Marine Management Organisation

UK Sea Fisheries Statistics 2022

UK SEA FISHERIES STATISTICS 2022

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About this publication

The aim of this publication is to provide a comprehensive picture of UK Sea Fisheries in 2022, recent trends and long-term historical context, back to 1938 in some instances.

The publication is a summary of:

- The UK fishing fleet (Section 1)
- Its activity at sea
    - Landings – how much fish are caught and landed (Section 2)
    - Effort – how long is spent at sea (Section 3)
- Trade (Section 4)

This report contains charts and commentary to describe UK sea fisheries. View the accompanying tables for each section and underlying datasets here.

Contents

Key Statistics

Fleet	In 2022 there were 5,541 UK registered fishing vessels. This represents a 14% reduction in the last ten years, however Gross Tonnage (GT) has remained similar at 203 thousand tonnes. Approximately 21% of the UK fleet is represented by vessels over 10 metres in length, of which 44% are administered in Scotland. There are around 10 thousand fishers working on UK registered vessels. This is a reduction of 2,100 fishers in the last ten years.
Landings	In 2022, UK vessels landed 640 thousand tonnes of sea fish with a value of £1.04 billion. Compared to 2021, this is a decrease of 2% in quantity, however an increase in value of 13%. The increase in value is mainly driven by higher fish prices. Landings into the UK by foreign vessels in 2022 was 19 thousand tonnes, which compared to 2021 represents a 4% reduction. Landings abroad by UK vessels also decreased to 245 thousand tonnes, a reduction of 5%.
Effort	Since 2004, fishing effort (kW days at sea) by the over 10m fleet has decreased by around 40%. Most of the reduction in effort is driven by a 41% decline in effort in the demersal trawl and seine segment. Fishing effort by the over 10m fleet decreased by 3% between 2021 and 2022.
Trade	The UK is a net importer of fish. The UK's crude trade gap in 2022 for sea fish is 316 thousand tonnes. This is lower than 2021, where the gap was 322 thousand tonnes. In 2022 the UK imported 647 thousand tonnes of sea fish, with a value of £3.7 billion. It exported 330 thousand tonnes, with a value of £1.7 billion.

Section 1: Fleet

View the tables accompanying this section here: https://www.gov.uk/government/statistics/uk-sea-fisheries-annual-statistics-report-2022

Fleet Characteristics

Capacity and power
As well as the total number of vessels, the fleet can also be assessed in terms of their capacity and power. Capacity is usually measured in gross tonnage (GT) which is a volumetric measure of a vessel capacity. The power (kW) of a vessel refers to the vessel's engine power.

The MMO holds data on the capacity and power of all individual UK vessels and these figures are aggregated to compare groups of interest. This allows for a more nuanced assessment of the fleet, as opposed to looking at the number of vessels alone.

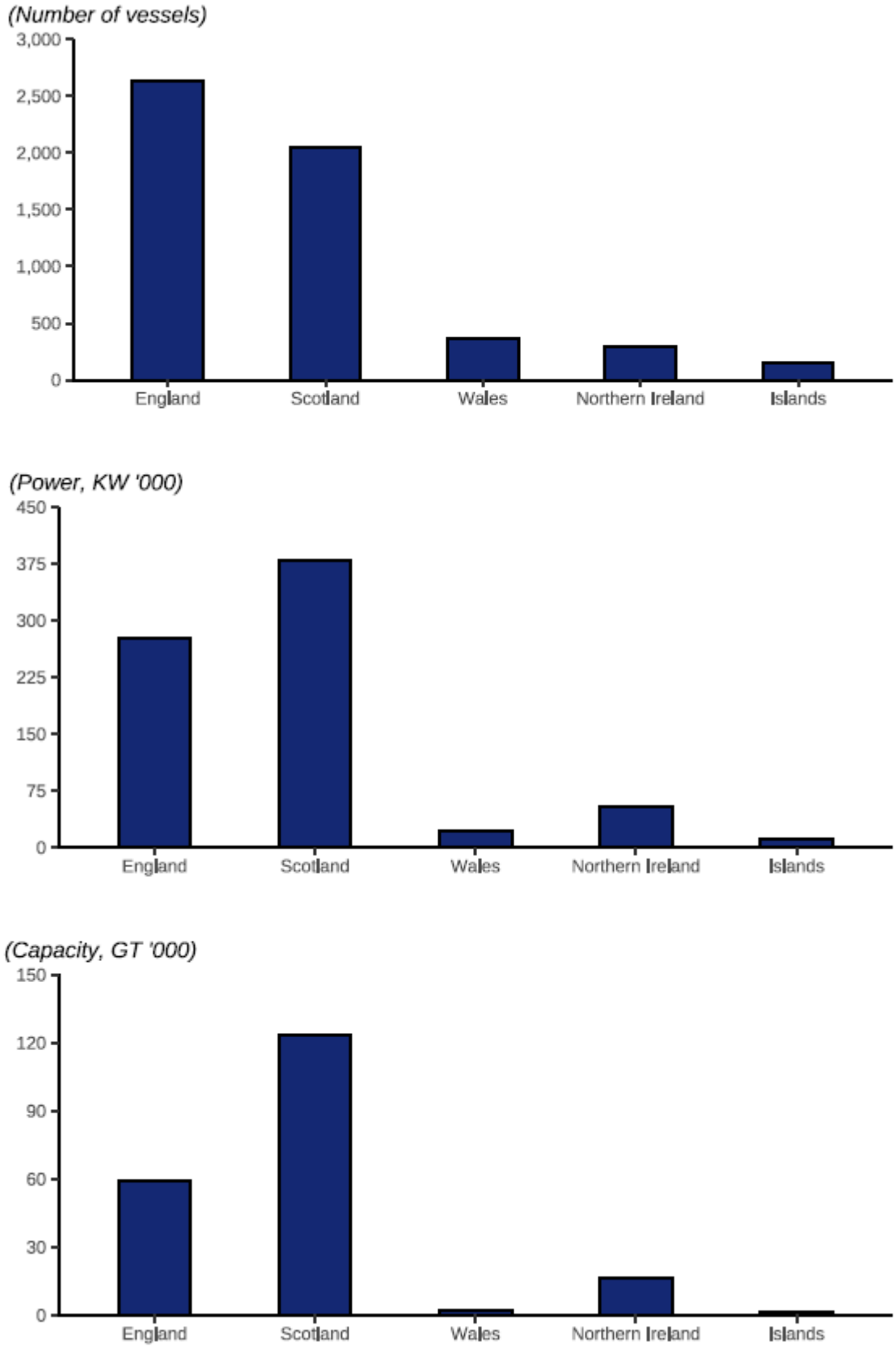
The number of UK fishing vessels has reduced by 52% over the past three decades, from over 11 thousand vessels to approximately 5.5 thousand. The power (kW) of the UK fleet has also decreased by 41% over the past three decades[1]. Two key changes which have contributed to this are national and international policies introduced to ensure the sustainability of fish stocks:

1. Greater controls on fishing opportunities

2. Fleet capacity reductions through decommissioning exercises

[1] Table 1.1

Figure 1.1[23]: Fleet characteristics split by country of admin within the UK.

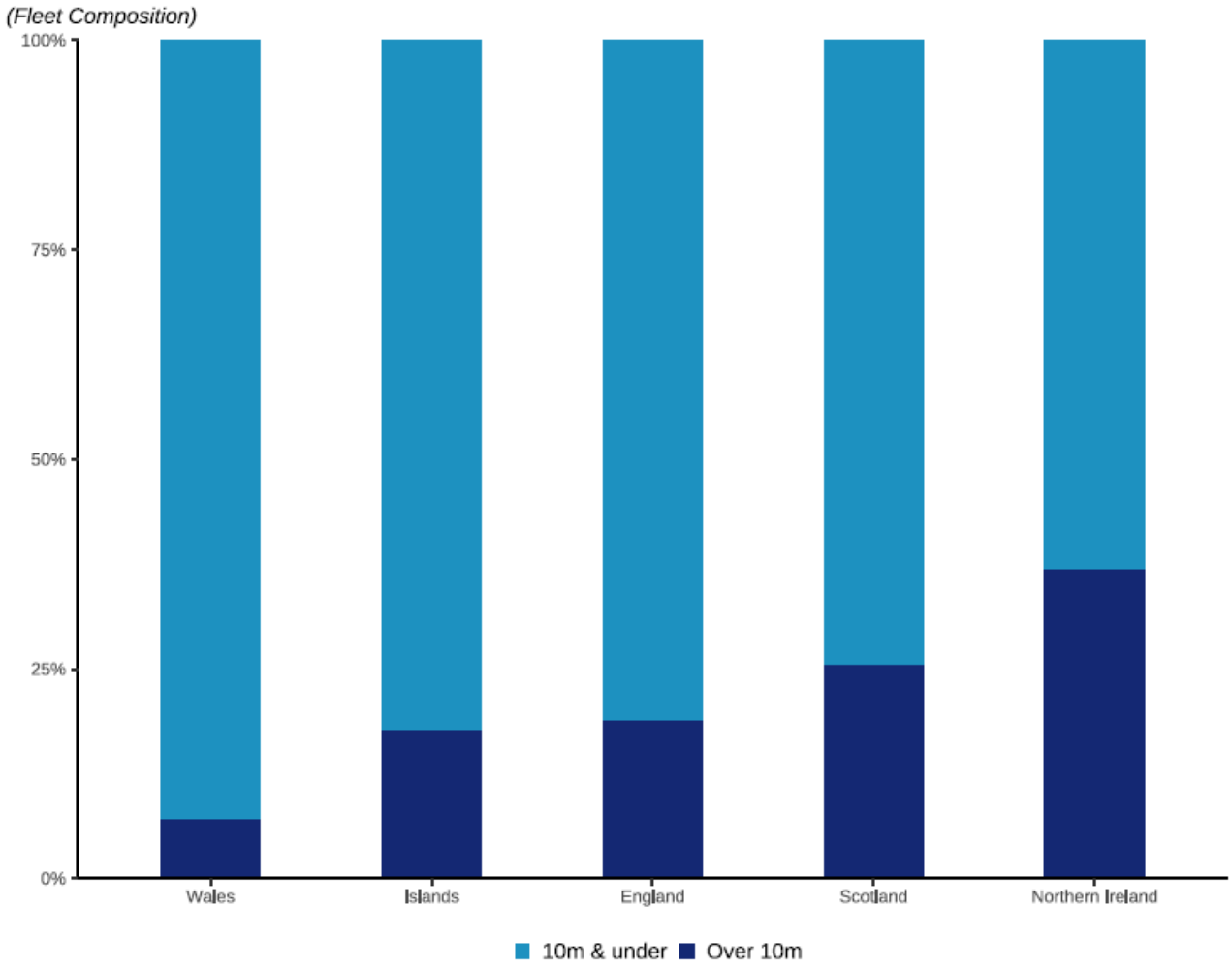


In 2022, England contributed the highest number of vessels to the UK fleet, but Scotland's fleet had more power and capacity. English vessels represent 48% of the total number of vessels in the UK while

Scottish vessels 37%. This proportion has remained the same since 2020, with little change over the last decade. The Scottish fleet has the greatest overall capacity (61%) while the English fleet accounts for 29% of the total fleet capacity.

Vessel length

Figure 1.2: Fleet composition showing proportion of over 10m and proportion of under 10m vessels in country of admin.



The Welsh fleet has the lowest proportion of vessels over 10m. The smaller number yet higher capacity of Scottish compared with English vessels (Figure 1.1) can be explained by Scotland having a higher proportion of larger, more powerful vessels in comparison to the English fleet.

[2] In this figure and throughout the publication, Islands refers to the Crown Dependencies of Isle of Man, Jersey and Guernsey.

[3] The figures and values reported here are based on the country of administration for the vessel while the figures in Tables 1.1 and 1.2 are based on the country associated with the district the vessel is administered by. Some Island vessels (based on country of administration) are assigned to England in the associated tables as the district of their admin port is Plymouth in England.

The fleet with the largest proportion of vessels over 10 metres in the UK is the Northern Irish fleet. The different length composition of the fleet can again be used to explain why the Northern Irish fleet has more capacity and power than the Welsh and island fleets, despite having a similar number of vessels.

In 2022, there were 31 vessels that could not be assigned to a country. These vessels are registered but not administered by a port; typically, new vessels and vessels in the process of moving to another administration[4].

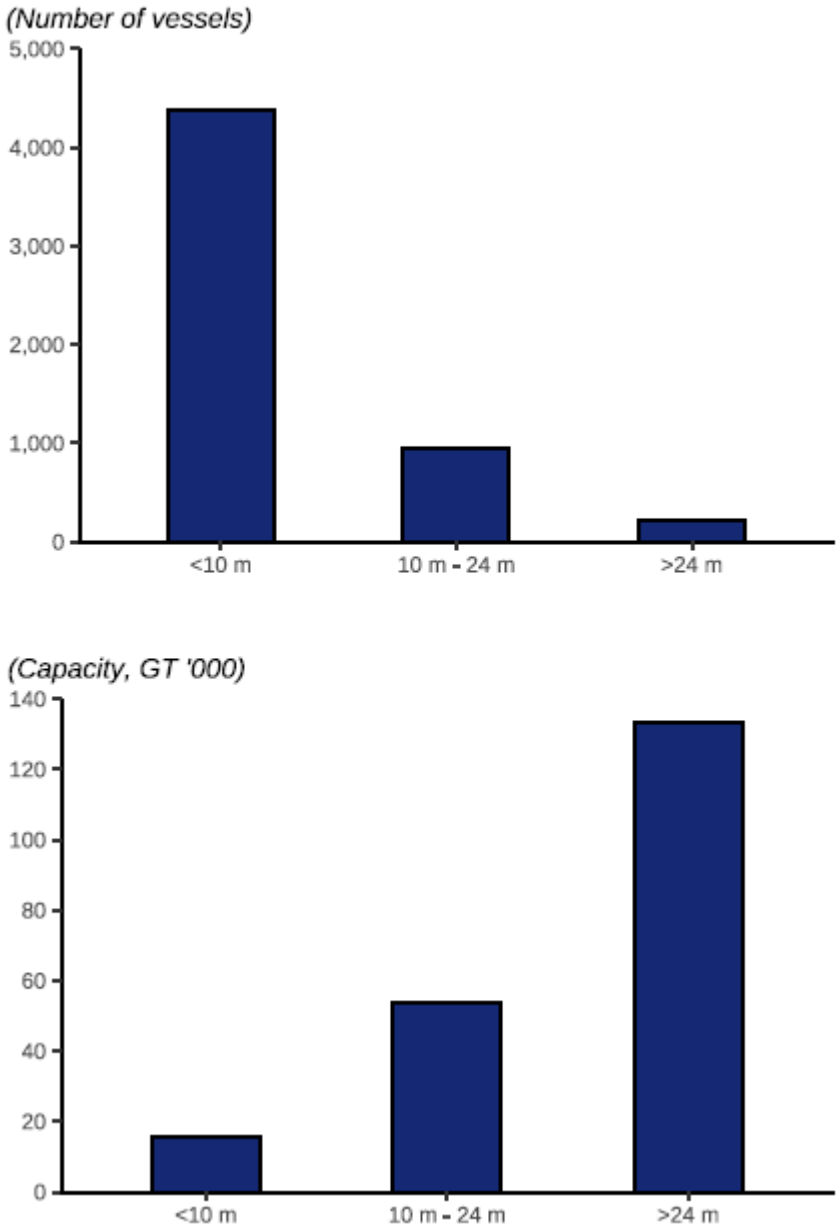
Fish stock
A fish stock refers to a fish population that is isolated from other stocks of the same species. For example, around the UK there are several cod stocks – including e.g. Cod 7d in the Channel and North Sea Cod. Many fish stocks are managed by quotas – limits set on the tonnage that can be caught. Currently the UK has quota for around 100 different fish stocks.

Owing to the diverse nature of the fishing industry, it is difficult to provide a simple explanation of the variation seen across the fleet. The main influencer is the different fish stocks that the fleets target. Key elements of the Scottish fleet target several fisheries that are high volume but lower priced, such as herring and mackerel caught in the North Sea and West of Scotland waters. To target these stocks, the Scottish fleet has moved towards having higher capacity vessels which cover large sea areas and can catch large volumes (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 in fishing opportunities over time have been key drivers for the development of the fleet.

[4] Table 1.2

Figure 1.3: Fleet characteristics by vessel length groups.

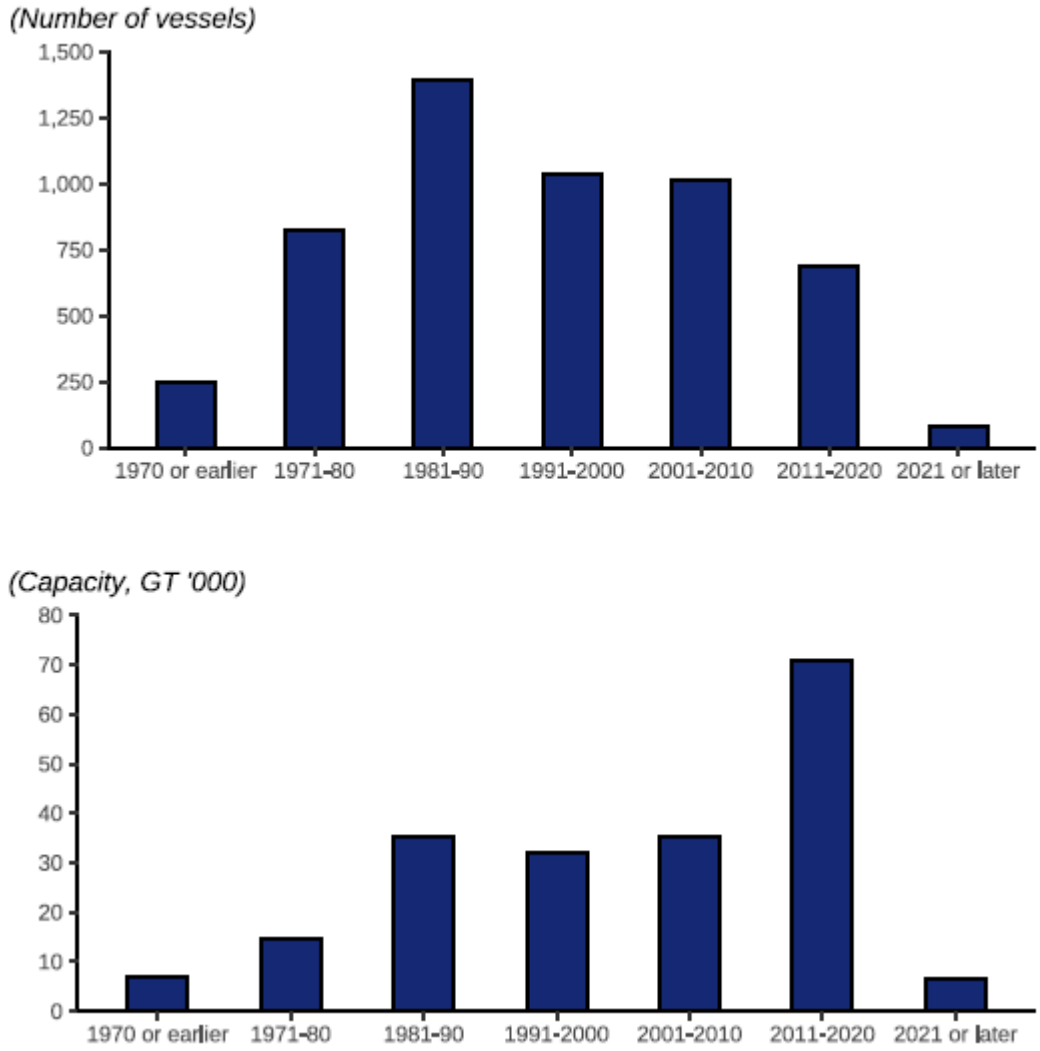


Larger vessels contribute more to the UK fleet's capacity than smaller vessels. Vessels under 10 metres make up 79% of the UK fleet but only contribute 8% to the fleet's total capacity. Larger vessels of more than 15 metres make up 10% of the total fleet by number representing 85% of the fleet's capacity. This is because larger vessels utilise fishing gear that can catch larger quantities and hold greater amounts of fish per trip and can journey for longer distances to better fishing locations.

The Scottish fleet has larger vessels than the English fleet. The average length of a Scottish vessel is 13 metres, while the average length of an English vessel is just over 11 metres. As a result, the Scottish fleet has over twice the capacity than the English fleet, despite the English fleet having 29% more vessels.

Age of vessels

Figure 1.4: Fleet characteristics by age of vessels within the UK fleet.



Vessels built in 2011 or later have a much higher capacity than vessels built prior to 2011. While the number of vessels built in the last four decades has decreased, the total capacity and power of those built since 2011 has increased substantially. These modern vessels (built since 2011) contribute 38% of the fleet's capacity, while only making up 14% of the vessels in the UK fleet. In comparison, vessels built between 1981 and 1990 account for 25% of the total number of vessels in the fleet but only 17% of the fleet's total capacity. This illustrates the transition within the UK fleet to fewer but larger vessels that have higher capacity and are more efficient in utilising the fishing opportunities available.

Industry groups

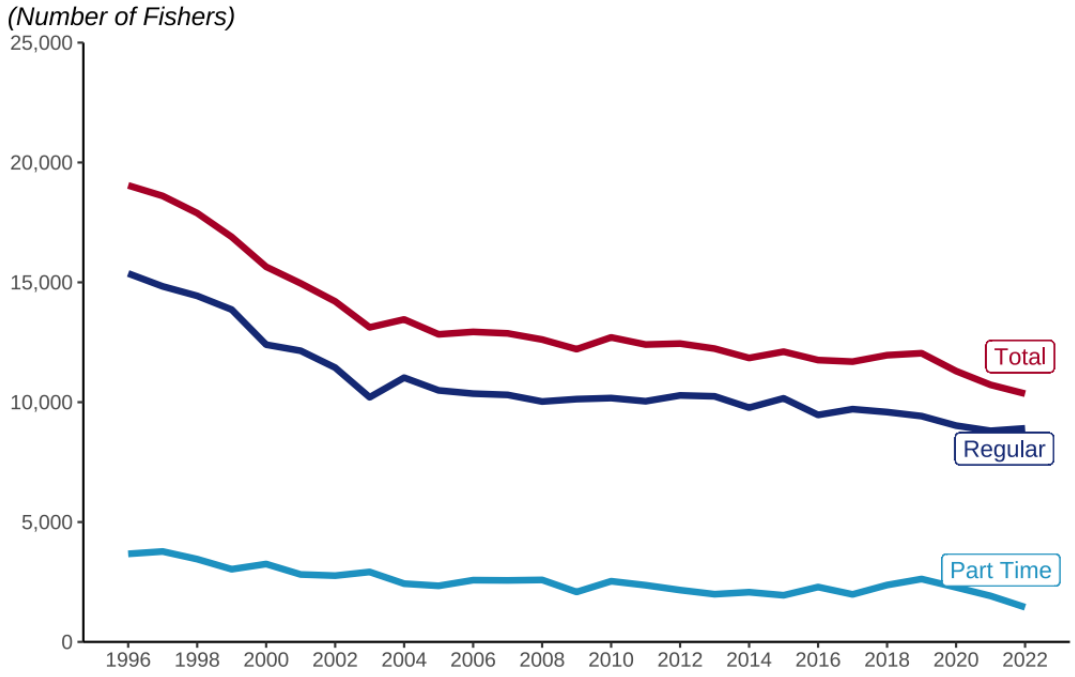
Fish Producer Organisations (FPOs)
FPOs are officially recognised bodies set up by fishery or aquaculture producers. In the UK, they are responsible for managing the quota for their vessels and play an essential role in fisheries management.

On 31 December 2022, 739 vessels over 10 metres in length were members of a FPO, 63% of all vessels over 10m. The remaining 430 vessels over 10m were not members of an FPO and were therefore members of the non-sector. The proportion of non-sector vessels (37%) has remained relatively stable since 2018.

The composition of FPOs varies greatly; Scottish FPO had the highest membership with 142 vessels, although the average number of vessels in an FPO was 31[5].

Fishers on UK vessels

Figure 1.5: Total number of fishers in the UK split by regular and part time fishers from 1996 to 2022



Compared to 2021, the total number of fishers decreased by over 3% in 2022. This amounted to almost 400 fewer jobs in the catching sector. This is less of a decrease from 2020 to 2021, which had a 5% decrease with almost 600 fewer jobs.

