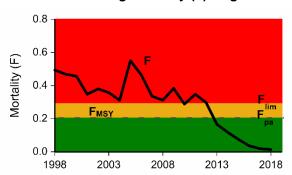


Chart 5.9c: Recruitment - age 2

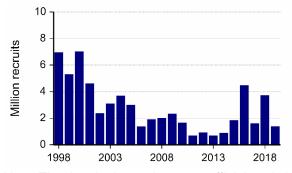
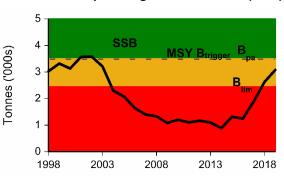


Chart 5.9d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: Irish Sea Sole

Since 2008 the stock has been assessed as suffering reduced reproductive capacity.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Stock Assessments												1

Eastern Channel Sole - in ICES Division VIId (Eastern Channel)

Sole stocks in the Eastern and Western Channel are biologically discrete stocks that are assessed and managed separately. In the larger, Eastern Channel stock, the assessed fishing rate has generally been above F_{MSY} throughout the time series but has recently been decreasing, and SSB has fluctuated without trend since the 1980s but has decreased and is now around B_{lim} . The TAC for 2019 is 2,515 tonnes, compared with 3,405 tonnes in 2018 and 2,769 tonnes in 2017.

Chart 5.10a: Total landings

Chart 5.10b: Fishing mortality (F) - ages 3 - 8

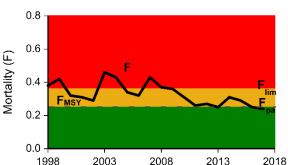


Chart 5.10c: Recruitment - age 1

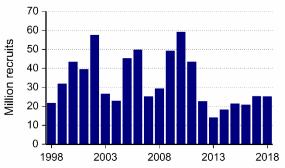
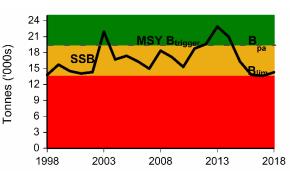


Chart 5.10d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: Eastern Channel Sole

The Eastern Channel sole stock had consistently been assessed at full reproductive capacity since 2008. However, from 2008 to 2015 the stock was judged to be at risk of being harvested unsustainably. Since 2016 the stock was assessed at risk of suffering reduced reproductive capacity.



Western Channel Sole – in ICES Division VIIe (Western Channel)

Sole stocks in the Eastern and Western Channel are biologically discrete stocks that are assessed and managed separately. In the smaller, Western Channel stock, the accepted assessment in 2008 indicated that the assessed fishing rate has been above F_{pa} since 1979, and that SSB has declined since 1980 to an historic low. The assessment in 2009 was merely indicative of trends, while in 2010 an analytical assessment was provided but one for which it was not possible to determine current stock status relative to precautionary boundaries. Since 2012 an analytical assessment has been provided but one for which it was not possible to determine stock status relative to precautionary boundaries as these were withdrawn by ICES for this stock until 2015. Fishing mortality is estimated to have been below F_{MSY} since 2009 and SSB has been above MSY $B_{trigger}$ since 2009. The TAC for 2019 is 1,242 tonnes, compared with 1,202 tonnes in 2018 and 1,178 tonnes in 2017.

Chart 5.11a: Total landings

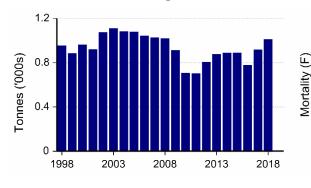


Chart 5.11b: Fishing mortality (F) - ages 3 - 7

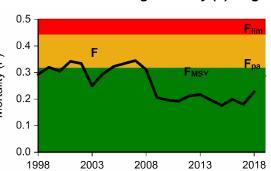


Chart 5.11c: Recruitment - age 1

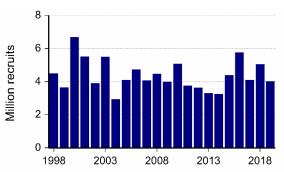
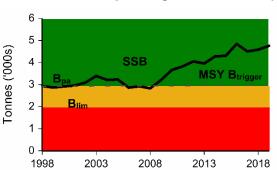


Chart 5.11d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: Western Channel Sole

In 2008, VIIe sole has been assessed as a stock at risk of suffering reduced reproductive capacity. Assessments were unable to be made in 2009 and 2010 while in 2011 an assessment was undertaken but the precautionary reference points were withdrawn by ICES. The same situation is the case in 2012, 2013 and 2014. Subsequently, however, in the years 2015-2018, it was assessed as being at full reproductive capacity and being harvested sustainably.

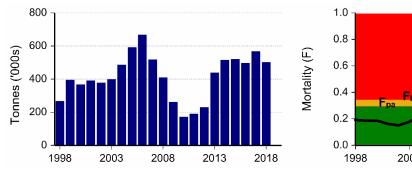
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Stock Assessments											

North Sea Herring – in ICES Sub-area IV (North Sea), ICES Division VIId (Eastern Channel) and ICES Division IIIa (Skagerrak – Kattegat)

The North Sea herring stock, which collapsed in the 1970s and was closed to fishing for several years, subsequently recovered, and although it fell back in the mid-1990s, it has again been rehabilitated. In 2018, SSB was above the precautionary level with a moderate fishing rate on both juvenile and adult herring. Recruitment was below average between 2003 and 2013, stronger in 2014 but then returning to lower values in recent years; with the two lowest year-classes falling within the recent four of the last 30 years. The TAC in 2019 is 385,008 tonnes, compared with 600,588 tonnes in 2018 and 481,608 tonnes in 2017.

Chart 5.12a: Total landings

Chart 5.12b: Fishing mortality (F) - ages 2 - 6



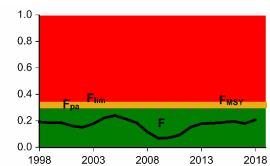
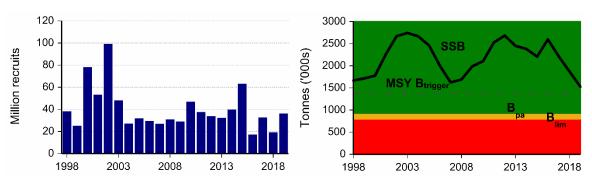


Chart 5.12c: Recruitment - age 0

Chart 5.12d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: North Sea Herring

North Sea herring was assessed as a stock at risk of suffering reduced reproductive capacity for the years 2008 to 2010, inclusive. Since 2011, North Sea herring has been assessed as being at full reproductive capacity and being harvested sustainably below the rate that would lead to high long-term yields.



North East Atlantic Mackerel – combined Southern, Western and North Sea spawning components

Mackerel is assessed as the single North East Atlantic (NEA) stock which combines the Southern, Western and North Sea spawning components. SSB has increased considerably since the early 2000s and remains high above MSY $B_{trigger}$. There has been a succession of strong year-classes since the early 2000s. New management measures adopted from 2009 led to an increase of almost 33 per cent in the 2009 TAC in the NEA for mackerel, while maintaining measures to protect the North Sea spawning component. A TAC of 653,438 tonnes was agreed for 2019, with shares to be allocated in line with the 2014-2018 arrangement for the stock; compared with 816,797 tonnes in 2018 and 1,020,996 tonnes in 2017. For reference, the TAC was not agreed for the years 2011 to 2016, inclusive.,

Chart 5.13a: Total removals

Chart 5.13b: Fishing mortality (F) - ages 4 - 8

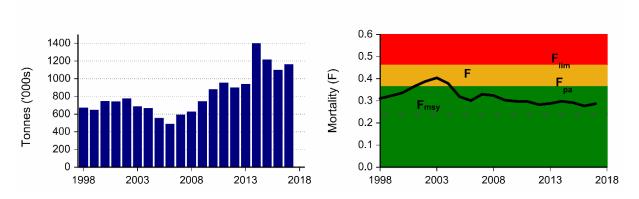
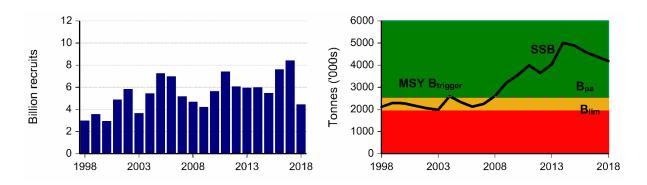


Chart 5.13c: Recruitment - age 0

Chart 5.13d: Spawning stock biomass (SSB)



Note: The data in these charts are official statistics and not subject to National Statistics accreditation.

ICES stock assessment: North East Atlantic Mackerel

From 2008 to 2012 North East Atlantic mackerel has been assessed as being at full reproductive capacity but either at risk of or being harvested unsustainably. Between 2013 and 2015, the stock has been assessed as being at full reproductive capacity and being harvested sustainably. In 2016 North East Atlantic mackerel was judged to be at risk of being harvested unsustainably, although assessed as being at full reproductive capacity; whilst in 2017 and 2018 the stock was again assessed as being at full reproductive capacity and being harvested sustainably.



(a) Status uncertain in terms of SSB relative to Bpa; but harvested unsustainably

6 Overview of the world fishing industry

Introduction

The world catch data presented in this chapter have been extracted from the most recently available data from the Food and Agricultural Organisation (FAO) of the United Nations. The tables present annual statistics of nominal catches (see Appendix 2, Glossary of terms). The data are official statistics and are not subject to National Statistics accreditation. The FAO updates historic data frequently. Revisions have not been highlighted in the following tables.

World catch

Table 6.1 shows that in 2017, the world catch from marine fishing was 80.1 million tonnes, more than 3 per cent higher than in 2016. Catches by the Central and South American fleet rose by more than 10 per cent while European fleet landings rose by 9 per cent and African fleet landings by around 5 per cent. Vessels from Asia and the Middle East caught 51 per cent of world landings in 2017 and those by European accounted for 18 per cent.

TABLE 6.1 World catch by continent: 2007 to 2017

igures refer to Marine Fishing	g Areas unl	ess other	wise spec	cified						(Million t	Million tonnes)	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Europe	13.1	12.8	13.0	13.5	13.0	12.7	13.1	13.4	13.7	13.3	14.5	
Africa	4.5	4.6	4.8	5.0	4.9	5.6	5.4	5.7	5.8	6.3	6.6	
North America	6.0	5.5	5.3	5.4	6.2	6.0	6.2	6.1	6.1	6.0	6.1	
Central & S. America ^(a)	15.7	15.9	15.2	11.5	15.8	11.8	11.9	10.1	10.8	9.6	10.6	
Asia ^(b)	39.3	38.7	38.6	39.2	39.3	39.8	40.3	42.0	41.9	41.0	41.0	
Oceania	1.4	1.2	1.2	1.2	1.2	1.3	1.2	1.3	1.4	1.4	1.4	
Other nei ^(c)											-	
otal Marine Areas	80.0	78.8	78.2	75.9	80.5	77.1	78.1	78.5	79.8	77.5	80.1	

Source: FAO

- (a) Central & S.America includes the Caribbean.
- (b) Asia includes the Middle East.
- (c) Not elsewhere included.

Note: The data in this table are official statistics and are not subject to National Statistics accreditation.

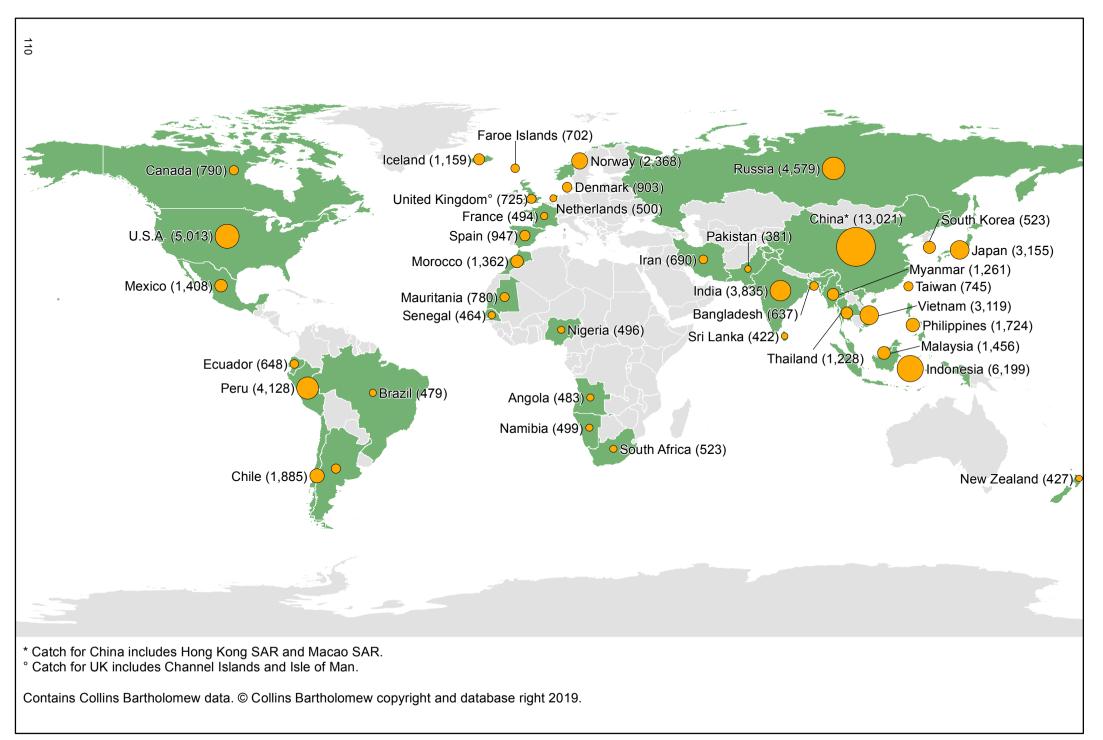
Note: Additional data on world catch by nationality of vessel are available from the MMO website as supplementary Table 6.1a.

