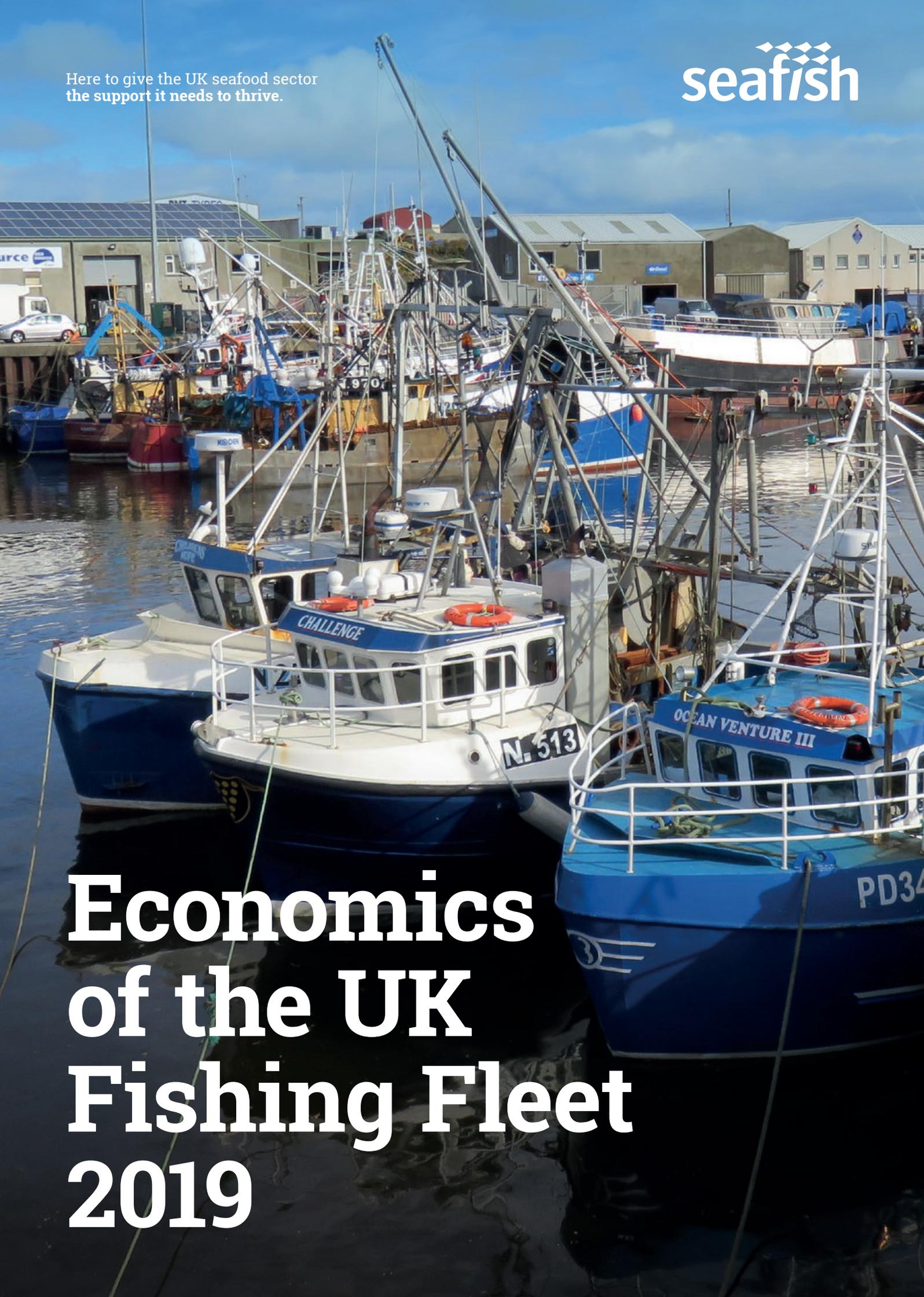


Here to give the UK seafood sector
the support it needs to thrive.

seafish

A harbor scene with several fishing boats docked. The boats are primarily blue and white. In the foreground, a boat named 'CHALLENGE' with registration 'N. 513' is prominent. To its right, another boat named 'OCEAN VENTURE III' with registration 'PD34' is visible. The background shows industrial buildings and other boats in the water.

Economics of the UK Fishing Fleet 2019

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Seafish Industry Authority
18 Logie Mill
Logie Green Road
Edinburgh
EH7 4HS

Authors:

Marta Moran Quintana

Kirsten Milliken

Arina Motova

Executive Summary

- Turnover of the UK fishing fleet was £1.03 billion in 2018. In 2019 turnover decreased slightly to £1 billion. Total operating profit was £238 million in 2018 and remained at a similar figure (£240 million) in 2019. This stabilisation in operating profit in 2019 was due mainly to a decrease in total costs which helped offset a decreasing income from fishing.
- Total fishing income of the fleet was close to £1.01 billion in 2018 and decreased to £980 million in 2019 as total weight of landings decreased by 12%.
- Total operating costs of the UK fleet were £788 million in 2018, decreasing to £761 million in 2019.
- The average price of fuel decreased in 2019 to 49.5 pence per litre, compared to 50.1 pence per litre in 2018. Total spend on fuel of the fleet in 2019 was an estimated £132 million, 5% lower than in 2018.
- Crew costs were £266 million in 2018, decreasing to £258 million in 2019. It is likely that the decrease in fishing income reduced the amount of money available to distribute among the crew.
- The total number of active fishing vessels was 4,590 in 2018, decreasing to 4,491 in 2019. Of these active vessels, just over 1,500 were classed by Seafish each year as low activity vessels with a fishing income of less than £10,000.
- Seafish researchers interviewed around 430 skippers and vessel owners during the summer of 2019. These interviews touched on the main factors impacting the financial performance of their businesses, such as the age and health of fishermen, the abundance of fish, access to quota, fuel price and the weather.

NB: 2019 financial estimates will be revised when vessel accounts for that year are available in early 2021. A new version of this annual report will be published based on updated estimates.

Introduction

This is the fourteenth edition of this annual report providing detailed insights into the financial and operational performance of the UK fishing fleet in 2018 and 2019. Accurate fleet economic data and analyses help inform decisions and enhance fisheries management, benefitting the UK fleet in the long-run.

The report presents economic estimates at UK, home nation and fleet segment level. The estimates are calculated based on samples of fishing costs and earnings gathered by Seafish as part of the 2019 Annual Fleet Economic Survey. The data does not include or reveal any individual vessel data, only totals and averages.

Estimates for 2018 are based on same year costs and earnings samples, official statistics on landings, capacity and effort, and fuel price. These estimates have been revised since the previous edition of this report to reflect updated cost and earnings data available in early 2020. Due to a time lag in the availability of company accounts estimates for 2019 are based on 2018 cost and earning samples and 2019 landings, effort, and fuel price data. 2019 estimates should therefore be considered preliminary. Seafish will revise those estimates when 2019 cost and earning data become available in early 2021.

The dataset presented in this report is downloadable from the Seafish website at www.seafish.org/insight-and-research/fishing-data-and-insight/. The website also offers access to our full suite of publications covering the economic performance of the UK seafood catching and processing sectors. Bespoke analyses are available upon request, dependent on sufficient data being available to ensure business anonymity.

If you have any comments about this report, would like to suggest improvements or would like more detailed information, please contact us at:

Seafish Economics

Seafish
18 Logie Mill
Logie Green Road
Edinburgh
EH7 4HS

Telephone: 0131 558 3331
E-mail: economics@seafish.co.uk

NOTE: all financial figures in this report are nominal (i.e., not adjusted for inflation).

The UK fishing fleet in 2018/19

Overview

All figures in million £

Total UK Fleet Fishing income



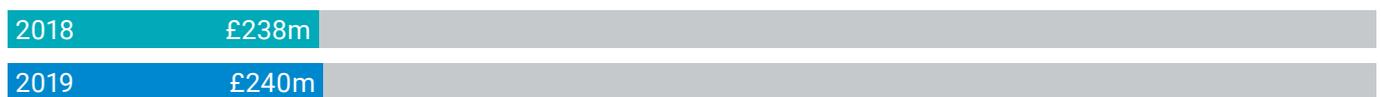
Total UK Fleet Turnover



Total UK Fleet Operating costs



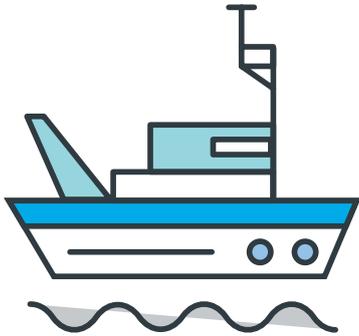
Total UK Fleet Operating profit



Total UK Fleet GVA



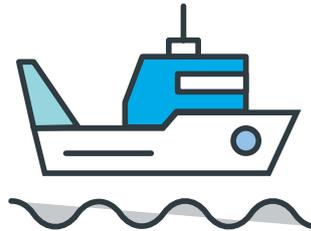
Fleet size



4,491

Active Vessels

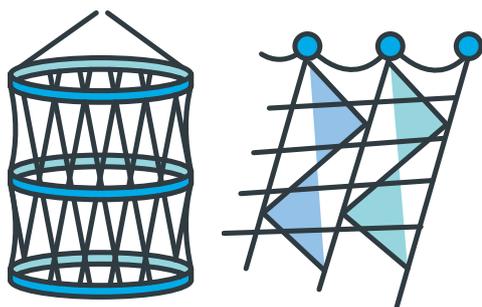
In 2019 there were **4,491** active fishing vessels in the UK fleet, approximately 100 fewer vessels than 2018. In addition there were **1,508** inactive vessels, most of them under 10m in length. Approximately a third (**35%**) of the vessels active in 2019 were classed by Seafish as 'low activity'. Low activity vessels are defined as those with annual fishing income under £10,000.



74%

of all active vessels in 2019 were under 10m in length.

These vessels tend to operate in inshore waters of the UK.



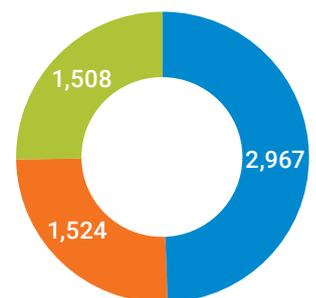
51%

Use static or passive gear

UK fishing vessels vary in the types of gears used. Approximately **51%** of active vessels (excluding low activity vessels) used mainly static or passive gear (mostly pots and traps but also hooks, drift and fixed nets).

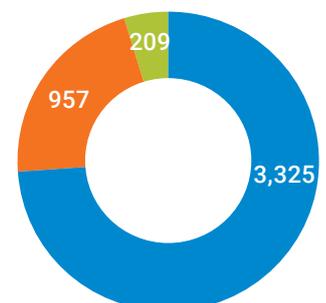
Numbers of vessels in 2019

- Active
- Low activity
- Inactive



Numbers of active vessels in 2019

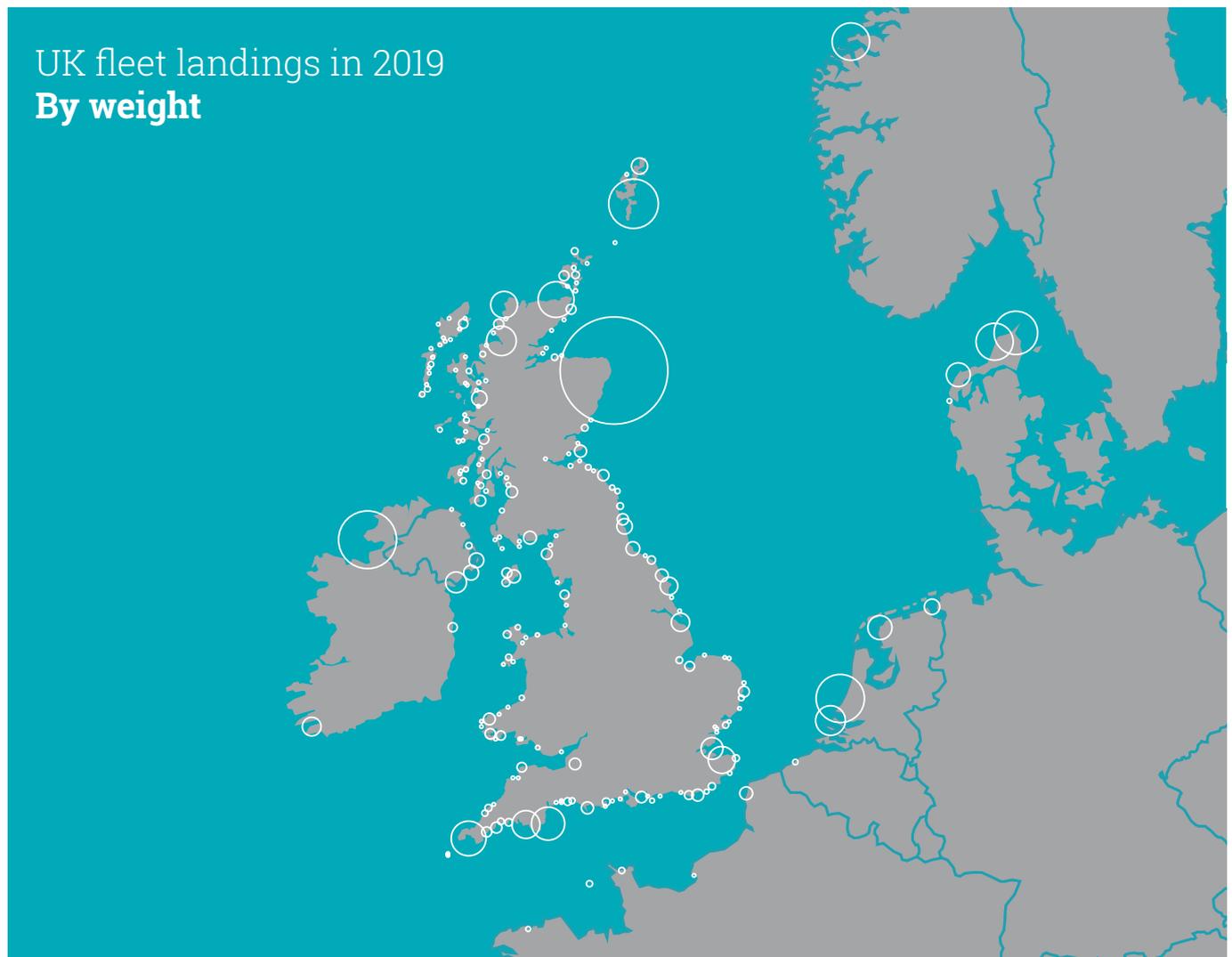
- Under 10m
- 10-24m
- Over 24m



Landings

Map of weight of landings by port

The UK fishing fleet landed 620 thousand tonnes of fish and shellfish in 2019. The majority of landings were made in the UK, with Peterhead, Lerwick and Fraserburgh being the main UK landing ports by weight. Landings abroad took place mainly in Norway, Denmark, the Netherlands and Ireland.