The total number of fishers in the United Kingdom has steadily declined by 48% since 1995.

[5] See Table 1.5.

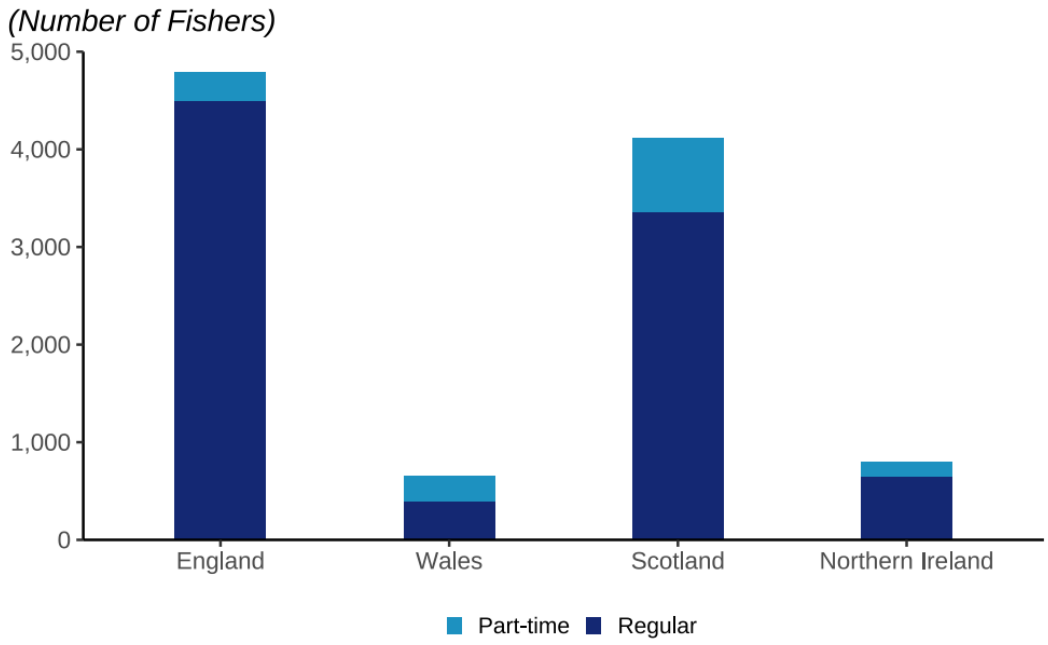
The number of part time fishers in 2022 decreased by 25% since 2021 and is 63% less than in 1995. The decrease in number of part-time fishers in 2022 from 2021 can be accounted for due to COVID. With crewing on vessels becoming more stable with the easing of COVID regulations, more part-time fishers left or became regular fishers. This is reflected by a slight increase in regular fishers in 2022 compared to 2021, when numbers have been decreasing since 2017.

The long-term decrease in the number of fishers is associated with reductions in fleet size and the move to fewer but larger vessels. Relative to their capacity, larger vessels do not require as many fishers as small vessels. As the UK fleet transitions to having more of these large ships rather than a higher proportion of small ships, there are fewer jobs in the catching sector.

Another reason for this decline is policies that limit fishing activity to protect fish stocks and the marine environment. National and international policies that limit fishing activity, such as the western waters and Sole recovery zone effort regimes, can reduce the number of available fishing jobs while insuring the sustainability of the industry.

Fishers by UK nation

Figure 1.6: Number of fishers in the UK by country with proportions of regular and part time fishers



Fishers working on English and Scottish vessels make up 86% of fishers on UK vessels.
Around 46% of UK fishers work onboard English vessels and 40% work on Scottish vessels. The remaining 14% is split 8% for Northern Irish vessels and 6% for Welsh vessels.
Welsh vessels have the highest proportion of part time workers (39%), in contrast to England where only 6% of fishers are part time.
The Scottish fleet has a 52% higher capacity compared to the English fleet, however, employs 669 fewer fishers. This demonstrates that fleets with a higher proportion of large ships require fewer fishers while having a higher capacity.

Section 2: Landings

View the tables accompanying this section here: https://www.gov.uk/government/statistics/uk-sea-fisheries-annual-statistics-report-2022

UK summary

In 2022, UK vessels landed 640 thousand tonnes[6] of sea fish into the UK and abroad with a value of £1.04 billion[7]. Compared to 2021, this is a decrease in the quantity of sea fish landed (2%), however a 13% increase in value landed.

Multiple factors impact fishing, and landings tend to fluctuate considerably over time. Since 2020, the biggest impact on sea fisheries was the effect of the UK's departure from the EU. This had an impact on the stocks the UK fleet had access to fish in subsequent years, including 2022.

Species groups

Fish are commonly split into three **groups of similar species**.

Demersal fish inhabit the bottom of the ocean. Key demersal species fished by the UK fleet include cod and haddock.

Pelagic fish inhabit the water column (not near the seabed or shore). The two main pelagic species fished by the UK fleet are mackerel and herring.

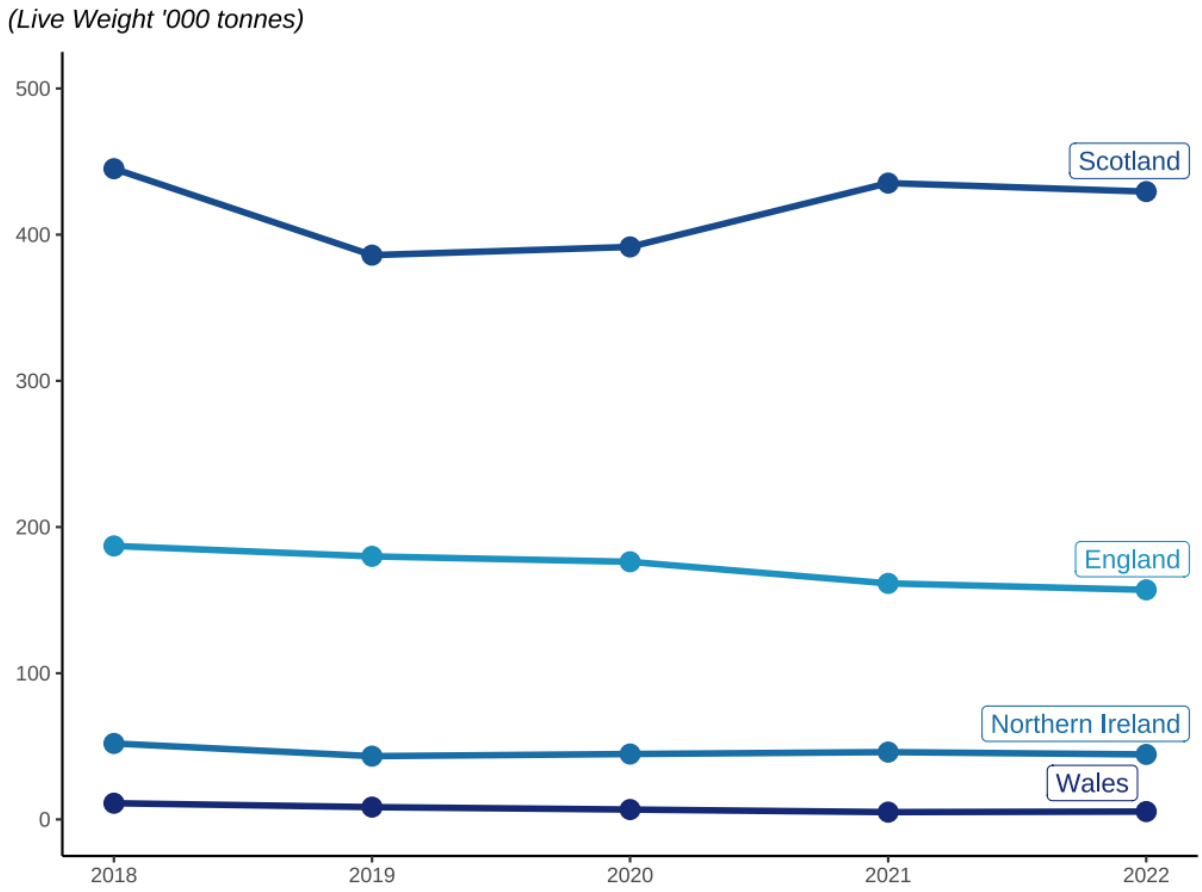
Shellfish include various species of molluscs (e.g. scallops, whelks) and crustaceans (e.g. crabs and nephrops).

The quantity of landings in 2022 decreased compared to 2021 driven by a decrease (2%) of lower value pelagic species compared to 2021. However, the overall value of landings increased due to higher value shellfish and demersal species, increasing by 14% and 21% respectively.

[6] In this section, tonnes always refer to live weight tonnes. This is the sum of the live weight of fish caught, prior to any processing e.g. gutting or shelling.
[7] Table 2.1

Vessel nationality

Figure 2.1: Quantity of landings by the UK fleet between 2018 and 2022 by fisheries administration.



Of the four UK nations, Scotland lands the most fish by quantity and value. At the country level, the landed weight of fish by each of the four nations remains relatively stable over time. A notable exception is the 13% decrease in landings by Scottish vessels between 2018 and 2019. This reduction was mainly driven by a reduction in landings of pelagic species, due to smaller quotas for key pelagic species. In recent years (2021 and 2022) this has now returned to 2018 levels, again driven by an increase in available quota for key pelagic stocks leading to increased pelagic uptake compared to 2019 and 2020.

Vessel length

Over three quarters of the total quantity of fish caught by UK vessels in 2022 was landed by vessels over 24 metres in length. In 2022, these vessels represented just 4% of the UK fleet by number. The large volume of landings by these large vessels is explained by their very high fishing capacity and power.

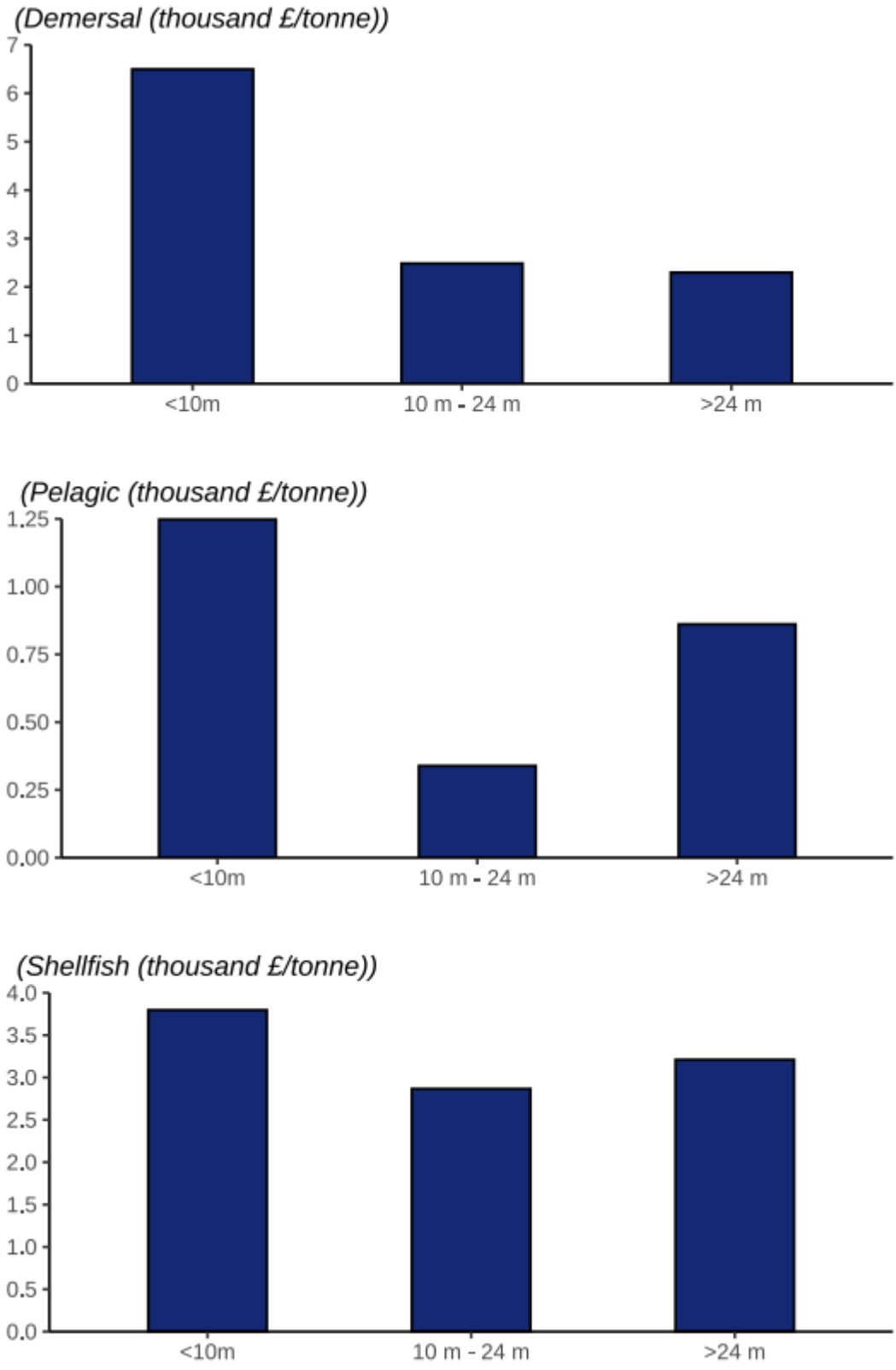
Landings of pelagic species by vessels over 24 metres in length accounted for 97% of the annual total pelagic landings for the whole UK fleet. 75% of all landings of demersal species by the UK fleet were by vessels over 24 metres in length.

In contrast, landings of shellfish are more evenly distributed across the fleet, with vessels 10 metres and under in length accounting for 21% of the total quantity of shellfish landings. Landings of shellfish made by 18 – 24m vessels accounted for 24% of shellfish landings.

Table 2.2: Quantity of landings by UK vessels 10m and under and over 10m

Vessel Length	2021	2022	Percentage change
Quantity ('000 tonnes)			
10m and under	35.9	31.9	-11%
Over 10m	615.9	608.4	-1%
Value (£ million)			
10m and under	121.5	127.1	5%
Over 10m	799.8	910.1	14%

Figure 2.3: Value of landings by the UK fleet in 2022 by fishing vessel length and species group.



Overall, vessels under 10 metres fetch a higher price per tonne for their landings (landings by under 10 metre vessels are 69% higher than those by over 24 metre vessels). This is especially true for demersal catches. Demersal landings by vessels under 10 metres fetch prices 65% higher than vessels over 24 metres. Landings of demersal species by larger vessels tend to be frozen on board the vessel and sold in bulk, contributing to their lower price per tonne.

Industry group[8]

Around 86% of the quantity of landings by the UK fleet in 2022 was landed by vessels in a Fish Producer Organisation (FPO)[9]. The largest FPO, Scottish FPO, accounted for 18% of both the quantity and value of fish landed by the UK fleet.

Some Producer Organisations target specific species groups. For example, vessels in North Atlantic FPO, Lunar Group and Interfish and Klondyke primarily target pelagic species. Other FPOs are segregated more by region. For example, Wales and West Coast FPO and South Western FPO.

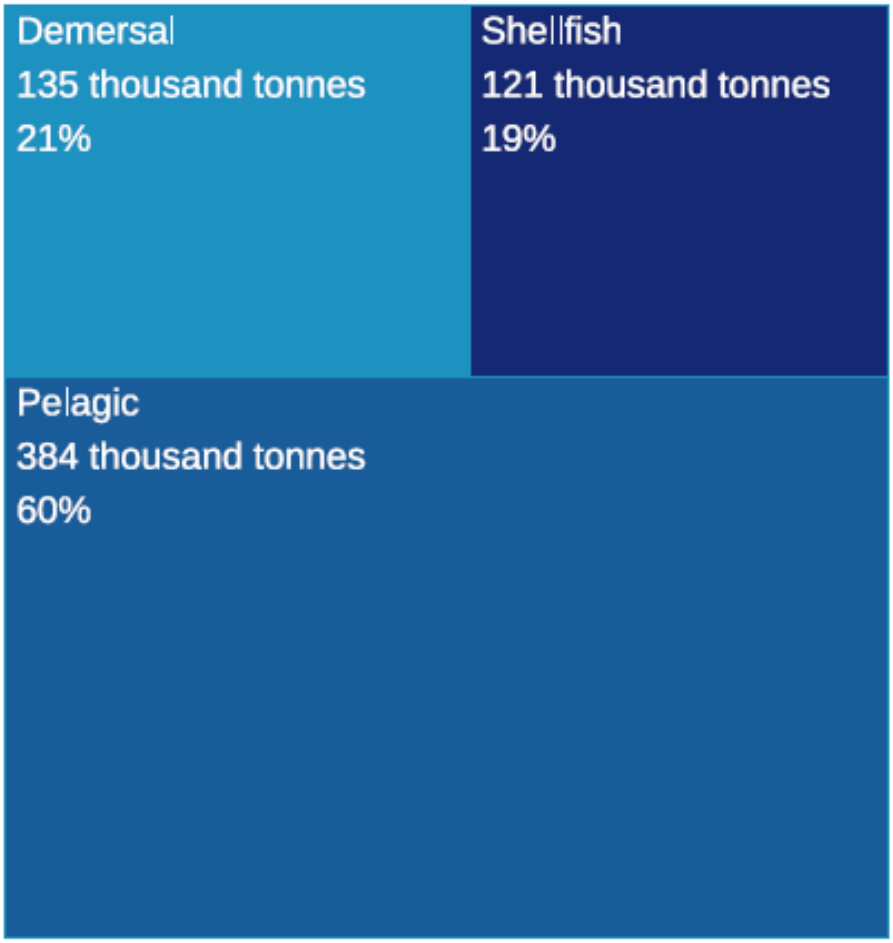
Over a third of UK vessels over 10 metres in length were in the non-sector (vessels without Producer Organisation membership). These vessels typically have limited access to fishing quota[10] and primarily target shellfish species, which are mostly non-quota stocks. In 2022 they caught 29% of all shellfish, 1% of demersal and 1% of pelagic species landed by the UK fleet.

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, with 79% shellfish landings. The fishing methods used by this sector and the different species targeted mean that they typically gain higher than average prices for their catch (Figure 2.3).

[8] Table 2.9
[9] Fish Producer Organisations (FPOs) are officially recognised bodies set up by fishery or aquaculture producers.
[10] Fishing quota allocations for England and the UK - GOV.UK (www.gov.uk)

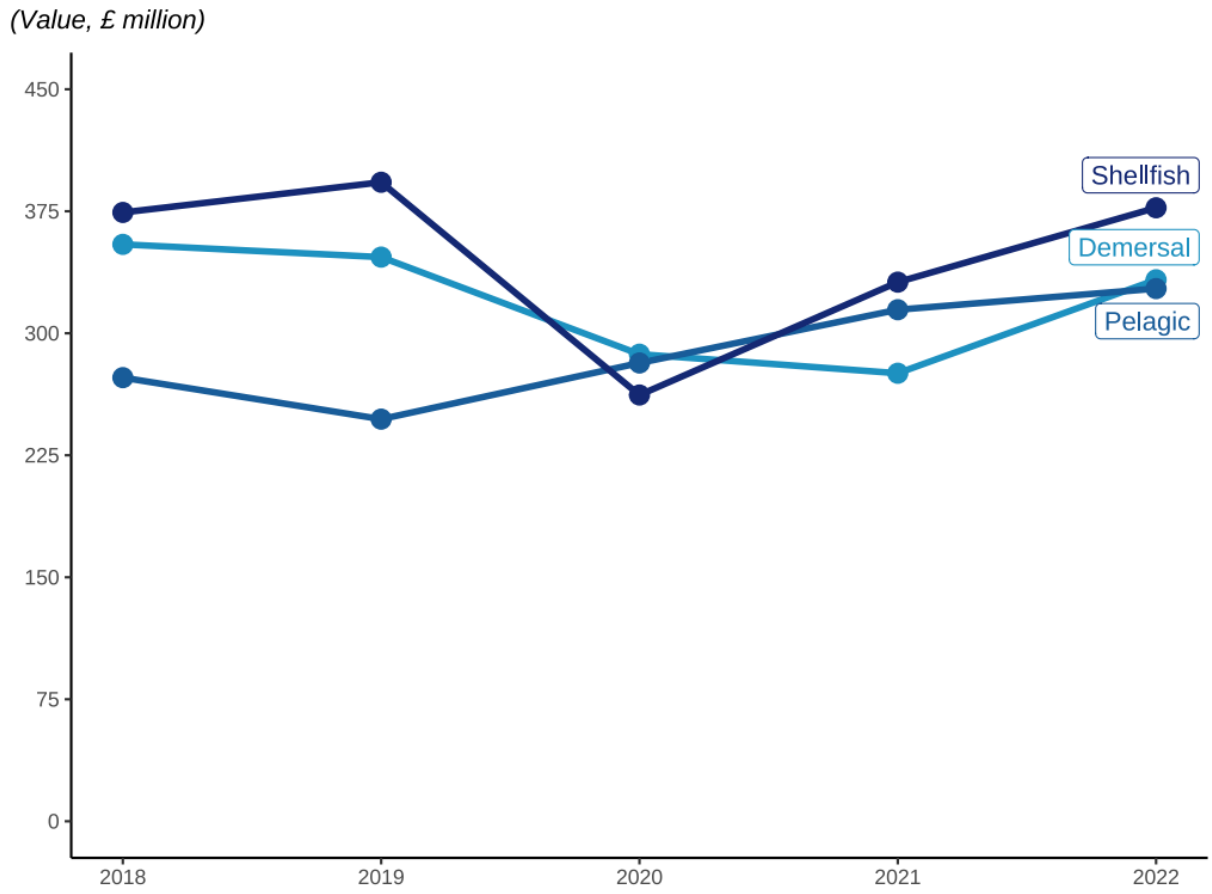
Species group

Figure 2.4: Quantity of landings by UK vessels in 2022 by species group.



Pelagic species make up 60% of the total quantity of landings by UK vessels, while only contributing just under a third of the value landed (Figure 2.5) this is due to pelagic species typically fetching a lower price per tonne. Shellfish landings make up 19% of the total quantity landed but accounted for £50 million more than pelagic landings. In 2022, a slightly higher proportion of landings by quantity were demersal (21%) than in 2021 (20%).

Figure 2.5: Value of landings by UK vessels between 2018 and 2022 by species group.



The value of landings increased in 2022 across all species groups, with value of landings for demersal species showing the largest increase compared to 2021.

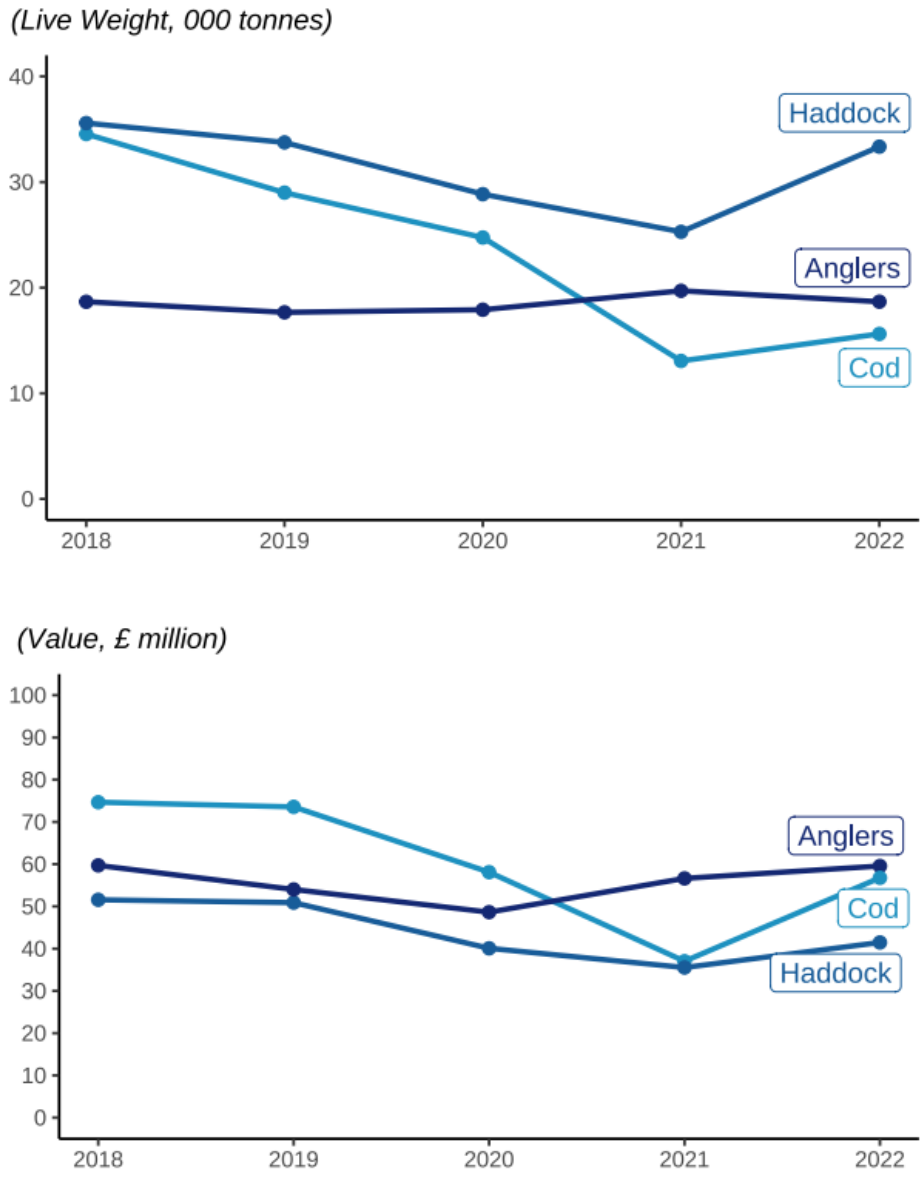
The value of pelagic landings between 2021 and 2022 increased by 4%, even with a decrease in quantity landed of pelagic species, due to prices of key pelagic species slightly up compared to 2021[11].