Chart 6.1 shows the total catch by major fishing nations in terms of quantity caught in 2016.

In 2017, China (including Hong Kong and Macao SAR) caught the largest amount of fish, just over 13 million tonnes. Indonesia had the second largest catch of 6.2 million tonnes, followed by the United States of America (5 million tonnes), the Russian Federation (4.6 million tonnes) and Peru (4.1 million tonnes).

In 2017, Spain caught 947 thousand tonnes, the highest of any country in the European Union. FAO figures show a UK catch of 735 thousand tonnes in 2017 (including 10 thousand tonnes by the Isle of Man and the Channel Islands). Note this is different from the figure of 725 thousand tonnes shown in Table 3.1 of Chapter 3. This will exclude some landings by the Channel Islands' fleet but insufficient amounts to account for the full difference. It may be that FAO has mistakenly included landings for the Isle of Man and Channel Islands in separate figures for the UK.

Chart 6.1: World catch by nationality of vessel, major catchers of fish: 2018 ('000 tonnes)



FAO fishing areas are shown in Chart 6.2. Of the 80.1 million tonnes of fish caught in 2017, 56 per cent were caught in the Pacific Ocean, 28 per cent in the Atlantic Ocean and 15 per cent in the Indian Ocean (see Table 6.2).

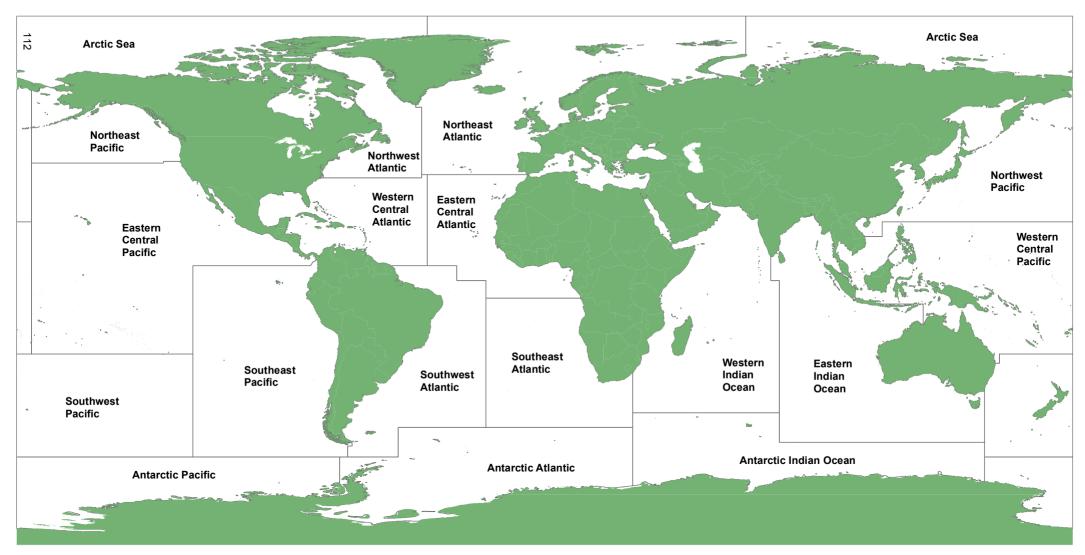
In 2017, landings were up by 9 cent from the Indian Ocean and by 7 percent from the Atlantic but from the Pacific were unchanged. Landings from the North East Atlantic – the seas which are most fished by the European fleet – increased by 12 per cent.

TABLE 6.2 World catch by sea area: 2007 to 2017

Figures refer to Marine Fishing		•								(Million	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Atlantic Ocean											
Arctic Sea		-	-								
Northw est Atlantic	2.2	2.1	2.1	2.1	2.0	2.0	1.9	1.8	1.8	1.8	1.7
Northeast Atlantic	8.9	8.5	8.5	8.7	8.0	8.0	8.5	8.7	9.1	8.3	9.3
Western Central Atlantic	1.4	1.3	1.4	1.1	1.5	1.3	1.2	1.2	1.4	1.5	1.4
Eastern Central Atlantic	3.6	3.9	4.2	4.5	4.4	4.2	4.3	4.5	4.4	4.8	5.′
Mediterranean and Black Sea	1.7	1.5	1.5	1.4	1.4	1.3	1.2	1.1	1.3	1.3	1.3
Southw est Atlantic	2.5	2.4	1.9	1.8	1.7	1.9	2.0	2.4	2.4	1.6	1.8
Southeast Atlantic	1.4	1.4	1.2	1.4	1.3	1.7	1.4	1.6	1.7	1.7	1.7
Antarctic Atlantic	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2
Total Atlantic Ocean	21.8	21.2	20.8	21.2	20.6	20.5	20.6	21.5	22.4	21.2	22.0
India Ocean											
Western Indian Ocean	4.2	4.1	4.1	4.2	4.2	4.5	4.6	4.8	4.7	4.9	5.3
Eastern Indian Ocean	5.7	5.7	5.9	5.9	6.0	6.1	6.1	6.2	6.2	6.3	6.9
Antarctic Indian Ocean											
Total Indian Ocean	9.9	9.8	10.1	10.2	10.3	10.6	10.7	11.0	10.9	11.2	12.2
Pacific Ocean											
Northw est Pacific	19.6	19.9	20.1	20.2	20.6	20.5	20.5	21.0	20.8	20.7	20.0
Northeast Pacific	2.9	2.6	2.2	2.4	2.9	2.8	3.2	3.2	3.2	3.1	3.4
Western Central Pacific	11.3	10.8	11.0	11.5	11.3	11.8	12.1	12.7	12.7	12.9	12.5
Eastern Central Pacific	1.8	1.9	2.1	1.9	1.9	2.0	2.0	1.8	1.6	1.6	1.7
Southw est Pacific	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
Southeast Pacific	12.0	12.1	11.4	7.8	12.3	8.3	8.5	6.8	7.7	6.3	7.2
Antarctic Pacific											
Total Pacific Ocean	48.3	47.8	47.4	44.5	49.6	46.0	46.9	46.0	46.5	45.1	45.2
World Total	80.0	78.8	78.2	75.9	80.5	77.1	78.1	78.5	79.8	77.5	80.1

Source: FAO

Chart 6.2: FAO marine fishing areas



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Appendix 1: Supplementary charts showing landings and effort by UK vessels by ICES rectangle: 2018

Chart A1.1: Cod landings by UK vessels by ICES rectangle: 2018

Chart A1.1a: Quantity of landings by ICES rectangle

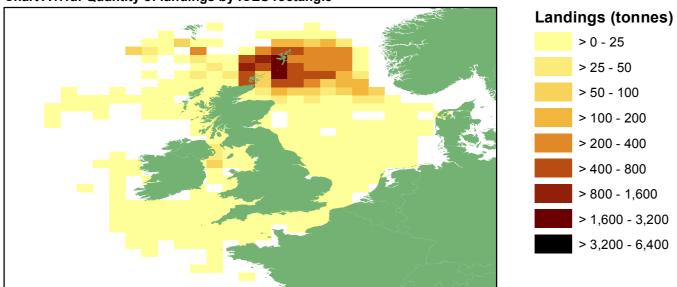


Chart A1.1b: Value of landings by ICES rectangle

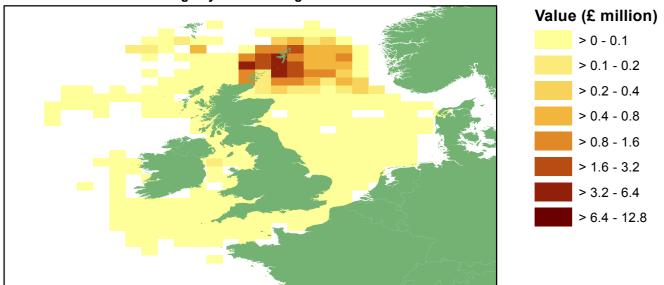


Chart A1.1c: Value of landings per tonne by ICES rectangle

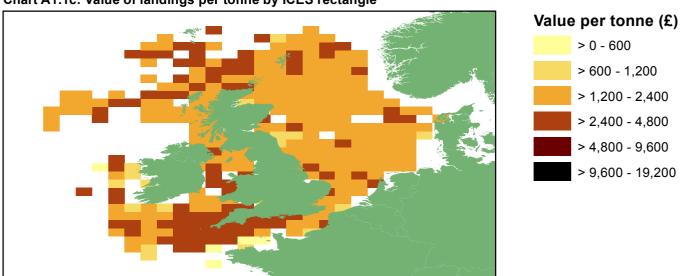


Chart A1.2: Haddock landings by UK vessels by ICES rectangle: 2018

Chart A1.2a: Quantity of landings by ICES rectangle

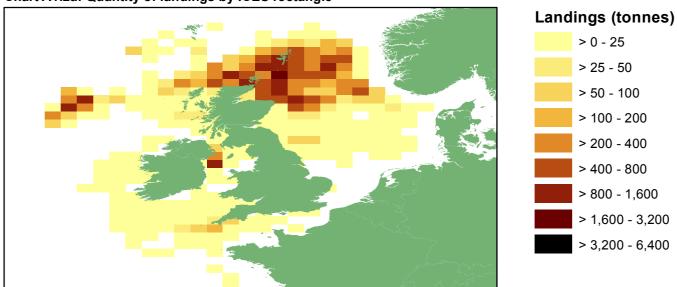


Chart A1.2b: Value of landings by ICES rectangle

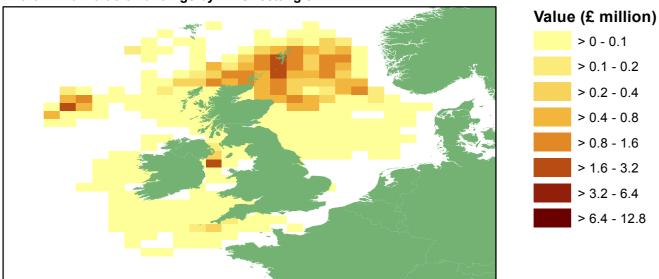


Chart A1.2c: Value of landings per tonne by ICES rectangle

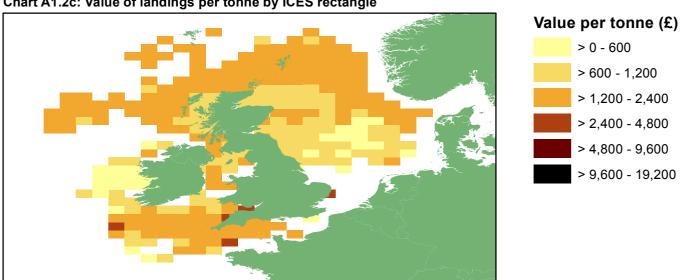


Chart A1.3: Monk or Angler landings by UK vessels by ICES rectangle: 2018

Chart A1.3a: Quantity of landings by ICES rectangle

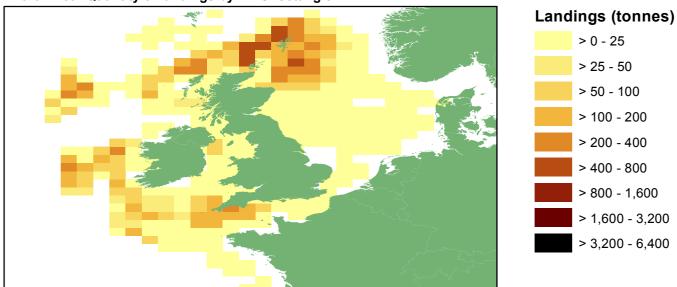


Chart A1.3b: Value of landings by ICES rectangle

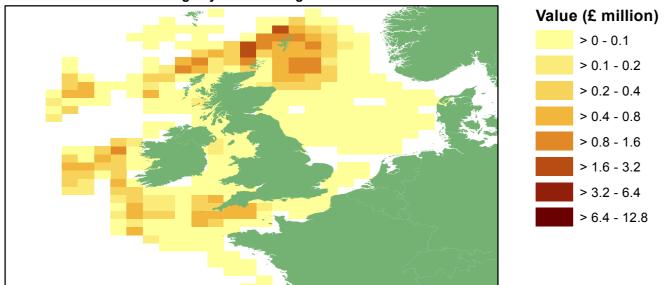


Chart A1.3c: Value of landings per tonne by ICES rectangle

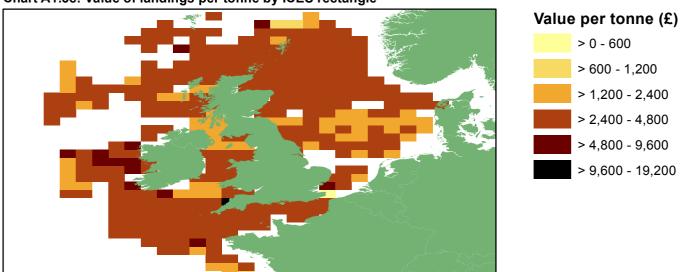


Chart A1.4: Plaice landings by UK vessels by ICES rectangle: 2018

Chart A1.4a: Quantity of landings by ICES rectangle

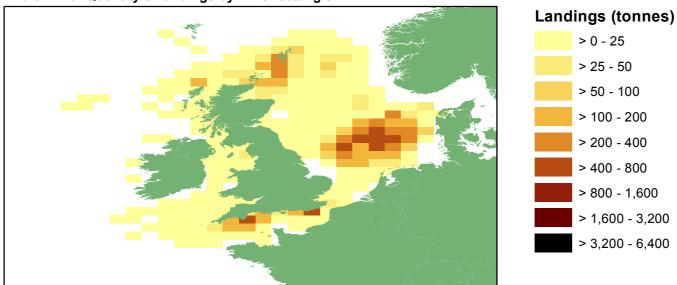
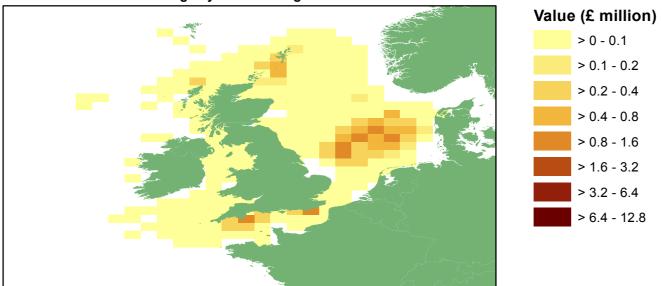