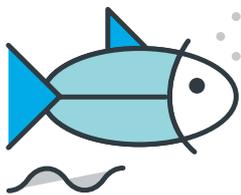


Total UK Fleet Landing location – Weight



Landing location – Value



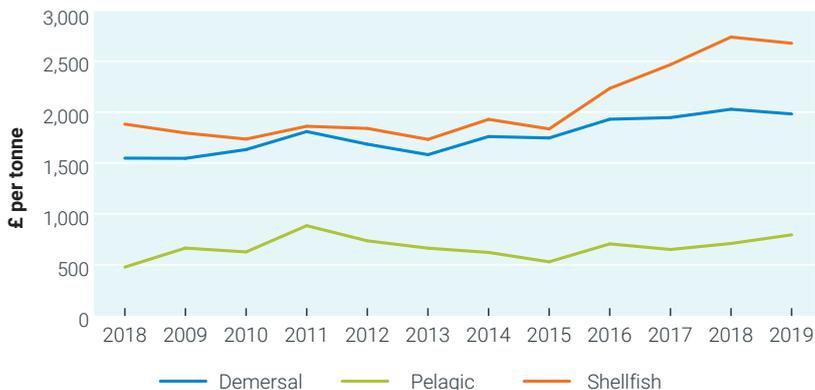


£980m

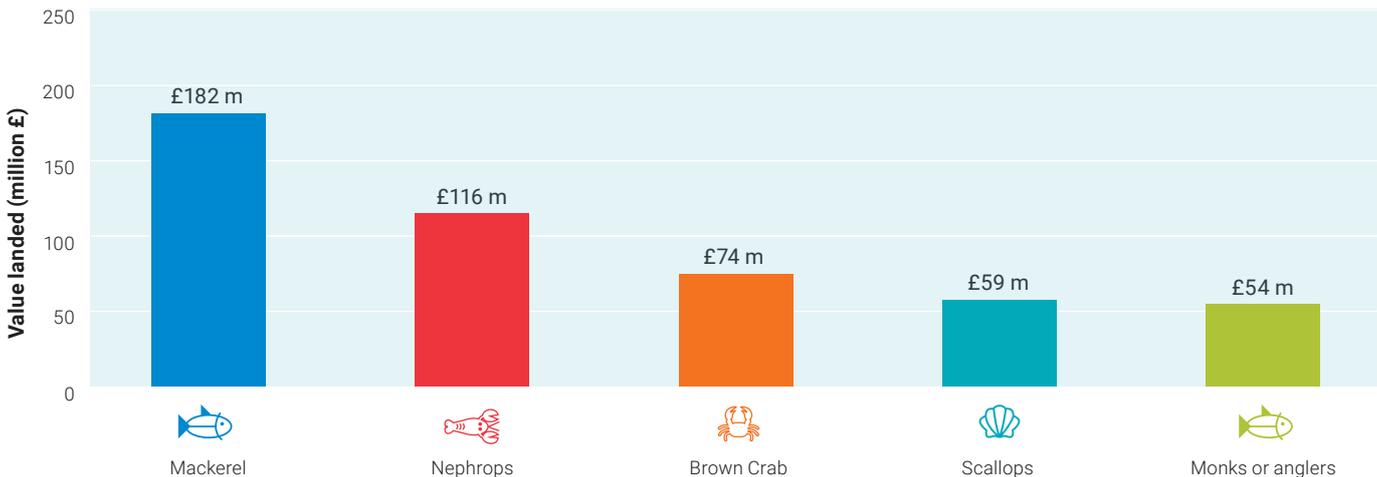
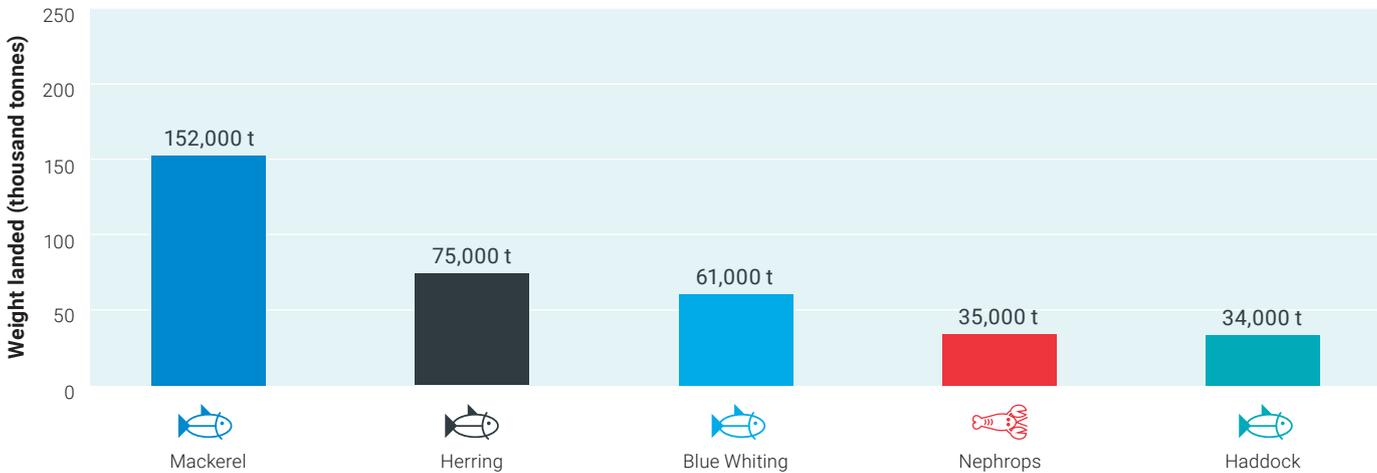
Value of landings

Total value of landings in 2019 was £980 million, a 3% decrease from 2018 as total weight landed decreased in 2019 by 12%.

Average first sale price by species group



Top species landed in 2019 by weight and value



Employment and GVA

Employment by home nation

Seafish combine data on hours worked by crew as reported by skippers with MMO employment data to estimate Full Time Equivalent (FTE) jobs on board UK vessels. In 2019 there were an estimated **8,012** FTE jobs generated by UK registered fishing vessels.



Overall

FTEs: **8,012**



Scotland

FTEs: **3,829**



Northern Ireland

FTEs: **705**



England

FTEs: **3,230**



Wales

FTEs: **140**



Top segments by FTEs in 2019

909

Pots and traps
over 12m

468

NSWOS demersal
over 24m

878

Under 10m pots
and traps

433

Pots and traps
10-12m

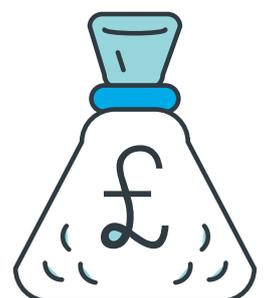
633

North Sea nephrops
over 300kW

£498m

Gross Value Added (GVA)

The Gross Value Added (GVA) of the UK fleet in 2019 is estimated at £498 million, a 1% decrease compared to 2018. The largest share of GVA corresponded to vessels over 24m in length.

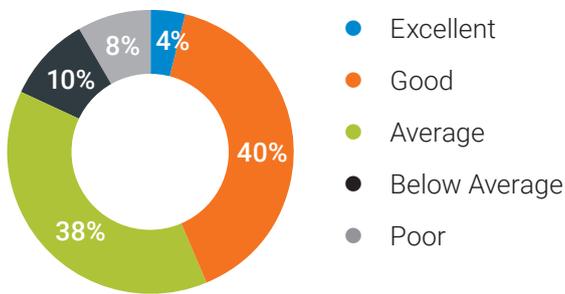


Performance rating

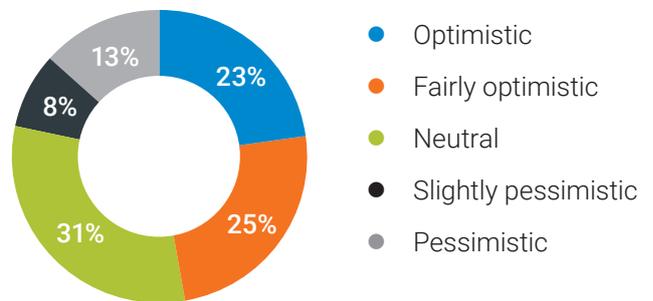
We asked respondents to the 2019 Fleet Survey to rate their performance in 2018 and their outlooks for future performance.

44% of respondents from the under 10m fleet reported their 2018 performance as Excellent or Good, compared to 54% of those in the over 10m fleet.

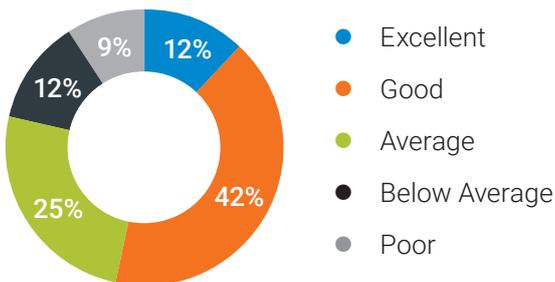
Performance Rating 2018 – Under 10m Vessels



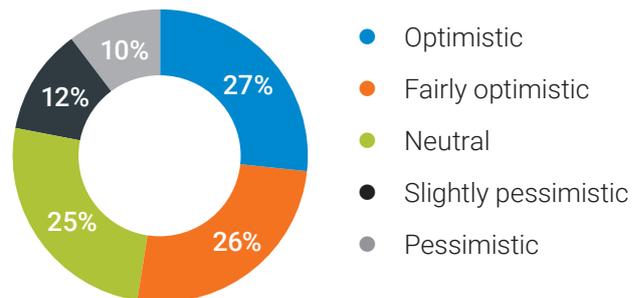
Outlook for future performance 2018 – Under 10m Vessels*



Performance Rating 2018 – Over 10m Vessels



Outlook for future performance 2018 – Over 10m Vessels*



* These ratings represent the views of vessel owners in the summer of 2019, prior to the COVID-19 pandemic

Home nations overview

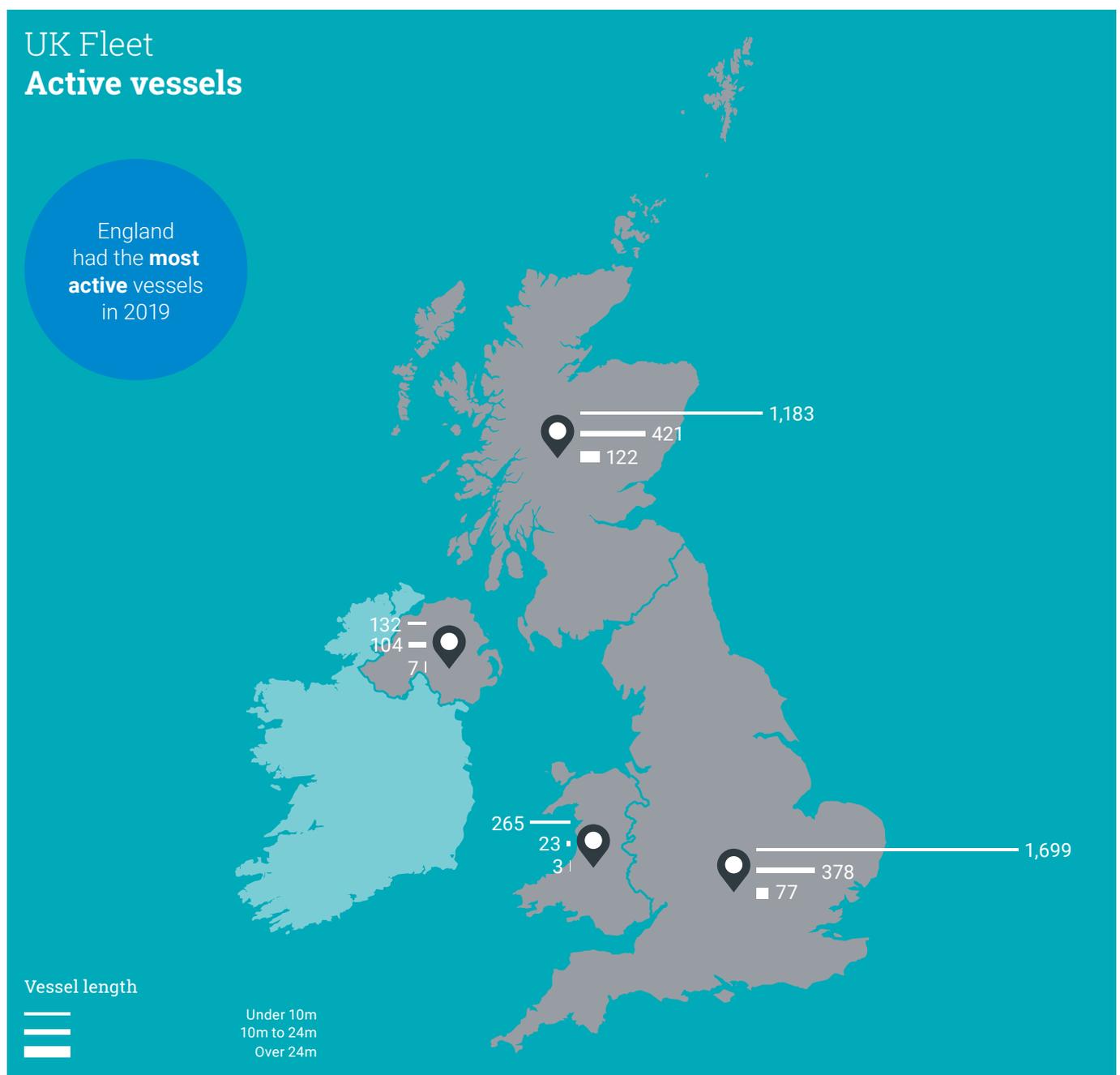
Fleet

Fleet size

Vessels registered in England represented nearly half of all the active UK fishing fleet in 2019: 2,154 vessels, or 48% of the fleet. The second highest number of registered vessels was in Scotland with 1,726 vessels or 38% of the fleet. Wales and Northern Ireland had a total of 291 and 243 active vessels respectively.