The quantity of demersal landings increased by 2% while the value of those landings increased by 18%. Shellfish landings decreased by 3% while their value increased by 15%. The price per tonne fetched for shellfish species increased across all species groups, with the highest increase seen in shellfish (21%). Pelagic species had the smallest increase (5%).

[11] Table 2.16

Demersal

Figure 2.6: Quantity and value of landings between 2018 and 2022 by UK vessels of different demersal species fish; Cod, Haddock, and Monks or Anglers



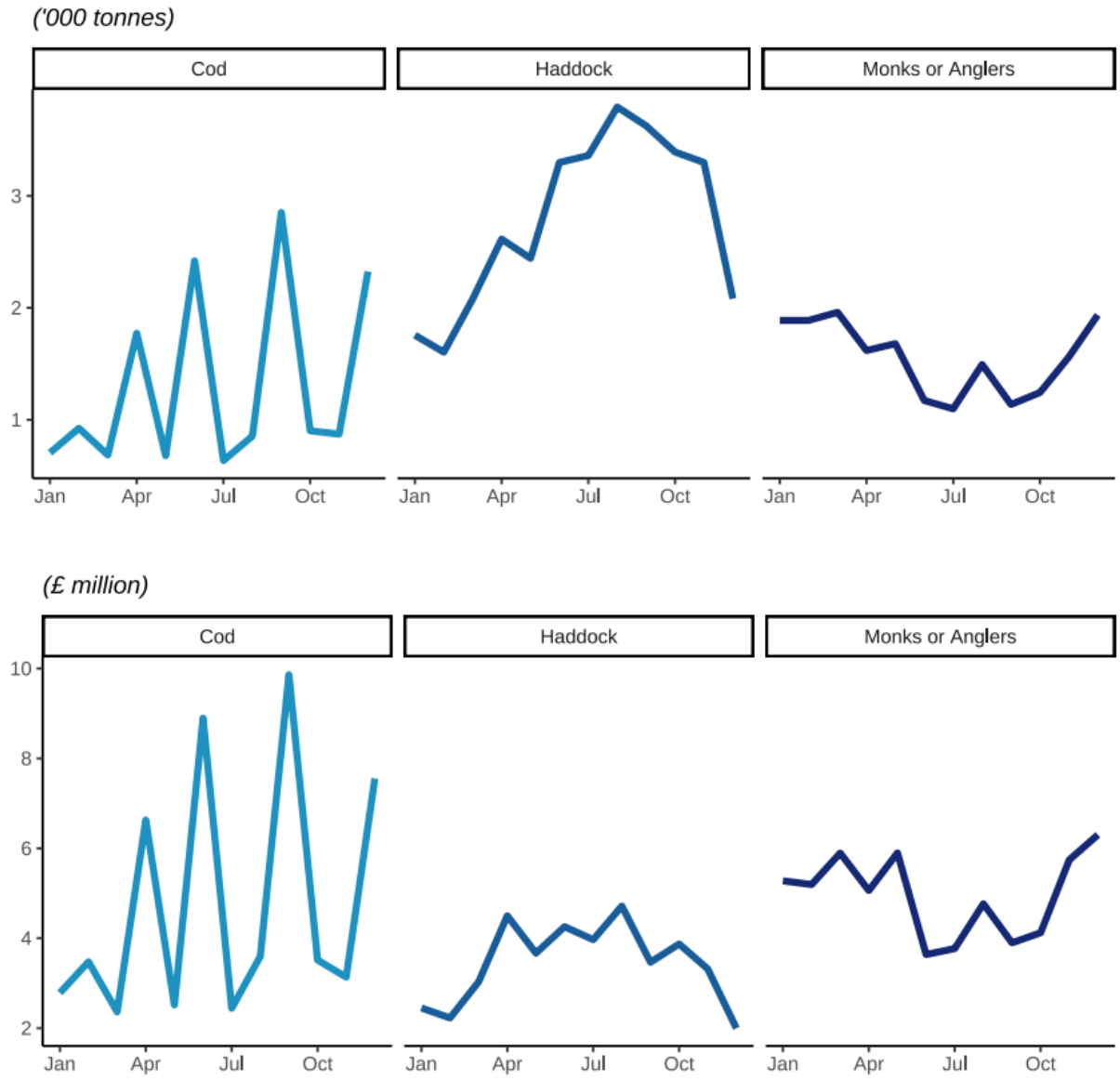
Landings of key demersal, species specifically cod and haddock, have increased in 2022. Landings of cod increased compared to 2021 (20%) leading to a large increase in the value landed (53%).

Landings of demersal species, particularly cod and haddock, have fallen considerably since 1996. This follows the long-term declining trend reported since 1938[12]. In 2022, landings of demersal fish were around 16% of the quantity landed in 1938.

The decline in landings of demersal fish has several causes, including reductions in fleet size, declining fish stocks and restricted fishing opportunities. National and international 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.

[12] Table 2.7 – note this table includes landings into the UK by UK and foreign vessels.

Figure 2.7: Quantity and value of landings in 2022 by UK vessels of different demersal species fish; Cod, Haddock, and Monks or Anglers.



Landings of cod fluctuate more than haddock and anglerfish as the UK's distant water fleet has targeted cod in e.g., Faroese waters. The distant water fleet are vessels that fish outside their own territories and often into other countries Exclusive Economic Zones (EEZ) and international waters. These large vessels can be out to sea for months and land huge volumes of fish at a time. This explains the spikes in quantity landed every few months.

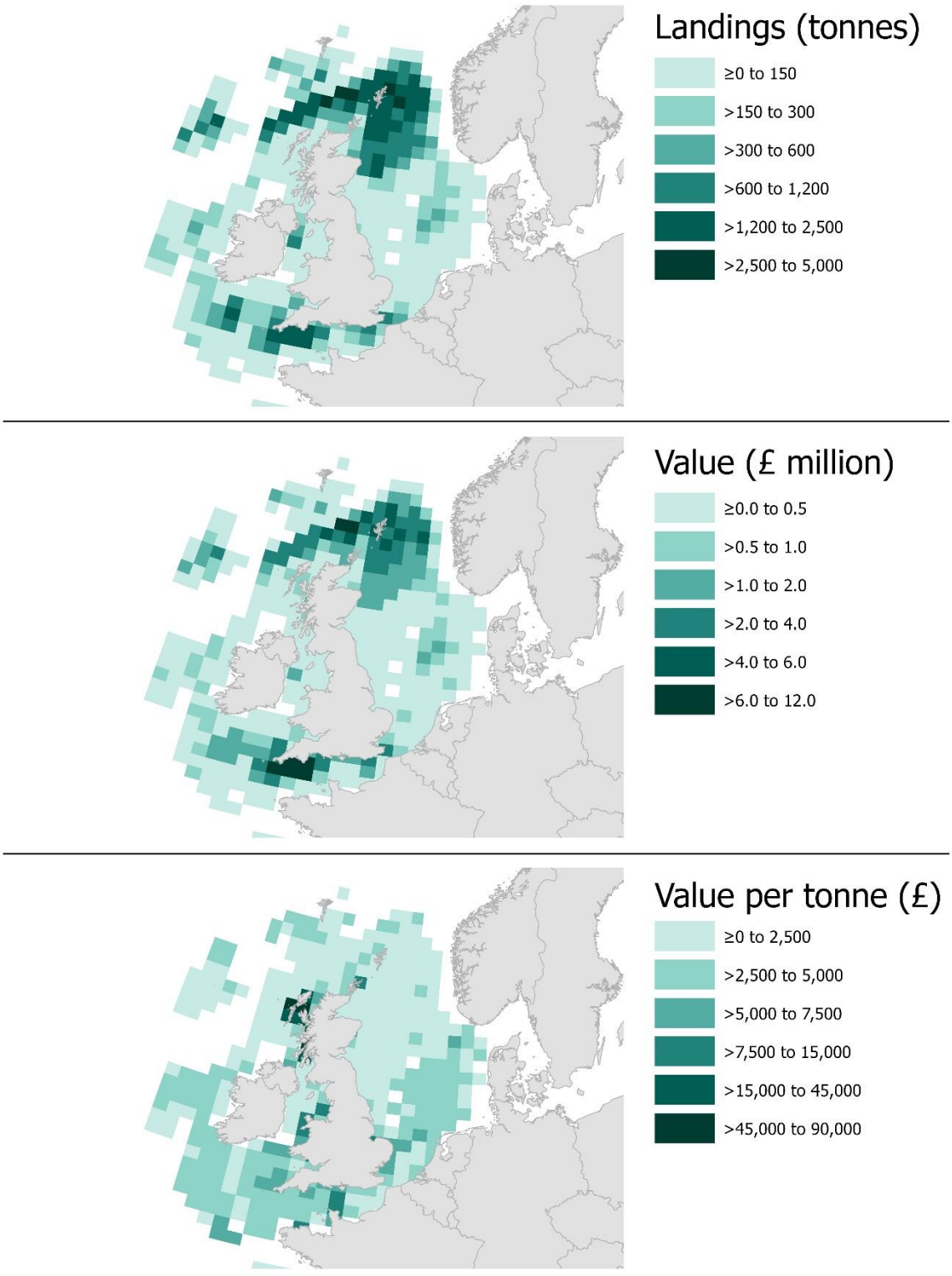
Sole, turbot and halibut all command the highest price of demersal species landed by the UK fleet, ranging between £12,000 and £15,000 per tonne in 2022[13]. These high prices, particularly for sole, are likely down to reduced supply following the introduction of the Sole Recovery Zone[14].

ICES rectangle
The International Council for the Exploration of the Seas (ICES) standardise the division of sea areas for analysis. Each ICES statistical rectangle is 30 min latitude by 1-degree longitude, which is approximately 30 nautical miles by 30 nautical miles. Note that the area of ICES rectangles varies because the Earth is a sphere.
ICES rectangles are amalgamated to create ICES areas.

The following maps show landings of demersal species by the UK fleet in 2022 by ICES rectangle of capture. In 2022, the largest quantities and value of demersal species caught by the UK fleet were in the north-east of Scotland, the central North Sea and the English Channel. Demersal species with the highest average prices were captured by the UK fleet from waters along the west coast of Scotland.

[13] Table 2.16
[14] https://www.gov.uk/government/publications/manage-your-fishing-effort-sole-recovery-zone/sole-recovery-zone-rules

Figure 2.8: Quantity and value of landings of demersal species by the UK fleet in 2022 by ICES rectangle.[15]



Date of Publication: 19/09/2023
Coordinate System: ETRS 1989 LAEA
Projection: Lambert Azimuthal Equal Area
MMO Reference: 10748

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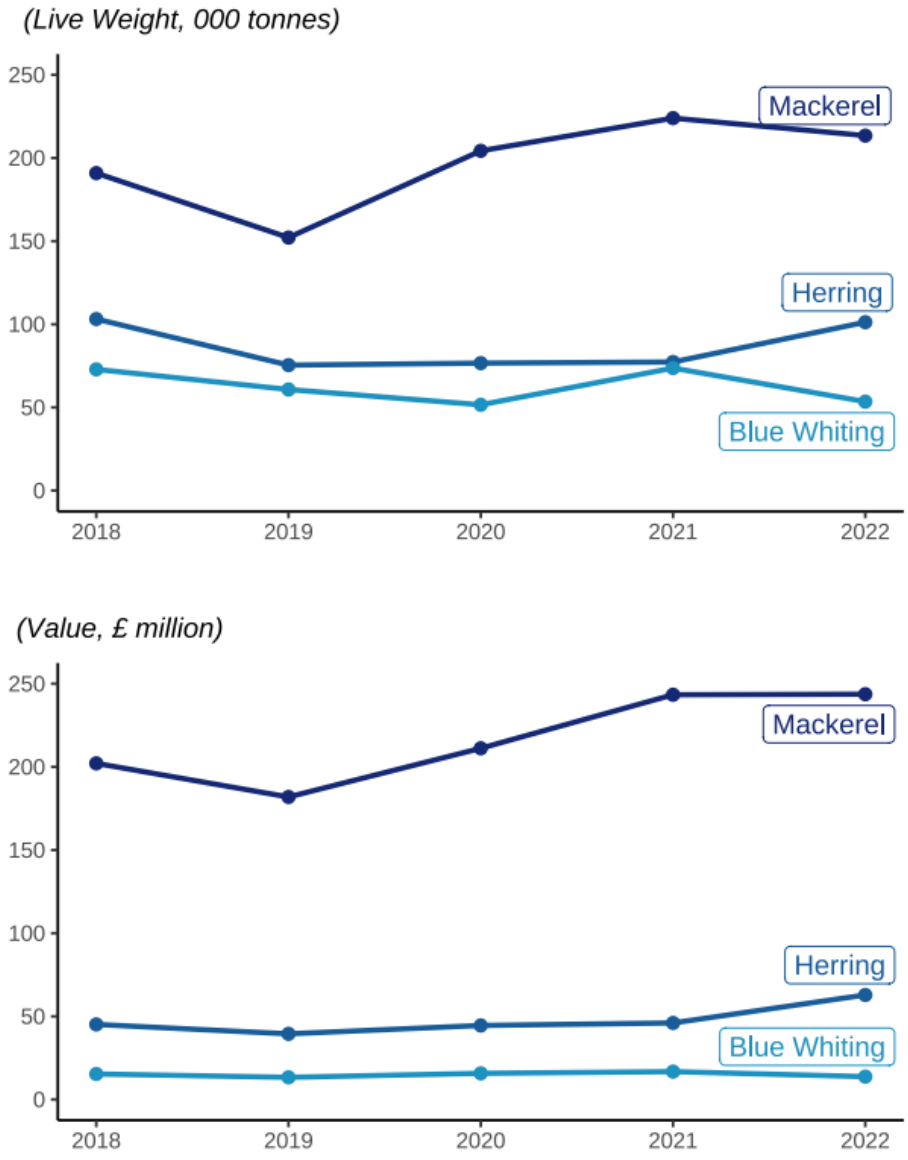
Pelagic

Figure 2.9: Quantity and value of landings between 2018 and 2022 by UK vessels of different pelagic species fish; Blue Whiting, Herring, and Mackerel.



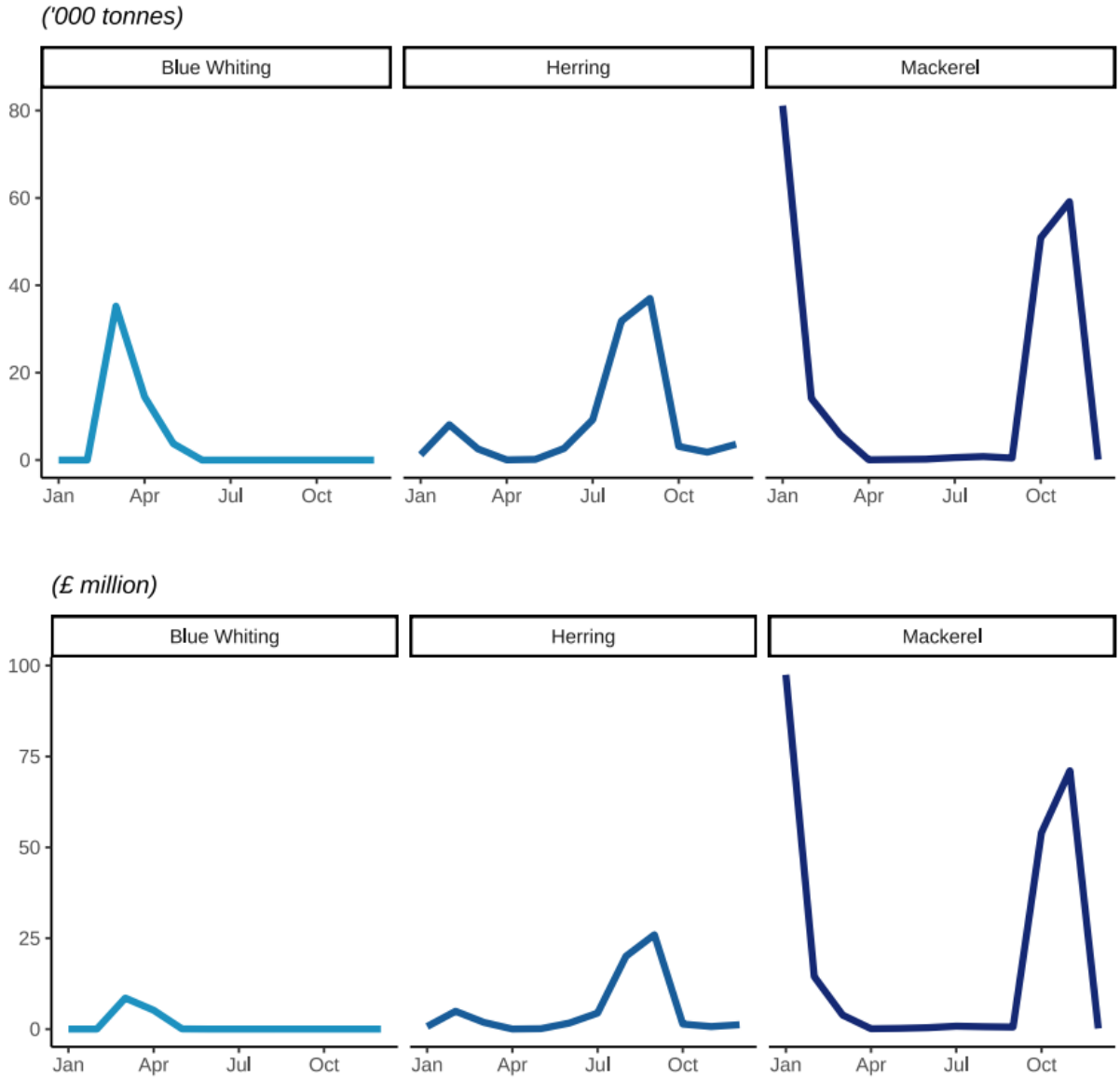
In 2022, the quantity of mackerel landed by UK vessels was 5% lower than in 2021 however, the value landed showed little change (<1%).
The UK fleet catches more mackerel than any other species – over 213 thousand tonnes in 2022, comprising 33% of the total UK catch in 2022. 58% of mackerel landings by UK vessels were landed abroad in 2022.

Most pelagic species are under stock management plans with quotas. Their annual landings therefore track quota limits.
Landings of herring have not fluctuated as much as mackerel, as their quota limits have been more stable in the past five years.

[15] The very high value per tonne records included here are landings of wrasse species, commonly referred to as “cleaner fish”. These are sold for their use in fish farms.

Like most demersal species, most pelagic species are managed by quota limits. However, pelagic landings have not seen the same reduction as demersal species over the very long term. When compared to 1938, pelagic landings in 2022 were 43 % lower, while demersal landings were down 84%.

Figure 2.10: Quantity and value of landings in 2022 by UK vessels of different pelagic species fish; Blue Whiting, Herring, and Mackerel.

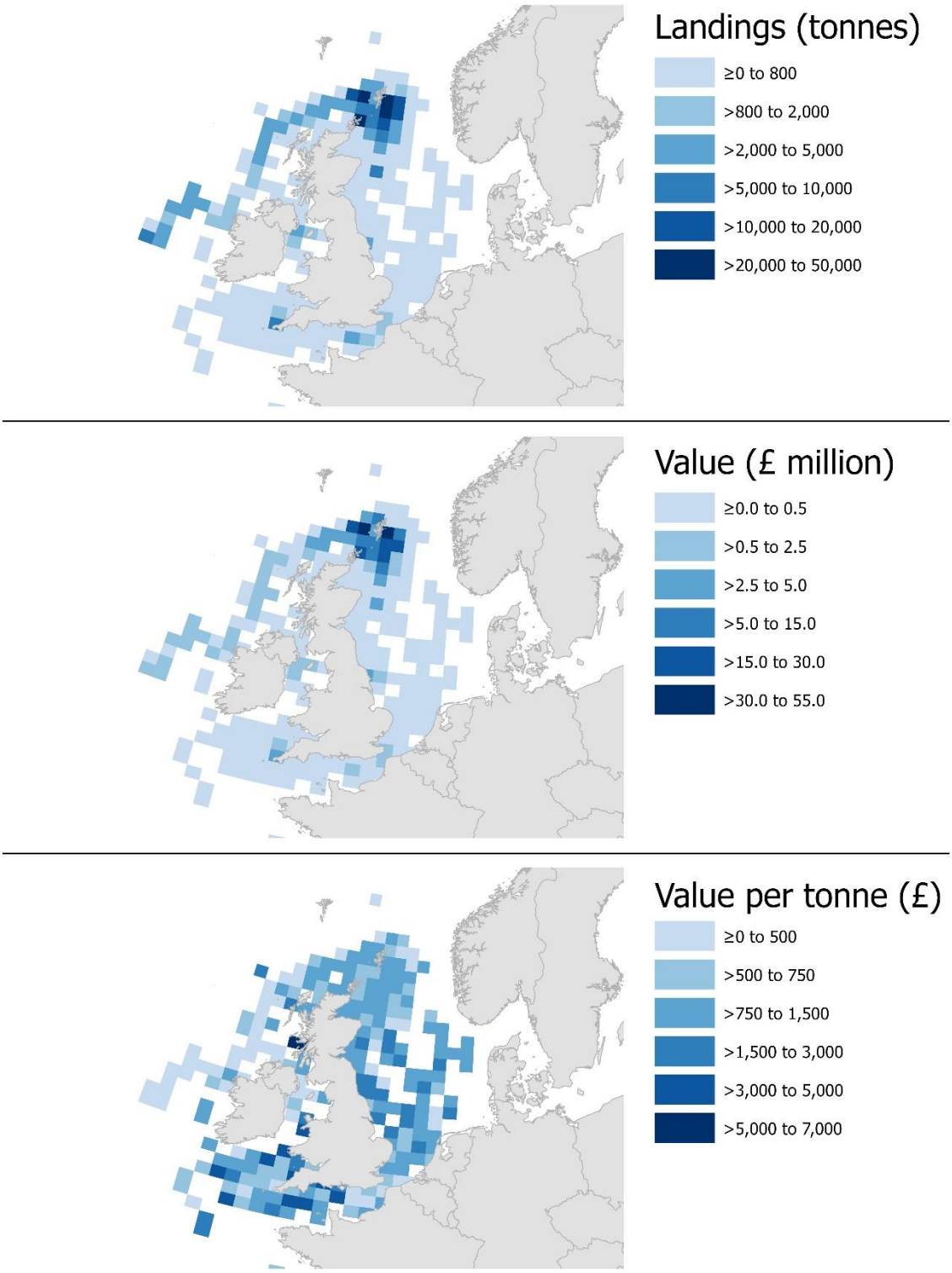


Pelagic landings follow seasonal patterns. Mackerel is a winter fishery for larger vessels therefore, large landings are seen annually in January, February and October and November. Quotas had almost been exhausted by the end of the year, so catches are consistently lower in December.
Around 97% of all mackerel landings into the UK by the UK fleet in 2022 were in those four peak months.