Chart A1.4b: Value of landings by ICES rectangle



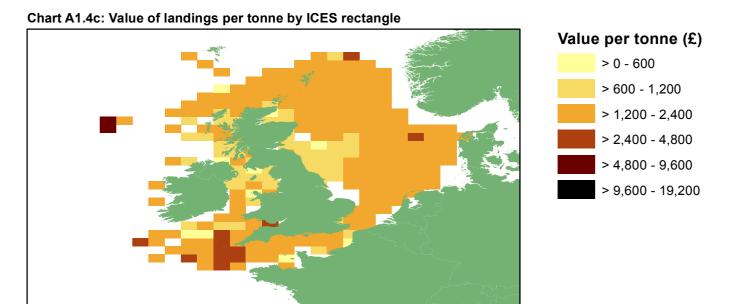


Chart A1.5: Sole landings by UK vessels by ICES rectangle: 2018

Chart A1.5a: Quantity of landings by ICES rectangle

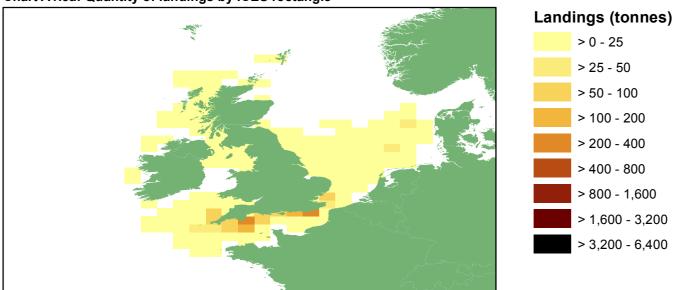
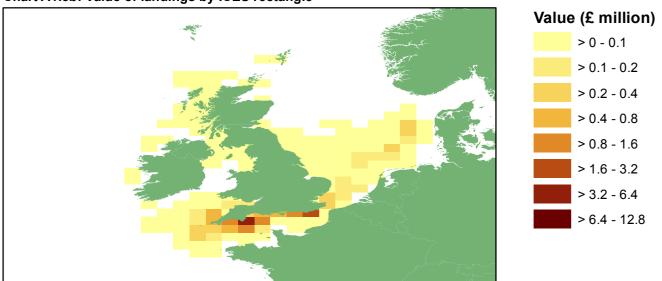


Chart A1.5b: Value of landings by ICES rectangle



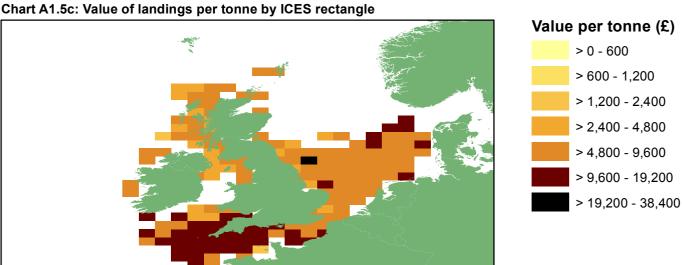


Chart A1.6: Herring landings by UK vessels by ICES rectangle: 2018

Chart A1.6a: Quantity of landings by ICES rectangle

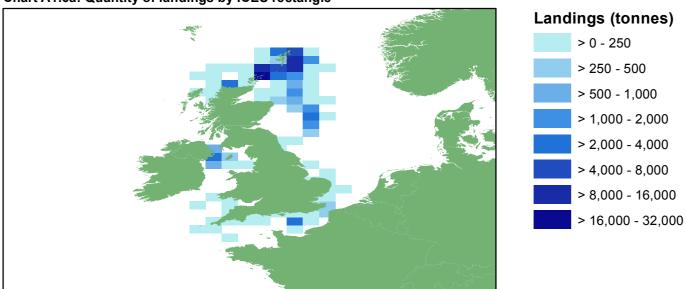


Chart A1.6b: Value of landings by ICES rectangle

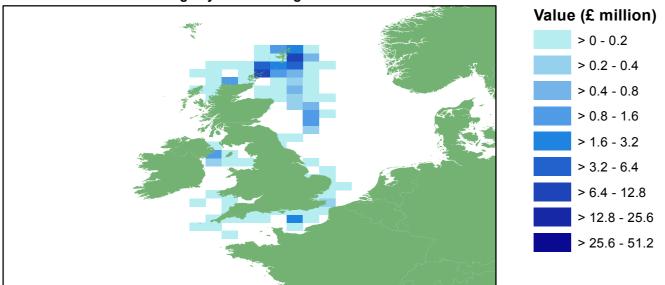


Chart A1.6c: Value of landings per tonne by ICES rectangle

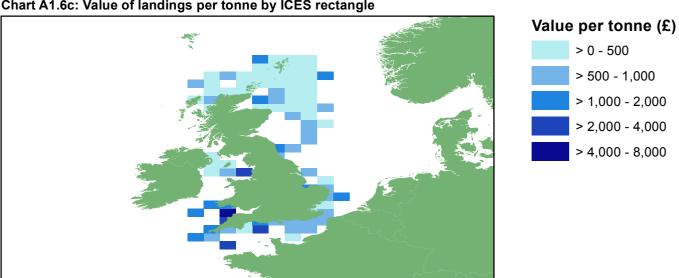


Chart A1.7: Mackerel landings by UK vessels by ICES rectangle: 2018

Chart A1.7a: Quantity of landings by ICES rectangle

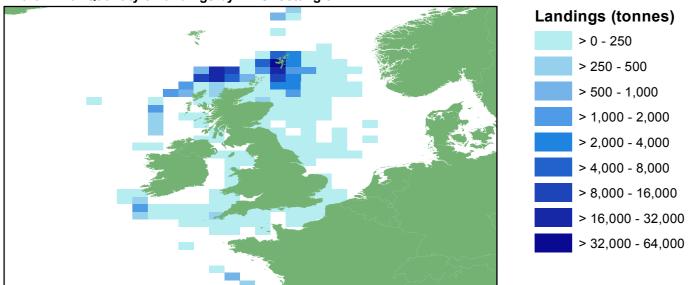


Chart A1.7b: Value of landings by ICES rectangle

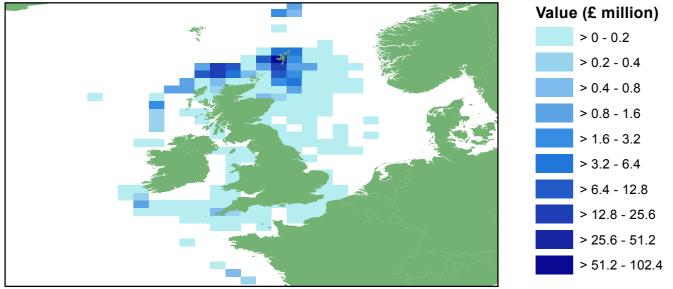


Chart A1.7c: Value of landings per tonne by ICES rectangle

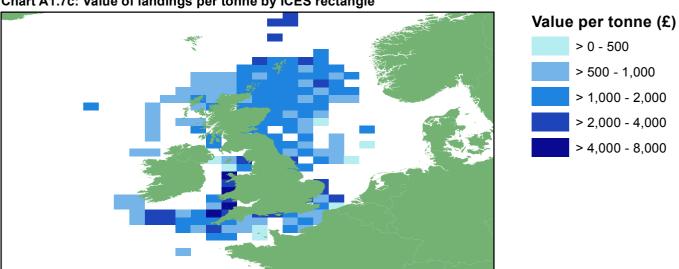


Chart A1.8: Crab landings by UK vessels by ICES rectangle: 2018

Chart A1.8a: Quantity of landings by ICES rectangle

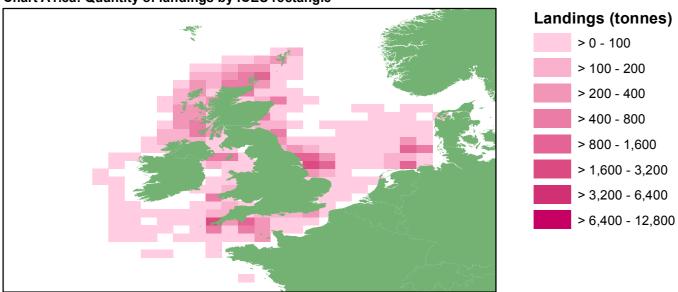


Chart A1.8b: Value of landings by ICES rectangle

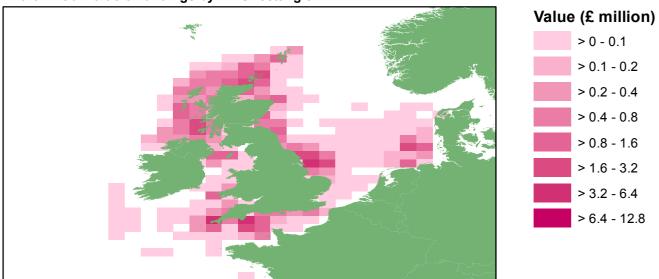


Chart A1.8c: Value of landings per tonne by ICES rectangle

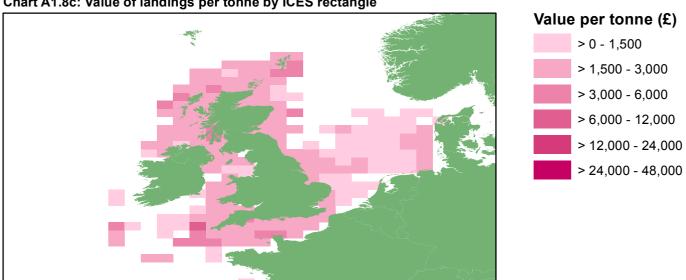


Chart A1.9: Lobster landings by UK vessels by ICES rectangle: 2018

Chart A1.9a: Quantity of landings by ICES rectangle

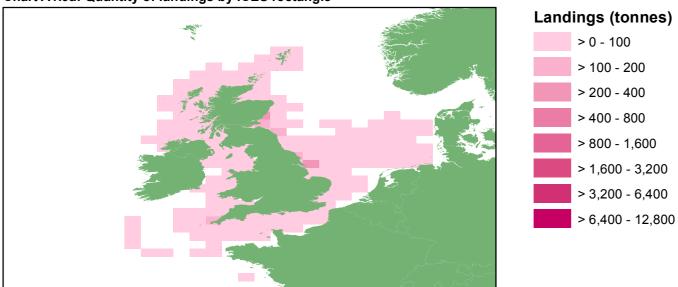


Chart A1.9b: Value of landings by ICES rectangle

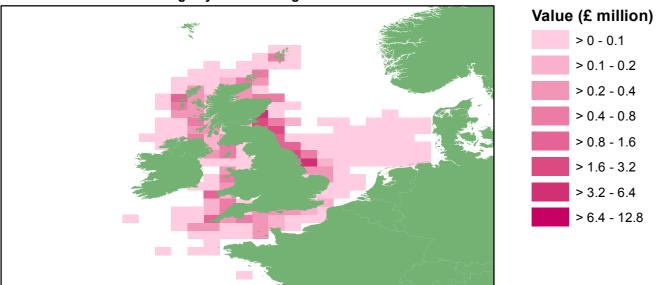


Chart A1.9c: Value of landings per tonne by ICES rectangle

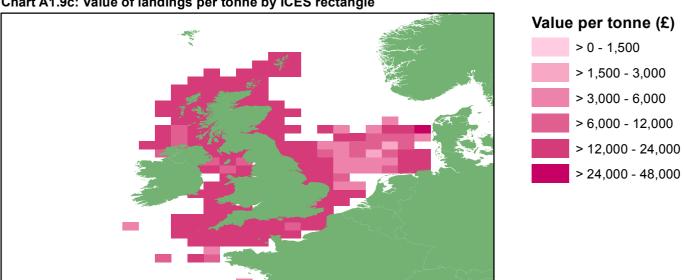


Chart A1.10: Nephrops landings by UK vessels by ICES rectangle: 2018

Chart A1.10a: Quantity of landings by ICES rectangle

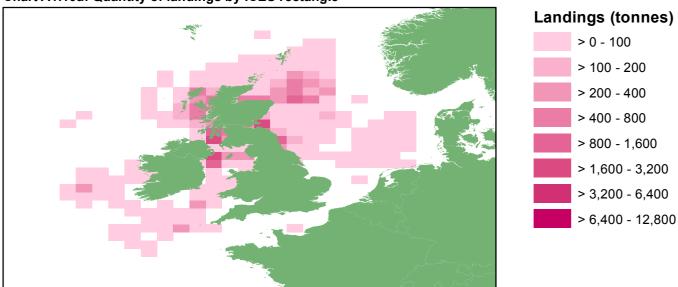
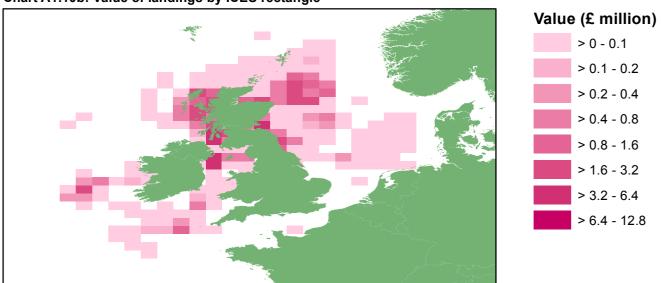