Across all home nations, the majority of active vessels were under 10m in length. These small scale vessels represented up to 91% of the Wales-registered fleet. The lowest proportion of under 10m vessels was found in Northern Ireland (54% of the fleet).

Figure 1. Number of active fishing vessels by registered home nation of vessels in 2019

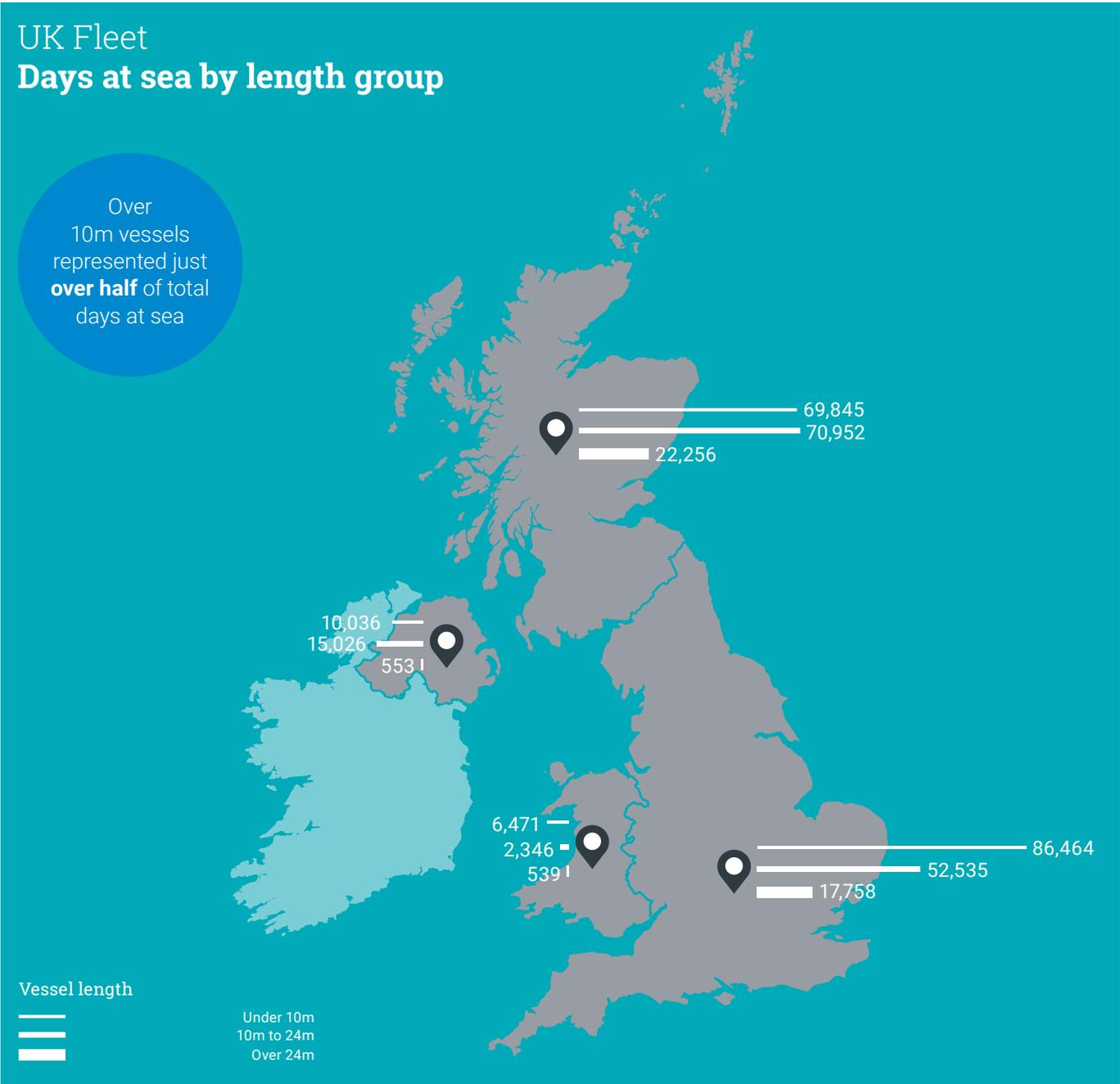


Days at sea

Although England had the highest number of registered vessels, vessels registered in Scotland were more active and spent just over 163,000 days at sea in 2019. Scotland had the highest registered numbers of over 10m vessels.

In England and Wales, under 10m vessels had the most days at sea (55% and 69% respectively). In Scotland and Northern Ireland it was vessels between 10 and 24m that spent most days at sea (44% and 59% of total days at sea respectively). In Scotland under 10m vessels group also contributed an important share to the overall Scottish fleet effort, only slightly smaller than that of 10-24m vessels (43%).

Figure 2. Days at sea by registered home nation of vessels in 2019



Landings

Weight and value of landings

Scotland-registered vessels landed the largest weight and value of fish and shellfish in 2019, with 384 thousand tonnes landed (£570 million). Vessels registered in England landed approximately 181 thousand tonnes (£326 million), while vessels registered in Northern Ireland and Wales landed around 43 thousand and 8 thousand tonnes respectively (£57 million and £19 million).

Vessels over 24m length contributed the majority of weight and value landed in all home nations, ranging from 46% of weight landed by Welsh fleets to 80% of overall weight landed by Scottish vessels.

Figure 3. Weight of landings by registered home nation of vessels in 2019 (thousand tonnes).

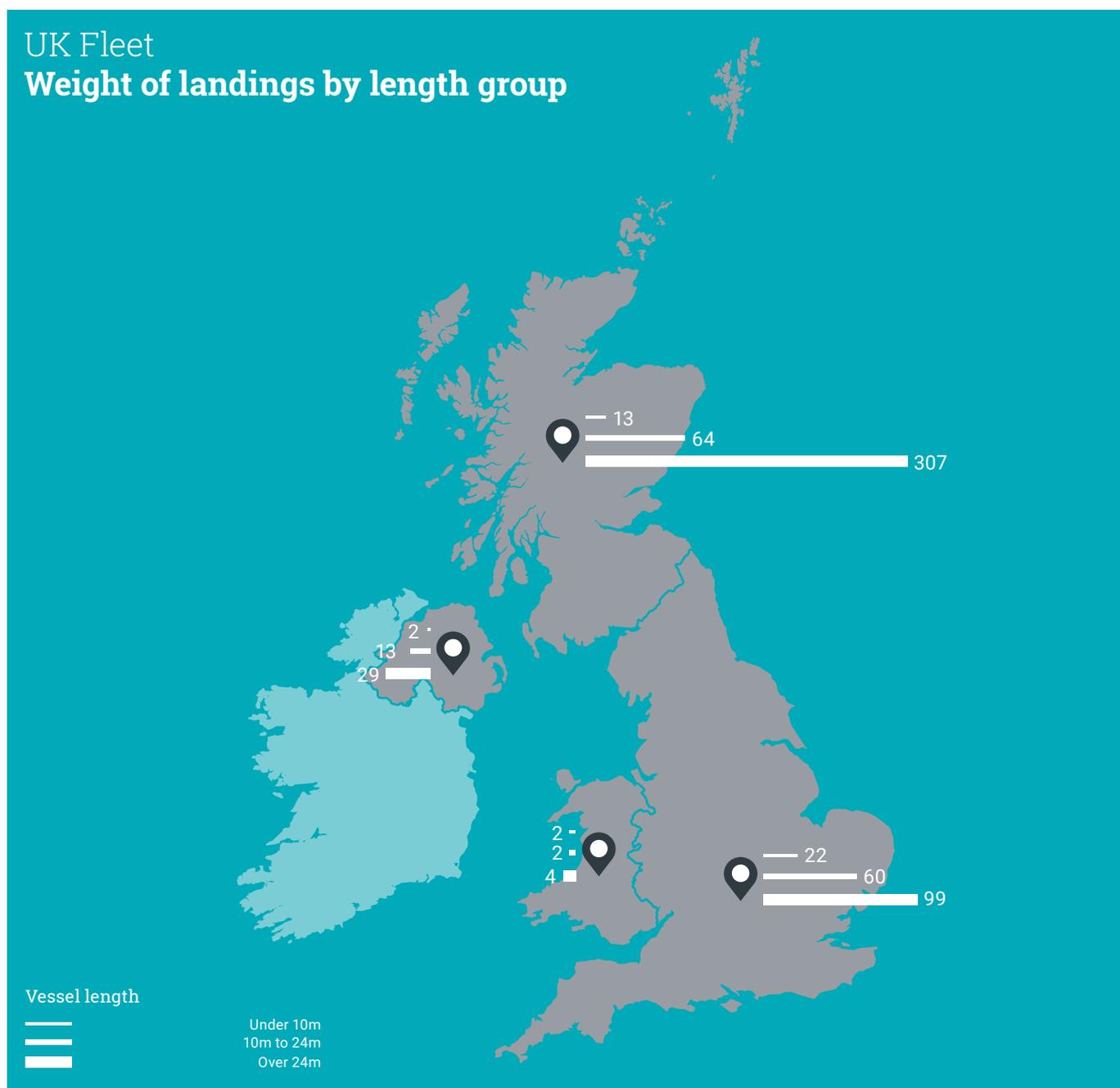
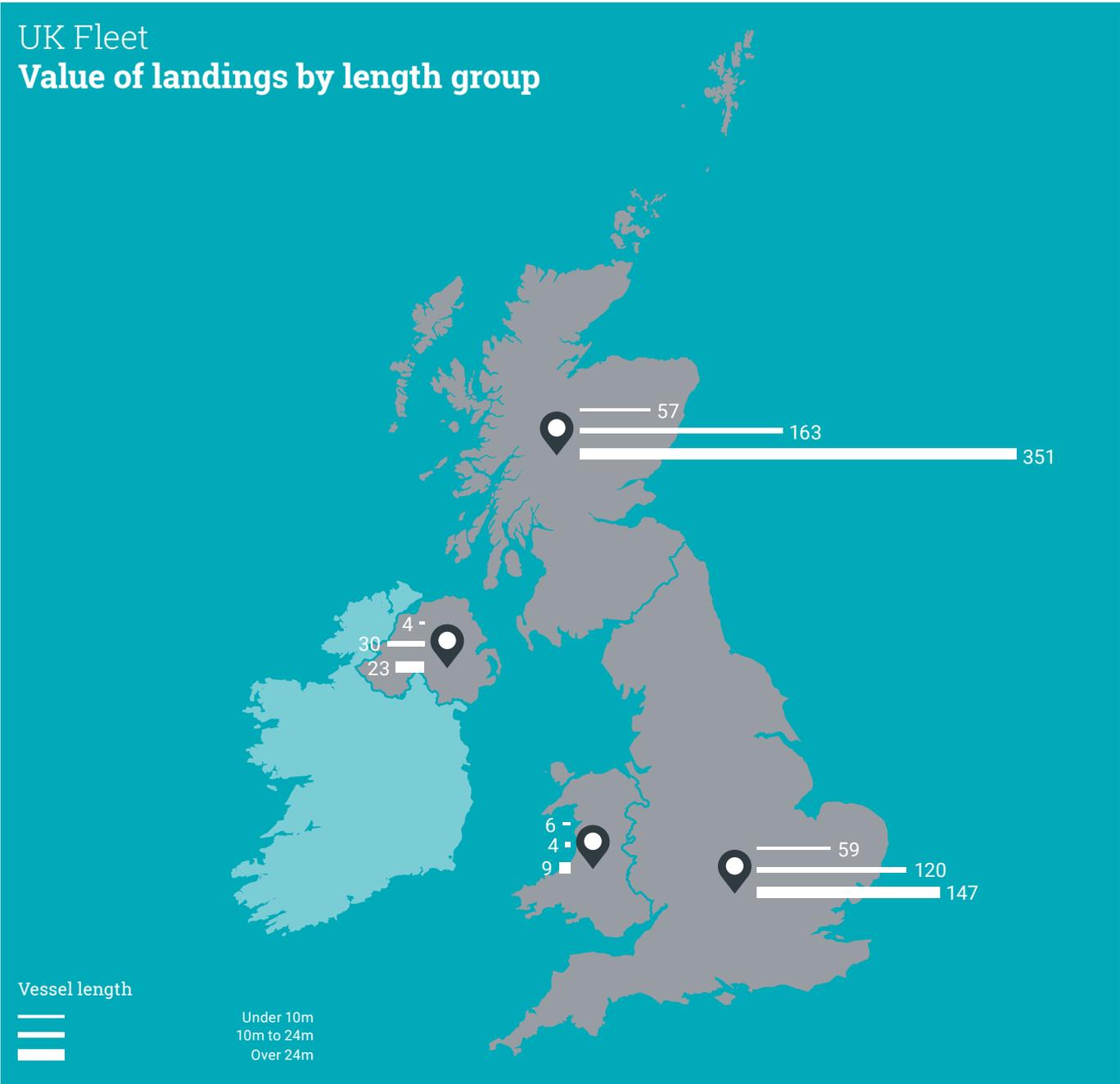


Figure 4. Value of landings by registered home nation of vessels in 2019 (million £).