A two-month period (August to September) accounts for 78% of herring landed into the UK by the UK fleet. Landings in June and July came primarily from the Northern North Sea and were supplemented in August and September by fisheries in the Irish Sea.

The following maps show landings of pelagic species by the UK fleet in 2022 by ICES rectangle of capture. In 2022, the largest quantities and value of pelagic species caught by the UK fleet were captured from rectangles near Shetland and from the north coast of Scotland down to the north-west coast of Ireland. Price per tonne was more evenly spread across ICES rectangles, with the highest prices fetched closer to the southwest coast.

Figure 2.11: Quantity and value of landings of pelagic species by the UK fleet in 2022 by ICES rectangle.



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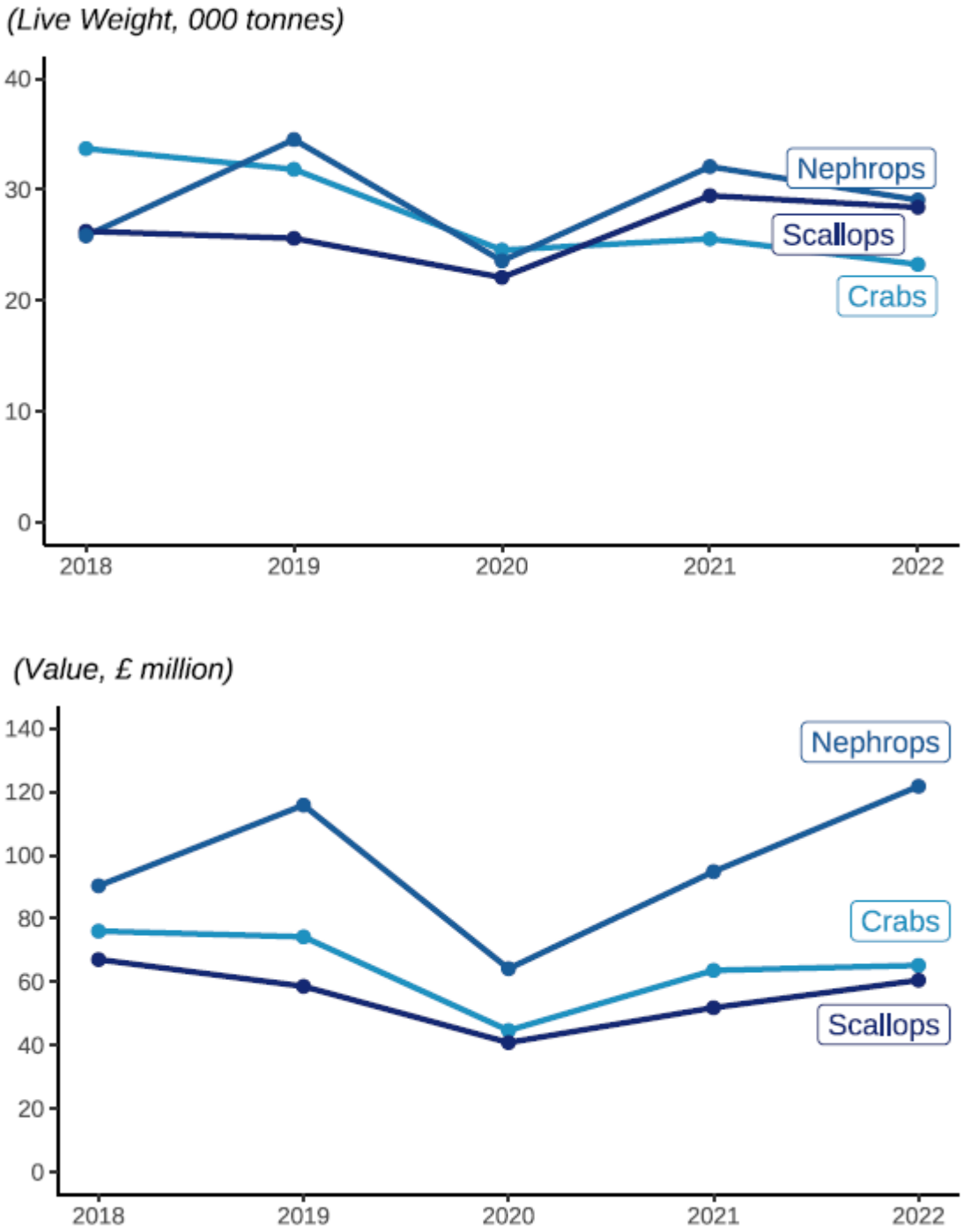
Shellfish

Figure 2.12: Quantity and value of landings between 2018 and 2022 by UK vessels of different shellfish species fish; Crabs, Nephrops, and Scallops.



Nephrops (also known as langoustine or Norway lobster), crabs and scallops are the main shellfish species landed by the UK fleet, accounting for 68% of all shellfish landings made by the UK fleet in 2022.

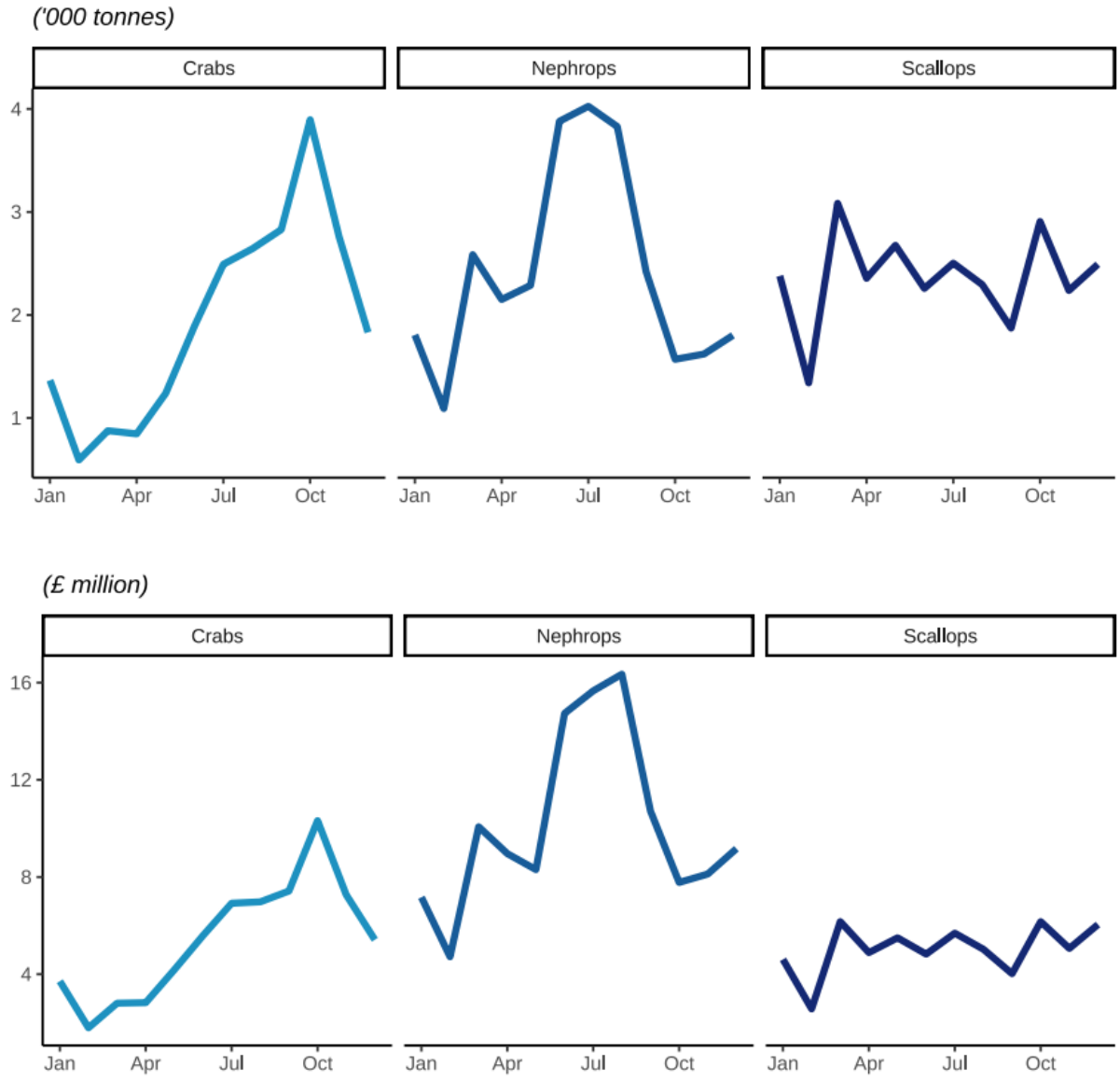
Value of landings of these three key species increased between 2021 and 2022, the increase in the value of nephrops landings was the most prominent at 28%.

Over the last eighty years, landings of demersal and pelagic landings have decreased substantially (discussed above). In contrast, landings of shellfish have increased by over 260%, from 32 thousand tonnes to almost 116 thousand tonnes in 2022.

This is partly driven because, for shellfish species, quotas only apply to nephrops. Further, the increase in shellfish landings by the UK fleet is likely due to the industry diversifying into the shellfish sector, where there are often fewer restrictions on fishing opportunities.

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. A large proportion of shellfish landings are by vessels 10 metres or under in length, for which there was no statutory obligation to report activity prior to 2022. From March 2022 this is now mandatory, with the introduction of the catch recording app. Due to 2022 representing an incomplete year of catch recording data, this is not included within landings figures within this release.

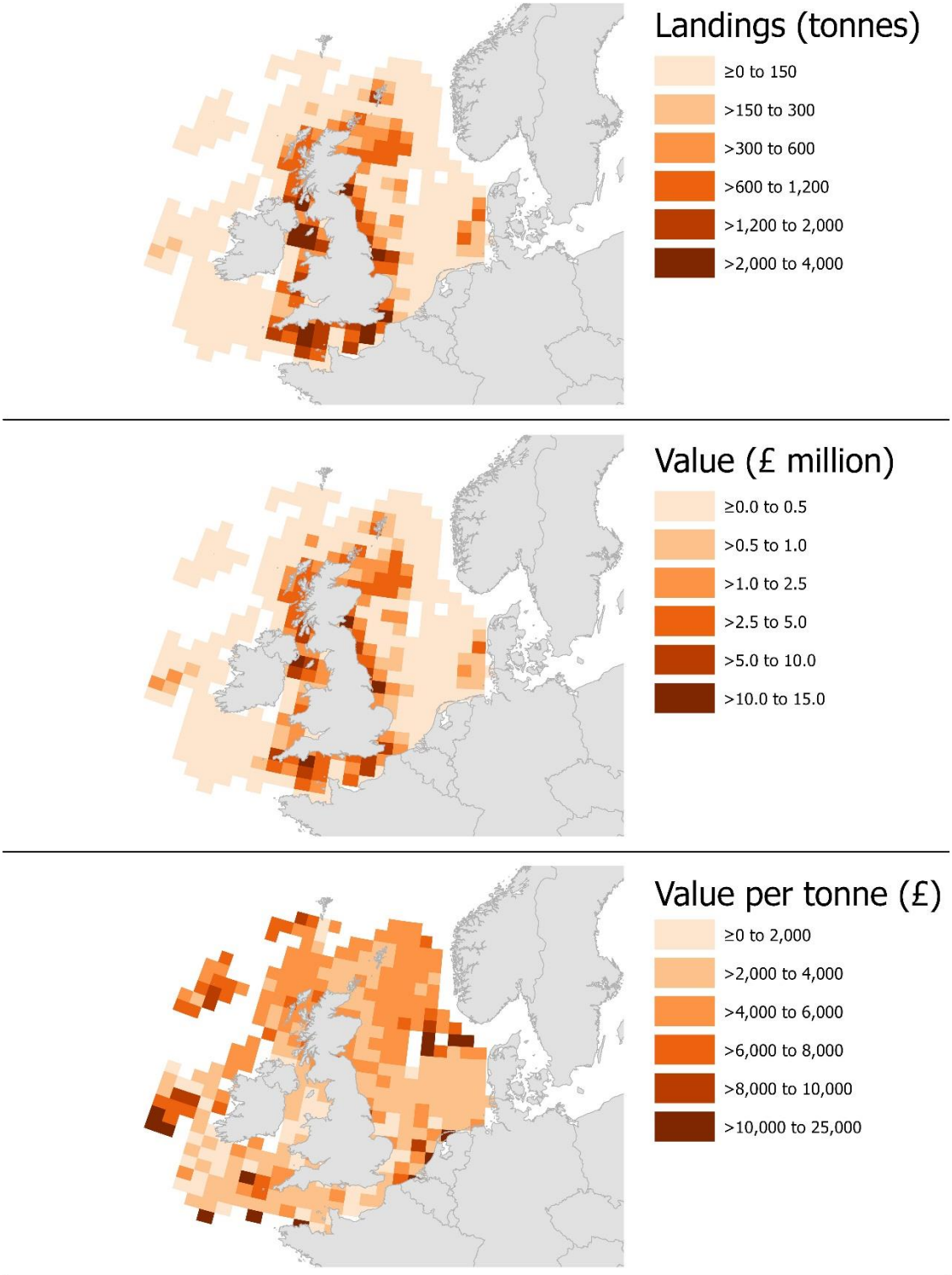
Figure 2.13: Quantity and value of landings in 2022 by UK vessels of different shellfish species fish; Crabs, Nephrops, and Scallops.



Landings of nephrops fluctuate but show the highest peak in summer months. Crabs and scallops peak in landings towards the end of the year before Christmas period.

The following maps show landings of shellfish species by the UK fleet in 2022 by ICES rectangle of capture. In 2022, 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, in particular off the west coast of Ireland around Porcupine bank.

Figure 2.14: Landings of shellfish species by the UK fleet in 2022 by ICES rectangle.

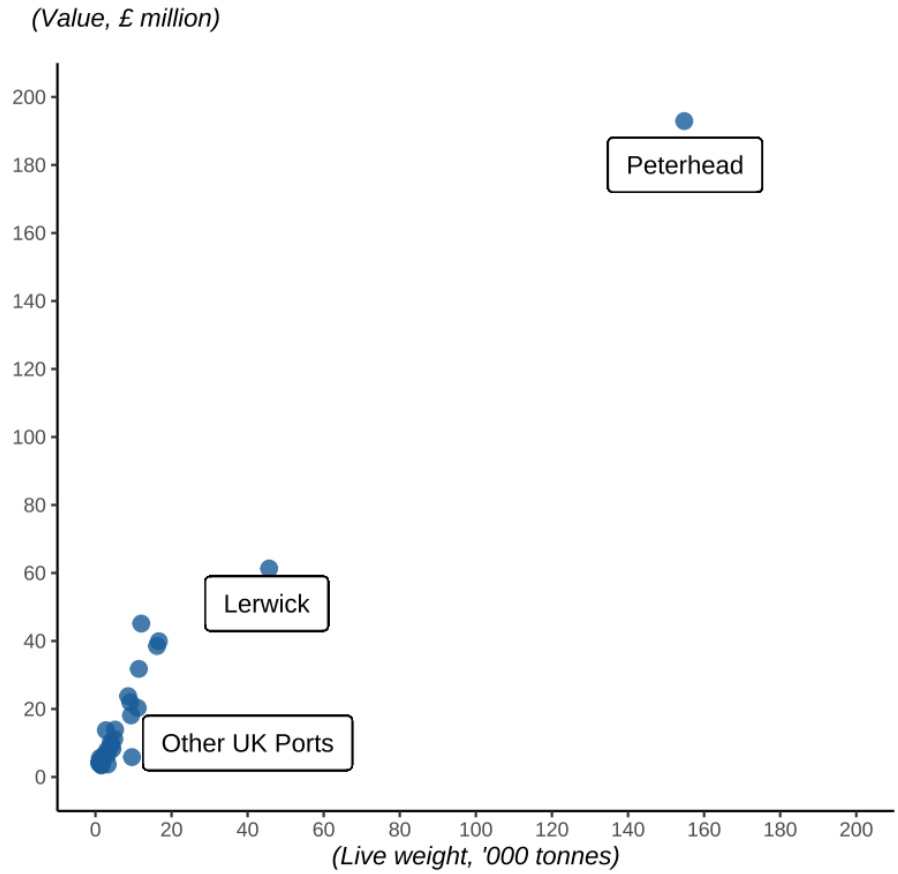


Date of Publication: 19/09/2023
Coordinate System: ETRS 1989 LAEA
Projection: Lambert Azimuthal Equal Area
MMO Reference: 10748

Not to be used for navigation
Contains Collins Bartholomew and MMO data

Landings by port

Figure 2.15: Quantity and value of landings in 2022 into UK ports.



Peterhead continually tops the leader board for the largest port landings, with Lerwick in second place. These ports are all in Northern Scotland. In England, Newlyn was the port with the highest quantity of landings, while Brixham had the highest value of landings.
Approximately 72% of all landings by UK vessels into Scotland were into Peterhead and Lerwick, this is because Peterhead and Lerwick specialise in pelagic species, where landings are higher in 2022 than 2021.

Contrastingly, landings into Newlyn and Brixham (the top 2 English ports) formed only 31% of landings into England, with the remaining landings more evenly spread around the English coast.

Figure 2.16: Quantity of landings into the UK's top 20 ports in 2022.

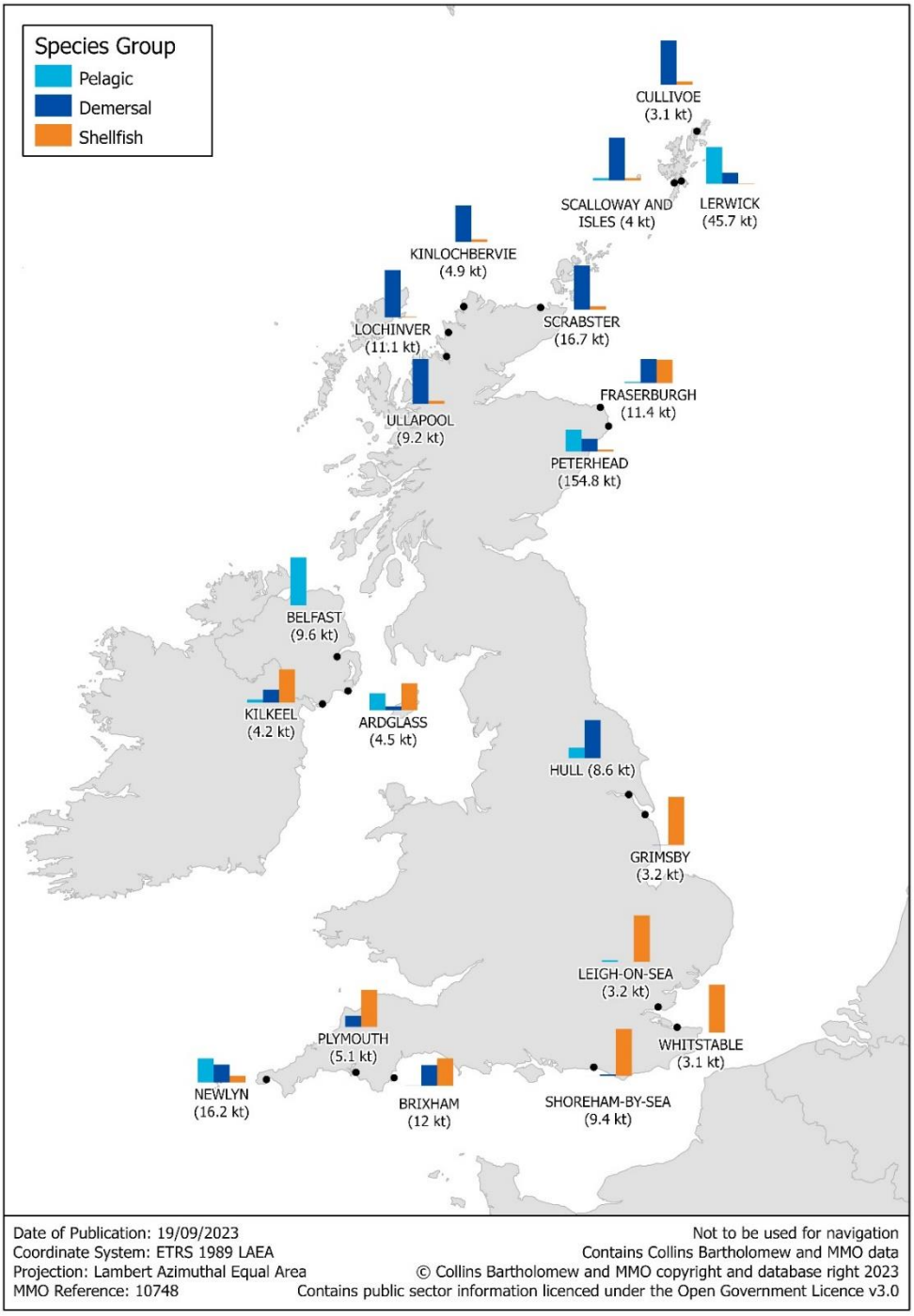
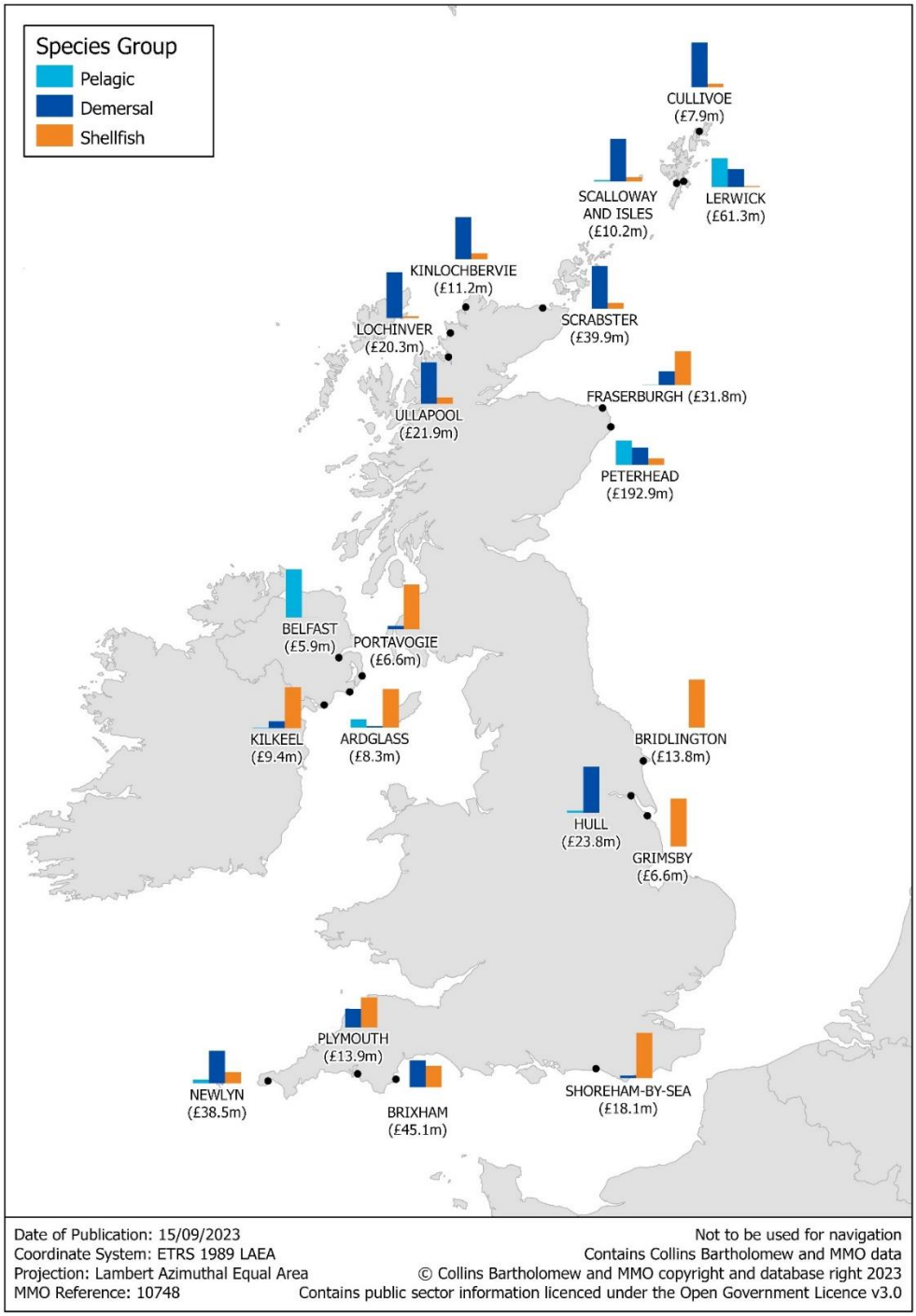
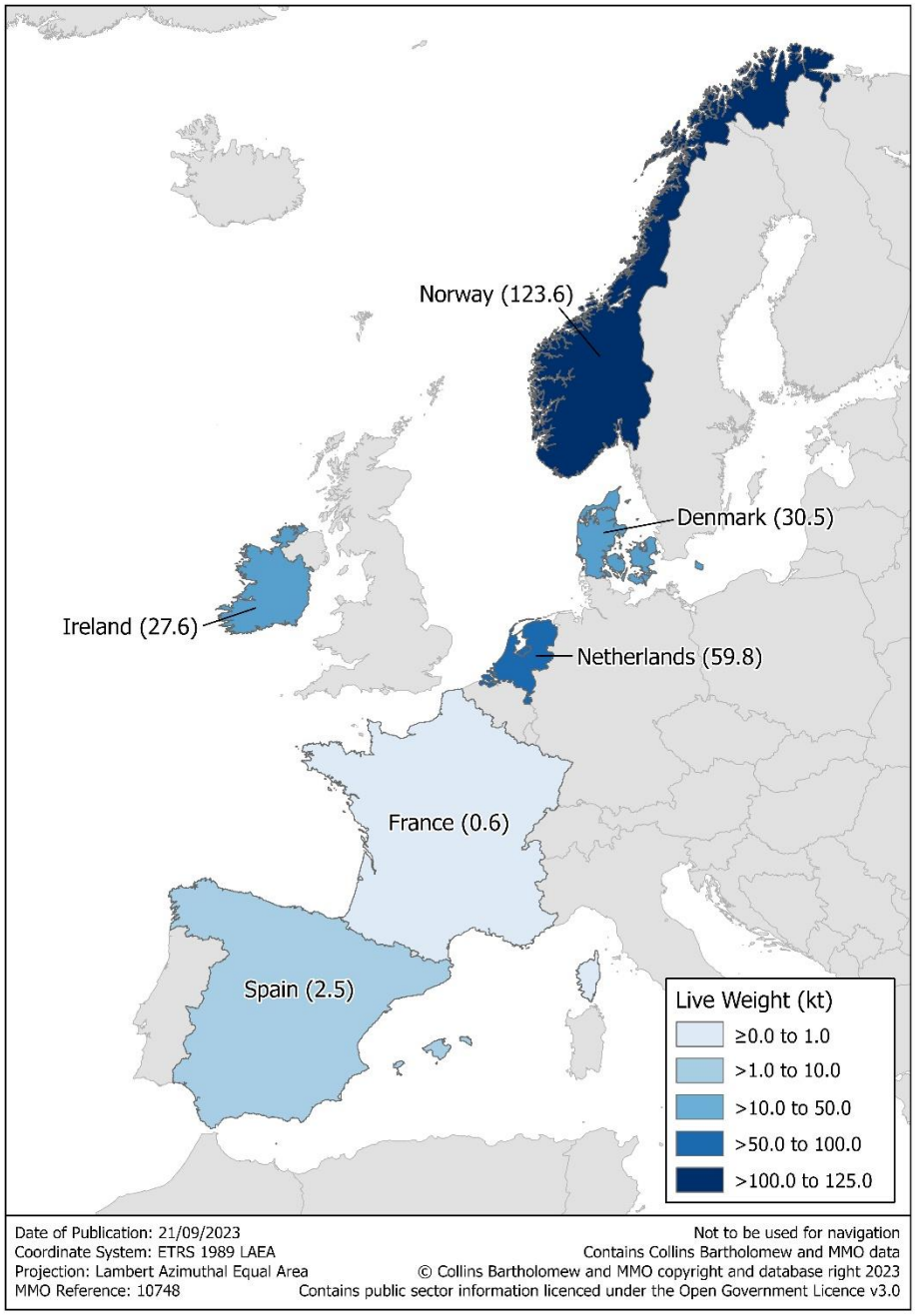