Chart A1.10b: Value of landings by ICES rectangle



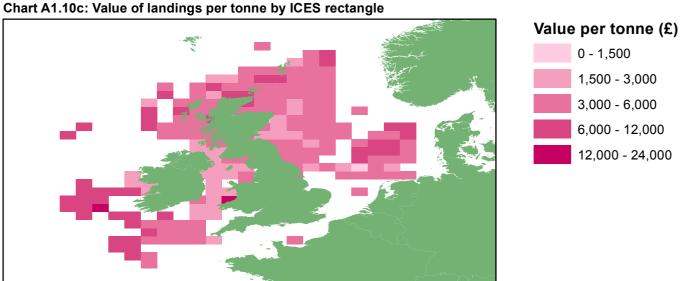


Chart A1.11: Scallop landings by UK vessels by ICES rectangle: 2018

Chart A1.11a: Quantity of landings by ICES rectangle

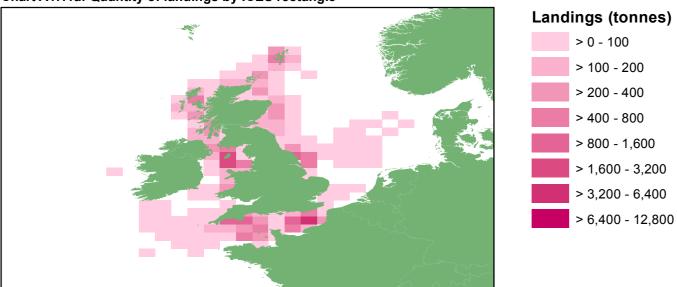


Chart A1.11b: Value of landings by ICES rectangle

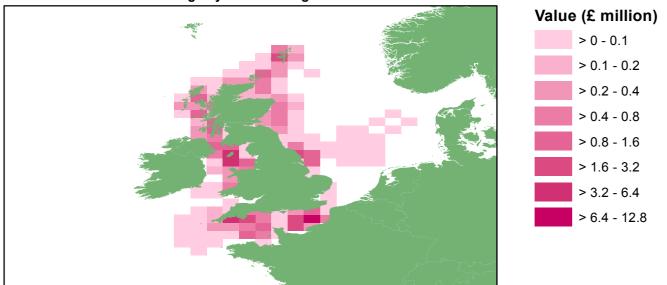


Chart A1.11c: Value of landings per tonne by ICES rectangle

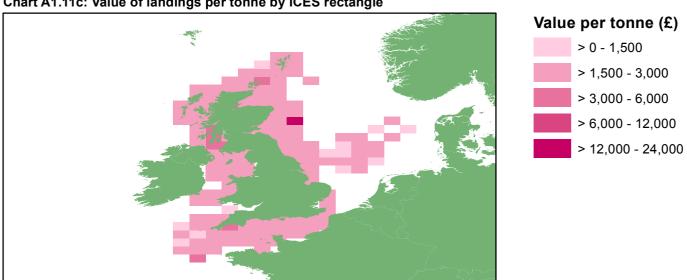


Chart A1.12: Beam trawl effort by UK 10m and over vessels by ICES rectangle: 2018

Chart A1.12a: Number of vessels by ICES rectangle

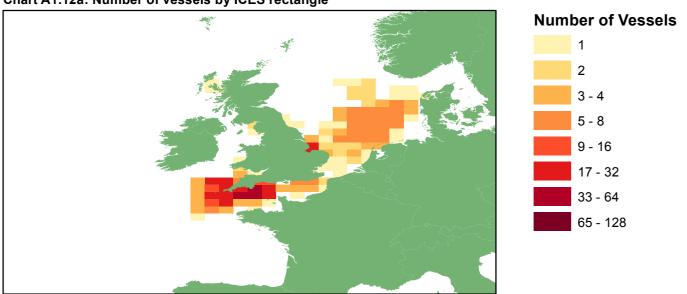


Chart A1.12b: Number of days at sea by ICES rectangle

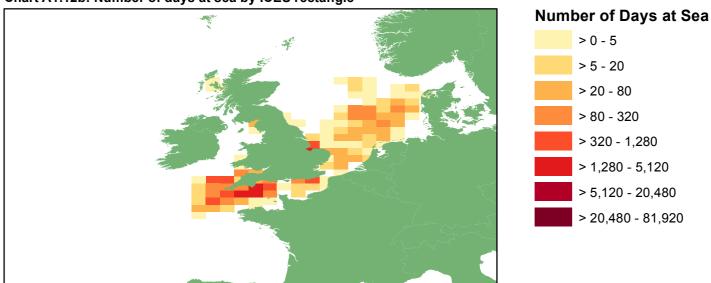


Chart A1.12c: kW day units by ICES rectangle

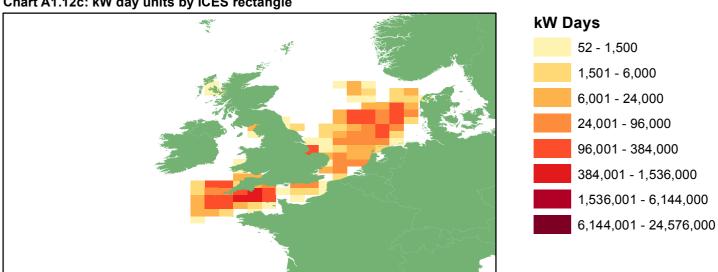


Chart A1.13: Demersal trawl and seine effort by UK 10m and over vessels by ICES rectangle: 2018

Chart A1.13a: Number of vessels by ICES rectangle

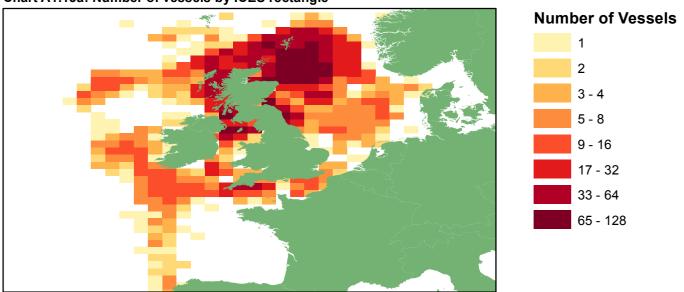


Chart A1.13b: Number of days at sea by ICES rectangle

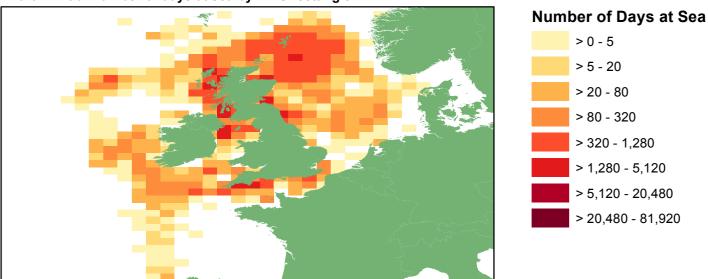


Chart A1.13c: kW day units by ICES rectangle

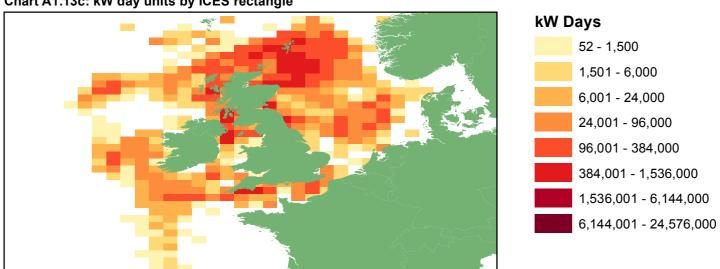


Chart A1.14: Dredges effort by UK 10m and over vessels by ICES rectangle: 2018

Chart A1.14a: Number of vessels by ICES rectangle

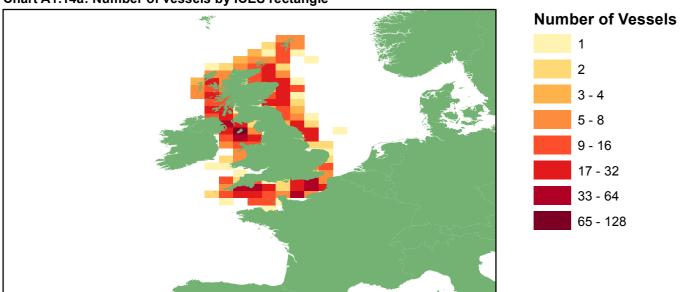


Chart A1.14b: Number of days at sea by ICES rectangle

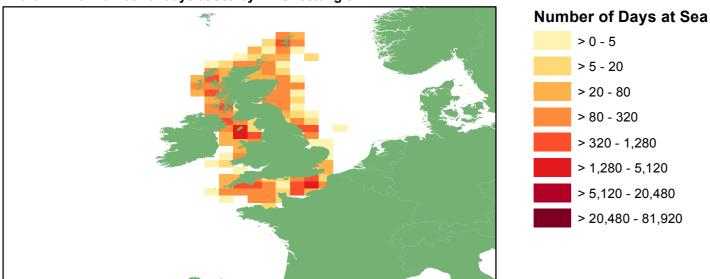
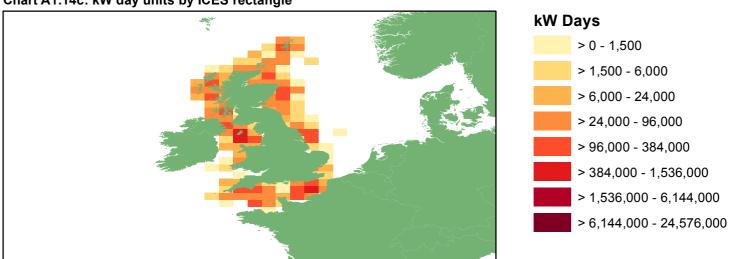


Chart A1.14c: kW day units by ICES rectangle



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Chart A1.15: Drift and fixed nets effort by UK 10m and over vessels by ICES rectangle: 2018

Chart A1.15a: Number of vessels by ICES rectangle

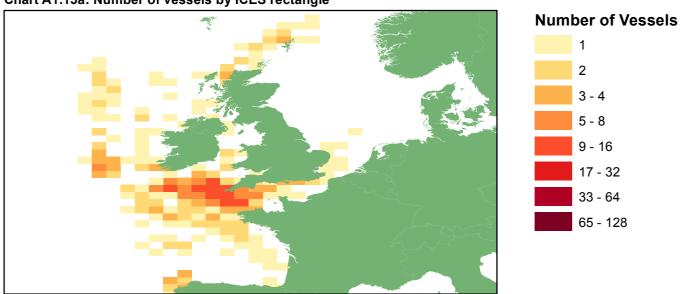


Chart A1.15b: Number of days at sea by ICES rectangle

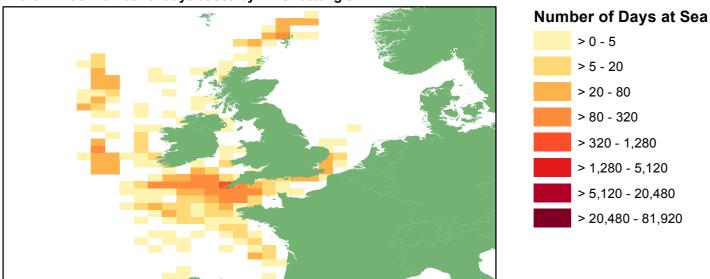
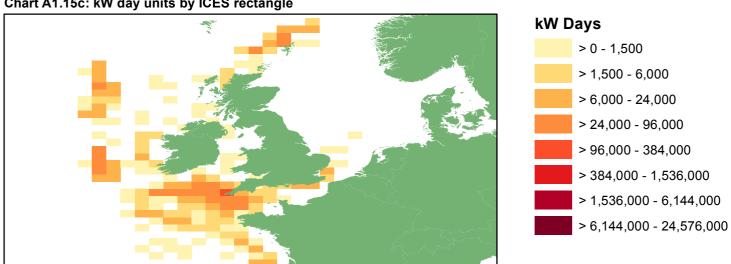


Chart A1.15c: kW day units by ICES rectangle



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Chart A1.16: Gears using hooks effort by UK 10m and over vessels by ICES rectangle: 2018

Chart A1.16a: Number of vessels by ICES rectangle

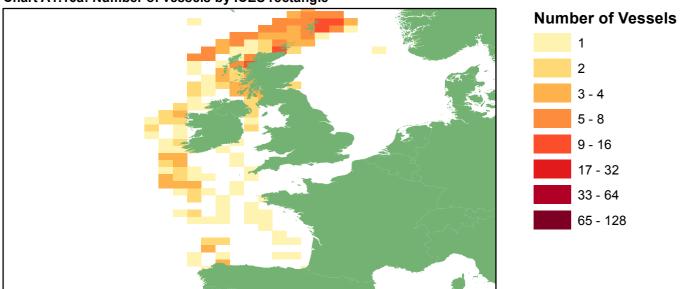


Chart A1.16b: Number of days at sea by ICES rectangle

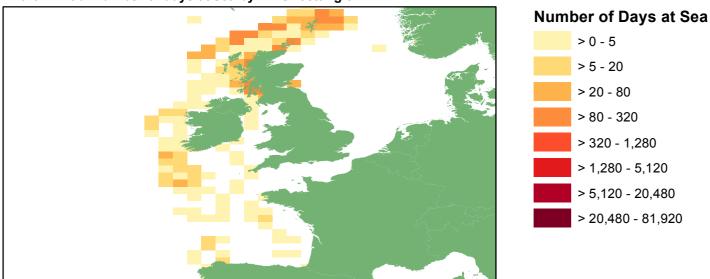
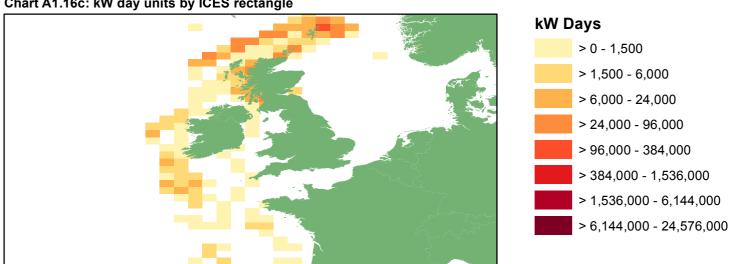