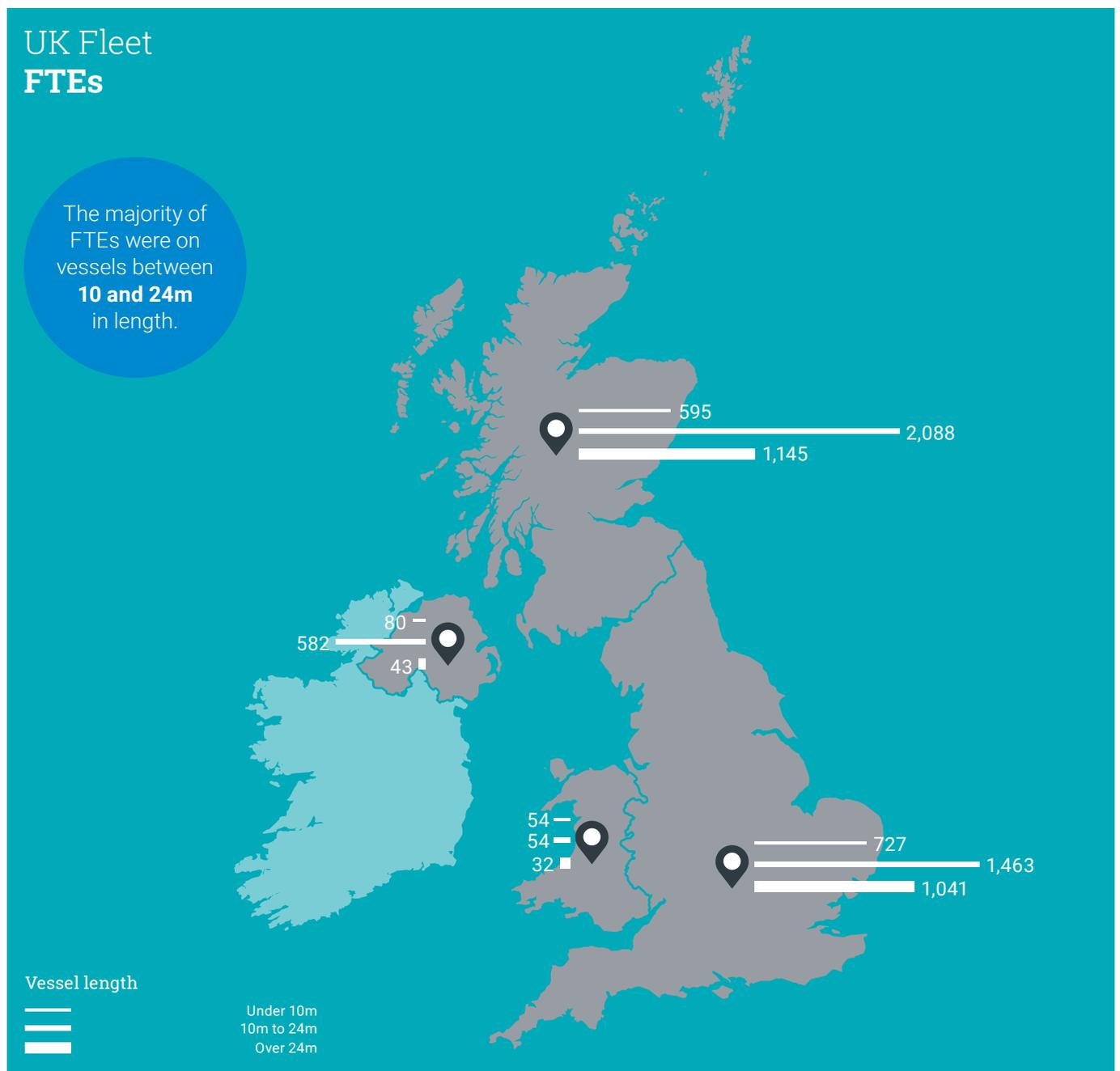


Employment

Scottish-registered vessels employed the most people in full time equivalent jobs (FTE) in 2019 (3,829 FTEs). English-registered vessels created 3,230 FTEs jobs, and Northern Irish- and Welsh-registered vessels provided 705 and 140 FTEs respectively. The majority of FTEs in England, Scotland and Northern Ireland were on vessels

between 10m and 24m in length. In Wales vessels under 10m and between 10 and 24m had an equal number of FTEs.

Figure 5. FTEs by registered home nation of vessels in 2019

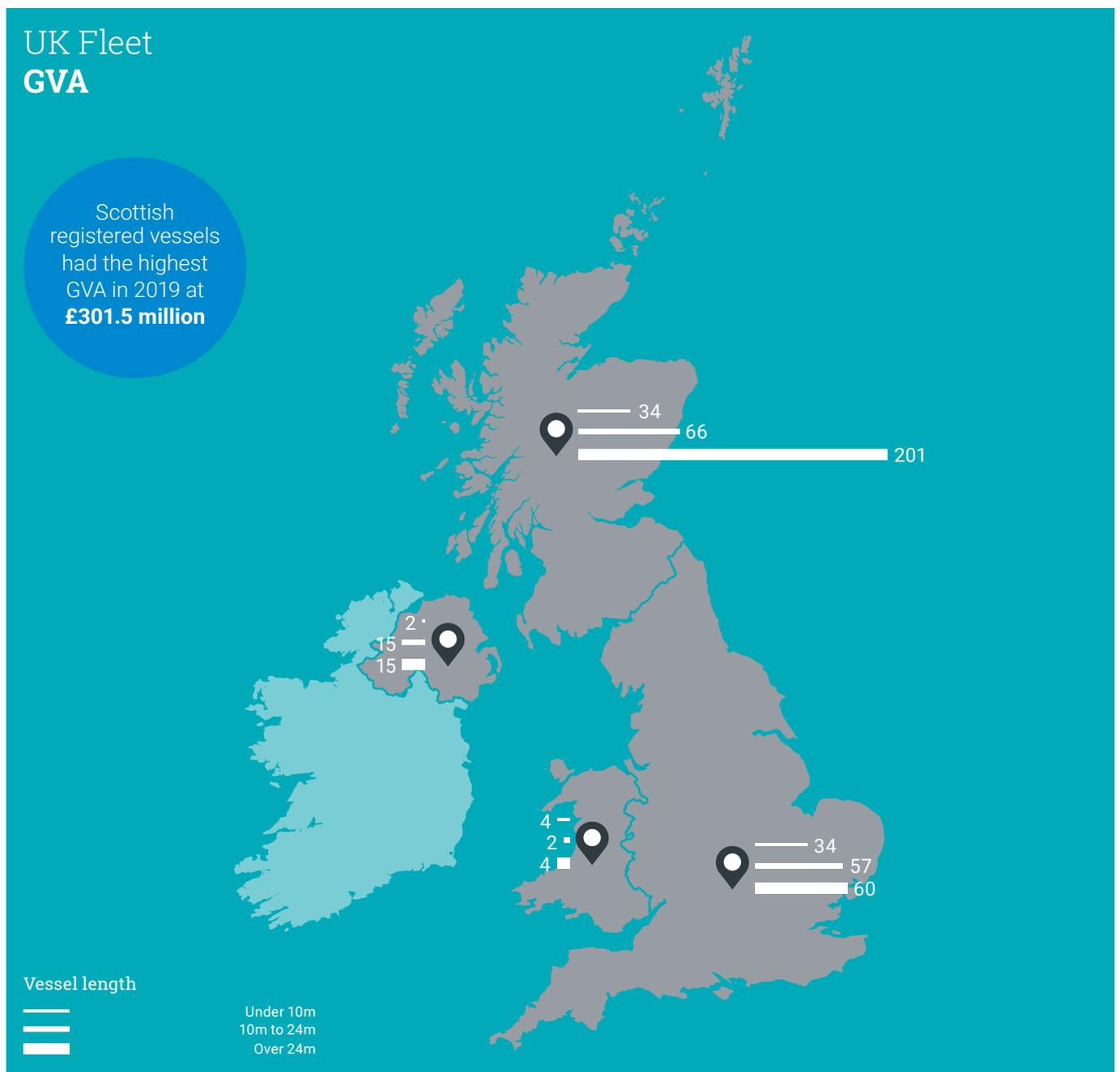


Gross Value Added (GVA)

Scottish-registered vessels created the highest GVA in 2019 at £302 million. English-registered vessels had a GVA of £151 million, while Northern Irish- and Welsh-registered vessels obtained GVA of £32 million and £10 million respectively.

Vessels over 24m in length contributed the largest share to total GVA in Scotland (67%). In England and Northern Ireland the largest contribution to GVA was almost equally split between vessels 10-24m and over 24m; while in Wales vessels under 10m contributed £3.5 million to GVA, just slightly under the £4.0 million contributed by vessels over 24m.

Figure 6. GVA by registered home nation of vessels in 2019 (million £).



Fleet size and activity

In 2018 there were 4,590 active vessels and 1,528 inactive vessels in the UK fishing fleet. In 2019 these numbers decreased to 4,491 active vessels and 1,508 inactive vessels.

The greatest change in number of vessels in a given fleet segment occurred among North Sea (NS) Nephrops vessels over 300kW: this segment went from 40 vessels in 2018 to 71 in 2019, a 78% increase. In contrast, numbers of North Sea and West of Scotland (NSWoS) demersal vessels decreased across all five segments that comprise this part of the fleet. The most obvious change was in the number of NSWoS demersal vessels under 24m over 300kW, which almost halved in 2019 (from 46 to 26 vessels) indicating a shift of the demersal fleet from whitefish landings to Nephrops.

Interview participants operating vessels in the five NSWoS demersal segments all rated their 2018 performance positively i.e. average, good or excellent. Participants noted that factors contributing positively to their performance included fish volume and good prices, though some also noted shortages of skilled labour and quota as negatively contributing to their performance.

The total number of days at sea by the fleet was nearly 366 thousand in 2018 and remained largely similar in 2019. The majority of segments increased or maintained their effort in terms of average number of days at sea in 2019. NS beam trawlers under 300kW showed the highest decrease in average days at sea (32%). NSWoS demersal fleets on the other hand increased their effort per vessel by an average of 11% across their five segments.

The total fishing income of the UK fishing fleet in 2018 was £1.01 billion. Within segments there was a significant variation in average fishing income per vessel in 2018 and 2019 and in trends from one year to the next. For the majority of segments average fishing income per vessel increased in 2019 or remained very similar to 2018 levels, but five segments saw considerable decreases.

Among the most noticeable changes, Area 7A nephrops vessels over 250kW and WoS nephrops vessels over 250kW saw increases in their average fishing income of over 30%, related to an increase in days at sea and in landings per day at sea in 2019. NS beam trawlers under 300kW experienced a 55% decrease in average fishing income per vessel. This segment is highly dependent on brown shrimp revenue, which experienced a 20% decline in average price in 2019.

Table 1 shows numbers of vessels, average days at sea and fishing income per vessel by fleet segment.



KINGFISHER

ANCE

GOLDEN DAWN F.R.

Table 1. Fleet size, activity, fishing income and main stocks, 2018–2019

Segment	Number of vessels				Average days at sea				Average fishing income (£'000)			
	2018		2019		2018		2019		2018		2019	
Area VIIA demersal trawl	10	↓	11	↑	130	↓	138	↑	343	↑	341	●
Area VIIA nephrops over 250kW	31	●	29	↓	145	↑	155	↑	272	↓	366	↑
Area VIIA nephrops under 250kW	33	↓	36	↑	136	↑	124	↓	175	↑	176	●
Area VIIBCEFGHK 24-40m	14	↑	14	●	232	↓	222	●	1,564	●	1,231	↓
Area VIIBCEFGHK trawlers 10-24m	59	●	54	↓	145	↓	149	●	197	↓	213	↑
North Sea beam trawl over 300kW	7	↓	7	●	240	↑	254	↑	1,691	↑	1,337	↓
North Sea beam trawl under 300kW	22	↑	14	↓	98	↓	67	↓	102	↑	46	↓
North Sea nephrops over 300kW	40	↓	71	↑	196	●	206	↑	612	↓	748	↑
North Sea nephrops under 300kW	63	↓	68	↑	125	●	124	●	182	●	189	●
NSWOS demersal over 24m	45	●	42	↓	228	↑	217	●	2,233	↑	2,135	●
NSWOS demersal pair trawl seine	25	●	23	↓	222	↑	230	●	1,948	●	2,049	↑
NSWOS demersal seiners	15	↓	14	↓	159	●	200	↑	1,403	●	1,716	↑
NSWOS demersal under 24m over 300kW	46	↑	26	↓	200	↑	214	↑	1,030	↓	1,331	↑
NSWOS demersal under 24m under 300kW	19	●	19	●	126	↑	154	↑	317	↑	325	●
South West beamers over 250kW	26	●	26	●	211	↓	199	↓	957	●	939	●
South West beamers under 250kW	25	↑	22	↓	220	●	222	●	658	↓	691	↑
UK scallop dredge over 15m	81	↓	74	↓	174	●	171	●	508	●	500	●
UK scallop dredge under 15m	210	●	185	↓	96	●	102	↑	149	●	173	↑
Under 10m demersal trawl/seine	158	↓	168	↑	90	●	93	●	75	↓	83	↑
Under 10m drift and/or fixed nets	212	↑	199	↓	78	↓	70	↓	46	↑	40	↓
Under 10m pots and traps	1,200	●	1,192	●	84	●	84	●	67	↑	73	↑
Under 10m using hooks	207	↓	194	↓	59	●	61	●	41	●	48	↑
WOS nephrops over 250kW	30	↓	26	↓	176	●	183	●	293	↓	394	↑
WOS nephrops under 250kW	61	↓	60	●	156	●	168	↑	174	●	203	↑
Gill netters	26	↓	27	●	171	↑	164	●	557	↑	715	↑
Longliners	30	↑	31	●	180	●	163	↓	490	↓	427	↓
Pots and traps 10-12m	187	●	180	●	150	●	156	●	173	↑	178	●
Pots and traps over 12m	98	↑	104	↑	191	●	191	●	572	↑	544	●
Low activity over 10m	39	↓	47	↑	22	↑	18	↓	4	●	4	↓
Low activity under 10m	1,523	↓	1,477	●	19	●	18	●	3	●	3	●