Figure 2.17: Value of landings into the UK's top 20 ports in 2022.



Landings abroad by the UK fleet

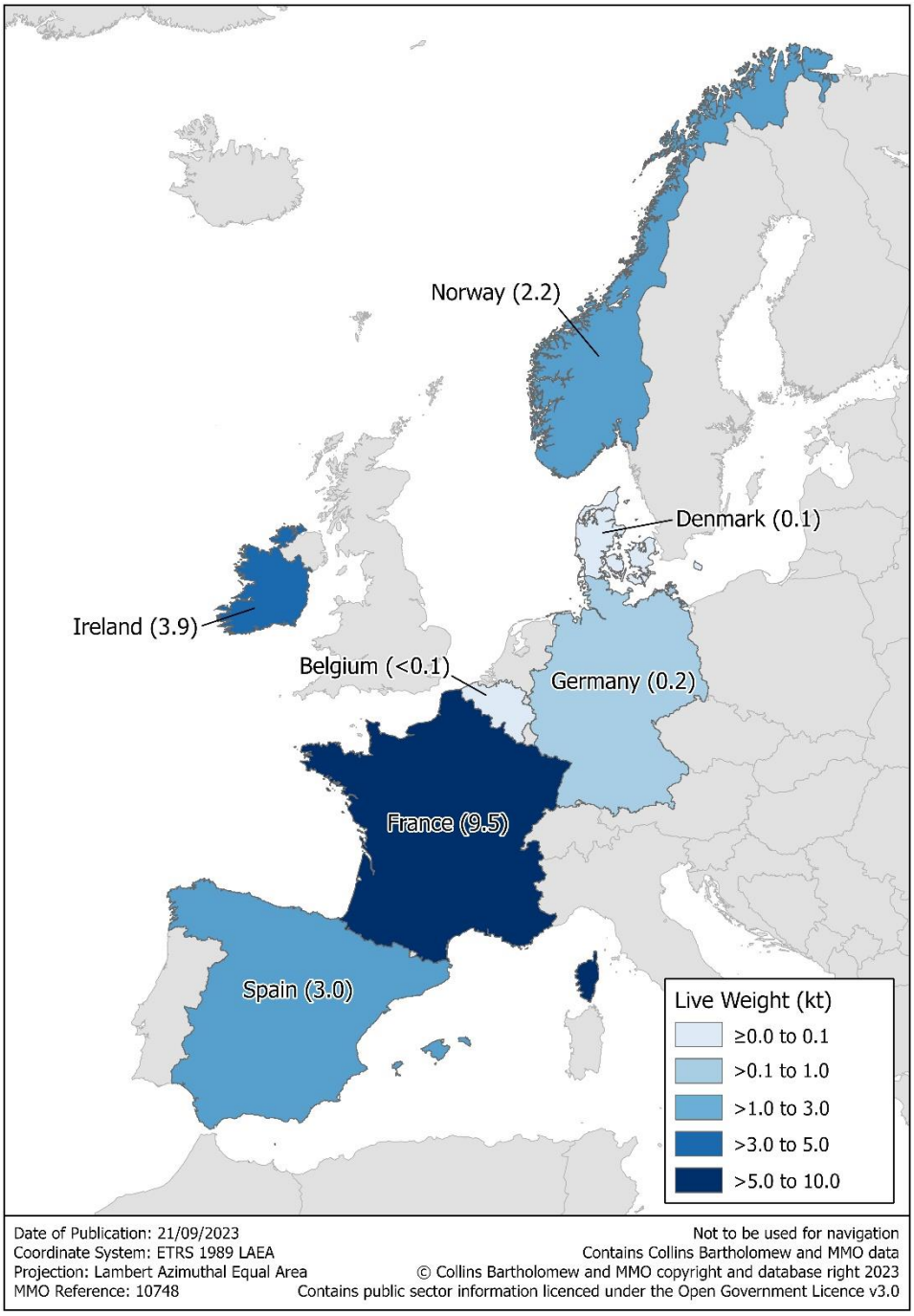
Figure 2.18: Quantity of landings abroad by the UK fleet in 2022.



In total in 2022, UK vessels landed 245 thousand tonnes of fish abroad. This is 38% of the total quantity of fish landed by UK vessels and represents 24% of the value of all fish landed by UK vessels. The majority of landings abroad are pelagic fish species. 90% of landings abroad were pelagic species, 52% of which was mackerel. Pelagic species fetch a lower price than most demersal and shellfish species which explains the 17% difference between the quantity and value landed abroad for pelagic species. Half of all landings abroad were into Norway, followed by almost a quarter of landings into ports in the Netherlands. A small number 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.

Landings into UK ports by foreign vessels

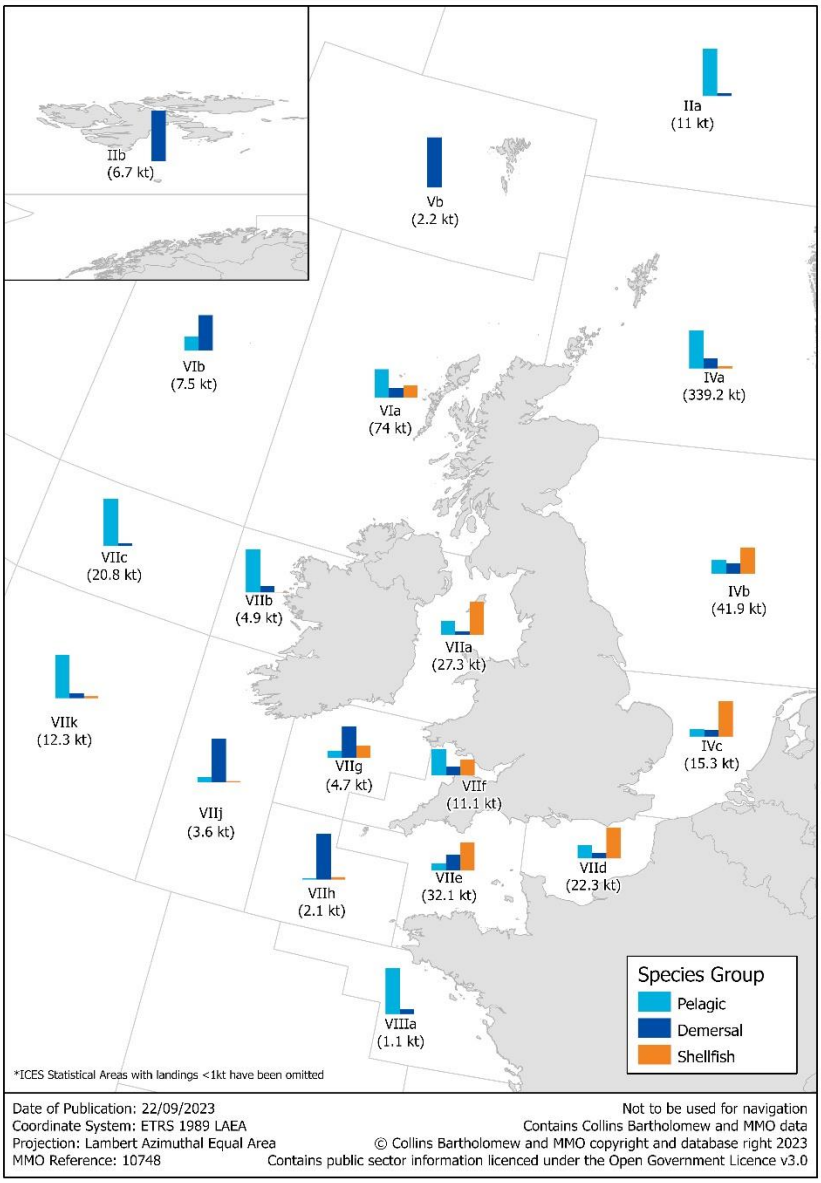
Figure 2.19: Quantity of landings in UK ports by foreign vessels in 2022.



In 2022, 19 thousand tonnes of fish were landed into the UK by foreign vessels, down 4% on 2021. The average change in landings between 2017 – 2019 was only 1% however from 2019 to 2020 there was a 25% decrease. This decrease continued (although not as sharply) between 2020 and 2022 likely be caused by continued reduced access for foreign vessels into UK waters following EU exit.
Close to 67% (13 thousand tonnes) of fish landed into the UK by foreign vessels were demersal. Most of the remainder was pelagic landings (6 thousand tonnes) and a small amount of shellfish, less than one thousand tonnes.

Area of capture

Figure 2.20: Quantity of landings by area of capture and species group in 2022.



Different sea areas yield different proportions of species.

- 50% (67 thousand tonnes) of the demersal fish landed by the UK fleet was from the Northern North Sea in 2022.

- 67% (256 thousand tonnes) of pelagic fish landed by the UK fleet was from the Northern North Sea in 2022.

- 26% (32 thousand tonnes) of shellfish landed by the UK fleet is from the English Channel.

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 and Porcupine Bank.

Landings by Exclusive Economic Zone

Exclusive Economic Zone

The term Exclusive Economic Zone is taken to mean the entire zone under the exclusive jurisdiction of a coastal state or international organisation. This will include the territorial seas which spans 0-12 nautical miles from the coast as well as the UNCLOS Exclusive Economic Zone from 12 up to 200 nautical miles (or roughly 22 to 370 kilometres) from the coast. Where EEZs would overlap a median line is used to delineate the sovereignty of waters.

ICES Statistical Rectangles

The International Council for the Exploration of the Sea (ICES) has implemented spatial divisions of the sea for statistical analysis in major fishing area 27. ICES rectangles are the lowest broadly available unit of spatial reporting for this area. Each rectangle is 0.5 degrees latitude by 1 degree longitude.

From 2021 vessels were required to report fishing activity by EEZ, differentiating between UK and EU waters. From this date the EEZ of capture will be determined by using the landings data as reported in vessel logbooks. Landings data by EEZ published prior to 2021 is based on the estimated EEZ by ICES rectangle spatial apportioning, therefore caution is advised when assessing differences with years before this date due to the alternative methodology used. This is however the most reliable data available to the MMO to determine EEZ for UK fishing vessel activity prior to 2021.

Figure 2.21: The UK's Exclusive Economic Zone.

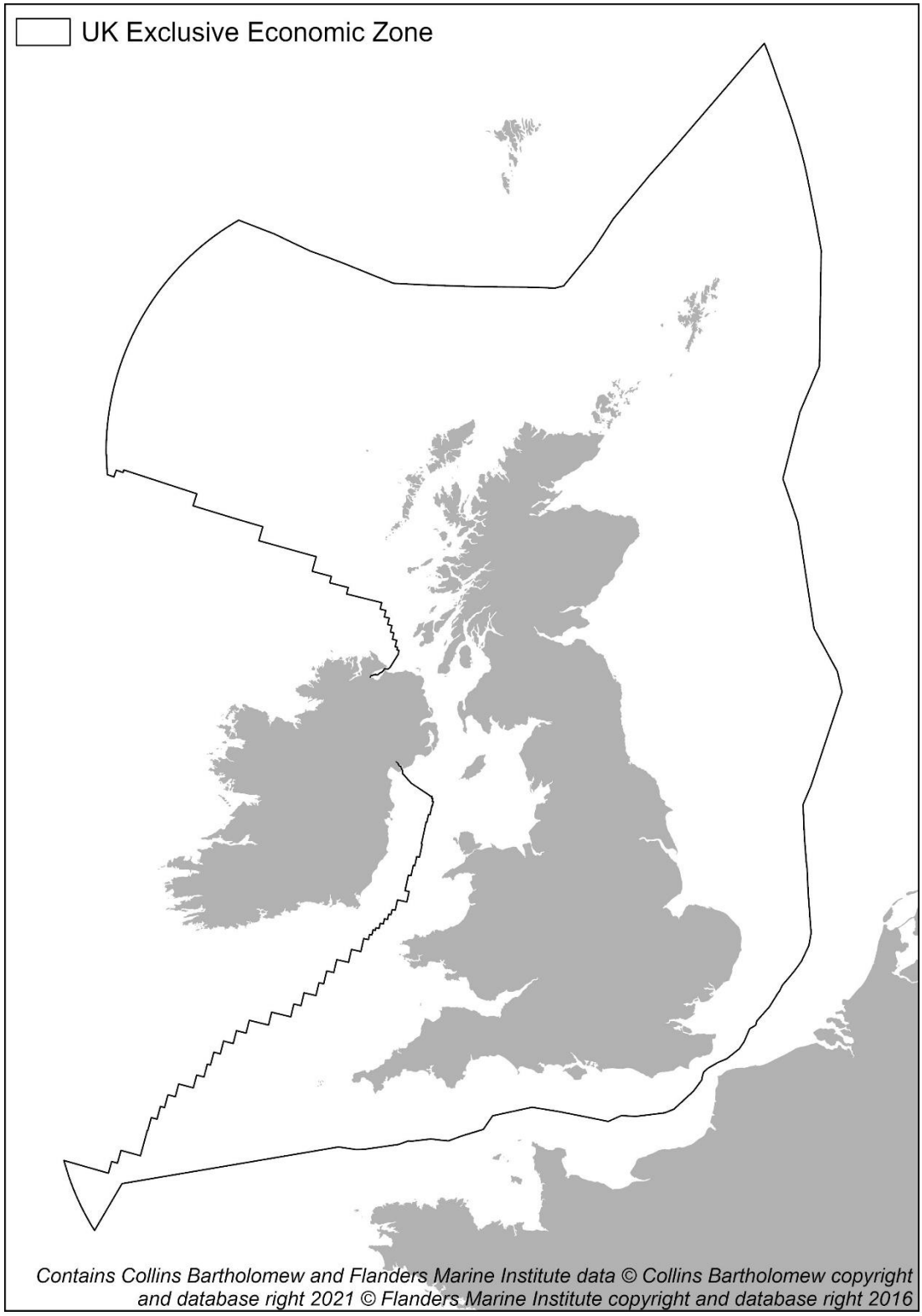


Figure 2.22: Quantity of landings caught by UK vessels in 2022 by waters.

(Live weight, '000 tonnes)

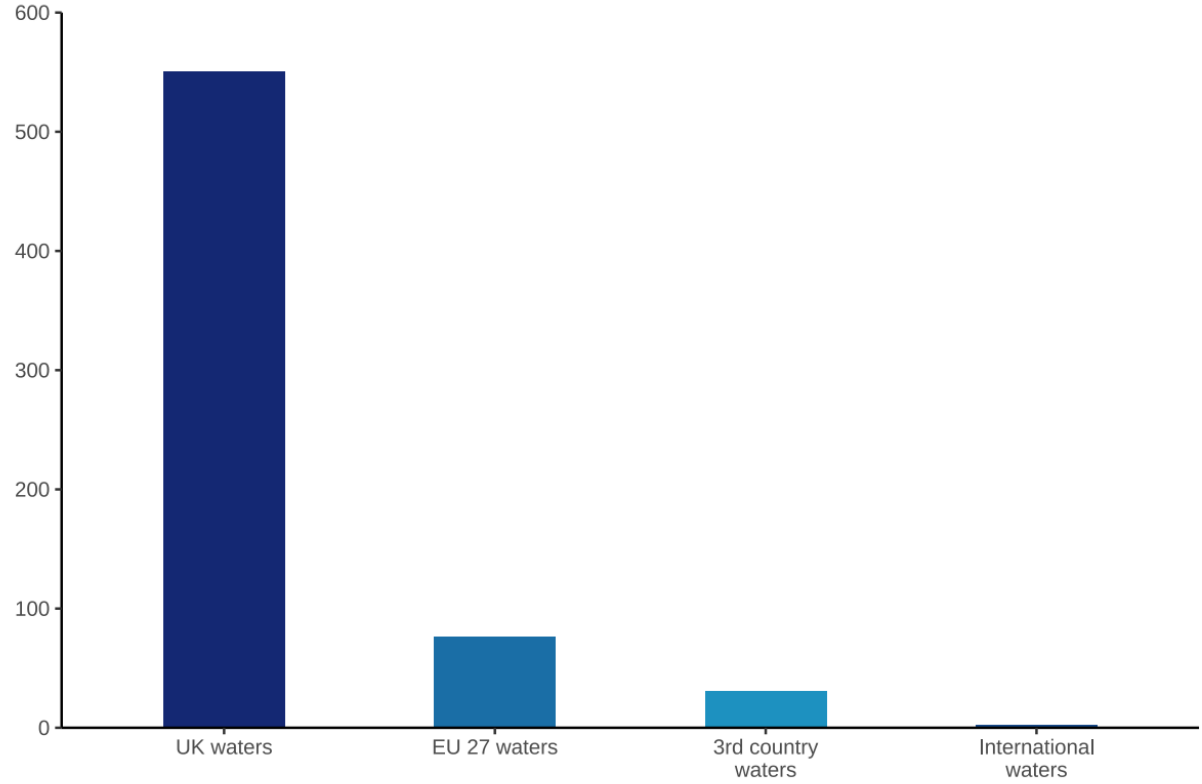
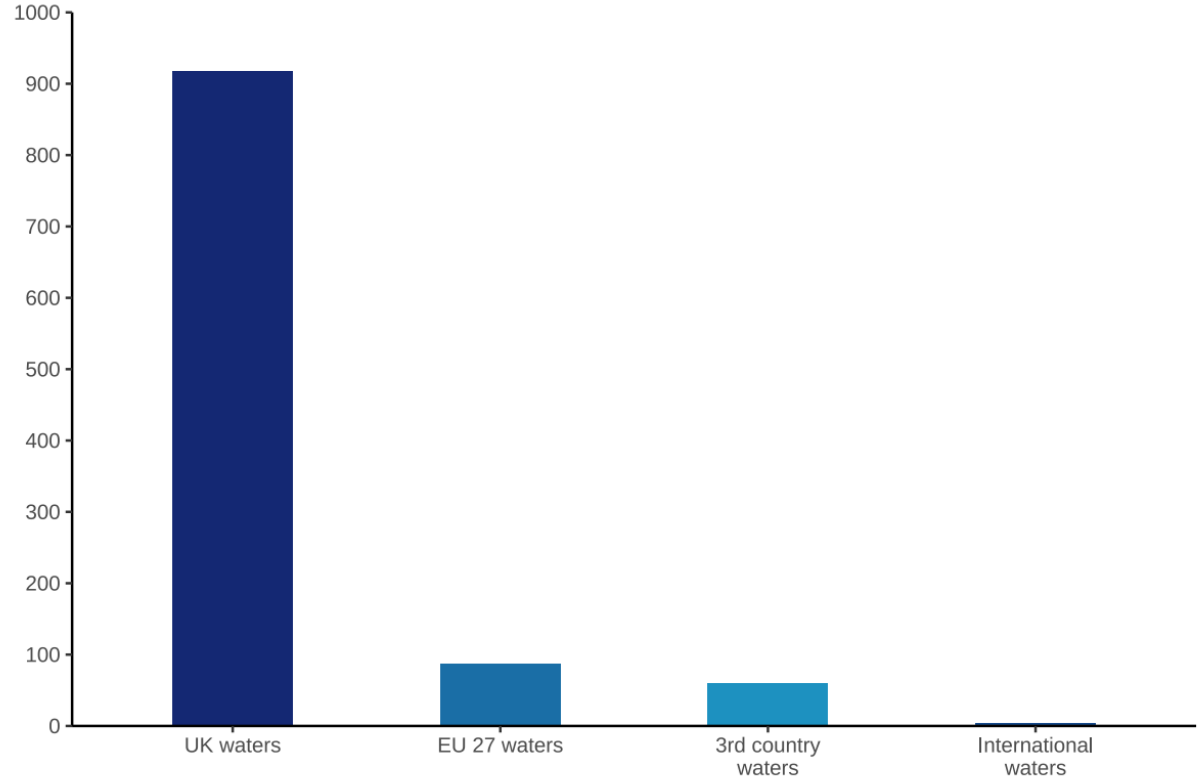


Figure 2.23: Value of landings caught by UK vessels in 2022 by waters.