Chart A1.16c: kW day units by ICES rectangle



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Chart A1.17: Pelagic purse seine & trawl effort by UK 10m and over vessels by ICES rectangle: 2018



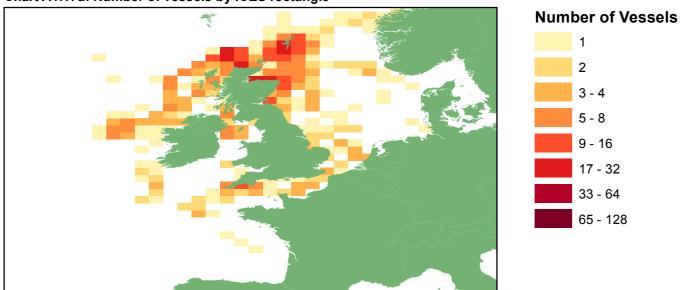


Chart A1.17b: Number of days at sea by ICES rectangle

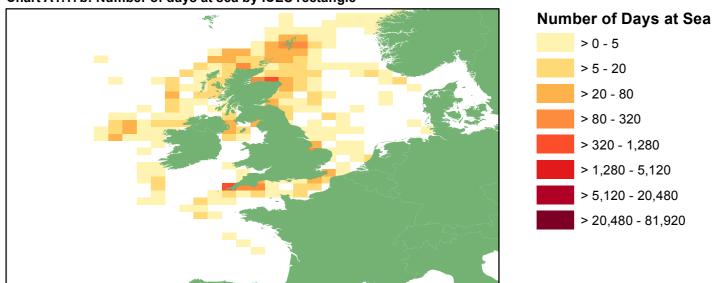
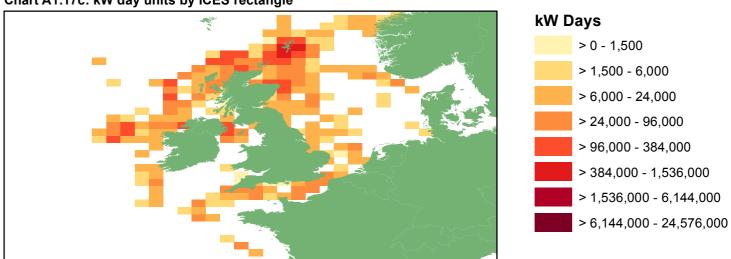


Chart A1.17c: kW day units by ICES rectangle



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Chart A1.18: Pots and traps effort by UK 10m and over vessels by ICES rectangle: 2018

Chart A1.18a: Number of vessels by ICES rectangle

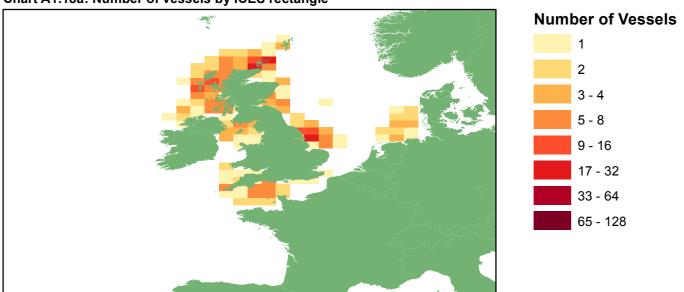


Chart A1.18b: Number of days at sea by ICES rectangle

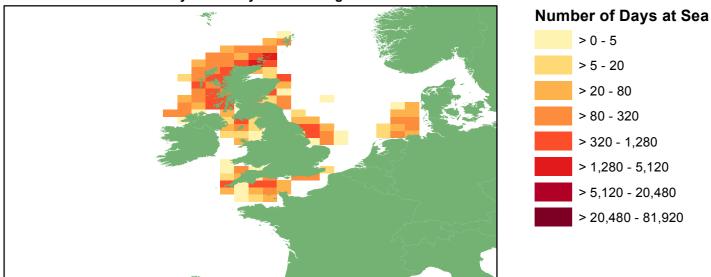
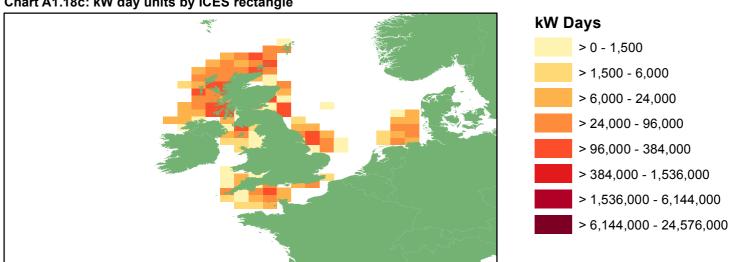


Chart A1.18c: kW day units by ICES rectangle



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Appendix 2: Glossary of terms

Administration port

Administration ports are responsible for issuing fishing vessel licences. The coastal office designated as a vessel's administration port is typically the responsible office closest in proximity to a vessel's operational base. A vessel's administration port may differ from its registration port.

Biologically Sensitive Area (BSA)

The Biologically Sensitive Area is a sea area in which restrictions exist on fishing effort by vessels 10 metres or over targeting certain species. The region is defined in Article 6 of Council Regulation (EC) No 1954/2003. It lies within ICES sub-area VII and constitutes part of the Western Waters.

Chain volume measure

A chain volume measure is an index number from a chain index of quantity (a chain index is an index constructed by linking two or more index series of different base periods or different weights). The index number for the reference period of the index may be set equal to 100 or to the estimated monetary value of the item in the reference period.

Cod Recovery Zone (CRZ)

The Cod Recovery Zone (CRZ) is a group of sea areas in which restrictions exist on fishing effort by vessels 10 metres or over using certain regulated gears. The CRZ comprises four areas: Kattegat, Irish Sea (ICES division VIIa), North Sea (ICES division IIIa excluding Kattegat; ICES sub-area IV; EU waters of ICES division VIIa; ICES division VIId) and West of Scotland (ICES division VIIa and EU waters of ICES division Vb).

The regulated gears are:

- Beam trawls of mesh:
 - equal to or larger than 120 mm (BT1)
 - equal to or larger than 80 mm and less than 120 mm (BT2)
- Gill nets, entangling nets (GN1)
- Trammel nets (GT1)
- Longlines (LL1)
- Bottom trawls and seines of mesh:
 - equal to or larger than 100 mm (TR1)
 - equal to or larger than 70 mm and less than 100 mm (TR2)
 - equal to or larger than 16 mm and less than 32 mm (TR3)

Consumer Price Index (CPI)

The Consumer Price Index (CPI) measures the average change in the prices of goods and services bought for the purpose of consumption in the UK. It is calculated according to a different formula than the Retail Price Index (RPI), and has narrower commodity coverage. The RPI excludes very high and low income households and hence the CPI has wider population coverage than the RPI.

Demersal

The term demersal fish covers species living on or near the sea bed.

Engine power

Engine power refers to a measure of the power of a fishing vessel's engine (in kW). Where an engine has been permanently de-rated

and this has been declared to the Register of Shipping and Seamen (RSS), this is the de-rated engine power; otherwise, it is the maximum continuous engine power (MCEP) declared to the RSS. Where neither of these are available the registered engine power is used.

Exports

Exports consist of the outward movement of goods produced by businesses in the UK, plus goods, which after importation, move outward from bonded warehouses or free zones without having been transformed i.e. both exports and re-exports. Export statistics exclude fish caught by domestic fishing craft, whether or not processed on board, landed in foreign ports. In UK export statistics, domestic fishing vessels are defined as vessels in UK economic ownership; these may differ from vessels registered in the UK.

Fishing areas

Fishing areas are defined by international convention. The immediate waters around the UK are subdivided into ICES subareas IV (North Sea), VI (West of Scotland) and VII and its divisions the Irish Sea, VIIa; Celtic Sea, VIIg,h; Bristol Channel, VIIf; and the English Channel, VIId,e. See Appendix 3.

Fishing capacity

Fishing capacity is the physical dimension of fishing vessels measured in gross tonnage (GT), or – in engine power terms – kilowatts (kW). See definitions in this glossary.

Fishing effort

Fishing effort is an aggregate measure of the activity of fishing vessels in a given sea area. It may be measured as the total time spent at sea (in hours or days), as the sum of the products of fishing capacity and time at sea for each vessel (in GT days) or as the sum of the products of engine power and time at sea for each vessel (in kW days).

Fishing mortality

Fishing mortality is the proportion of a stock killed/dying each year as a result of fishing activity.

Fish flour

Fish flour is powdered fish meal.

Fish meal

Fish meal is dried, ground fish (chiefly fish offal). It provides a dry, storable product that is frequently used in animal feeds.

Fish oil

Fish oils are oils extracted from fish, typically pelagic species such as herring and mackerel.

Fish preparations

Fish preparations refer to fish that have been prepared using one of the following techniques: fresh or chilled, frozen, salted, in brine, dried or smoked, prepared or preserved.

Fish producer organisation (FPO)

Fish producer organisations are institutions set up in accordance with EC regulations to improve the market for their members' catches. FPOs may also be granted responsibility by Fisheries Administrations for the management of fish quotas in addition to this function.

Fish products

Food products manufactured from fish such as fish meal, fish flour and fish oil.

Fixed gears

Fixed gears are mainly used for demersal species. They are normally vertically hung curtains of netting which enmesh or entangle the fish, fixed to the seabed with anchors or weights and held upright with floats.

Gross Domestic Product (GDP)

Gross Domestic Product (GDP) is a key indicator of the state of the whole economy. It is related to Gross Value Added (GVA) by adding the taxes on products and subtracting the subsidies from GVA. GDP is available at a whole economy level only, whereas GVA is available by industry sector.

Gross Registered Tonnage (GRT)

Gross Registered Tonnage (GRT) is a general term applied to a range of volumetric measures of vessel capacity.

Gross Tonnage (GT)

Gross Tonnage (GT) is a volumetric measurement of vessel capacity under the rules of the ITC69 (International Tonnage Convention). By the end of 2003 all UK fishing vessels over 15m overall length were required to have their tonnage measured on this basis.

Gross Value Added (GVA)

Gross Value Added (GVA) measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom. GVA is used in the estimation of Gross Domestic Product (GDP), a key indicator of the state of the whole economy. Adding the taxes on products and subtracting the subsidies from GVA gives GDP. GDP is available at a whole economy level only, whereas GVA is available by industry sector.

The International Council for the Exploration of the Sea (ICES)

The International Council for the Exploration of the Sea (ICES) coordinates and promotes marine research on oceanography, the marine environment, the marine ecosystem, and on living marine resources in the North Atlantic. See also: Fishing areas.

Imports

Imports consist of all goods moving into a country, including goods for domestic consumption and goods into bonded warehouses or free zones. In accordance with the internationally recommended practice, import statistics include fish caught by foreign fishing craft, whether or not processed on board, landed in domestic ports. In UK import statistics, foreign fishing vessels are defined as vessels in foreign economic ownership; these may differ from vessels registered abroad. Only goods for which the final destination is the UK are included in import statistics.

Landed Price Index (LPI)

The Landed Price Index measures the average change in the prices at first sale of fish landed by UK vessels into the UK.

Landed weight

Mass (or weight) of a product at the time of landing, regardless of the state in which it has been landed. Landed fish may be whole, gutted and headed or filleted.

Live weight

The mass or weight of a product, when removed from the water.

National Statistics

'National Statistics' are a subset of official statistics which have been assessed and certified by the UK Statistics Authority as compliant with its Code of Practice for Official Statistics. The label currently comprise three basic types:

- legacy 'National Statistics' those statistical products which obtained their designation as 'National Statistics' before April 2008, but which have not yet been formally re-assessed.
- re-assessed 'National Statistics' those retaining their status after a formal re-assessment.
- new 'National Statistics' any statistical product which has been proposed by ministers as a candidate 'National Statistics' and

assessed and granted accreditation.

UK Sea Fisheries Statistics and its associated data sets are designated as National Statistics. They retained this designation following an assessment by the UK Statistics Authority in 2011. For more information see the UK Statistics Authority website at www.statisticsauthority.gov.uk/national-statistician/types-of-official-statistics.

Nominal catches

Nominal catches refer to landings converted to a live weight basis. A nominal catch consists of fish, crustaceans, molluscs and other aquatic animals, taken for all purposes (commercial, industrial and subsistence) except recreational, operating in inshore, offshore and high seas fishing areas (marine fishing areas). Inland waters, both fresh and brackish, are excluded. The data on the landings of such species and products require conversion by accurate yield rates (conversion factors) to establish the live weight equivalents at their time of capture.

Official statistics

The Statistics and Registration Service Act 2007 defines 'official statistics' as all those statistical outputs produced by the Office for National Statistics, central Government departments and agencies, devolved administrations and other Crown and certain non-Crown Bodies.

For more information see the UK Statistics Authority website at www.statisticsauthority.gov.uk/national-statistician/types-of-official-statistics.

Pelagic

The term pelagic fish covers species found mainly in shoals in midwater or near the surface of the sea.

Quota

A share in a total allowable catch (TAC) held by an EU member state. EU TACs are divided on the basis of a number of factors, including the member state's past catch record. Shares are awarded according to a principle of 'relative stability', namely that each member state should enjoy a fixed percentage share of the fishing opportunities for commercial species across time. See also: Total allowable catch.

Recruits

Recruits are the young fish in the year class which is entering the fishery.