Trend:

↓ Indicates a decrease of >5% compared to previous year

● Indicates a change in the range of +/-5% compared to previous year

↑ Indicates an increase of >5% compared to previous year

Main stock by value	Stock status	Stock dependency % of fleet segment revenues	Fleet significance % of stock landings caught by this fleet	2nd main TAC stock	Stock status	Stock dependency % of fleet segment revenues	Fleet significance % of stock landings caught by this fleet
2019	2019	2019	2019	2019	2019	2019	2019
Cod VIIa		12%	73%	Had VIIa	●	39%	81%
Nep VII	●	75%	45%	NS Nephrops	●	8%	2%
Nep VII	●	73%	27%	Scallops		7%	1%
Anglers VII	●	44%	40%	Meg VII	●	22%	71%
Anglers VII	●	9%	6%	Cuttlefish		17%	15%
NS Plaice	●	61%	46%	NS Sole	●	19%	64%
Brown Shrimps		85%	81%	Crabs (C.P.Mixed Sexes)		4%	0%
NS Anglers IIa(EC),IV(EC)	●	9%	20%	NS Haddock	●	4%	10%
NS Nephrops	●	82%	19%	WC Nephrops	●	4%	2%
NS Cod	●	17%	35%	NS Haddock	●	10%	24%
NS Cod	●	25%	27%	NS Haddock	●	28%	39%
NS Cod	●	23%	13%	NS Haddock	●	23%	19%
NS Anglers IIa(EC),IV(EC)	●	16%	22%	NS Cod	●	21%	16%
Mixed Squid and Octopi		11%	10%	NS Cod	●	12%	2%
Anglers VII	●	14%	20%	Cuttlefish		22%	42%
Anglers VII		10%	9%	Cuttlefish		19%	23%
Queen Scallops		8%	85%	Scallops	●	92%	59%
Cockles		31%	98%	Mussels		3%	67%
NS Nephrops	●	29%	6%	Squid		7%	11%
Bass	●	11%	23%	Sole VII d	●	14%	47%
Crabs (C.P.Mixed Sexes)		25%	30%	Lobsters		33%	62%
Bass	●	21%	43%	Razor Clam		36%	46%
Nep VII	●	8%	2%	Squid		8%	6%
Nep VII	●	3%	2%	NS Nephrops	●	7%	2%
Anglers VII	●	12%	15%	NS Anglers IIa(EC),IV(EC)	●	21%	21%
NS Hake	●	30%	34%	Razor Clam		20%	38%
Crabs (C.P.Mixed Sexes)		35%	15%	Lobsters		28%	19%
Crabs (C.P.Mixed Sexes)		69%	52%	Lobsters		12%	13%
Brown Shrimps		30%	11%	Crabs (C.P.Mixed Sexes)		10%	0%
Bass	●	13%	16%	Crabs (C.P.Mixed Sexes)		7%	0%

Stock status (ICES advice):

- Unknown
- Above MSY Btrigger
- Below MSY Btrigger
- Mixture of above and below MSY Btrigger

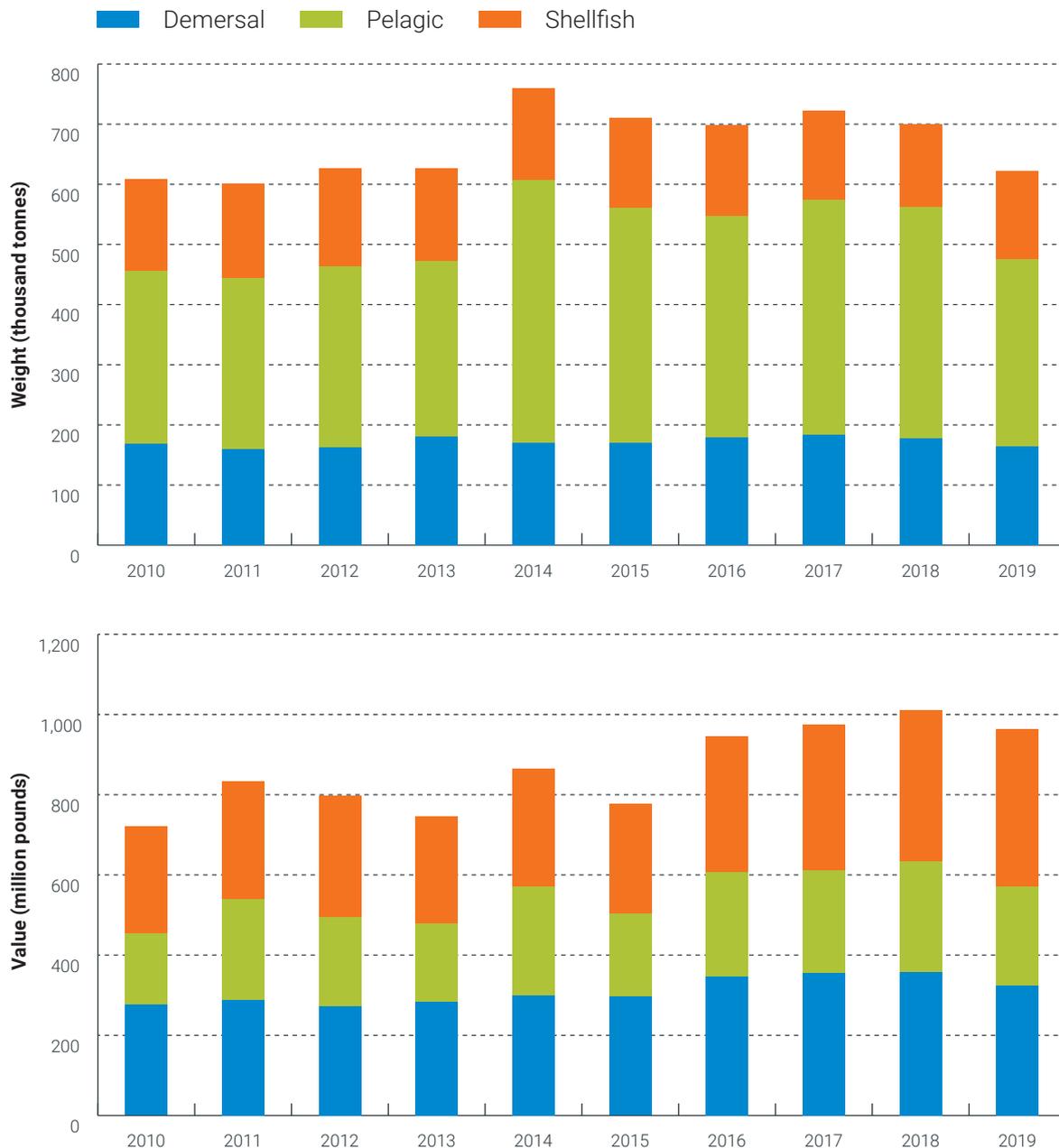
Landings

UK vessels landed 700 thousand tonnes of fish and shellfish in 2018. This figure decreased to 620 thousand tonnes in 2019. The decrease in weight of landings in 2019 was mainly driven by pelagic species landings and a significant reduction of mackerel quota for that year.

Half of landings by the UK fleet (in terms of weight) were of pelagic species in both 2018 and 2019. In terms of value landed shellfish and demersal species represented the largest share of total value (41% and 34% respectively in 2019).

The total fishing income of the UK fleet was £1,006 million in 2018 and £980 million in 2019 following the decrease in weight landed.

Figure 7. Weight and value of landings by the UK fishing fleet in the UK and abroad by species type, 2010-2019



Fish prices

Shellfish and demersal species are the most valuable species for the UK fishing fleet.

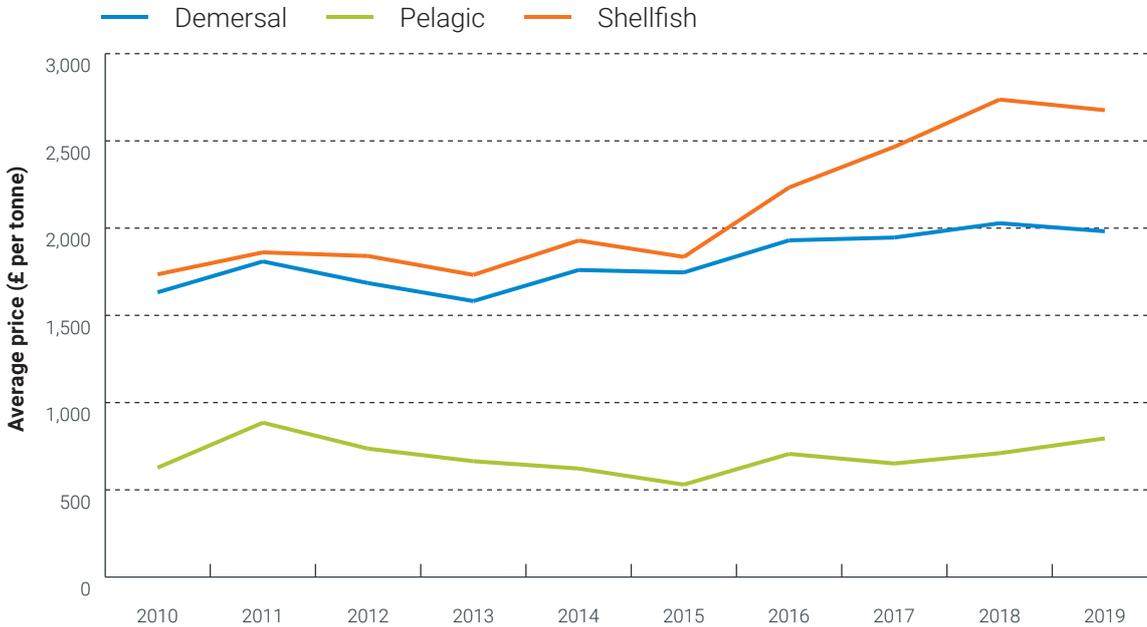
Average nominal prices per tonne of all species types increased from 2017 to 2018. The greatest increase was for shellfish species, with an average price increase of 11%. From 2018 to 2019 average prices of pelagic species continued to increase by 12% and prices of demersal and shellfish species decreased very slightly (-2%).

Fish price was one of the most frequently discussed topics amongst interview participants. A total of 75 participants (17% of interview participants) highlighted prices positively affected on their 2018 performance, i.e. good or increasing prices.

This was particularly notable for some shellfish species (crab and nephrops). Contributing factors cited by participants included tourism, electronic markets, strong export markets to China and the EU and the value of the pound compared to the Euro.

Conversely 38 participants (9% of interview participants) discussed price as negatively affecting their 2018 performance, i.e. poor or decreasing prices. This was particularly notable for scallops. Contributing factors cited by participants included poor market facilities and oversupply of scallops to European markets.

Figure 8. Average price of landings in the UK and abroad by species type, 2010-2019



Factors influencing 2018 fleet performance

Many factors influence fishing patterns and vessel operators' choices about where, when and how much to fish. By far the most frequently discussed factor affecting 2018 performance was fish weight. A total of 80 participants (18% of interview participants) said that low volumes of target catch contributed negatively to their performance in 2018. Conversely 71 participants (16%) said that high volumes of their target catch contributed positively to their performance in 2018. There may be many reasons for the variations in observation including specifics of species in question, local conditions affecting stock abundance, seasonality, environmental conditions and gear used.

Shellfish were described as being low in volume in 2018, in particular crab, scallops, lobster and whelk. Often when participants discussed low volumes of shellfish they also noted that there are more fishers operating static gear or deploying more gear in their area. There is no data at UK level on number of pots used and soaking time so it is not possible to calculate catch per unit of effort for shellfish.

Fish price was the second most frequently discussed factor affecting performance in 2018. This topic was also discussed both positively and negatively by different participants highlighting that species type, geography and catching method among other factors influence the price fishers get for their catch.

The right to fish was another frequently discussed topic. This category included competing with other fishers and with other marine industries for access to the seabed. A total of 75 participants (17% of the sample) discussed rights to fish during fleet survey interviews: all of them highlighted that access rights negatively affected their performance in 2018. The majority of participants that discussed this topic represented under 10m segments, namely pots and traps along with the low activity segment, though it was also an important topic for operators of scallop dredgers. Participants talked about gear conflict, loss of or damage to fishing gear and overcrowding of the seabed with static gears. In cases where participants described competition with other marine industries the negative consequence arising was loss of access to fishing grounds.

Weather is a topic that arises every year during the fleet survey interviews as it can strongly influence performance. Poor weather can prevent fishers, especially those operating small vessels, from going to sea and rough sea conditions also increases fuel consumption leading to greater operating costs. Temperature can affect the migratory patterns, behaviour and spawning of fish and shellfish which can impact species abundance. Major storms can also have an impact on species abundance by causing seabed disturbance, and can damage gear. A total of 61 participants (14% of interview participants) described weather as negatively affecting their performance in 2018. The severe cold front and winter storms in February and March 2018 (colloquially known as the Beast from the East) was noted in particular.



Fishing efficiency

Fishing efficiency refers to the average weight and value of landings and the average fishing costs per vessel per day spent at sea.

Overall, average weight and value landed per day at sea and fishing costs per day at sea were largely similar in 2018 compared to 2017, and again did not vary greatly from 2018 to 2019. Within segments however there was considerable variation in trends in fishing efficiency from one year to the next.

North Sea beam trawlers, which had seen varying trends in 2018 depending on their length, all experienced decreased fishing efficiency in 2019, with a 16% reduction in landings per day at sea and an average 30% reduction in fishing income per day at sea. Their fishing costs per day at sea also decreased in 2019, although in a smaller proportion than landings and value per day at sea.

Nephrops vessels (comprising six segments: Area 7A vessels under/over 250kW, NS vessels under/over 300kW and WoS vessels under/over 250kW) experienced an average 10% decrease in weight of landings per day at sea in 2018; with a similar decrease in value per day at sea. In 2019 however they experienced an overall 16% increase in landings per day at sea. This was reflected in a similar increase in fishing income per day at sea.