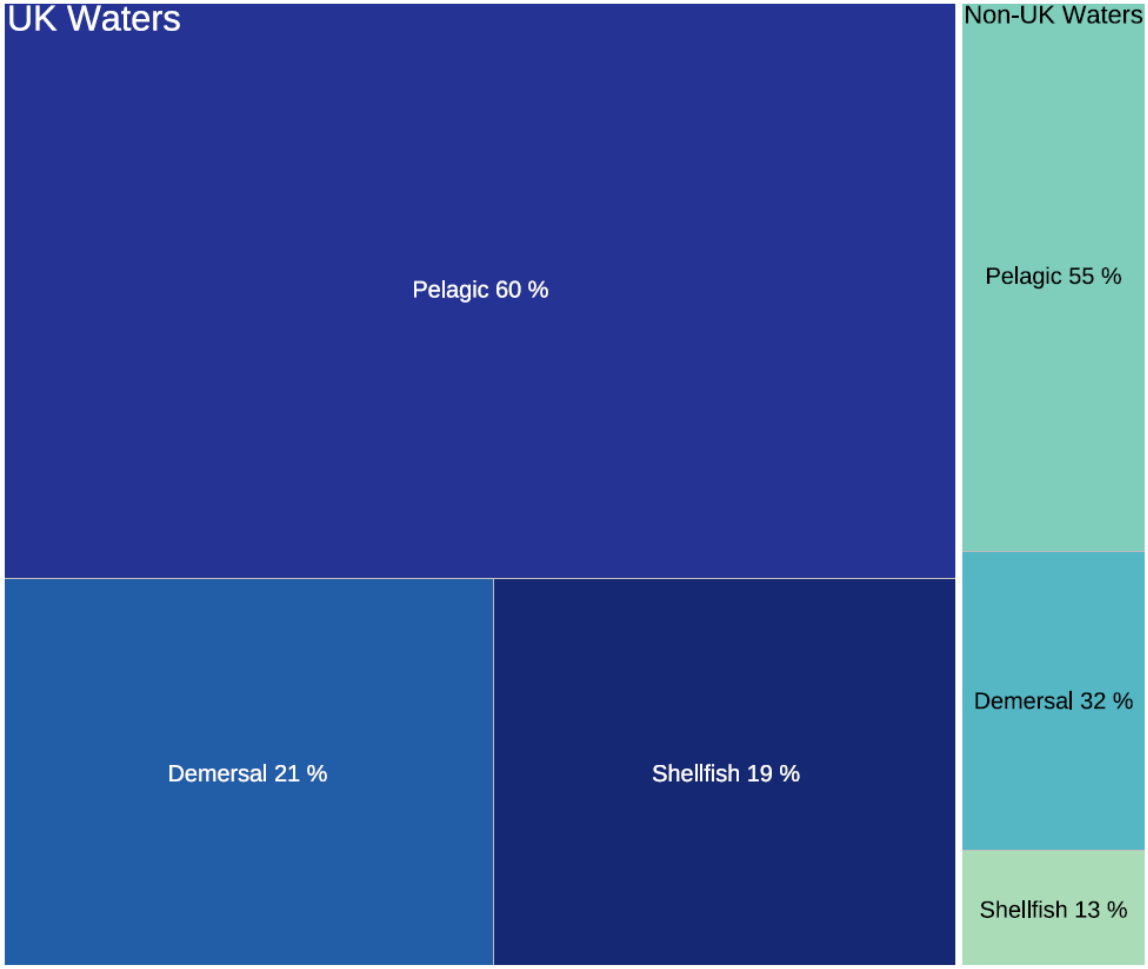
(Value, £ million)



In 2022, 84% of landings and 86% of the value of landings by UK vessels were from UK waters.

Outside the UK's waters the most important coastal state or bloc was EU-27 waters, where UK vessels caught and landed 74 thousand tonnes of fish and shellfish for a value of £84 million in 2022. This equates to 11% by weight and 8% by value of the UK fleet's landings.

Figure 2.24: Percentage of species group landed by UK vessels caught from both UK and non-UK waters in 2022.



Pelagic species made up the majority of landings caught from both UK and non-UK waters in 2022. UK vessels landed a total of around 540 thousand tonnes of fish and shellfish from UK waters with a first sale value of approximately £900 million. By tonnage 62% of this was from UK waters of area 27.4.a (Northern North Sea); mackerel and herring made up 77% of those UK in UK Northern North Sea landings.

Fishing gear

Gear

Different types of fishing gear are used to catch different species of fish. A single vessel can use several gears, or individual vessels may be more specialised. Gears can be grouped several ways. One grouping is active versus passive. Active gears follow the target fish while target fish come to passive gears which remain in one place.

Active gears

- Beam trawlers target fish on the seabed by towing a net from either side of the boat.
- Demersal trawlers fish along or just above the seafloor to catch demersal fish. A funnel-shaped net is towed behind one or two boats.
- Dredges are rigid structures that are towed along the seabed by a boat. They are used to target shellfish species such as scallops and oysters.
- Seine netting uses a net that is vertical in the water. Demersal seines target bottom dwelling fish while pelagic seines target fish that inhabit the water column.

Passive gears

- Drift and fixed nets usually target pelagic fish and hang in the water column. They are suspended from buoys or the seabed.
- Gears using hooks attract fish by placing bait on a hook fixed to the end of e.g. a line.
- Pots and traps are rigid structures into which fish, mainly shellfish, are enticed through funnels that are hard to escape from.

Most (88% in 2022) of fish landed by UK vessels was captured using active gears. 96% of pelagic fish were caught using active gears and 91% of demersal fish[16]. 62% of all shellfish were caught using active gears, mainly by scallop dredges and otter trawls.

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 higher than for active gears. Price differentials are also observed between different gears of the same class. For example, shellfish caught using demersal trawls and seines are sold at a higher average price than dredges. This variation in prices partly reflects the different species caught by different gears. For example, demersal trawls and seines

[16] Table 2.11

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[17]. However, there can also be a premium attached to the method by which the fish are captured. This is driven partly by consumer choice around the environmental impact of different gears.

[17] Table 2.16

Landings by quota and non-quota stocks

Quota and non-quota stocks

Landings of quota stocks are those fish which are managed via quota limits, i.e. there is an upper limit set on the amount of fish that can be harvested from the sea. Non-quota stocks do not have an upper limit set on the quantity of fish that can be caught but some are managed via different regimes, e.g. effort limits on days at sea.

Non-quota species include almost all commercial shellfish species, nephrops being the exception.

In 2022, landings of quota species make up 83% of the total quantity of landings by the UK fleet and 71% of the value.

Figure 2.25: Quantity of landings by UK vessels of non-quota and quota species in 2022 by fisheries administration.

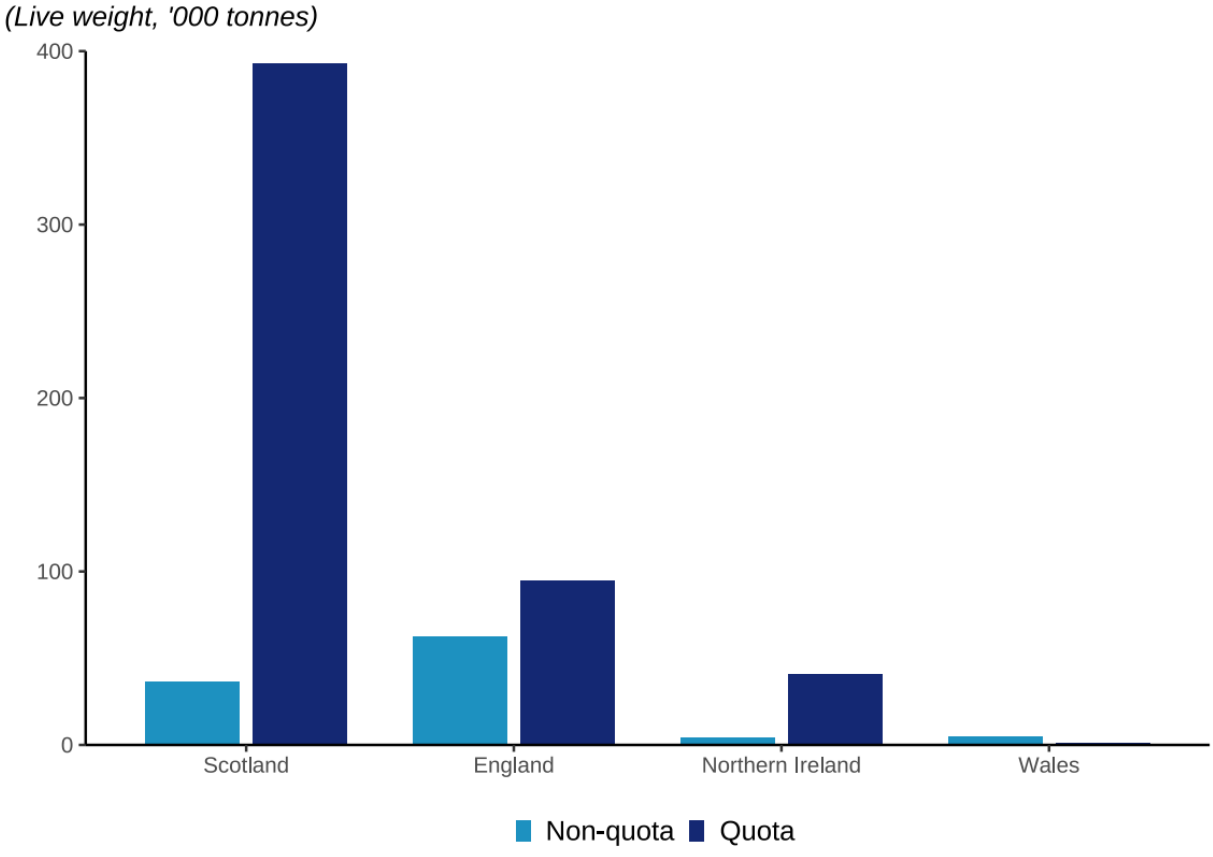
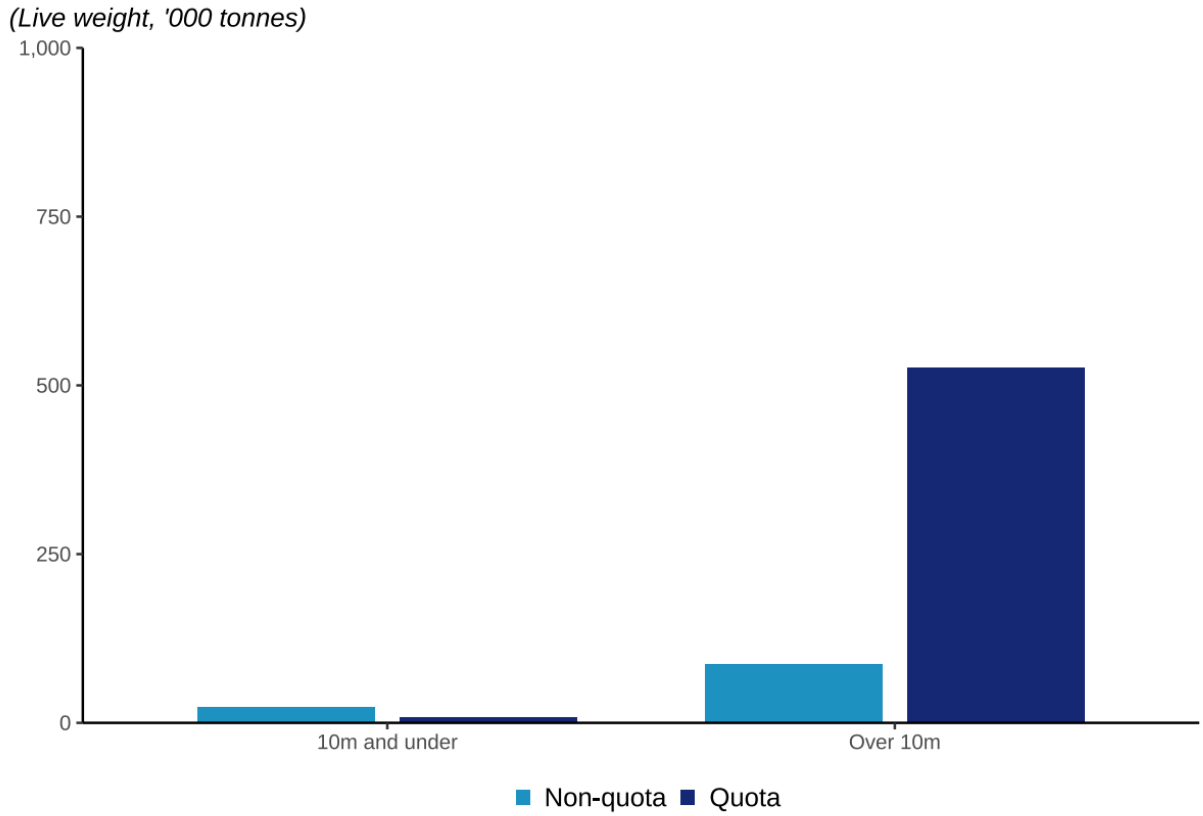


Figure 2.26: Quantity of landings by UK vessels of non-quota and quota species in 2022 by 10m and under and over 10m vessels.



Quota allocations and management

Quota is allocated to the sector (Fish Producer Organisations) and the non-sector. The non-sector is split into two categories based on vessel length – over 10 metre and 10 metre and under.

Each UK nation holds the quota and manages uptake via catch limits for the non-sector. For the sector, individual Fish Producer Organisations are responsible for managing their members quota.

Scottish vessels landed 74% of UK landings of quota species in 2022.

Landings of non-quota species by under 10m vessels were 3 times higher than their landings of quota species. Conversely, landings of quota species by over 10m vessels were almost 6 times higher than their landings of non-quota species. Vessels over 10m in length landed 98% of the landings of quota species by UK vessels.

Quota allocations are primarily based on Fixed Quota Allocation (FQA) units. These are mainly held by vessels in the sector based on their fishing track record of catching quota species. Most vessels in the sector – a member of a Fish Producer Organisation – are vessels over 10m in length. Vessels under 10m in length are mainly part of the non-sector and are allocated a small proportion of the total UK quota. Their landings of quota species are therefore less.

Section 3: Effort

View the tables accompanying this section here: https://www.gov.uk/government/statistics/uk-sea-fisheries-annual-statistics-report-2022

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.

Trips targeting edible crabs and spider crabs, demersal species and scallops are covered by the Western Water effort regime.

Following the end of transition from the EU in 2021 the UK has been enforcing the EU Western Waters regulation as amended by The Common Fisheries Policy (Amendment etc.) (EU Exit) Regulations 2019. The scope of this regulation has been changed to be consistent with the jurisdiction of the UK as an independent coastal state, and as such limits the application to those parts of the areas covered by Western Waters which are within United Kingdom waters.

Western waters effort statistics are also updated monthly here: https://www.gov.uk/government/collections/effort-use-statistics

These monthly statistics are provided to supervise control of fishing effort in Western Waters areas within British fisheries limits waters by UK vessels. The Western Waters regulations were originally derived from EU law and have been transposed into UK law. The statistics are made available on or after the 15th day of each month.

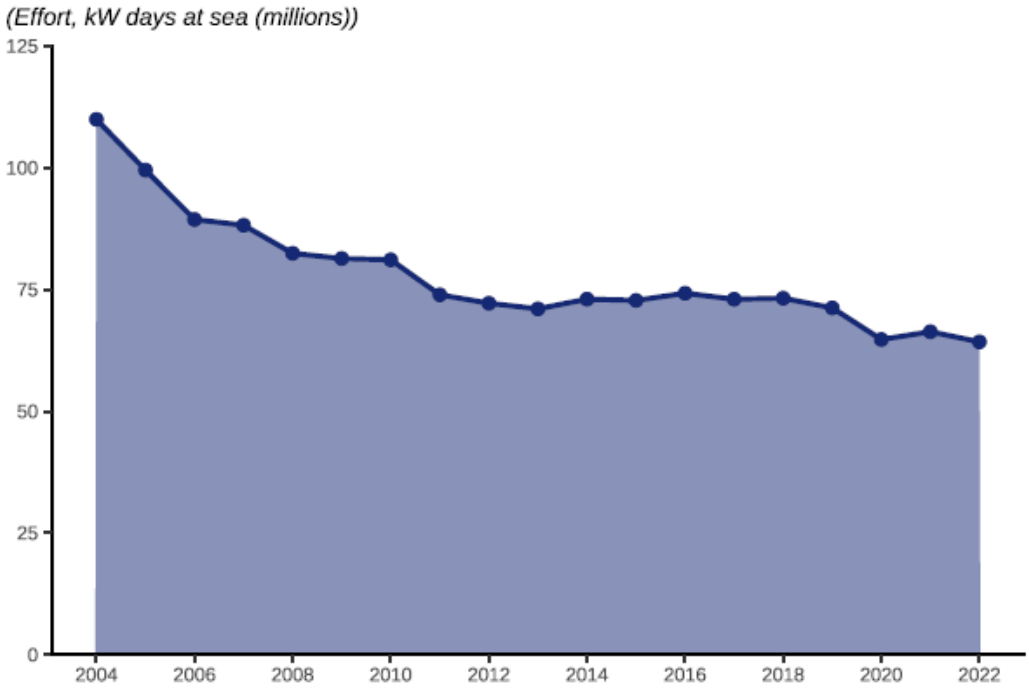
Over 10 metre fleet

Effort

Fishing effort captures the time vessels spend fishing. One measure of this is **days at sea**. Another measure is **kW days at sea**, which considers both the time vessels spend fishing and the power (kW) of the vessel's engine.

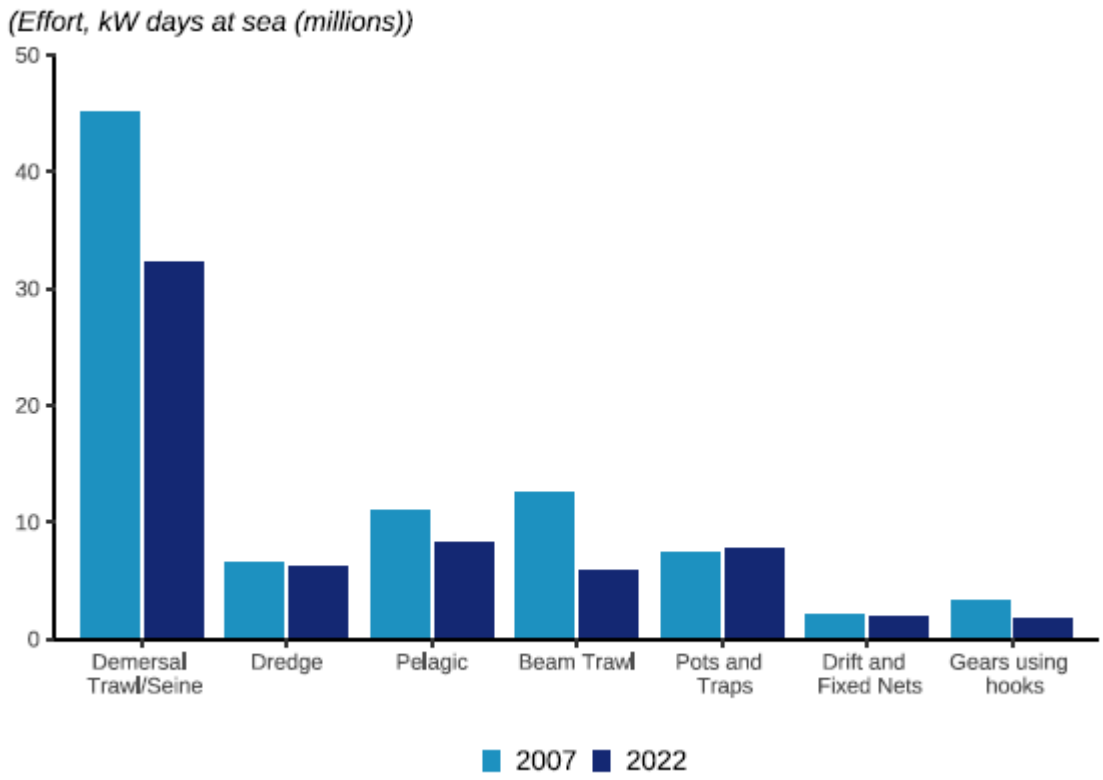
Effort restrictions are one of the ways fish stocks are managed. Limiting the number of days vessels can fish restricts their fishing opportunities.

Figure 3.1: Fishing effort shown by kW days at sea (millions) from 2004 to 2022 by the over 10m fleet.



Since 2004, fishing effort (kW days at sea) by the over 10m fleet has decreased by around 42%. Between 2004 and 2012 there was a fairly sharp decline, from 110 million kW days at sea down to around 72 million kW days at sea, but this then levelled off and remained relatively stable before seeing another decline down to around 65 million kW days from 2019 onwards.

Figure 3.2: Fishing effort shown by kW days at sea (millions) comparing 2007 to 2022 by the over 10m fleet by gear metier.



Effort by the demersal trawl and seine segment of the fleet fell by 41% between 2004 and 2022 to 32 million kW days at sea. The beam trawl segment, which has relatively lower levels of effort (5.9 million kW days at sea in 2022) fell by 67% over the same period.

This reduction in effort in the demersal trawl and seine segment followed decommissioning exercises which were carried out by UK fisheries administrations between 2001 and 2003. The latter focused 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 focused on vessels that used demersal trawls for whitefish. A further exercise was carried out to remove excess beam trawl fishing capacity in the Western Channel fishing area as part of the recovery regime for sole. This removed eight vessels previously active in the area.

Sole Recovery Zone

Sole Recovery Zone (SRZ)

As part of the measures for recovery of sole stocks, a Sole Recovery Zone was established from 2004 to apply effort controls to vessels of 10 metres or over, using certain gears (including beam trawls) in the Western Channel. Further information of SRZ measures can be found here: https://www.gov.uk/government/publications/manage-your-fishing-effort-sole-recovery-zone/sole-recovery-zone-rules

The Marine Management Organisation controls effort in the Western Channel by allocating days for fishing with these gears to eligible vessels.

Figure 3.3: The Sole Recovery Zone (British Waters of ICES Area VIIe).