Registration port

A registration port is a port chosen by the owner of a vessel as the port that forms part of the external markings of a fishing vessel – the Port Letters and Numbers painted on the bow of the vessel. The owner chooses this as part of the process of registering a commercial fishing vessel with the Register of Shipping and Seamen, part of the Maritime and Coastguard Agency. A fishing vessel's registration port defines its nationality but does not necessarily coincide with its administration port and may not be located close to the vessel's operational base.

Retail Price Index (RPI)

The Retail Price Index (RPI) is the most long standing general purpose domestic measure of inflation in the United Kingdom. It is calculated according to a different formula than the Consumer Price Index (CPI), and has wider commodity coverage. The RPI excludes very high and low income households and hence the CPI has wider population coverage than the RPI.

Seining

Seining is a method used exclusively for demersal fishing. The net. lighter than for trawling, is set on very long ropes designed to herd or contain the fish for capture in the net. After the fish have been surrounded by the ropes, the net is slowly hauled back to the vessel.

Shellfish

The term shellfish covers all crustaceans and molluscs.

Sole Recovery Zone (SRZ)

The Sole Recovery Zone (SRZ) corresponds to the Western Channel (ICES division VIIe), in which restrictions exist on fishing effort by vessels 10 metres or over using regulated gears. In the SRZ, regulated gears are beam trawls of mesh size equal to or greater than 80mm and static nets, including gill-nets, trammel-nets and tangle-nets, with mesh size less than 220mm.

Spawning stock biomass (SSB)

The spawning stock biomass (SSB) is the total weight of a species population capable of reproducing.

Stock

A stock is that part of a species population exploited in a defined fishing area.

Total allowable catch (TAC)

A total allowable catch (TAC) is a catch limit set by EU fisheries ministers for a particular stock. TACs are fixed on an annual basis on the basis of scientific research by national and international organisations, including ICES and the European Commission's Scientific, Technical and Economic Committee for Fisheries (STECF). TACs are usually expressed in tonnes live weight. See also: Quota.

Transhipment

The transfer from one conveyance to another for shipment. In this case, transhipments usually take place in coastal waters.

Trawling

Trawling may be used either for bottom-dwelling (demersal) or midwater (pelagic) species, the net being of a basic funnel-shaped construction and towed behind a vessel or between two vessels (pair trawling).

Western Waters

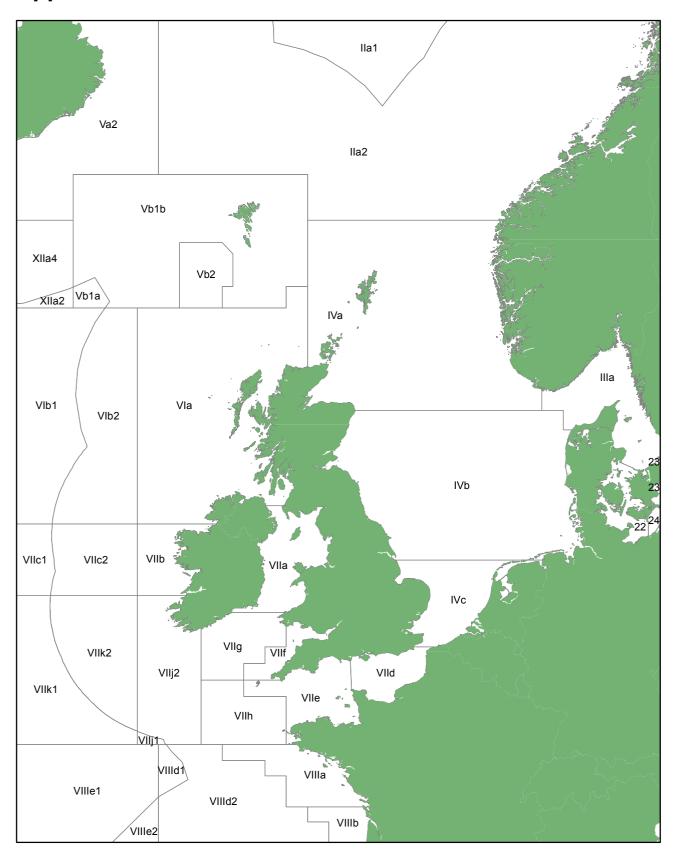
The Western Waters are a group of sea areas in which restrictions exist on fishing effort by vessels 15 metres or over on trips with certain target species. The Western Waters comprise nine areas, of which UK registered vessels are permitted to deploy effort in four: ICES sub-areas V and VI, ICES sub-area VII, ICES sub-area VIII and the Biologically Sensitive Area.

Target species are demersal species (excluding those covered by Council Regulation (EEC) No 2347/2002), scallops and edible crab and spider crab. In the Biologically Sensitive Area, restrictions exist on fishing effort by vessels 10 metres or over on trips with these target species.

Year class

A year class is the young of any one annual spawning.

Appendix 3: ICES divisions



Contains Collins Bartholomew and ICES data. © Collins Bartholomew copyright and database right 2019. © ICES Areas dataset 2010. ICES, Copenhagen.

Appendix 4: UK fisheries statistics methodology

Fleet size and composition

Statistics on the UK fishing fleet since 1990 have been based on the fleet of fishing vessels as registered with the Register of Shipping and Seamen, part of the Maritime and Coastguard Agency which is an executive agency of the Department for Transport. Information provided by the Register includes the length (overall and registered), breadth, gross tonnage, power, age and material of construction. Information on the fishing fleets of the Isle of Man, Guernsey and Jersey are supplied by the respective registering authorities. Prior to 1990, the statistics were based on fishing vessels known by Administrative Departments to be active.

Statistics on the size of the UK fishing fleet are complicated by the fact that the European Union (EU) has progressively revised the methodology used to determine vessel tonnage for the fishing fleet from various national and international standards, previously collectively called Gross Registered Tonnage (GRT), to a common standard based on the International Tonnage Convention 1969 (ITC69) and known as Gross Tonnage (GT). A phased programme of re-measurement was introduced in the UK in 1996 which was completed by the early part of 2004.

Licensing of vessels first applied in 1977 and covered only fishing vessels over 40 feet (12.14 metres) in certain fisheries. Following the adoption of the European Union's Common Fisheries Policy, the UK designated a number of fish stocks as pressure stocks and introduced a restrictive licensing scheme for vessels fishing those stocks. The licensing regime initially only covered vessels over 10 metres registered length, but its coverage has been progressively extended over the years.

- In February 1990 the licensing regime was extended to vessels of over 10 metres overall length fishing for quota stocks.
- Later in 1990 restrictive licensing was extended to cover all fishing by vessels over 10 metres
 overall length with the exception of those fishing for salmon and migratory trout which were
 covered by a separate regime.
- From May 1993 licensing was extended to vessels of 10 metres and under overall length.

Statistics on the UK fishing fleet in this publication are based on the fleet of fishing vessels as registered with the Register of Shipping and Seamen. To this is added details of fishing vessels as registered with the Crown Dependencies (Isle of Man and the Channel Islands) to form the full UK fleet, details of which are reported to the European Commission on a regular basis and recorded as part of the EU Community Fleet Register.

The UK fleet has been broken down for analysis by individual country based on the administration ports where vessels were licensed as at the end of 2017. Vessels which are registered but do not have an administration port at this time are not counted against any country.

Fish Producer Organisation membership

Fish producer organisations are institutions set up in accordance with EU regulations to improve the market for their members' catches. In the UK, FPOs are also granted responsibility by Fisheries Administrations for the management of fish quotas for vessels in their membership.

Vessel owners notify UK Fisheries Administrations when transferring between FPOs for the purposes of quota management. A comprehensive database of membership of FPOs is maintained which augments the vessel data provided by the Register of Shipping and Seamen.

Fishermen numbers

Data on fishermen numbers are collected separately by the Marine Management Organisation (MMO) for England, Marine Scotland, the Department of Agriculture, Environment and Rural Affairs for Northern Ireland (DAERA) and the Welsh Assembly Government (WAG). The Departments in Jersey, Guernsey and the Isle of Man do not contribute data on fishermen numbers.

In Scotland and Northern Ireland, staff in coastal offices are issued with a census of all vessels in their responsibility and asked to provide data on the number of part-time and regular fishermen on each vessel. Marine Scotland and DAERA process and compile these data to provide estimates of fishermen numbers on vessels at each port of administration.

In England and Wales, a census of fishing vessels over 10 metres in overall length is performed. For the large number of fishing vessels 10 metres and under in length, a stratified sample of vessels is taken, with strata defined by administration port, vessel length and gross tonnage. A 20 per cent sample is drawn from each stratum. As in Scotland and Northern Ireland, staff in coastal offices provide data on the number of part-time and regular fishermen on each vessel in their administration based on enquiries and local knowledge. All staff are provided with clear guidance on how to complete the survey.

From 2010, revised guidance was issued to staff on how to complete the survey. For the purposes of the survey, a fisherman is defined as a person working at sea on a commercial fishing vessel, such as skippers or crew members. The definition excludes persons not working at sea, such as administrators and land-based processing staff. Fishermen are classified as regular or part-time according to whether commercial fishing is their main occupation.

Data collected for England and Wales are processed by the MMO. Checks are made on the quality and reliability of data returned and every effort is made to minimise non-response. In the 2018 survey, fishermen numbers were collected for 1,097 of the 1,098 vessels surveyed, i.e. 99.9 per cent. Where no data were available on fishermen numbers for a vessel the value was assumed to be the average number of fishermen on vessels in the same stratum, such that no bias was caused by non-response. Estimates from the survey for England and Wales are combined with those supplied by Marine Scotland and DAERA to provide overall UK estimates.

Activity and landings

Statistics on fishing effort and landings are calculated using data collected and processed by officials of the various Fisheries Administrations in the UK, namely the MMO, Marine Scotland, DAERA, WAG and Departments in Jersey, Guernsey and the Isle of Man.

The main legislation used to collect these data is:

- (i) the EU fisheries legislation on keeping and submitting logbooks and providing landing declarations and sales notes, primarily Council Regulation (EC) No. 1224/2009 (the 'Control Regulation').
- (ii) general powers under the Sea Fisheries (Conservation) Act 1967 under which Ministers granting a licence can require the master, owner or charterer of the vessel named in the licence to provide such statistical information as required. These powers were widened in the Sea Fish (Conservation) Act 1992 to cover other types of information and the form in which it is to be supplied.

The method of data collection depends on the length of the vessel.

Data collection for vessels over 10 metres in overall length

Data collected on fishing effort by over 10 metre vessels come primarily from the fishing logbook. Two additional sources are used to collect data on landings by over 10 metre vessels: landing declarations and sales notes.

The fishing logbook captures data on fishing activity by individual vessels by trip, and for each day of activity within a trip. This includes details of the catch, by species, in terms of the presentation and quantity of fish retained on board. Information is also collected on the fishing gear used and the ICES division, rectangle and zone for the activity. Supply of logbook data is mandated by legislation for all vessels over 10 metres overall length in respect of catches of all species. Logbook data for UK vessels must be submitted within 48 hours of landing to UK authorities; this includes landings into foreign ports.

Landing declarations provide information on the weight and presentation of fish landed by species. As with logbooks, landing declarations must be submitted to authorities within 48 hours of completion of the landing.

Sales notes are required in respect of first sales of fish and fishery products. For paper declarations, sales notes for first sales of fish must be submitted to UK Fisheries Administrations within 48 hours of sale by the registered buyer of the fish, except at designated auction centres where the registered seller has responsibility. This reduces to 24 hours if they are required to report sales notes electronically (see information below in the section "Requirements to report fishing activity data electronically").

Requirements set out in EU legislation to require the submission of logbook and landing declaration data electronically have in recent years been phased so that now virtually all UK vessels 12 metres and over in overall length are required to report their activity data by electronic means only. This phasing out of paper reporting was introduced on a vessel by vessel basis as on-board systems were installed, checked and tested through a period of double-running before vessels switched over to electronic-only reporting. Additionally, from 1 January 2009, buyers and sellers with an annual turnover of first sale fish of more than 400,000 euro have been required to submit sales notes electronically; this threshold was reduced to 200,000 euro from 1 January 2011. A UK Electronic Reporting Systems (ERS) Hub has been set-up to collect, process, and store these electronic data.

Data collection for vessels 10 metres and under in overall length

For 10 metre and under vessels, there is no statutory requirement under either EU or national legislation for fishermen to declare their catches. Historically, information for this sector has been collected with the co-operation of the industry: it comprised log sheets and landing declarations voluntarily supplied by fishermen as well as sales notes and assessments of landings collected from market sources and by correspondents located in the ports. This collection of data has now been replaced after the introduction in September 2005 of a scheme of registration for buyers and sellers of first sale fish (see above). Sales notes are now used in addition to the voluntary information from fishermen.

During 2005 and 2006, UK Fisheries Administrations introduced a system of restrictive licensing for activity targeted at shellfish. As part of this system, new reporting requirements were introduced involving a requirement for fishermen fishing with under 10 metre vessels to complete diaries of their daily activity which needed to be submitted on a monthly basis. Summary information from these diaries is in use in Northern Ireland and it is used alongside other data in other parts of the UK, but the main source of activity data in the rest of the UK is the sales notes data. This helps to ensure consistency with the activity data for other types of fishing activity that are also derived from the sales notes data. The diaries of activity are however an important source of information for the scientific assessment of the state of the local shellfish fisheries around the coast and as such the data in them are entered, collated and analysed by scientists at the fisheries laboratories around the UK.

Coverage

Data collection for vessels over 10 metres overall length aims to achieve full coverage of activity by this sector of the fleet. For the sector 10 metres or under in overall length, landings are only reported where the fish are sold or data have been provided voluntarily, leading to reduced coverage¹.

The reliability of the data collected is dependent on the information provided by fishermen. Inspectors at port offices carry out a mix of manual and automatic checks on the information provided by vessel operators. These include a check between logbook information and that given in the sales notes or observed as landed as well as checks against other sources of information (e.g. satellite position reports, information from aerial and at-sea surveillance and inspection activity carried out by UK enforcement officers).