Interview participants operating vessels in the six nephrops segments rated their 2018 performance fairly well, with 85% of participants rating 2018 performance as average or above. These participants noted that factors contributing positively to their performance included fish volume and good prices, though some also noted shortages of skilled labour and quota as negatively contributing to their performance.

Table 2. Landings per day at sea, fishing income and expenditure per day at sea (nominal figures), 2018–2019

Segment	Landings per day (tonnes)				Fishing income per day (£)				Fishing expenditure per day (£)			
	2018		2019		2018		2019		2018		2019	
	Value	Trend	Value	Trend	Value	Trend	Value	Trend	Value	Trend	Value	Trend
Area VIIA demersal trawl	1.52	↑	1.26	↓	2,634	↑	2,462	↓	1,772	↑	1,428	↓
Area VIIA nephrops over 250kW	0.89	↓	1.01	↑	1,878	↓	2,362	↑	1,149	↓	1,395	↑
Area VIIA nephrops under 250kW	0.59	●	0.63	↑	1,286	●	1,420	↑	827	↑	898	↑
Area VIIBCDEFGHK 24-40m	2.12	↑	2.03	●	6,739	↑	5,553	↓	5,091	↑	4,282	↓
Area VIIBCDEFGHK trawlers 10-24m	0.79	↓	0.73	↓	1,354	↓	1,424	↑	786	●	816	●
North Sea beam trawl over 300kW	2.98	↓	2.52	↓	7,032	↓	5,264	↓	7,523	↑	5,000	↓
North Sea beam trawl under 300kW	0.46	↑	0.38	↓	1,042	↑	691	↓	945	↑	861	↓
North Sea nephrops over 300kW	1.32	●	1.45	↑	3,125	↓	3,624	↑	2,392	●	2,701	↑
North Sea nephrops under 300kW	0.53	●	0.63	↑	1,457	●	1,530	↑	1,039	↑	1,084	●
NSWOS demersal over 24m	4.97	↓	5.01	●	9,797	↓	9,855	●	6,826	↓	6,856	●
NSWOS demersal pair trawl seine	5.10	↓	4.90	●	8,755	↓	8,926	●	6,501	↓	6,614	●
NSWOS demersal seiners	5.34	●	4.73	↓	8,848	●	8,563	●	5,441	●	5,300	●
NSWOS demersal under 24m over 300kW	2.31	↓	2.55	↑	5,152	↓	6,212	↑	3,660	↓	4,286	↑
NSWOS demersal under 24m under 300kW	1.03	↑	0.73	↓	2,524	●	2,107	↓	1,535	↓	1,367	↓
WOS nephrops over 250kW	0.57	↓	0.78	↑	1,669	↓	2,152	↑	1,079	↓	1,325	↑
WOS nephrops under 250kW	0.39	↓	0.43	↑	1,112	●	1,204	↑	666	●	718	↑
South West beamers over 250kW	1.26	●	1.38	↑	4,546	●	4,724	●	3,161	↑	3,263	●
South West beamers under 250kW	0.83	↓	0.93	↑	2,995	↓	3,115	●	1,940	●	2,008	●
UK scallop dredge over 15m	1.25	↓	1.46	↑	2,930	●	2,934	●	2,049	↑	2,055	●
UK scallop dredge under 15m	0.90	↑	1.00	↑	1,552	●	1,702	↑	902	●	971	↑
Under 10m demersal trawl/seine	0.31	↓	0.34	↑	833	↓	891	↑	470	↑	497	↑
Under 10m drift and/or fixed nets	0.21	↑	0.20	●	592	↑	575	●	289	↑	280	●
Under 10m pots and traps	0.23	↓	0.25	↑	806	↑	863	↑	403	●	428	↑
Under 10m using hooks	0.18	↓	0.19	↑	691	●	785	↑	366	●	412	↑
Gill netters	1.89	↑	1.82	●	3,259	↑	4,352	↑	2,083	↑	2,736	↑
Longliners	1.15	↓	1.06	↓	2,721	↓	2,621	●	1,805	↓	2,030	↑
Pots and traps 10-12m	0.38	↓	0.36	●	1,154	↑	1,144	●	441	↓	437	●
Pots and traps over 12m	1.40	●	1.23	↓	2,993	↑	2,840	●	1,842	↑	1,754	●

Trend:

- ↓ Indicates a decrease of >5% compared to previous year
- Indicates a change in the range of +/-5% compared to previous year
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Operating costs

Definitions

Fishing vessels incur a range of operating costs which are split into two groups: fishing costs and vessel costs.

Fishing costs vary depending on the amount of vessel activity and the value and weight of landings. Fishing costs cover several elements, of which crew share (wages), and fuel and oil are the most significant. Other items grouped under fishing costs include boxes, ice, food and stores, sales commissions, harbour dues, subscriptions and levies, shore labour, travel costs and quota leasing.

Vessel costs are independent of, or not directly related to, the level of vessel activity during the year. These vessel costs include gear and vessel repairs, insurance, administration and the purchase, hire and maintenance of electronic equipment.

Total operating costs

Total operating costs of the UK fleet were £788 million in 2018, decreasing to £761 million in 2019. A slight decrease in fuel price was the main driver for this trend.

On average per vessel however operating costs increased overall by 5% in 2018 and in 2019, as average costs per vessel increased across the majority of segments. Operating costs represented a similar percentage of total income in 2018 and 2019 for the vast majority of segments (84-85% on average).

Two segments, North Sea beam trawlers over/under 300kW, made a loss in 2019 as their operating costs exceeded total income. These segments also experienced decreasing landings and income per day at sea in 2019.

Fuel is a significant part of operating costs. Fuel costs represented on average 18% of total income in 2018 and in 2019. Fuel costs as a percentage of income did not change much from 2018 to 2019 across all segments except for NS beam trawlers. For these segments fuel represented a significantly greater proportion of income in 2019, following a decrease in fishing income and efficiency (Tables 1 and 2).

Operating costs were described as negatively affecting 2018 performance by 31 interview participants (7% of interview participants). The major operating costs discussed were fuel, vessel repairs and fishing gear.

Table 3. Average annual operating costs, 2018–2019

Segment	Average annual operating costs (£)				Operating costs as % of income				Fuel costs as % of income			
	2018		2019		2018		2019		2018		2019	
Area VIIA demersal trawl	327,093	↑	304,654	↓	84%	●	83%	●	14%	●	15%	●
Area VIIA nephrops over 250kW	214,049	●	280,395	↑	79%	●	77%	●	21%	↑	17%	●
Area VIIA nephrops under 250kW	142,844	↑	142,216	●	80%	●	79%	●	15%	●	13%	●
Area VIIBCDEFGHK 24-40m	1,512,874	↑	1,210,283	↓	97%	●	98%	●	18%	●	21%	●
Area VIIBCDEFGHK trawlers 10-24m	163,954	↓	175,856	↑	78%	↑	77%	●	16%	●	15%	●
North Sea beam trawl over 300kW	2,035,291	↑	1,496,964	↓	103%	↑	109%	↑	40%	↑	59%	↑
North Sea beam trawl under 300kW	101,643	●	62,724	↓	92%	↓	125%	↑	47%	●	71%	↑
North Sea nephrops over 300kW	637,258	●	764,152	↑	99%	↑	97%	●	26%	↑	22%	●
North Sea nephrops under 300kW	174,826	●	180,928	●	92%	↑	92%	●	25%	●	24%	●
NSWOS demersal over 24m	1,909,462	↑	1,823,659	●	84%	●	84%	●	19%	●	19%	●
NSWOS demersal pair trawl seine	1,698,762	●	1,783,492	↑	87%	●	87%	●	9%	●	9%	●
NSWOS demersal seiners	1,106,230	●	1,359,896	↑	75%	●	75%	●	8%	●	9%	●
NSWOS demersal under 24m over 300kW	915,444	●	1,156,329	↑	85%	↑	83%	●	19%	↑	15%	●
NSWOS demersal under 24m under 300kW	295,150	↑	304,220	●	78%	↑	73%	↓	11%	●	12%	●
WOS nephrops over 250kW	287,067	↓	373,722	↑	96%	↑	93%	●	23%	↑	17%	↓
WOS nephrops under 250kW	155,901	↑	181,096	↑	86%	●	86%	●	17%	●	17%	●
South West beamers over 250kW	849,867	●	829,874	●	89%	↑	88%	●	29%	●	28%	●
South West beamers under 250kW	566,320	●	592,907	↑	85%	↑	85%	●	18%	●	18%	●
UK scallop dredge over 15m	503,914	↑	496,423	●	97%	↑	97%	●	18%	●	18%	●
UK scallop dredge under 15m	132,731	●	152,566	↑	86%	●	85%	●	17%	●	15%	●
Under 10m demersal trawl/seine	60,862	↑	66,323	↑	79%	↑	78%	●	12%	●	11%	●
Under 10m drift and/or fixed nets	28,253	●	24,441	↓	61%	●	61%	●	9%	●	8%	●
Under 10m pots and traps	48,269	●	51,842	↑	70%	●	69%	●	9%	●	8%	●
Under 10m using hooks	30,818	●	35,914	↑	74%	↑	74%	●	6%	●	5%	●
Gill netters	497,285	↑	630,263	↑	89%	●	88%	●	8%	●	6%	●
Longliners	424,922	↓	403,759	●	86%	●	94%	↑	24%	↑	24%	●
Pots and traps 10-12m	104,540	●	107,742	●	58%	↓	58%	●	7%	●	6%	●
Pots and traps over 12m	495,849	↑	472,261	●	85%	↑	85%	●	11%	●	11%	●

Trend:

- ↓ Indicates a decrease of >5% compared to previous year
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Fuel

The price of Brent crude oil reached its lowest figure in the last ten years in early 2016 when it fell to \$26 per barrel. This drop in price led to the price of marine diesel falling to 26p per litre in January 2016. After that the price of Brent crude and of marine diesel increased steadily until late 2018 when the price of marine diesel experienced a sharp drop to below 50p per litre. Prices increased again in 2019, when the average price of diesel reached 49.5p per litre.

The fuel costs of the UK fishing fleet follow the development in fuel prices. Fuel consumption remained largely unchanged across fleet segments in 2018 and 2019 but a higher price of fuel in 2018 meant that fuel costs increased across all fleet segments. In 2019 there were varying trends in fuel costs: some segments saw an increase in fuel costs of up to 33% (NSWOS demersal seiners), while others saw a decrease of up to 31% (NS beam trawlers under 300kW).

Figure 9: Oil price and marine fuel price (source: Seafish, U.S. Energy Information Administration)