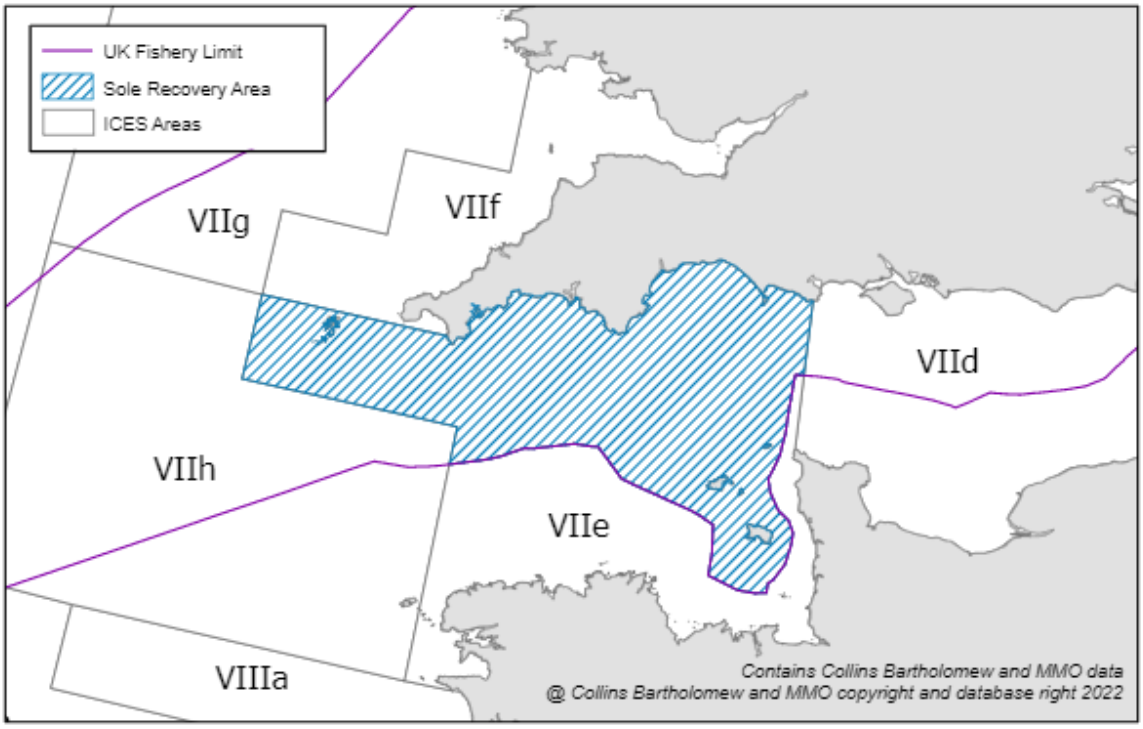
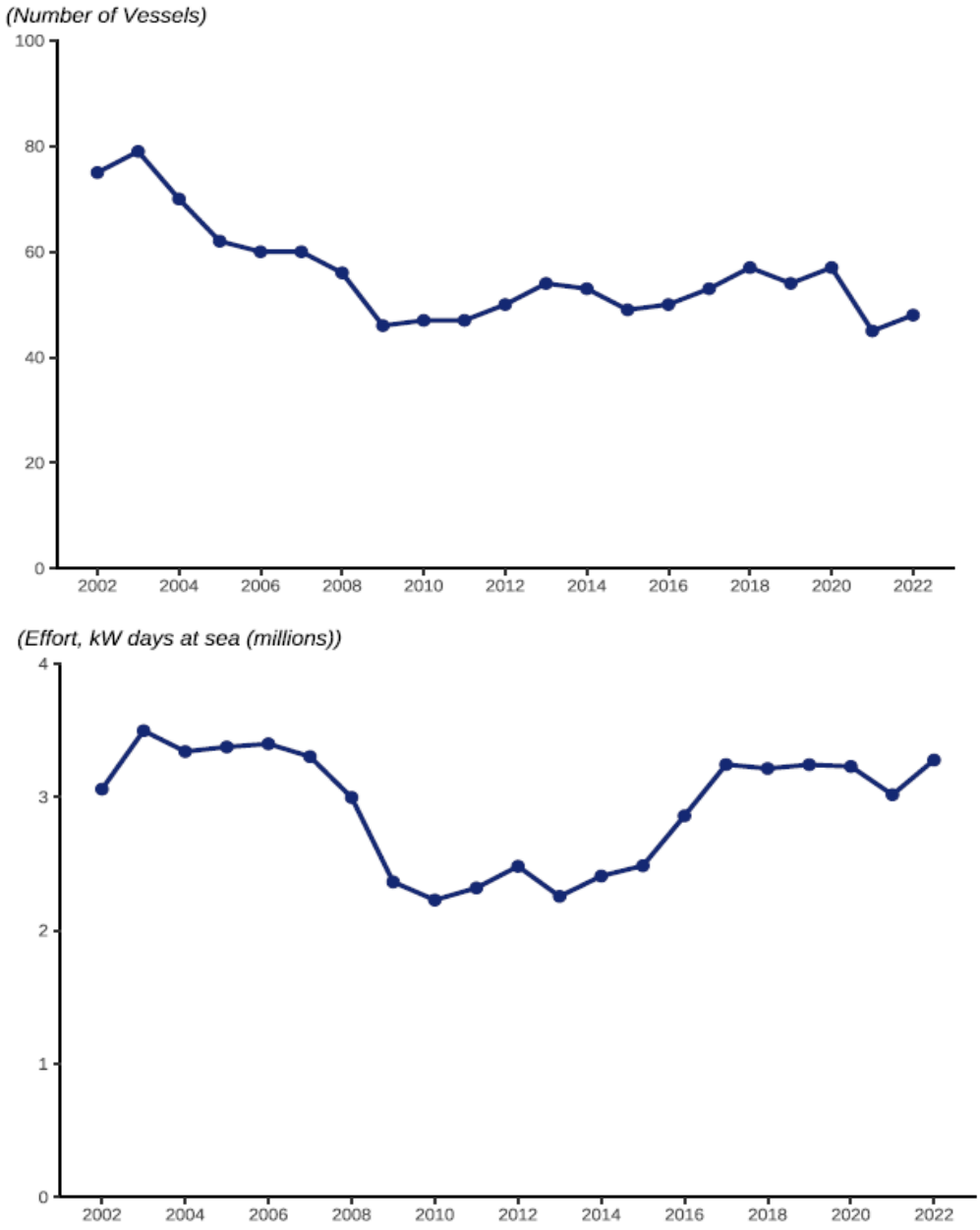


Figure 3.4: The number of vessels using beam trawls and associated effort (kW days at sea) in the SRZ from 2002 to 2022.



Since the implementation of the SRZ in 2004, the number of vessels beam trawling in the Sole Recovery Zone fell dramatically, as did effort, before stabilising. Reasons for this may include the effect of decommissioning schemes as well as reduced fishing opportunities owing to effort and quota controls. However, effort has increased considerably in recent years, approaching pre-2008 levels. In 2022 there was an increase in the number of vessels compared to 2021 increasing by 7%. This translated to increases in effort levels up by 9% equating to an addition of 260 thousand Kw Days.

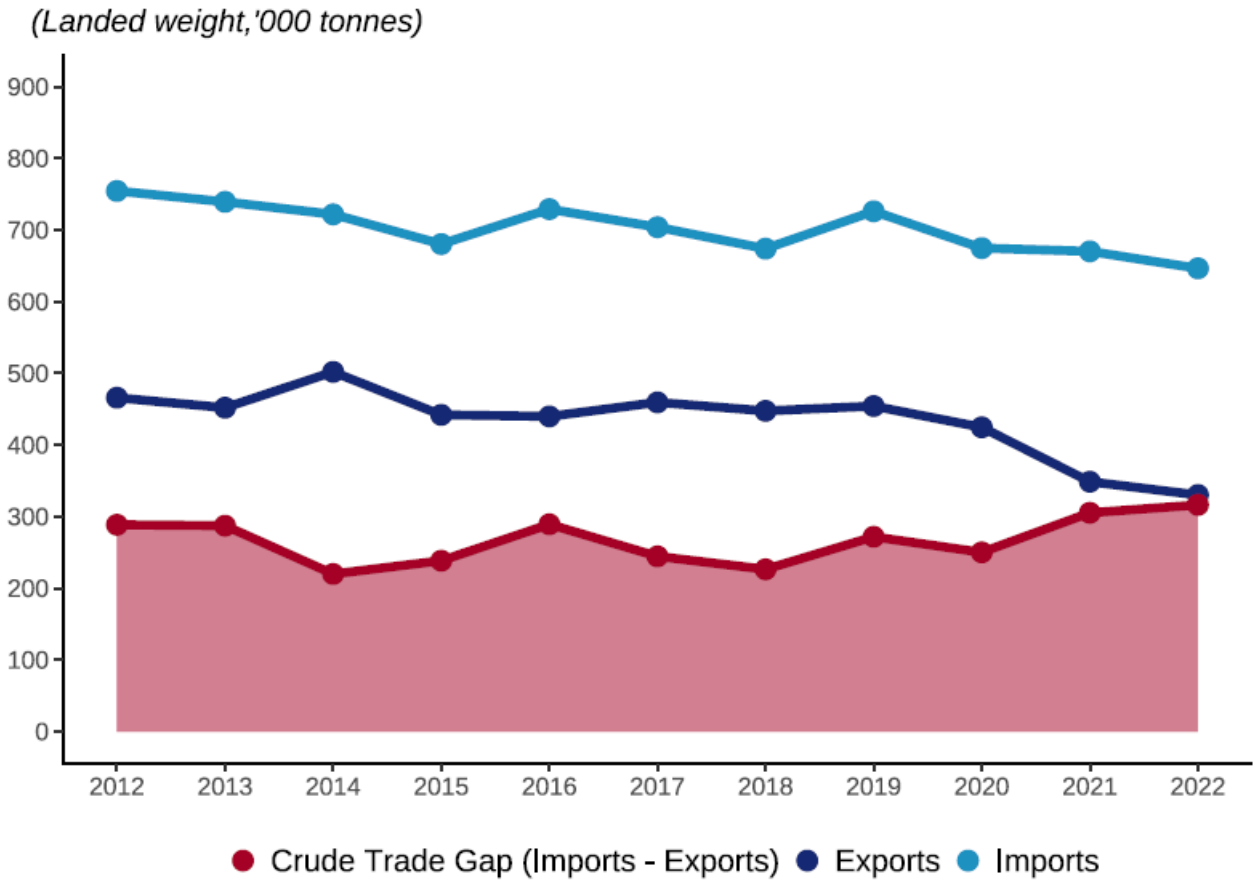
Section 4: Trade

View the tables accompanying this section here: https://www.gov.uk/government/statistics/uk-sea-fisheries-annual-statistics-report-2022

Data on trade is collected by landed weight. This differs to the measure of quantity used in previous sections which is live weight. MMO landings data is reported in terms of *live weight* which is the weight of the live fish caught from the sea. Landed weight is sometimes smaller if fish are processed (e.g. gutted or shelled) on board a ship prior to being landed.

Imports and exports

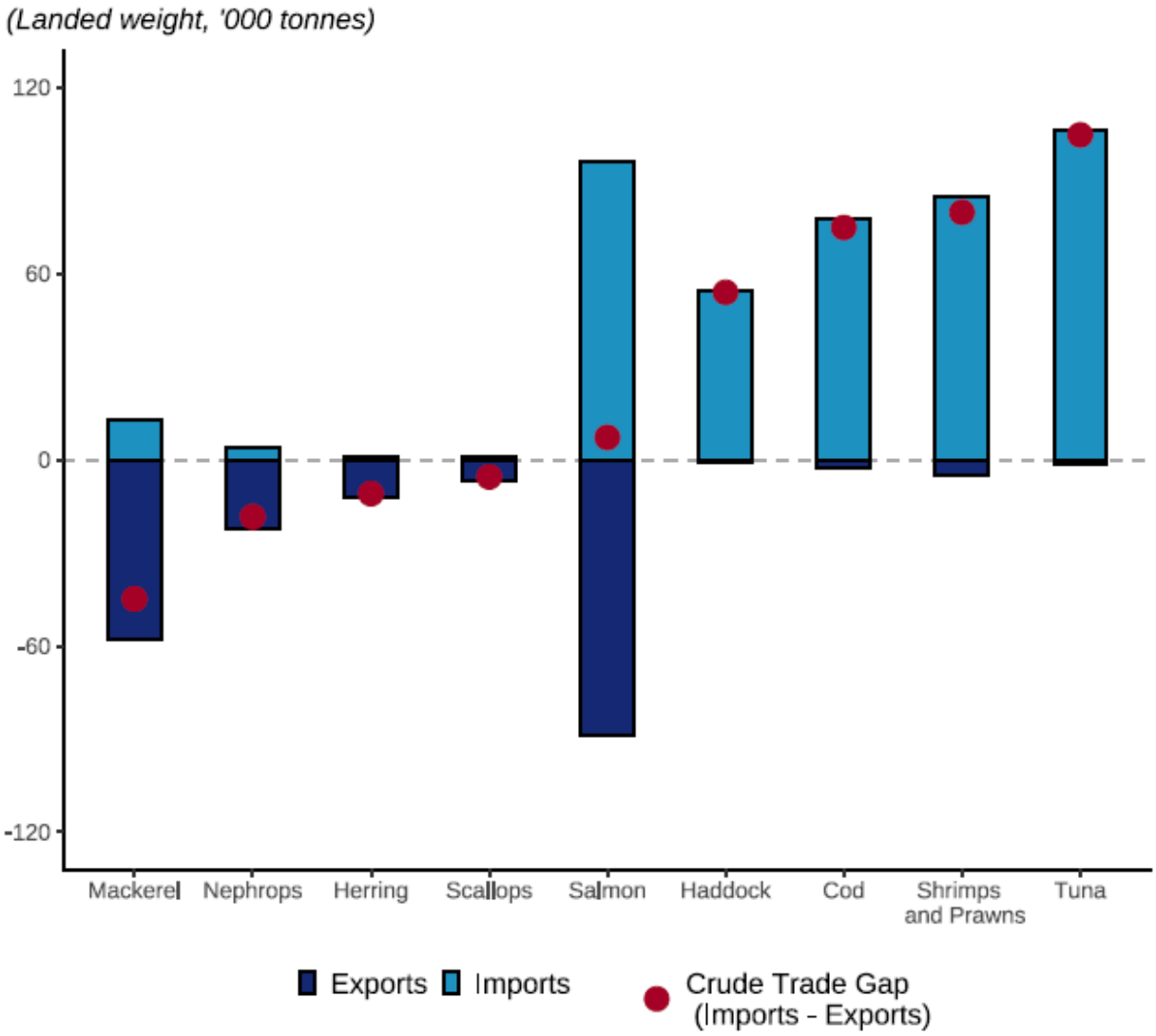
Figure 4.1: Total imports and exports by the UK in 2022.



The UK's trade gap in 2022 for sea fish was 316 thousand tonnes. The UK is a net importer of fish. In 2022 the UK imported 647 thousand tonnes of fish[18], with a value of £3.7 billion. It exported 330 thousand tonnes. Compared to 2021, the crude trade gap decreased by 2%, caused by a decrease in exports (5%).

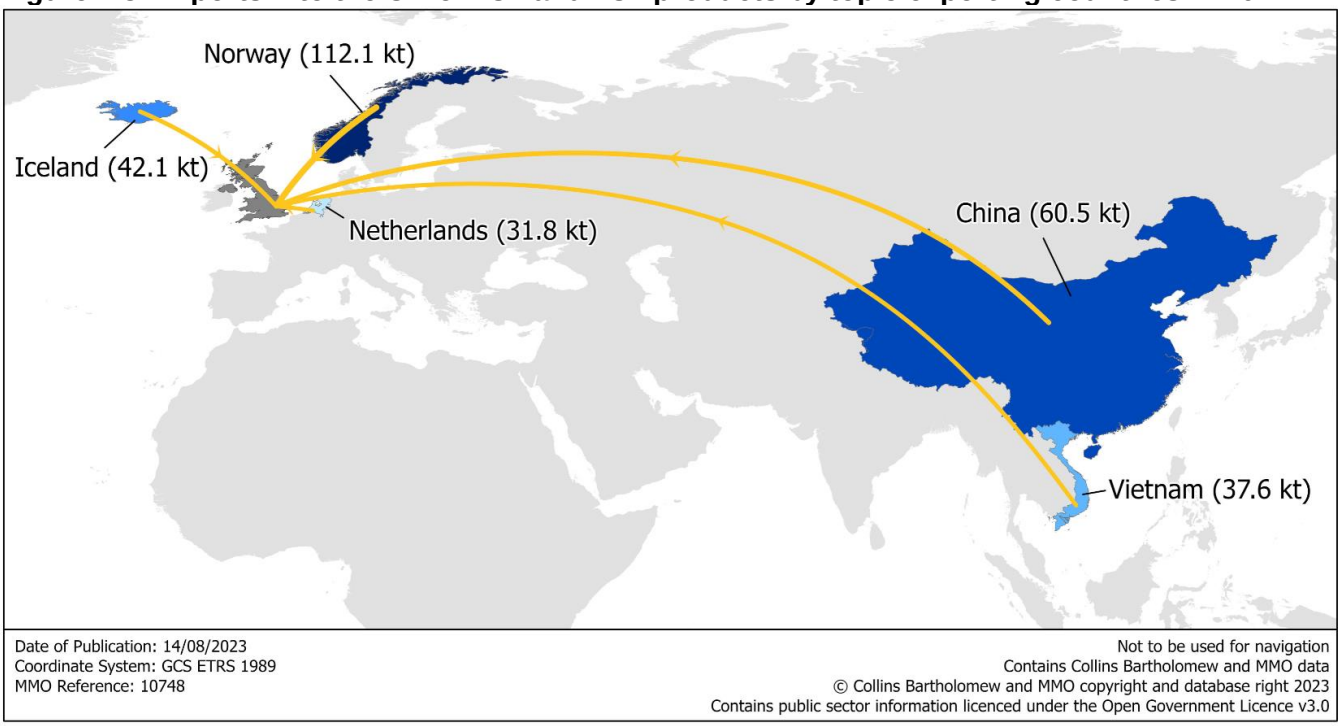
[18] Excluding fish products

Figure 4.2: UK imports and exports of fish and fish products split by species in 2022.



Imports

Figure 4.3: Imports into the UK of fish and fish products by top 5 exporting countries in 2022.

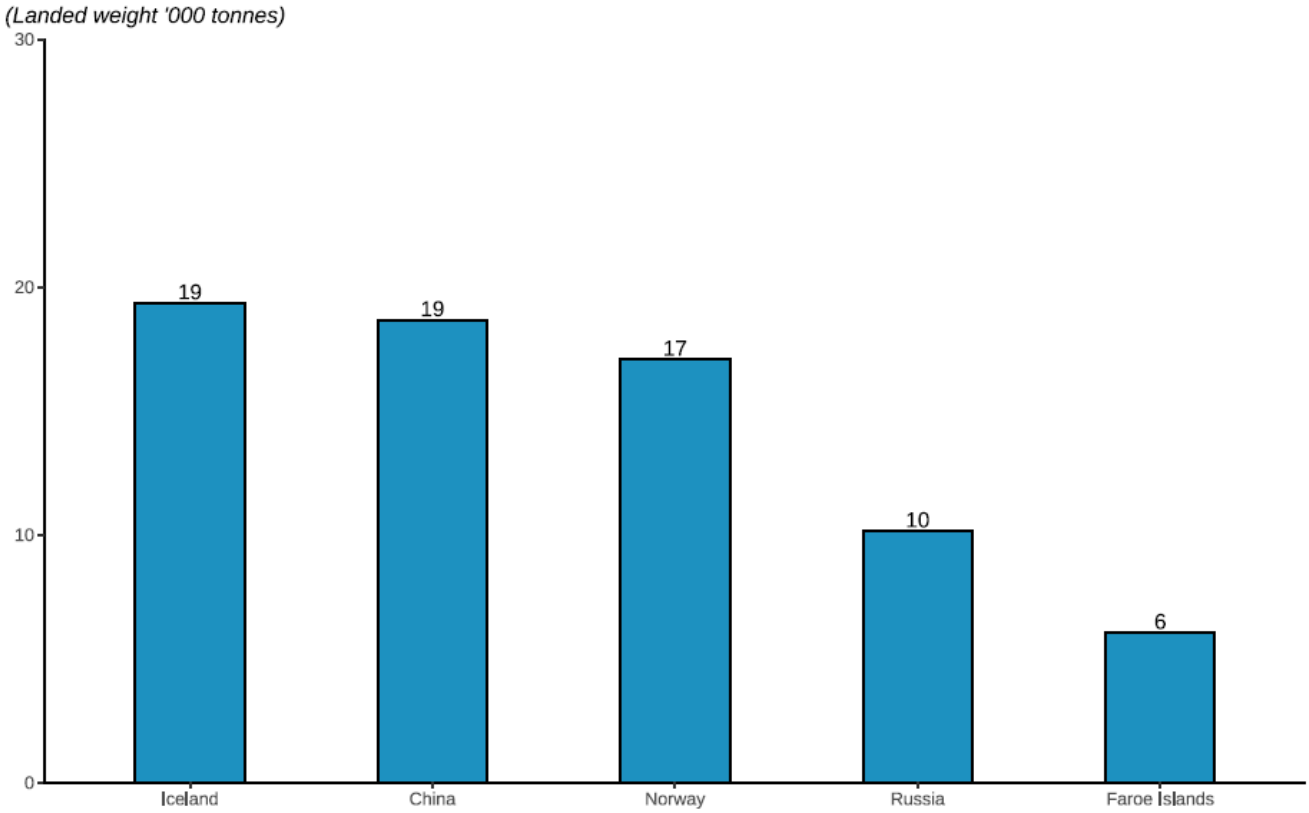


Norway was the country from which the UK imported the most fish and fish products in 2022. Demersal and pelagic fish accounted for 83% of fish imports into the UK by weight. Shellfish accounted for the remaining 17%. In terms of value imported, shellfish made up a slightly higher percentage at 24%, because of the higher price typically fetched by shellfish species[19].
The UK imported 152 thousand tonnes of fish products[20] in 2022, with most of which was fish meal (68%). This brings the total imports (including sea fish, freshwater fish and fish products) to 798 thousand tonnes.

[19] Table 2.12.

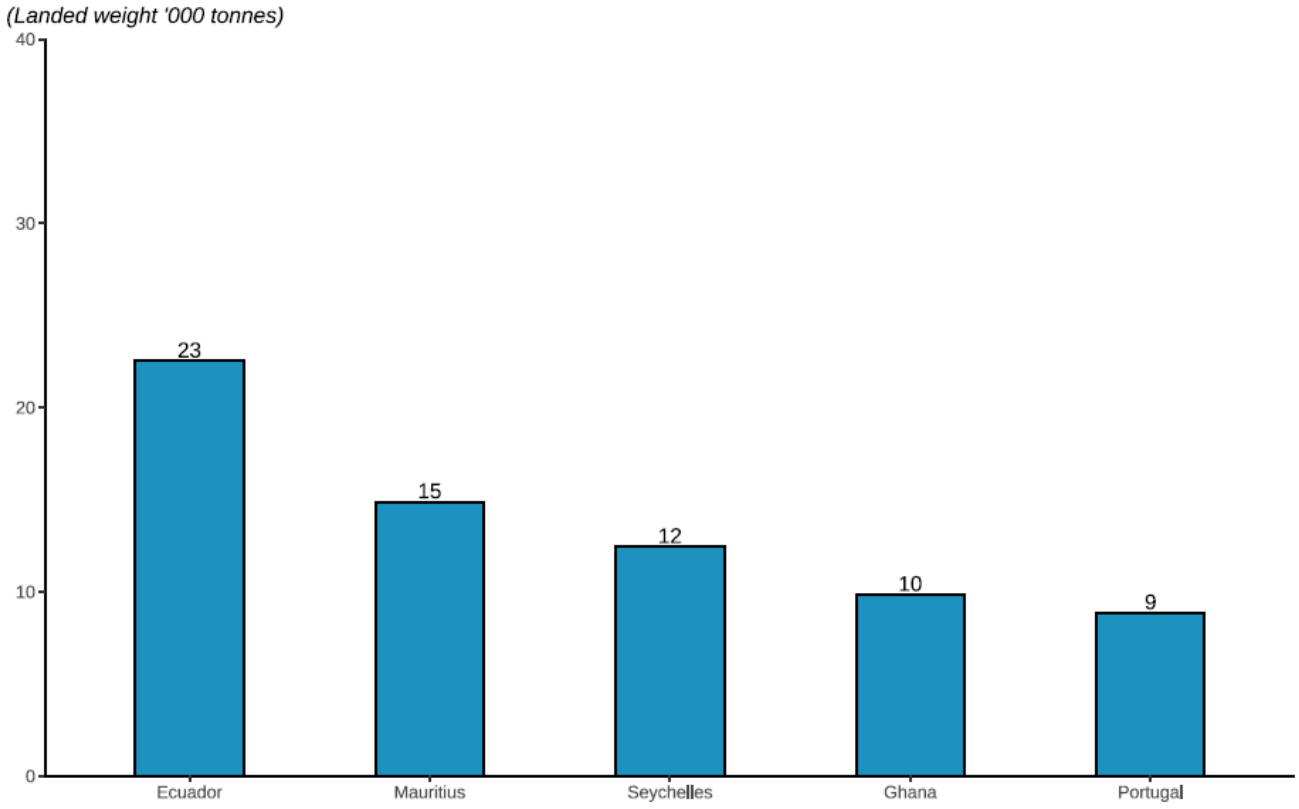
[20] Fish products includes e.g. fish meal and oils.

Figure 4.4: Imports to the UK of cod by top 5 exporting countries in 2022.