Despite legal obligations for fishermen to declare their catches, a proportion of fishing activity remains unreported. This chiefly affects landings data and the effects on statistics on fishing effort are considered to be small. A 2009 study² jointly funded by the Department for Environment, Food and Rural Affairs and the Department for International Development estimated that between 2000 and 2003, illegal fishing in the northeast Atlantic amounted to between 5 and 13 per cent of reported catches of species studied.

The extent of illegal and unreported fishing by UK vessels is uncertain and varies across stocks. However, it is considered that the overall level of unreported fishing has been reduced in recent years following the introduction of a scheme of registration for buyers and sellers of first sale fish, and the implementation of Commission Regulation (EC) No. 1005/2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing.

It should be noted that landings do not typically equate to total catches, as fish may be returned to the sea through a practice known as discarding. The degree of discarding varies by stock, and by the sector of the fleet involved. The figures presented in this publication should not be interpreted as total removals from the sea. However, with the implementation of the Landing Obligation whereby discarding of fish is prohibited, the amount of discards will clearly fall. The obligation began in 2015 for pelagic species and is currently being phased in for other species in anticipation of a full discard ban in 2019 (Commission Delegated Regulations (EU) 2018/45, 2018/46, 2018/189 and 2018/190).

Data processing

Information from log sheets, landing declarations, sales notes and other sources is keyed into computers connected to the main databases by government staff at port offices, or is transferred electronically from the UK ERS Hub. Details of the areas fished are taken from the logbooks and entered as codes for the ICES divisions and statistical rectangles. Where a statistical rectangle is split into different areas (e.g. part is in EU waters and part in Norwegian waters) an additional code is used to indicate the zone fished. Where a vessel fishes in more than one area in a single trip, the total amounts for the trip of each species, as given in the sales notes and landing declarations are allocated to the areas in proportion to the estimated quantities of the species taken from each area, as recorded in the logbook.

In many cases only the weight of fish landed is provided, as it is impractical to record the weight of fish at the time of capture due to working conditions. The landed weight may differ significantly from the weight of the fish as it was taken from the sea, in large part due to the processing of the catch

¹ 2011 data showed an increase in reported landings into the Isle of Man. From 1 January 2011 the Isle of Man authorities became fully integrated with the data collection and recording systems operated by mainland fisheries administrations, enabling the inclusion of activity that was previously not available.

² Agnew DJ, Pearce J, Pramod G, Peatman T, Watson R, et al. (2009) Estimating the Worldwide Extent of Illegal Fishing. PLoS ONE 4(2): e4570.

on board the vessel (e.g. gutting, filleting, etc). To render these data comparable, the landed weights are converted to a live weight equivalent using standard conversion factors according to the species landed and its presentation (e.g. gutted, skinned, etc).

The complete fishing records are transmitted to the central computer systems where further checks are carried out on the data before they are reflected in the main landings databases. Activity and landings data for the UK are compiled in a central database containing key information from systems run by the MMO and Marine Scotland. The former holds information on all landings into England, Wales and Northern Ireland and the Isle of Man by UK vessels and of landings abroad by vessels administered by the MMO, WAG, DAERA and Isle of Man Department of Environment, Food and Agriculture. The latter provides figures for landings into Scotland by all UK vessels and landings abroad by Scottish administered vessels.

Regular checks are made on the quality of the data and unusual records referred to staff in coastal offices to confirm or correct as necessary. In addition, prior to publication of these data, amendments are made to records with extreme prices for the weight of fish sold and values imputed based on average prices for the same species.

The sale value of transhipped landings is also imputed using an average price. These are instances where fish may be landed in the UK, but it is transported (usually by road and ferry) out of the UK before it is sold. This usually happens to allow vessel owners to take advantage of higher market prices for some species of fish when sold at continental markets rather than in the UK. Note that this differs from transhipment at sea. This involves transferring fish between vessels before landing, which is banned within community waters.

Effort statistics for the UK are calculated using trip data from the fishing logbook to determine the time spent at sea with each gear in each ICES sub-division and rectangle. This is combined with information from the Register of Shipping and Seamen on the capacity and engine power of vessels in order to calculate fishing effort exerted in GT days or kW days. These data are aggregated for different sea areas and gear types to produce the statistics shown.

In some instances the spatial resolution of the data is not sufficient to permit exact attribution of time spent at sea to recovery areas defined by EU legislation. In the Cod Recovery Zone, it is assumed that all effort deployed in ICES sub-division IIIa occurs outside of Kattegat. In the Western Waters, it is assumed that effort occurring within ICES rectangles transected by the boundaries of the Biologically Sensitive Area (BSA) occurs within the BSA itself. In this way measures of effort in the North Sea and BSA may be overestimates.

Effort deployed in the Western Waters is classified according to the target species of the trip. This is determined using a decision tree approved by the Scientific, Technical and Economic Committee for Fisheries (STECF) of the European Commission. The target species is assigned on the basis of the gears used and the species composition of the vessel's landings.

Changes in processing for UK Sea Fisheries Statistics 2012 onwards

All mussel landings with a zero landings value, since 2008, have been removed from the dataset used to create all the tables in Chapter 3. These landings were identified to be landings of mussel seed which, rather than being sold for human consumption at this point are re-laid for aquaculture. They are then harvested and sold at a later stage. As these landings are not sold at the point of initial dredging they have been removed and the data recalculated.

In the calculation of average prices throughout Chapter 3, landings with a zero value have not been included in the calculation as inclusion would result in a lower average price. There are various reasons why landings may have a zero value. There are some fish which cannot be sold and therefore have a zero value e.g. undersize fish landed as part of catch quota work, or scientific dispensation landings which cannot be sold but have to be recorded in sales notes to allow cross checks with landings declarations. There are also instances where fish are not offered for sale or are intended for sale at a later date, and so are subject to takeover declarations. For the 2018 edition

of Sea Fisheries Statistics, zero value landings into the UK have also had values added to better reflect the true value of fishing to the economy.

EU reporting requirements on fishing activity data

As part of the EU legislation that established controls on fishing activity, limits are set in two key areas:

- (i) Fish quotas limits on the level of fish that can be caught and landed related to the species of fish and sea area of activity.
- (ii) Fishing effort limits in terms of the total fishing effort that can be exerted, usually in terms of the days spent at sea by vessels combined with a measure of their catching capacity such as engine power.

The legislation that sets out control limits in these two areas also includes requirements on Member States to report data on the uptake by their fishing fleets against these levels. However, the information reported to the Commission has to be collated in line with two conflicting requirements, that is to report accurate data that are available as at the time of submission, as well as meet the tight reporting deadlines for providing information to the Commission after the end of a period. For example, information for end year quota and effort uptake has to be reported by the 15th calendar day after the end of the period in question.

Following the reporting of data to the Commission, there are additional processes that need to occur to allow the "close-down" of a year for quota and effort management purposes, such as additional checks with the Commission and other Member States on data, the agreement of end year quota and effort swaps, and the agreement on banking and borrowing of fish quotas between years. This close-down is a necessary element within the management of fishing activity as it allows for the level of any overfishes for the previous year to be determined and penalties needed for the current year to be set. This needs to be done as early in the year as possible to ensure that both national administrations and the fishing industry know the levels of quota and effort they have to operate with, so that any detrimental effect on management of activity within the current year is avoided.

As part of ensuring the close-down process takes place as early as possible, the Commission sets out operational requirements related to reporting amendments to data. After initial submissions by 15 January, final data for the previous year's quota and fishing effort uptake have to be submitted to the Commission by 15 February. There are, however, lags in the reporting of data on activity by fishermen that include:

- The legislative requirement on fishermen is to submit the reports on their operations within 48 hours of a landing taking place. This does not guarantee that fishing administrations receive this information within 48 hours, and we frequently experience significant delays in receiving documentation.
- Processing of documentation takes time as there is a significant amount of information reported on the logbook on the activity of vessels. The EU logbook system used for the vessels over 10 metres in length covers many different reporting obligations, thus the volume and complexity of data involved can lead to delays in data entry.
- The information received is thoroughly checked and validated before reporting to the Commission. This can delay the use of data.

In previous years a consequence of the early reporting deadline and the required close-down of a year has been that there were data entered and validated after the reports were submitted to the Commission. For the final reports on UK landings of quota species and fishing effort for 2013 onwards, a revised approach was taken which combines pre-validated data (from electronic logbooks and VMS systems) with fully validated data that have gone through the array of cross

checks required under the EU Regulations. Additional validation processes were put in place to quality assure the pre-validated data prior to submission. By definition it was not possible to include any estimates for landings where no information to inform authorities that a landing or fishing activity had taken place had been received.

The desire to reduce the impact of these lags in information is one of the key drivers for larger fishing vessels to move to electronic reporting of data on activity both in terms of the activity carried out by fishermen at sea and also in terms of the land-based activity in terms of the sales notes associated with the first sale of the fish after landing, and so the requirements to report data electronically have been expanded over recent years. By the first half of 2015, all UK vessels 12 metres and over in length were submitting activity data electronically - vessels 12 metres and over in length accounted for 92 per cent of the total quantity of fish landed by UK vessels in 2018. In terms of the sales notes, these are usually reported by the merchants buying the fish, and for these first sales of fish within the UK in 2016, around 90 per cent of the tonnage of fish reported as sold from UK vessels were reported via electronic sales notes rather than paper documents. The electronic reporting of activity has helped to significantly reduce the lags in the monitoring and reporting of activity.

Data are prepared for the annual statistics publication at a point significantly after the close-down date for EU reporting systems. The publication is prepared to meet a wide range of uses. Apart from Tables 2.10 and 3.12, the data included incorporate the full picture of data held on UK fisheries administrations systems including information on any landing that is received after the EU close-down date and also all data that have passed through the complete checking and validation processes. This means that the publication gives as complete a picture as possible of total UK vessel activity in quantity and value terms. We therefore report on all landings and effort data, including that related to non-quota species (such as shellfish) which are of economic importance to the UK industry. See Appendix 5 for details of our policy with regards to data revisions.

Requirements to report fishing activity data electronically

Requirements to report data on fishing activity through electronic reporting systems rather than by using the paper community logbook were first introduced by Council Regulation (EU) 1996/2006. A phased approach to the introduction of requirements to report data electronically was planned to cover all vessels over 15m overall length. These requirements were subsequently revised by Council Regulation (EU) No. 1224/2009 that introduced an extended deadline for the change-over as well as extending the requirements so that all EU fishing vessels over 12m overall length would eventually be required to report data by electronic means. The full requirements of the electronic reporting system are in Commission Implementing Regulation (EU) No. 404/2011. This sets out the various elements of activity during a fishing trip that must be reported – these cover all possible events and activities from the vessel leaving port to its return to land fish. More details on these requirements can be found on the MMO internet site and that of the European Commission via the links given below:

https://www.gov.uk/government/publications/how-to-report-fishing-activities-using-an-electronic-logbook-software-system

http://ec.europa.eu/fisheries/cfp/control/technologies/ers/index en.htm

As stated earlier, by the first half of 2015, all active UK fishing vessels of 12 metres and over in length were reporting their data electronically. Both data reported electronically and on paper declarations go through extensive validation checks, with the system used for electronic returns extended to cover the differences in structure and the additional elements required within it. The validation system also covers checks mandated by EU legislation that must take place on all landings data received via electronic or paper declarations. These checks are set out in Article 109 of Council Regulation (EU) No. 1224/2009, and require the data reported on fishing activity in logbooks, landing declarations and sales notes to be cross-checked for consistency and accuracy. Activity data reported in these documents are also compared with other sources of information, such as satellite surveillance information from vessels where available.

The fishing activity data reported to the European Commission under the various sets of EU legislation have all gone through these checks before inclusion in the reports, with any discrepancies identified going through investigation to identify the causes in case further action is required. The investigation of discrepancies involves a significant degree of resources in all four UK fisheries administrations, but the complex nature of these checks does lead to instances where there can be a lag in time between the activity taking place and it being included in the data reports. The change-over to electronic reporting systems has increased the length of the validation process in some cases as vessel operators have had to become used to their new role as data reporters using the new electronic systems.

Imports and exports

HM Revenue & Customs (HMRC) is responsible for collecting the UK's international trade in goods data. The data are compiled from trade declarations made using commodity codes from the UN Tariff (HS Nomenclature) and its EU derivative the Intrastat Classification Nomenclature (ICN). These data are sent annually to the MMO, who process the data for this publication.

Landings of fish into the UK by foreign vessels are typically included in import statistics; however, statistics on imports and landings by foreign registered vessels may not strictly be comparable. Arrivals of fish should be reported where the economic owner of the vessel is outside the UK. In some cases, the countries of vessel registration and economic ownership may differ. A further complication is that import statistics do not include fish landed into the UK by foreign vessels which have a final destination outside the UK. Lastly, in some cases there exists a value threshold for declaration of imports. For these reasons it is possible that imports of fish may be below the quantity of landings reported for foreign registered vessels.

Exports include dispatches of fish by UK economically owned vessels when landing outside the UK. For similar reasons to those for imports, these are not directly comparable with landings by UK registered vessels abroad.

Household consumption and expenditure

Data on household purchases are sourced from the Living Costs and Food Survey run by the Office for National Statistics. The Family Food module of the survey collects detailed quantity and expenditure information on household and eating out purchases of food and drink for use by the Department for Environment, Food and Rural Affairs (Defra).

The survey is an annual voluntary sample survey of private households. The survey is continuous, with interviews being spread evenly over the year to ensure that seasonal effects are covered. Each report details the number of people and households that completed a diary during the reporting year.

Each individual aged 16 and over in the household is asked to keep diary records of daily expenditure for two weeks. Information about regular expenditure, such as rent and mortgage payments, is obtained from a household interview along with retrospective information on certain large, infrequent expenditures such as those on vehicles. Simplified diaries are kept by children aged between 7 and 15.