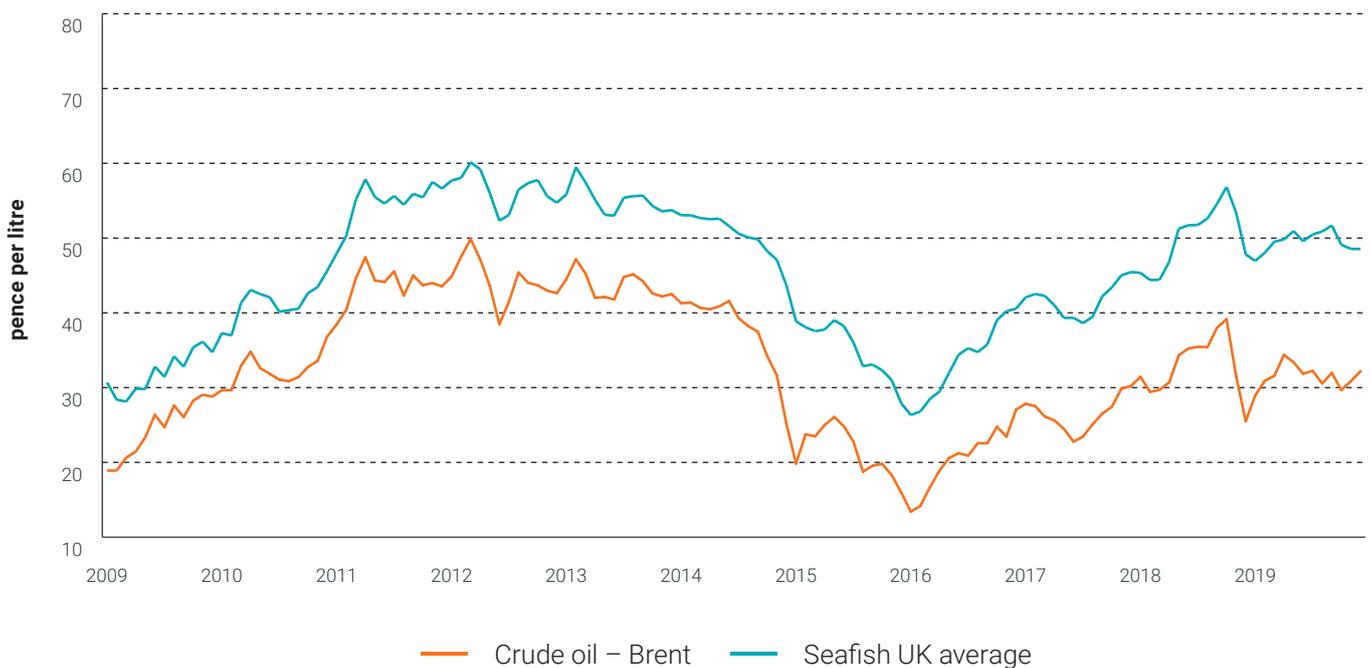


Table 4. Average annual and daily fuel costs per vessel, 2018–2019

Segment	Fuel costs (£)				Fuel cost per day (£)				Litres per day			
	2018		2019		2018		2019		2018		2019	
Area VIIA demersal trawl	55,234	↑	55,108	●	424	↑	398	↓	844	↑	802	●
Area VIIA nephrops over 250kW	56,607	↑	62,177	↑	391	↑	401	●	785	●	808	●
Area VIIA nephrops under 250kW	26,361	↑	22,720	↓	194	↑	183	↓	387	↑	368	●
Area VIIBCDEFGHK 24-40m	281,457	↑	258,036	↓	1,213	↑	1,164	●	2,426	●	2,353	●
Area VIIBCDEFGHK trawlers 10-24m	33,413	↑	33,577	●	230	↑	225	●	456	●	453	●
North Sea beam trawl over 300kW	786,259	↑	818,403	●	3,270	↑	3,222	●	6,500	●	6,500	●
North Sea beam trawl under 300kW	51,816	↑	35,784	↓	528	↑	535	●	1,057	●	1,094	●
North Sea nephrops over 300kW	166,037	↑	172,432	●	848	↑	835	●	1,686	●	1,687	●
North Sea nephrops under 300kW	47,607	↑	47,748	●	382	↑	386	●	766	●	782	●
NSWOS demersal over 24m	425,592	↑	402,896	●	1,867	↑	1,860	●	3,712	●	3,754	●
NSWOS demersal pair trawl seine	172,879	↑	175,313	●	777	↑	764	●	1,538	●	1,539	●
NSWOS demersal seiners	117,232	↑	155,550	↑	739	↑	776	↑	1,470	●	1,567	↑
NSWOS demersal under 24m over 300kW	201,747	↑	209,561	●	1,009	↑	978	●	2,008	●	1,975	●
NSWOS demersal under 24m under 300kW	43,077	↑	49,278	↑	343	↑	320	↓	681	↑	643	↓
WOS nephrops over 250kW	68,284	↑	69,732	●	389	↑	381	●	777	●	769	●
WOS nephrops under 250kW	31,186	↑	35,505	↑	199	↑	211	↑	398	●	425	↑
South West beamers over 250kW	279,840	↑	266,767	●	1,329	↑	1,342	●	2,650	●	2,714	●
South West beamers under 250kW	122,945	↑	125,408	●	560	↑	565	●	1,119	●	1,143	●
UK scallop dredge over 15m	94,676	↑	94,152	●	546	↑	552	●	1,089	●	1,116	●
UK scallop dredge under 15m	25,699	↑	26,841	●	268	↑	264	●	533	●	533	●
Under 10m demersal trawl/seine	9,178	↑	9,250	●	102	↑	100	●	201	●	201	●
Under 10m drift and/or fixed nets	4,000	↑	3,363	↓	51	↑	48	↓	101	●	97	●
Under 10m pots and traps	6,050	↑	6,018	●	72	↑	71	●	142	●	143	●
Under 10m using hooks	2,446	↑	2,411	●	41	↑	40	●	81	↑	79	●
Gill netters	44,818	↑	43,435	●	262	↑	264	●	522	●	534	●
Longliners	119,733	↑	105,249	↓	664	↑	646	●	1,320	●	1,305	●
Pots and traps 10-12m	11,621	↑	11,936	●	78	↑	77	●	154	●	154	●
Pots and traps over 12m	61,707	↑	60,831	●	323	↑	318	●	636	●	641	●

Trend:

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Crew costs

In 2018 the UK fishing fleet supported a total estimated 8,006 FTEs. The number of FTEs in 2019 was 8,012.

The number of FTEs per fleet segment varies depending on vessel size and vessel numbers. The segment with the most FTE jobs in both 2018 and 2019 was pots and traps over 12m, which in 2019 had 909 FTEs spread across 180 vessels. The under 10m pots and traps supported the second highest number of FTEs with 878 FTEs across 1,192 vessels in 2019. This means less than one full time equivalent job per vessel, reflecting the fact that many of these vessels do not operate at sea all year round.

Overall the total number of FTEs in the fleet did not change much from 2018 to 2019 but for some segments there were noticeable changes. North Sea Nephrops vessels over 300kW had a 90% increase in FTEs in 2019 (from 333 to 633 FTEs). The number of these vessels also increased in 2019 by 31 vessels (Table 1), which explains the increase in FTEs. NS beam trawlers under 300kW had a 56% decrease in FTEs, to a total of 17 FTEs. This segment decreased by six vessels in 2019. Changes in number of FTEs can also arise if there is a difference in estimated number of hours worked, not necessarily implying that jobs were created or lost.

The average crew cost per FTE was £24k in both 2018 and 2019. Crew share is strongly linked with fishing income and costs as many fishermen are paid a share of the vessel earnings, usually after deducting some direct costs such as fuel. Crew costs (i.e., the total expenditure in crew, including crew shares, salaries and agency payments of all crew) across segments therefore reflect the variability in vessel earnings. Total crew costs of the UK fishing fleet were £266 million in 2018 and they decreased in 2019 by 3% (£258 million), possibly as a result of decreased fishing income which reduced the amount of money available for crew share. Average crew costs per vessel decreased sharply in 2019 for NS beam trawlers (over and under 300kW); these segments also experienced considerable decreases in average fishing income and efficiency. Longliners saw a noticeable increase (57%) in average crew costs per vessel in 2018 but in 2019 they went down by 69%.

Access to labour was a fairly common discussion point amongst interview participants. Lack of crew was noted by 14 participants (3% of interview participants) as negatively affecting their performance in 2018. Access to labour appears to be slightly more of an issue in Scotland compared to other home nations. Despite making up 43% of the total interviewees, 57% of participants operating Scottish vessels mentioned difficulties accessing labour.

When discussing issues around access to labour, many participants noted that there are skills shortages and that crew can often be unreliable, with issues related to alcohol and drug use being noted. Furthermore disparities were highlighted around the rules in different parts of the country relating to workers from non-EEA nations.

Table 5. Average annual crew costs and FTEs, 2018–2019

Segment	Average crew cost per vessel (£)				FTE (total)				Crew cost per FTE (£)			
	2018		2019		2018		2019		2018		2019	
Area VIIA demersal trawl	103,572	↑	84,175	↓	30	↓	30	●	34,686	↑	30,793	↓
Area VIIA nephrops over 250kW	84,537	●	120,059	↑	217	↑	224	●	12,079	●	15,543	↑
Area VIIA nephrops under 250kW	67,432	↑	70,022	●	187	↑	180	●	11,929	●	14,000	↑
Area VIIBCDEFGHK 24-40m	340,243	●	250,687	↓	160	↑	145	↓	29,729	●	24,189	↓
Area VIIBCDEFGHK trawlers 10-24m	54,441	↓	59,933	↑	179	↓	164	↓	17,954	↓	19,676	↑
North Sea beam trawl over 300kW	346,949	↑	68,725	↓	174	●	182	↑	13,965	●	2,636	↓
North Sea beam trawl under 300kW	19,512	●	9,493	↓	39	↑	17	↓	11,086	●	7,863	↓
North Sea nephrops over 300kW	152,260	↓	201,828	↑	333	↓	633	↑	18,301	↓	22,620	↑
North Sea nephrops under 300kW	49,012	●	51,835	↑	168	↑	179	↑	18,420	↓	19,668	↑
NSWOS demersal over 24m	545,844	●	523,779	●	529	●	468	↓	46,442	●	46,966	●
NSWOS demersal pair trawl seine	544,043	●	575,564	↑	282	↑	272	●	48,164	↓	48,734	●
NSWOS demersal seiners	415,759	↑	503,221	↑	114	↓	153	↑	54,886	↑	46,132	↓
NSWOS demersal under 24m over 300kW	263,862	↓	365,200	↑	481	↑	293	↓	25,234	↓	32,421	↑
NSWOS demersal under 24m under 300kW	73,859	↑	74,364	●	69	↑	88	↑	20,397	↓	16,003	↓
WOS nephrops over 250kW	85,926	↓	125,451	↑	179	↓	163	↓	14,435	↓	20,001	↑
WOS nephrops under 250kW	50,852	↓	59,568	↑	288	●	315	↑	10,789	↓	11,339	↑
South West beamers over 250kW	255,652	↓	254,577	●	162	↓	157	●	41,038	●	42,118	●
South West beamers under 250kW	175,222	↓	185,738	↑	176	●	157	↓	24,883	●	25,966	●
UK scallop dredge over 15m	149,605	↓	146,753	●	343	↓	315	↓	35,361	●	34,452	●
UK scallop dredge under 15m	42,223	↑	50,343	↑	312	↑	294	↓	28,410	↑	31,732	↑
Under 10m demersal trawl/seine	19,906	●	22,175	↑	197	●	218	↑	15,952	↓	17,127	↑
Under 10m drift and/or fixed nets	13,675	●	11,903	↓	114	↓	90	↓	25,431	↑	26,327	●
Under 10m pots and traps	19,687	↑	21,471	↑	864	↑	878	●	27,356	●	29,165	↑
Under 10m using hooks	12,953	↑	15,397	↑	109	↓	108	●	24,699	↑	27,605	↑
Gill netters	174,741	↑	230,639	↑	229	↑	229	●	19,847	↓	27,200	↑
Longliners	122,416	↑	38,362	↓	198	↓	182	↓	18,534	↑	6,539	↓
Pots and traps 10-12m	32,711	↓	33,734	●	431	↑	433	●	14,192	↓	14,021	●
Pots and traps over 12m	186,430	↑	176,100	↓	877	↑	909	●	20,825	↓	20,138	●

Trend:

- ↓ Indicates a decrease of >5% compared to previous year
- Indicates a change in the range of +/-5% compared to previous year
- ↑ Indicates an increase of >5% compared to previous year

Economic Performance

Economic performance of the UK fishing fleet is measured here in terms of Gross Value Added (GVA) and operating and net profit.

GVA is a measure of the value of goods and services produced by an industry. Here we calculate GVA as the sum of operating profit and crew share.

Gross Value Added (GVA)

Overall, average GVA per vessel decreased by 5% in 2018 as a result of increasing fuel costs. In 2019 average GVA per vessels increased for the majority of fleet segments, particularly among Nephrops and NSWoS demersal vessels driven by an increase in average fishing income and crew payments.

NS beam trawlers had a negative average GVA per vessel in 2019 as their costs exceeded income, linked to decreased fishing income. Longliners also experienced a sharp decline in average GVA per vessel in 2019 linked to a decrease in average crew costs (Table 5).

Table 6. Average annual GVA per vessel and GVA per FTE, 2018–2019

Segment	Gross value added (£)				GVA as % of total income				GVA per FTE (£ per FTE)			
	2018		2019		2018		2019		2018		2019	
Area VIIA demersal trawl	168,306	↑	144,655	↓	43%	↑	40%	↓	56,366	↑	52,919	↓
Area VIIA nephrops over 250kW	142,642	↓	206,088	↑	52%	●	56%	↑	20,381	↓	26,680	↑
Area VIIA nephrops under 250kW	102,481	↑	107,232	↑	58%	↑	60%	●	18,129	↓	21,439	↑
Area VIIBCDEFGHK 24-40m	395,808	↓	275,127	↓	25%	↓	22%	↓	34,584	↓	26,548	↓
Area VIIBCDEFGHK trawlers 10-24m	102,061	↓	113,015	↑	48%	↓	49%	●	33,658	↓	37,103	↑
North Sea beam trawl over 300kW	293,156	↓	-50,485	↓	15%	↓	-4%	↓	11,799	↓	-1,936	↓
North Sea beam trawl under 300kW	28,797	↑	-3,125	↓	26%	↑	-6%	↓	16,361	↑	-2,588	↓
North Sea nephrops over 300kW	159,232	↓	225,171	↑	25%	↓	29%	↑	19,139	↓	25,237	↑
North Sea nephrops under 300kW	64,278	↓	68,626	↑	34%	↓	35%	●	24,158	↓	26,039	↑
NSWOS demersal over 24m	901,558	●	866,186	●	40%	↓	40%	●	76,708	●	77,669	●
NSWOS demersal pair trawl seine	799,161	↓	846,996	↑	41%	↓	41%	●	70,750	↓	71,716	●
NSWOS demersal seiners	789,501	●	953,467	↑	53%	●	53%	●	104,225	↑	87,408	↓
NSWOS demersal under 24m over 300kW	432,218	↓	610,060	↑	40%	↓	44%	↑	41,335	↓	54,159	↑
NSWOS demersal under 24m under 300kW	156,536	●	186,430	↑	41%	↓	45%	↑	43,230	↓	40,118	↓
WOS nephrops over 250kW	99,403	↓	155,614	↑	33%	↓	39%	↑	16,699	↓	24,810	↑
WOS nephrops under 250kW	75,490	↓	88,734	↑	42%	↓	42%	●	16,017	↓	16,891	↑
South West beamers over 250kW	363,167	↓	364,288	●	38%	↓	39%	●	58,297	↓	60,270	●
South West beamers under 250kW	275,388	↓	293,137	↑	41%	↓	42%	●	39,108	↓	40,981	↑
UK scallop dredge over 15m	165,649	↓	162,049	●	32%	↓	32%	●	39,154	↓	38,043	●
UK scallop dredge under 15m	63,805	↑	77,263	↑	41%	↑	43%	●	42,931	↑	48,700	↑
Under 10m demersal trawl/seine	36,240	↓	40,630	↑	47%	↓	48%	●	29,042	↓	31,382	↑
Under 10m drift and/or fixed nets	31,629	↑	27,547	↓	69%	●	69%	●	58,821	↑	60,930	●
Under 10m pots and traps	40,514	↑	44,309	↑	59%	↑	59%	●	56,295	●	60,187	↑
Under 10m using hooks	23,606	↑	28,182	↑	57%	↑	58%	●	45,011	↑	50,527	↑
Gill netters	234,719	↑	315,077	↑	42%	↑	44%	↑	26,659	↓	37,157	↑
Longliners	189,466	↑	65,179	↓	39%	↑	15%	↓	28,686	↑	11,110	↓
Pots and traps 10-12m	107,680	●	111,058	●	60%	↓	60%	●	46,718	↓	46,159	●
Pots and traps over 12m	277,229	↓	261,165	↓	47%	↓	47%	●	30,968	↓	29,866	●

Trend:

- ↓ Indicates a decrease of >5% compared to previous year
- Indicates a change in the range of +/-5% compared to previous year
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Profit

The total operating profit (total income minus total operating costs) of the UK fleet was £238 million in 2018 and remained largely unchanged in 2019 at £240 million despite a decrease in the total weight and value landed. A slight reduction in costs helped offset the decrease in weight and value landed.