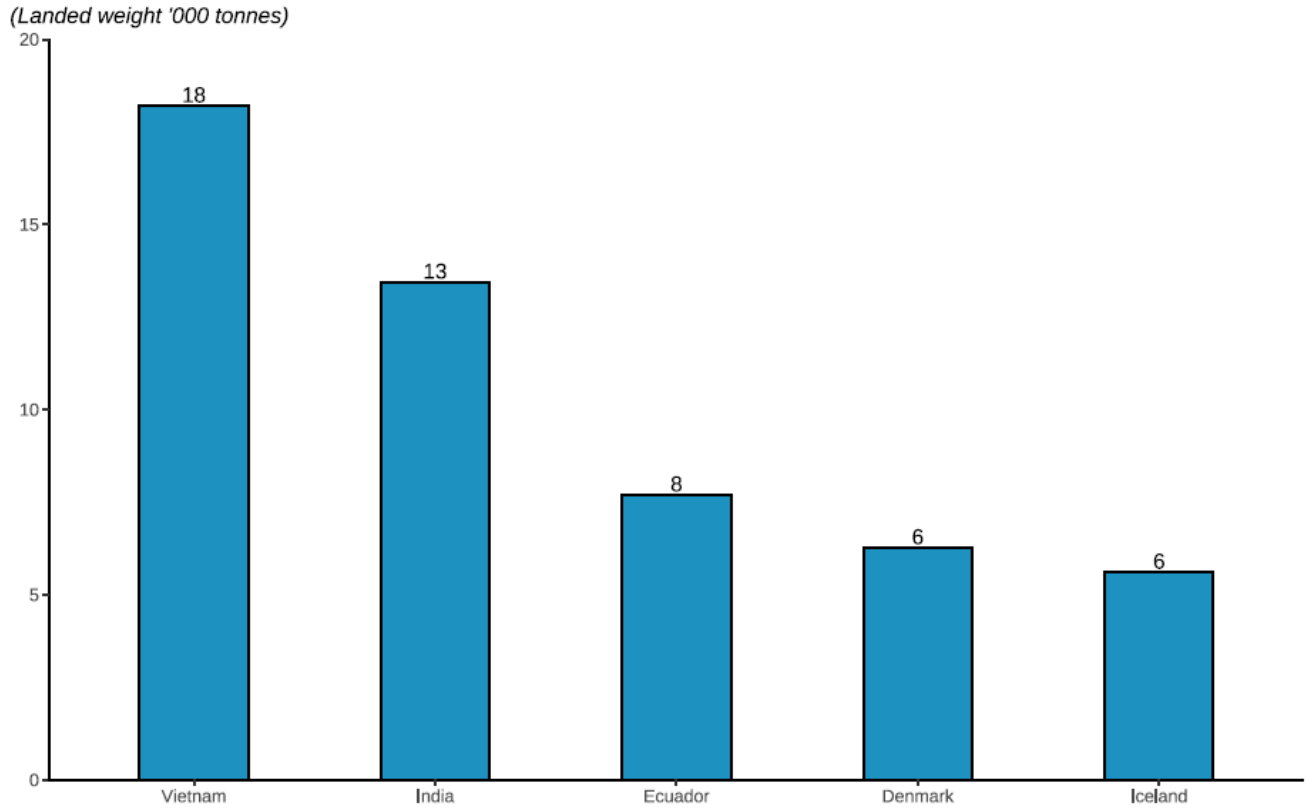
The UK is a net importer of cod, importing 85 thousand tonnes in 2022. The largest exporters of Cod to the UK in 2022 were Iceland (19 thousand tonnes), China (19 thousand tonnes) and Norway (17 thousand tonnes) imports from these 3 countries accounted for 65% of the total imports of Cod into the UK in 2022.

Figure 4.5: Imports to the UK of tuna species by top 5 exporting countries in 2022.



The UK is a net importer of tuna, importing 106 thousand tonnes in 2022. The largest exporters of Tuna to the UK in 2022 were Ecuador, imports from Ecuador accounted for 21% of the total imports of Tuna into the UK in 2022.

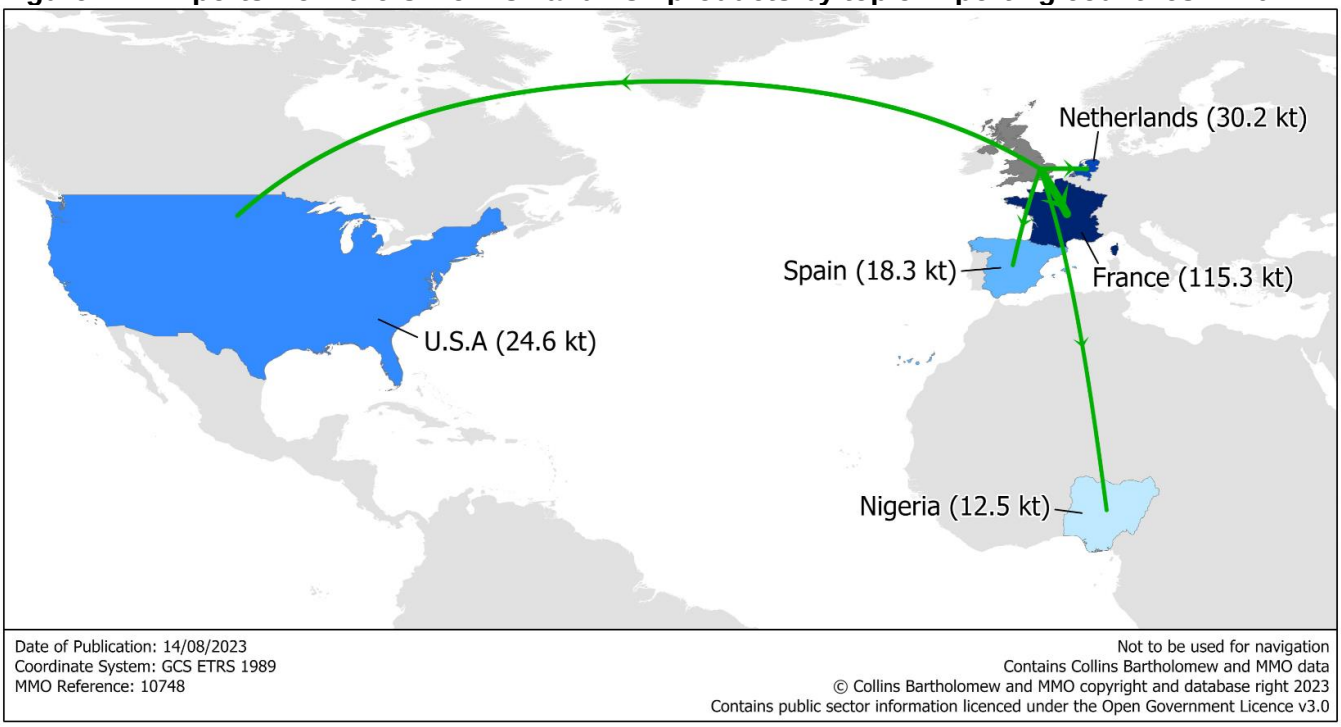
Figure 4.6: Imports to the UK of shrimps and prawns by top 5 exporting countries in 2022.



The UK is a net importer of shrimps and prawns, importing 78 thousand tonnes in 2022. The largest exporters of shrimps and prawns to the UK in 2022 were Vietnam (18 thousand tonnes) and India (13 thousand tonnes), imports from these two countries accounted for 41% of the total imports of shrimps and prawns into the UK in 2022.

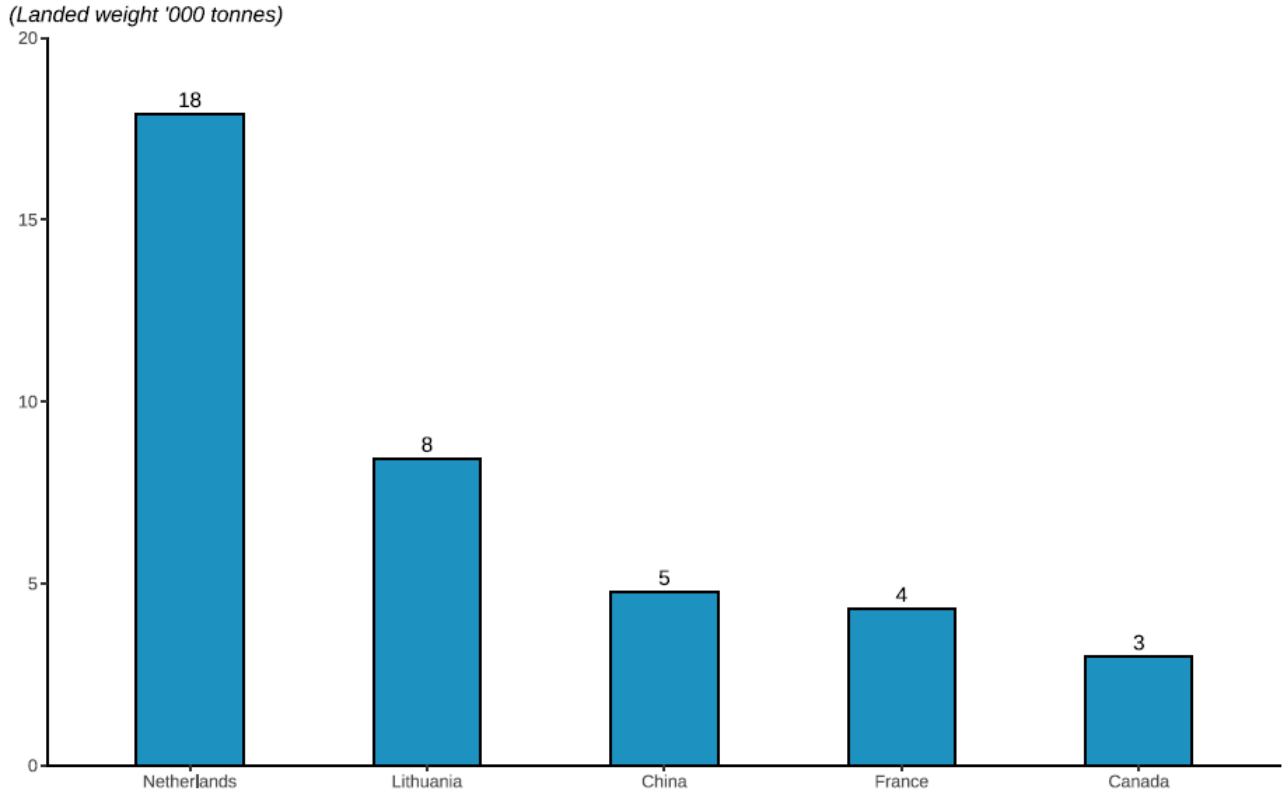
Exports

Figure 4.7: Exports from the UK of fish and fish products by top 5 importing countries in 2022.



The UK exported the most fish and fish products to France in 2022. Demersal and pelagic fish accounted for 83% of fish exports out of the UK by weight with shellfish accounting for 17%. This is identical to the split seen for imports. Shellfish similarly make up a higher percentage of the exports by value owing to their higher price per tonne on average than other sea fish (28%). The UK exported 14 thousand tonnes of fish products in 2022, bringing the total exports (including sea fish, freshwater fish and fish products) to 345 thousand tonnes.

Figure 4.8: Exports from the UK of Mackerel by top 5 importing countries.



The UK is a net exporter of mackerel, exporting 58 thousand tonnes in 2022. Mackerel exports increased by 6% compared to 2021. The largest share of mackerel exports went to Netherlands (18 thousand tonnes).

GDP

GDP
Gross Domestic Product (GDP) provides an economic snapshot for a country. Within countries, this is split into different sectors so you can see how much different industries contribute to the economy.
Within the UK GDP for fishing includes landings abroad by the UK fleet and the aquaculture sector. Fishing can then be grouped with the wider agriculture, forestry and fishing GDP total.

The GDP for fishing (including aquaculture) comprises 4.3% of the total for agriculture, forestry and fishing[21].

[21] http://www.ons.gov.uk/ons/datasets-and-tables/data-selector.html?table-id=A1&dataset=pn2 .

Annex A: ICES data

In collaboration with CEFAS, the MMO has previously published either a chapter or standalone report called Main stocks and their level of exploitation[22] which summarised ICES data for 6 key species (spanning 13 stocks) of interest to the UK fleet.
ICES have improved their dissemination of scientific data and we now recommend users access this interactive data direct from ICES.

All stock assessment graphs can be accessed at the following link: https://www.ices.dk/data/assessment-tools/Pages/stock-assessment-graphs.aspx.

Seafish provide a thorough guide of how to interpret ICES graphs. See pages 25-26 here: https://www.seafish.org/document/?id=23A69338-21D2-4617-ADF5-58099360DAEB.

Below we have provided a list of key stocks of interest to the UK fleet and their corresponding biological stock page on ICES. This is not an exhaustive list of stocks that the UK holds quota in.

Stock code	Biological stock code	Link
ANF/07.	ank.27.78abd	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14295
ANF/07.	mon.27.78abd	https://standardgraphs.ices.dk/ViewCharts.aspx?key=16700
BOR/678-	boc.27.6-8	standardgraphs.ices.dk/ViewCharts.aspx?key=16799
COD/07A.	cod.27.7a	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14433
COD/07D.	cod.27.47d20	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14324
COD/2A3AX4	cod.27.47d20	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14324
COD/7XAD34	cod.27.7.e–k	https://standardgraphs.ices.dk/ViewCharts.aspx?key=15605
HAD/07A.	had.27.7.a	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14557
HAD/2AC4.	had.27.46a20	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14386
HAD/5BC6A.	had.27.46a20	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14386
HAD/7X7A34	had.27.7.b–k	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14557
HER/07A/MM	her.27.nirs	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14091
HER/4AB.	her.27.3a47d	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14149
HER/4CXB7D	her.27.3a47d	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14149
HER/7G-K.	her.27.irls	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14087
HKE/2AC4-C	hke.27.3a46-8abd	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14566
HKE/571214	hke.27.3a46-8abd	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14566
JAX/4BC7D	hom.27.3a4bc7d	standardgraphs.ices.dk/ViewCharts.aspx?key=16767
L/W/2AC4-C	wit.27.3a47d	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14516
L/W/2AC4-C	lem.27.3a47d	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14370
LEZ/07.	meg.27.7b-k8abd	https://standardgraphs.ices.dk/ViewCharts.aspx?key=16699
LIN/04-C.	lin.27.3a4a6-91214	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14347
LIN/6X14.	lin.27.3a4a6-91214	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14347
MAC/2A34.	mac.27.nea	standardgraphs.ices.dk/ViewCharts.aspx?key=16735
MAC/2CX14-	mac.27.nea	standardgraphs.ices.dk/ViewCharts.aspx?key=16735
NEP/07.	nep.fu.14	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14248
Stock code	**Biological stock code**	**Link**
NEP/07.	nep.fu.2021	standardgraphs.ices.dk/ViewCharts.aspx?key=16789
NEP/07.	nep.fu.22	standardgraphs.ices.dk/ViewCharts.aspx?key=16794
NEP/2AC4-C	nep.fu.5	https://standardgraphs.ices.dk/ViewCharts.aspx?key=15601

[22] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/920035/2019_Main_stocks_and_their_level_of_exploitation.pdf.

NEP/2AC4-C	nep.fu.6	https://standardgraphs.ices.dk/ViewCharts.aspx?key=15601
PLE/07A.	ple.27.7a	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14392
PLE/2A3AX4	ple.27.420	https://standardgraphs.ices.dk/ViewCharts.aspx?key=15614
PLE/7DE.	ple.27.7d	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14598
PLE/7DE.	ple.27.7e	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14426
PLE/7FG.	ple.27.7fg	https://standardgraphs.ices.dk/ViewCharts.aspx?key=15646
POL/07.	pol.27.67	https://standardgraphs.ices.dk/ViewCharts.aspx?key=16701
POL/56-14	pol.27.67	https://standardgraphs.ices.dk/ViewCharts.aspx?key=16701
RJC/07D.	rjc.27.3a47d	standardgraphs.ices.dk/ViewCharts.aspx?key=16689
RJC/2AC4-C	rjc.27.3a47d	standardgraphs.ices.dk/ViewCharts.aspx?key=16689
RJC/67AKXD	rjc.27.7afg	standardgraphs.ices.dk/ViewCharts.aspx?key=13888
RJC/67AKXD	rjc.27.7e	standardgraphs.ices.dk/ViewCharts.aspx?key=13779
RJH/04-C.	rjh.27.4c7d	standardgraphs.ices.dk/ViewCharts.aspx?key=15669
RJH/07D.	rjh.27.4c7d	standardgraphs.ices.dk/ViewCharts.aspx?key=15669
SAN/234_1R	san.sa.1r	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14067
SOL/07A.	sol.27.7a	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14536
SOL/07D.	sol.27.7d	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14317
SOL/07E.	sol.27.7e	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14506
SOL/24-C.	sol.27.4	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14338
SOL/7FG.	sol.27.7fg	https://standardgraphs.ices.dk/ViewCharts.aspx?key=16761
SOL/7HJK.	sol.27.7h-k	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14537
SPR/7DE.	spr.27.7de	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14079
T/B/2AC4-C	tur.27.4	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14296
T/B/2AC4-C	bll.27.3a47de	https://standardgraphs.ices.dk/ViewCharts.aspx?key=15609
WHB/1X14	whb.27.1-91214	standardgraphs.ices.dk/ViewCharts.aspx?key=16754
WHG/07A.	whg.27.7a	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14474
WHG/2AC4.	whg.27.47d	https://standardgraphs.ices.dk/ViewCharts.aspx?key=15613
WHG/7X7A-C	whg.27.47d	https://standardgraphs.ices.dk/ViewCharts.aspx?key=15613
WHG/7X7A-C	whg.27.7b-ce-k	https://standardgraphs.ices.dk/ViewCharts.aspx?key=14474

Annex B: Methodology

The methodology for data from 2000 and earlier included in this publication is described in earlier versions of the methodology: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/920038/Methodology.pdf.

Fleet (Section 1)
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. 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 year the report covers. Vessels which are registered but do not have an administration port at this time are not counted against any country,

Fish Producer Organisation membership (Section 1)
In the UK, FPOs (Fish Producer Organisations) are 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.

Employment data (Section 1)
Data on fishers' 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 fishers' 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 fishers on each vessel. Marine Scotland and DAERA process and compile these data to provide estimates of fisher's 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% 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 fishers on each vessel in their administration based on enquiries and local knowledge.

For the purposes of the survey, a fisher 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. Fishers 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. Where no data were available on fishers' numbers for a vessel the value was assumed to be the average number of fishers 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 (Section 2)
The data in Sections 2 is administrative data which the UK is legally required to collect to enable management of the seas. The data collected via these means is used for the majority of MMO statistical products, not just this annual publication.
The data collection and processing for this administrative data is described here:
https://www.gov.uk/guidance/fishing-activity-and-landings-data-collection-and-processing.

Amendments to the administrative data collected (Section 2)
Following quality assurance, MMO statistics make some amendments to the administrative data collected ahead of producing the datasets and tables for the Sea Fisheries Statistics publication. Amendments were made this year to the 2022 value data. Firstly, where sales note mismatches were identified as causing gaps in landed value, the affected sales note's value information were manually inputted into the final data sets by applying an average price per tonne derived from the mismatching sale notes to affected landings. This primarily affected ICES area 27.1 cod landed value. Further records were identified as missing value (primarily for mackerel and blue whiting landings). For these records a general annual average price per tonne was applied to the relevant live weight landings to produce estimated landed value. For example, mackerel landings were assigned value based on a price per tonne of £991 for 2020. For context on scale, this fix was applied to around 6,000 tonnes of mackerel landings in 2020 which equates to approximately 3% of UK mackerel landings that year.

All mussel landings with a zero landings value have been removed from the dataset used to create Section 2 and the underlying datasets. 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.

Estimated landings by EEZ (Section 2)
Most figures in Sections 2 are based on administrative data collected direct from vessels, with some amendments to improve the quality (described above). From 2021, data relating to the area of capture (EEZ) are based on reported areas, however prior to this period, the data relies on estimated areas to determine the EEZ. For years prior to 2021 the MMO hold robust data on catches by ICES rectangle. This rectangle data is used as the basis for estimating landings by EEZ.

An example to illustrate follows:

> *If an ICES rectangle is fully in UK waters, we can assume 100% of the catch assigned to that rectangle is from UK waters. However, EEZ lines intersect and cut across ICES rectangles so this assumption cannot be applied in all instances.*
> *For example, in the English Channel, the ICES rectangles span both UK and French waters. Imagine the sea surface of an ICES rectangle falls in a way so that exactly 50 per cent of the ICES rectangle is in UK waters and 50 per cent is in French waters.*
> *Based on the per cent of the sea surface that falls in each nation's EEZ we can make an assumption that 50 per cent of the catch reported against that ICES rectangle was from French waters and 50 per cent was from UK waters. This same calculation can be done for all ICES rectangles and aggregated up to various groupings to estimate e.g., the percentage of landings by the UK fleet from UK waters compared to the percentage of landings from EU waters.*

In reality, in the example of the English Channel described above, a vessel may have actually landed 100% of their catch on the UK side of the EEZ. Because of this, for each estimate we can calculate a confidence interval around the estimated value. Confidence intervals are presented in the charts in this section. When considering individual vessel landings, these estimates will have very wide confidence intervals. However, when we aggregate this data to the UK fleet level (for example), the confidence in our estimates is much higher.

The method described above relies on us knowing what fraction of the sea surface of an ICES rectangle falls in each nation's EEZ. To obtain this information a spatial dataset containing the

boundaries of all world EEZs was segmented by a spatial dataset containing the boundaries of the ICES rectangles. From this, the fraction of total sea surface area, excluding any land area, occupied by each national EEZ was calculated for each rectangle.

The underlying dataset titled *UK_fleet_landings_by_rectangle_stock_and_estimated_EEZ_2016_2020* published alongside this report includes the estimated EEZ and region of capture based on the method described above. In this dataset there are a small number of unapportioned landings – i.e. landings which cannot be attributed to an EEZ or region. This is because these landings have an unknown ICES rectangle. They are included in the dataset for completeness but only make up 0.04 per cent of all landings.

Please refer to the published Economic Exclusive Zone analysis report[23] for further details on the methodology and assumptions used for these figures.

Trade (Section 4)
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.

[23] UK commercial sea fisheries landings by Exclusive Economic Zone of capture report 2019 - GOV.UK (www.gov.uk)

Annex C: Revisions policy

The Marine Management Organisation policy is to revise or produce 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.

There are several causes of the revisions made in this publication:

1. **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.

2. **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.

3. **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/publications/defra-policy-statement-on-revisions-and-corrections.

Annex D: Associated publications

Annual Sea Fish Statistics

All associated tables, underlying datasets and documents relating to this publication can be **downloaded here:**
https://www.gov.uk/government/statistics/uk-sea-fisheries-annual-statistics-report-2022

MMO National and Official Statistics publications

- Monthly UK sea fisheries statistics: https://www.gov.uk/government/collections/monthly-uk-sea-fisheries-statistics
- UK fishing vessel lists: https://www.gov.uk/government/collections/uk-vessel-lists
- Effort use statistics: https://www.gov.uk/government/collections/effort-use-statistics
- Quota use statistics: https://www.gov.uk/government/statistical-data-sets/quota-use-statistics

Sea fisheries publications by other UK nations and international bodies

- Scottish Sea Fisheries Statistics: https://www.gov.scot/collections/sea-fisheries-statistics/
- Department for Agriculture, Environment and Rural Affairs in Northern Ireland, fisheries policy and statistics: Animal health, inland fisheries, food and forestry statistics | Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk)
- FAO Yearbook of Fishery and Aquaculture Statistics: FAO Yearbook of Fishery and Aquaculture Statistics - Fisheries and Aquaculture
- Eurostat Agriculture, Forestry and Fisheries Statistics: https://ec.europa.eu/eurostat/en/web/products-statistical-books/-/KS-FK-17-001

Other Useful websites

- Sea Fish Industry Authority: https://www.seafish.org/
- Maritime and Coastguard Agency: https://www.gov.uk/government/organisations/maritime-and-coastguard-agency
- Marine Accident Investigation Branch: https://www.gov.uk/government/publications/marine-accident-investigation-branch-current-investigations
- Centre for Environment, Fisheries and Aquaculture Science: https://www.gov.uk/government/organisations/centre-for-environment-fisheries-and-aquaculture-science
- International Council for the Exploration of the Sea (ICES): https://www.ices.dk/Pages/default.aspx
- FQA Register: https://www.fqaregister.service.gov.uk/
- HMRC Trade data tool: https://www.uktradeinfo.com/

Annex E: Further Information

National Statistics Designation

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards. The continued designation of these statistics as National Statistics was confirmed in February 2019 following a compliance check[24] by the Office for Statistics Regulation. The statistics last underwent a full assessment against the Code of Practice for Official Statistics[25] in 2014.

Pre-release access to statistics

Some ministers and officials receive access to these statistics up to 24 hours before release. Details of the arrangements for doing this and a list of the ministers and officials that receive pre-release access to these statistics can be found in the DEFRA statement of compliance[26] with the Pre-Release Access to Official Statistics Order 2008.

Contact

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- Media enquiries: 0300 123 1032

[24] https://osr.statisticsauthority.gov.uk/correspondence/compliance-check-of-uk-sea-fisheries-statistics/
[25] https://code.statisticsauthority.gov.uk/
[26] https://www.gov.uk/government/publications/defra-group-pre-release-access-to-official-statistics-compliance-statement