Prior to 2008, the Living Costs and Food Survey was named the Expenditure and Food Survey. In 2001-2002 this replaced the National Food Survey and the Family Expenditure Survey. More detailed methodological information for all four surveys is available from Defra and the Office for National Statistics.

Inflation

The Retail Price Index (RPI) and Consumer Price Index (CPI) measures of inflation are produced by the Office for National Statistics. The Landed Price Index (LPI) is produced by the MMO.

Only the components of the RPI and CPI for fish prices are included in this publication. These were based on a 'basket' of six items: fresh white fish fillets, fresh salmon fillets, frozen prawns, canned tuna, fish fingers, and frozen breaded/battered white fish. These two price indices differ in three main ways:

- population base the RPI excludes very high and low income households and hence the CPI has a wider population coverage than the RPI.
- formulae used to combine prices the CPI uses a combination of geometric means and arithmetic means, whereas the RPI only uses arithmetic means.
- commodity coverage the CPI excludes owner occupiers' housing costs and hence the RPI has wider commodity coverage than the CPI. The fish components of these indices have the same commodity coverage.

Further methodological details for the RPI and CPI are available from the Office for National Statistics.

The LPI is a simple price index used to assess the change in prices at first sale of fish landed into the UK by UK vessels. It is calculated using the average annual prices of 46 categories of fish species, using data collected on all landings into the UK by UK vessels. The prices are aggregated using a weighted mean, with weights chosen as the quantities landed (in live weight equivalent) of each species category into the UK in 2000.

GDP for fishing

The Office for National Statistics produces data on gross value added (GVA), gross domestic product (GDP) and output indices. GVA measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom. It is used in the estimation of GDP, a key indicator of the state of the whole economy. In the UK, three theoretical approaches are used to estimate GDP: 'production', 'income' and 'expenditure'. When using the production or income approaches, the contribution to the economy of each industry or sector is measured using GVA.

The production approach to estimating GDP looks at the contribution of each economic unit by estimating the value of an output (goods or services) less the value of inputs used in that output's production process. The income approach to estimating GDP measures the incomes earned by individuals (e.g. wages) and corporations (e.g. profits) in the production of outputs (goods or services).

The link between GVA and GDP can be defined as: GVA (available by industry only) plus taxes on products (available at whole economy level only), less subsidies on products (available at whole economy level only) equals GDP (available at whole economy level only). In summary:

GVA + taxes on products - subsidies on products = GDP

Further methodological details on GDP and GVA are available from the Office for National Statistics.

Other data sources

EU fishing vessels

The European Commission collects and publishes data on the characteristics of EU fishing vessels in the EU Fleet Register. Each Member State provides the Commission with a complete snapshot of their national register to the EU Fleet Register on the first working day of March, June, September and December each year, as required by Commission Regulation (EC) No 26/2004. Validation checks are performed to confirm the consistency of data submitted before the data are published in an online database.

Accidents, lost vessels and fatalities

Data on accidents involving UK fishing vessels are collected and compiled by the Marine Accident Investigation Branch (MAIB), a separate branch within the Department for Transport. MAIB inspectors examine and investigate all types of marine accidents involving UK vessels worldwide, and other vessels in UK territorial waters.

EU landings

EU member states exchange information on landings of quota species via the Fisheries Language for Universal Exchange (FLUX). Data on the quantity landed of each stock subject to quotas are submitted to meet monthly reporting deadlines set out in EU legislation, in particular Council Regulation (EC) No. 1224/2009. These reporting deadlines are often shortly after the close of the fishing period; data lags mean that the figures reported are typically slight underestimates of the true quantity landed. Each member state reports the landings into their own country by vessels registered in other member states, leading to occasional differences with figures reported by the UK on landings by UK vessels abroad. The figures are compiled by the European Commission to give an overall picture of the landings by each member state.

Stock assessments

Stock assessments are provided by the International Council for the Exploration of the Seas (ICES) using data supplied by national administrations. In the UK, the Centre for Environment, Fisheries, and Aquaculture Science (Cefas), an executive agency of Defra, provides expert advice on fisheries assessment.

The world fishing industry

Data on the world fishing industry are compiled by the Fisheries and Aquaculture Department of the Food and Agriculture Organisation of the United Nations (FAO). Data on landings by UK vessels are supplied by the MMO on an annual basis; separate figures for the Isle of Man and the Channel Islands are sent directly by their Fisheries Departments. FAO figures are not directly comparable with landings figures in Chapter 3 owing to differences in time of production.

Appendix 5: Revisions policy

Where possible, the Marine Management Organisation produces revised figures each year to ensure that users have access to the latest data available. Revisions typically affect fishing effort, catches and trade data, where data from logbooks, landing declarations, sales notes and trade declarations may occasionally be received or amended several months after the event. The magnitude of revisions to tables is typically larger for more recent years although the size of revisions is usually very small. Any revised data presented in this publication will be clearly marked with an 'R' against the relevant entries.

There are a number of causes of the revisions made in this publication:

- Receipt of additional data. Despite strict data reporting requirements, some data are not received or entered at the time of publication. This typically affects data for more recent years.
- ii) **Revisions to data sources**. Corrections are made to database entries throughout the year where these are found to be incorrect. In addition, for landings data systematic corrections are made to implausible quantities and values prior to production of the publication to reduce the influence of outliers.
- iii) **Rectification of data processing errors**. Where data are found to have been incorrectly processed for a previous publication, these errors are corrected as soon as possible.

Users should always refer to the latest figures published by the Marine Management Organisation. Previous editions of all publications are made available online on the Marine Management Organisation website should users wish to examine the effect of revisions in further detail.

The Marine Management Organisation adheres to the Department for the Environment, Food and Rural Affairs' policy on revisions and errors. Further information can be found in the *Statement on Revisions and Errors* at

https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/about/statistics#corporate-procedures-and-standards.

Structure and activity of the UK fishing industry

Several tables in Chapter 2 are revised annually as follows:

Table Title

- 2.7 Number of accidents, lost vessels and fatalities involving UK vessels: 2008 to 2018 (revised by the Marine Accident Investigation Branch)
- 2.8 Beam trawl activity in the Sole Recovery Zone: 2002 to 2018
- 2.11 Days at sea for the over 10m UK fishing fleet: 2002 to 2018 (supplementary table)

Landings

Tables in Chapter 3 are revised annually for the preceding four years to reflect information received since the previous publication. The following table shows the effect of revisions to landings data published in *UK Sea Fisheries Statistics 2017*:

Figures published in *UK Sea Fisheries Statistics 2018* as a proportion of figures previously published in *UK Sea Fisheries Statistics 2017*

	Quantity					Value			
	2014	2015	2016	2017	201	4 2015	2016	2017	
					· · · · · · · · · · · · · · · · · · ·				
Landings into the UK by L	JK vessels	S:							
Demersal	100.0%	100.0%	100.0%	100.5%	100.0%	6 100.0%	100.0%	100.0%	
Pelagic	100.0%	100.0%	100.0%	96.7%	100.0%	6 100.0%	100.0%	100.0%	
Shellfish	100.0%	100.0%	100.0%	95.1%	100.0%	6 100.0%	100.0%	99.8%	
Total	100.0%	100.0%	100.0%	97.3%	100.0%	6 100.0%	100.0%	99.9%	
Landings into the UK by for	oreign ves	sels:							
Demersal	100.0%	100.0%	100.0%	108.6%	100.0%	6 100.0%	100.0%	104.6%	
Pelagic	100.0%	100.0%	100.0%	108.6%	100.0%	6 100.0%	100.0%	97.1%	
Shellfish	100.0%	100.0%	100.0%	100.0%	100.0%	6 100.0%	100.0%	100.0%	
Total	100.0%	100.0%	100.0%	108.4%	100.0%	6 100.0%	100.0%	102.9%	
Landings abroad by UK ve	essels:								
Demersal	100.0%	100.0%	100.0%	99.9%	100.0%	6 100.0%	100.0%	99.8%	
Pelagic	100.0%	100.0%	100.0%	100.0%	100.0%	6 100.0%	100.0%	100.0%	
Shellfish	100.0%	100.0%	100.0%	108.5%	100.0%	6 100.0%	100.0%	100.0%	
Total	100.0%	100.0%	100.0%	100.3%	100.0%	6 100.0%	100.0%	99.9%	

Source: Fisheries Administrations in the UK

There have been some relatively large percentage increases in the 2016 value of the UK fleet's demersal landings into both the UK and abroad. These relate to a small number of cod landings which previously did not have a value assigned. The revision to shellfish landings abroad is relatively very high (an increase of 5 per cent) although this relates to a relatively small adjustment in crabs of 400 tonnes.

Revisions to more detailed landings figures may differ in magnitude to the above indicative proportions.

Supplies, overseas trade and marketing

All tables in Chapter 4 are revised annually as follows:

- i) Landings data (Tables 4.1, 4.4a-e, 4.5) are revised annually for the preceding four years, in keeping with conventions used in Chapter 3.
- ii) Trade data (Tables 4.1, 4.2, 4.2a, 4.3, 4.3a, 4.4a-e) are revised annually for the preceding year. The current year's data are provisional.
- iii) Household consumption, RPI, CPI and GDP data are revised for all previous years using data received from the Department for Environment, Food and Rural Affairs and the Office for National Statistics.

The following table shows the effect of revisions to trade data published in *UK Sea Fisheries Statistics 2017*:

Trade data published in *UK Sea Fisheries Statistics 2018* as a proportion of figures previously published in *UK Sea Fisheries Statistics 2017*

	Imports	(2017)	Exports (2017)		
	Quantity	Value	Quantity	Value	
Fish (excluding Shellfish)	99.9%	99.9%	99.9%	99.9%	
Shellfish (Crustaceans and Molluscs)	100.0%	100.0%	99.8%	99.9%	
Fish Products	99.9%	99.8%	99.9%	99.9%	
Total	99.9%	100.0%	99.9%	99.9%	

Source: H.M. Revenue and Customs

Main stocks and their level of exploitation

The time series estimates of abundance and fishing mortality are revised each year using the data provided by the International Council for the Exploration of the Seas (ICES). Stock assessments for previous years are as provided in annual ICES reports and are not updated using more recent data.

Overview of the world fishing industry

All tables in Chapter 6 are revised annually for all previous years using data received from the United Nations Food and Agriculture Organisation (FAO).

Appendix 6: Further information

Official publications

Other official publications on sea fisheries statistics include:

MMO / DEFRA UK Fishing Vessel List. List of registered and licensed vessels of over 10 metres

overall length. Published monthly.

Monthly UK Sea Fisheries Statistics. Summary publication of landings into

England and Wales. Published monthly.

Available from https://www.gov.uk/government/organisations/marine-

management-organisation/about/statistics or by writing to Marine Management Organisation, 1st floor, Seacole Block, 2 Marsham Street, London, SW1 4DF.

Tel: 0300 123 1032; accesstoinformation@marinemanagement.org.uk.

Marine Scotland Scottish Fisheries Statistics 2017. Tel: 0131 244 6437. Available online from

http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubFisheries

DAERA Report on the sea and inland fisheries of Northern Ireland. Available from

DARDNI Fisheries division, Tel: 028 9056 9262 https://www.daera-ni.gov.uk/topics/fisheries

FAO Yearbook of Fishery and Aquaculture Statistics 2017. Available from

http://www.fao.org/fishery/publications/yearbooks/en

Eurostat Agriculture, Forestry and Fisheries Statistics: 2017. Available from

http://ec.europa.eu/eurostat/en/web/products-statistical-books/-/KS-FK-17-001

The statistics in this release are derived from the same sources as the above publications in many cases. However, discrepancies may exist between these publications owing to differences in dates and methods of data extraction and compilation.

Useful websites

Marine Management Organisation www.gov.uk/mmo

Defra https://www.gov.uk/government/organisations/department-

irs

Marine Scotland https://www2.gov.scot/Topics/marine

DAERA https://www.daera-ni.gov.uk/

Welsh Assembly Government https://gov.wales/

National Statistics https://www.gov.uk/search/research-and-

nent_type=upcoming_statistics

Sea Fish Industry Authority http://www.seafish.org/

Maritime and Coastguard Agency https://www.gov.uk/government/organisations/maritime-and-

Marine Accident Investigation Branch www.maib.gov.uk

Centre for Environment, Fisheries and

Aguaculture Science

www.cefas.defra.gov.uk

European Commission - Fisheries https://ec.europa.eu/fisheries/home_en

Eurostat https://ec.europa.eu/eurostat

EU Fleet Register http://ec.europa.eu/fisheries/fleet/index.cfm

FAO Fisheries Department http://www.fao.org/fishery/en

ICES https://www.ices.dk/Pages/default.aspx

Additional information on management of UK fish quotas

Limits are set each year on the levels of quota available to Member States in a range of fisheries – there are limits on the quantity of different species of fish that can be caught and landed from different combinations of sea areas set for each Member State. More information on the management of quotas in the UK can be obtained from the MMO at: https://www.gov.uk/government/publications/quota-management-rules

A key element of managing fish quotas in the UK is the delegation of management responsibilities to various parts of the UK industry. Allocations are made each year to Producer Organisations (POs) within the UK based on the holdings of Fixed Quota Allocation units (FQAs). More information on the process is available from the source listed above. In addition a publicly accessible register of holdings of these FQA units is available on line. This includes details of the holdings of FQA units related to individual vessels and as held by POs collectively on behalf of their member vessels. More information on these holdings is available at: https://www.fqaregister.service.gov.uk/

The MMO and other UK fisheries administrations continually monitor the activity of UK fishing vessels in terms of landings of quota species during each year. Weekly reports are released which give the latest picture of landings by UK vessels against the annual quotas available. These are available from the MMO at:

https://www.gov.uk/government/statistical-data-sets/quota-use-statistics