The majority of fleet segments saw a decrease in operating profit per vessel in 2018 as fuel costs increased (compared to 2017), but for many of them profit increased again in 2019. Nephrops vessels and NSWoS demersal vessels in particular experienced considerable increases in average profit per vessel in 2019.

North Sea beam trawlers made a loss in 2018 (over 300kW) and in 2019 (over and under 300kW). Some individual vessels within other segments may also have made a loss, even if the overall segment has made a profit on average.

Operating profit margins (operating profit expressed as percent of total income) did not change much overall from 2018 to 2019, remaining at 15%.

Net profit is another useful measure of economic performance, calculated as operating profit less cost of finance. Net profit is the amount that would be subject to taxation and profits after tax would be the amount that could be retained by the company and/or distributed as dividends to shareholders in the company. For smaller businesses that operate as sole traders, owner's drawings often reflect a combination of wages for their labour and return on their capital invested in the business. Net profit margins in 2018 ranged between -22% and 33%, with an average of 10% across segments.

Table 7. Average annual operating profit per vessel and net profit margin, 2018–2019

Segment	Operating profit (£)				Operating profit margin				Net profit margin	
	2018		2019		2018		2019		2018	
Area VIIA demersal trawl	64,734	↑	60,480	↓	17%	↓	17%	↑	14%	●
Area VIIA nephrops over 250kW	58,105	↓	86,029	↑	21%	↓	24%	↑	18%	↑
Area VIIA nephrops under 250kW	35,049	↓	37,210	↑	20%	↓	21%	↑	10%	↓
Area VIIBCDEFGHK 24-40m	55,565	↓	24,441	↓	4%	↓	2%	↓	4%	↓
Area VIIBCDEFGHK trawlers 10-24m	47,620	↓	53,082	↑	23%	↓	23%	↑	21%	↓
North Sea beam trawl over 300kW	-53,792	↓	-119,210	↓	-3%	↓	-9%	↓	-22%	↓
North Sea beam trawl under 300kW	9,285	↑	-12,618	↓	8%	↑	-25%	↓	-2%	↑
North Sea nephrops over 300kW	6,972	↓	23,343	↑	1%	↓	3%	↑	-6%	↓
North Sea nephrops under 300kW	15,267	↓	16,791	↑	8%	↓	9%	↑	5%	↑
NSWOS demersal over 24m	355,715	●	342,407	●	16%	↓	16%	↑	11%	↓
NSWOS demersal pair trawl seine	255,118	↓	271,432	↑	13%	↓	13%	↑	8%	↓
NSWOS demersal seiners	373,742	●	450,246	↑	25%	↓	25%	↓	19%	↓
NSWOS demersal under 24m over 300kW	168,356	↓	244,860	↑	16%	↓	18%	↑	10%	↓
NSWOS demersal under 24m under 300kW	82,677	↓	112,066	↑	22%	↓	27%	↑	16%	↓
WOS nephrops over 250kW	13,477	↓	30,163	↑	5%	↓	8%	↑	-3%	↓
WOS nephrops under 250kW	24,638	↓	29,166	↑	14%	↓	14%	↑	7%	↓
South West beamers over 250kW	107,515	↓	109,711	●	11%	↓	12%	↑	7%	↓
South West beamers under 250kW	100,166	↓	107,399	↑	15%	↓	15%	↑	11%	↓
UK scallop dredge over 15m	16,044	↓	15,297	●	3%	↓	3%	↓	-2%	↓
UK scallop dredge under 15m	21,582	↑	26,920	↑	14%	↑	15%	↑	7%	↑
Under 10m demersal trawl/seine	16,334	↓	18,456	↑	21%	↓	22%	↑	10%	↓
Under 10m drift and/or fixed nets	17,955	↑	15,644	↓	39%	↑	39%	↑	31%	↑
Under 10m pots and traps	20,826	↑	22,839	↑	30%	↑	31%	↑	22%	↑
Under 10m using hooks	10,653	↓	12,785	↑	26%	↓	26%	↑	18%	↓
Gill netters	59,978	↓	84,438	↑	11%	↓	12%	↑	7%	↓
Longliners	67,050	↓	26,818	↓	14%	↑	6%	↓	7%	↓
Pots and traps 10-12m	74,969	↑	77,324	●	42%	↑	42%	●	33%	↑
Pots and traps over 12m	90,799	↓	85,065	↓	16%	↓	15%	↓	10%	↓

Trend:

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- Indicates a change in the range of +/-5% compared to previous year
- ↑ Indicates an increase of >5% compared to previous year

Methods

The collection of economic data on the UK fishing fleet is a staged process involving government administrations, vessel owners, accountancy firms and Seafish field researchers, data analysts and economists.

Government administrations data collection

Government administrations gather data on vessel numbers and characteristics, catch, landings, sales, gear type and fishing effort (days at sea). This information is transmitted to a central UK database which keeps logbook, sales note and fleet register data.

Field research

Every year Seafish researchers visit ports around the UK, interviewing fishing business owners about their fishing businesses and obtaining their permission to get copies of their financial data. Although we have fishing income data for every UK vessel, we also gather a sample of other financial data for each fleet segment. To ensure an adequate sample size for other financial data we use a self-selecting stratified sampling approach, i.e., we interview a sufficient number of vessel owners from each segment who choose to participate in the survey when our researchers visit the ports. During this stage, researchers collect data on employment, fuel use and capital value indicators as well as the contact details of vessel owners' accountancy firms. In addition, researchers gather qualitative data on matters relating to fishing businesses.

We collect financial data from accountants and owners after the interview phase, with the objective of gathering a large sample of vessel accounts. In late 2019 and early 2020 Seafish Economics collected 394 sets of 2018 financial accounts (9% of the active UK fleet). It is not possible to collect an adequate sample for 2018 any earlier than this because vessel owners do not finish their annual accounts until around 10 months after the end of year being reported.

Fleet segmentation

The Seafish economic database includes all vessels recorded in the UK fishing fleet register that are active during the year considered. This includes all vessel types, gear types and activity levels. Therefore, we define groups or fleet segments of relatively similar vessels so we can provide information on the operational and financial performance of groups of comparable vessels.

Each fleet segment has a set of mutually exclusive criteria that define which vessels are included in it for each year. Every single active vessel will fit into only one segment each year. Criteria are based on the physical characteristics of the vessels, activity level, the gear used, species targeted and areas fished. For this report we have defined 32 Seafish segments to categorise the UK fleet as shown in the Segmentation Criteria table. Some segments have a large number of vessels, such as the under 10m pots and traps segment (1,192 vessels), while others have very few, such as North Sea beam trawl over 300kW (7 vessels). Individual vessels may be included in different segments in different years depending on their activity and gear use. Segments must contain at least five vessels so that reliable data can be collected, robust estimates of costs and profits can be produced, and confidentiality is protected. If fewer than five vessels fit into one segment in a given year, they are instead included in the 'Miscellaneous' fleet segment.

Costs and earnings estimation

Declared fishing income is available from the government data set for every active vessel in the fleet, so fishing income is the most reliable financial figure we produce.

We allocate costs structure and non-fishing income data from the sampled vessel accounts to particular fleet segments. We then extrapolate costs and non-fishing income to all vessels in the segment using official statistics on effort and fishing income covering every vessel in the fleet.

Within each fleet segment we add together the individual costs items from the collected vessel financial accounts (the segment sample) to create a 'combined segment sample cost structure'.

We then calculate, for all vessels in a segment, the sum of each cost item in the 'combined segment sample cost structure' as a proportion of the sum of fishing income. For example:

- a) The sum of gear costs is 10% of the sum of fishing income for this group of vessels;
- b) The sum of sales commission is 3% of the sum of fishing income, etc.

Fuel costs and crew share costs are calculated differently from other costs. To calculate fuel costs, we use the vessel capacity (VCUs) and days at sea for the year of each vessel to estimate its fuel consumption in litres, which is then multiplied by the average annual red diesel price (excluding duty) to estimate total annual fuel cost for each vessel. To calculate crew share costs, we use a system similar to how crew share is estimated in practice, where fishing costs are deducted from fishing income and then the remainder is split between the crew and the vessel business. We allocate a minimum of £100 per day in instances where the actual observed amount within the 'combined segment sample cost structure' is lower, in order to reflect the market value of the labour.

Following the calculation of fuel cost and crew share, we apply the proportions from all the other costs within the 'combined segment sample cost structure' to the official declared fishing income for each vessel within each fleet segment. This enables us to calculate Gross Value Added, operating profit and net profit for all vessels in each fleet segment.

Employment data

The estimation of employment is based on the survey data collected from vessel owners during the first stage of data collection, combined with MMO employment data. This process provides details of the number of engaged crew, both full-time and part-time. With this sample information we then estimate total engaged crew based on the physical characteristics of each individual vessel and the vessel's level of activity. Once the total engaged crew is estimated for all types of vessel in the UK fleet, we estimate Full Time Equivalent (FTE) jobs based on hours worked by crew as reported by skippers (one full time job is assumed to be 2,000 hours worked a year).

2019 estimates

Figures presented for the year 2018 are estimates based on Government data and data collected by Seafish. Figures for 2019 are estimates using provisional official statistics on landings, numbers of vessels and effort, along with actual annual average 2019 fuel prices and previous years' cost structures. Therefore, the 2019 values should be considered robust preliminary estimates. Seafish will revise these estimates when final government data and 2019 vessel accounts are available.

Methods

Table 8. Segmentation Criteria Table

Seafish Segments	Main Area	Main DAS Gear	Main Species by value	Main Gear Type	Power Main Engine	Vessel Length	Value of landings
Area VIIA demersal trawl over 10m	VIIA	Demersal trawls and seines				>= 10m	
Area VIIA nephrops over 250kW	VIIA	Demersal trawls and seines	Nephrops		>= 250 kW	>= 10m	
Area VIIA nephrops under 250kW	VIIA	Demersal trawls and seines	Nephrops		<250 kW	>= 10m	
Area VIIb-k trawlers 10-24m	VIIDE, VIIFG, VII other	Demersal trawls and seines	Not Nephrops			>= 10m & <24m	
Area VIIb-k trawlers 24-40m	VIIDE, VIIFG, VII other	Demersal trawls and seines	Not Nephrops			>= 24m & <40m	
UK Gill netters over 10m		Drift Nets and Fixed Nets	Not Nephrops			>= 10m	
UK Longliners over 10m		Gears using hooks	Not Nephrops			>= 10m	
Low activity vessels over 10m						>= 10m	< £10,000
Low activity vessels under 10m						< 10m	< £10,000
Miscellaneous vessels over 10m						>= 10m	
North Sea beam trawl over 300kW	NS	Beam Trawl	Not Nephrops		>= 300 kW	>= 10m	
North Sea beam trawl under 300kW	NS	Beam Trawl	Not Nephrops		< 300 kW	>= 10m	
North Sea nephrops trawl over 300kW	NS	Demersal trawls and seines	Nephrops		>= 300 kW	>= 10m	
North Sea nephrops trawl under 300kW	NS	Demersal trawls and seines	Nephrops		< 300 kW	>= 10m	
North Sea and West of Scotland demersal trawl over 24m	NS, WoS		Not Nephrops			>= 24m	
North Sea and West of Scotland demersal pair trawls and seines	NS, WoS	Demersal trawls and seines	Not Nephrops	Paired Trawl		>= 10m	
North Sea and West of Scotland demersal seiners	NS, WoS	Demersal trawls and seines	Not Nephrops	Scottish Seiner		>= 10m	
North Sea and West of Scotland demersal trawl under 24m, over 300kW	NS, WoS	Demersal trawls and seines	Not Nephrops		>= 300 kW	>= 10m & <24m	
North Sea and West of Scotland demersal trawl under 24m, under 300kW	NS, WoS	Demersal trawls and seines	Not Nephrops		< 300 kW	>= 10m & <24m	
UK pelagic trawl over 40m		Pelagic: Trawl, Seiner / Purse Seiner	Mackerel			>= 40m	

Seafish Segments	Main Area	Main DAS Gear	Main Species by value	Main Gear Type	Power Main Engine	Vessel Length	Value of landings
UK pots and traps 10m-12m		Pots and Traps				>= 10m & <12m	
UK Pots and traps over 12m		Pots and Traps				>= 12m	
South West beam trawl under 250kW	VIIDE, VIIFG, VII other	Beam Trawl			< 250 kW	>= 10m	
South West beam trawl over 250kW	VIIDE, VIIFG, VII other	Beam Trawl			>= 250 kW	>= 10m	
UK demersal trawls and seines under 10m		Demersal trawls and seines				< 10m	
UK drift and fixed nets under 10m		Drift Nets and Fixed Nets				< 10m	
UK pots and traps under 10m		Pots and Traps				< 10m	
UK hooks under 10m		Gears using hooks				< 10m	
West of Scotland nephrops trawl over 250kW	WoS	Demersal trawls and seines	Nephrops		>= 250 kW	>= 10m	
West of Scotland nephrops trawl under 250kW	WoS	Demersal trawls and seines	Nephrops		< 250 kW	>= 10m	
UK scallop dredge over 15m		Dredges	Scallops, queen scallops, cockles			>= 15m	
UK scallop dredge under 15m		Dredges	Scallops, queen scallops, cockles			<= 15m	

Glossary and acronyms

Glossary

Active vessel Any UK registered fishing vessel that recorded any amount of landings in the year considered.

Fishing costs Costs incurred by vessel owners as a result of their fishing activity. Fishing costs include fuel costs, crew shares, ice and boxes, sales commissions, harbour dues, subscriptions and levies, quota leasing, days at sea purchases, food and stores, travel costs and shore labour.

Fleet segment A group comprising vessels of similar characteristics in terms of level of activity, main gear used and/or area of operation.

FTE (Full-Time Equivalent) A standardised measure of employment, based on an employee working 37 hours per week, 52 weeks a year.

GDP (Gross Domestic Product) An indicator of the economic performance of a country.

GVA (Gross Value Added) A measure of the value of goods and services produced by an industry. In this report, GVA is calculated as the sum of operating profit and crew share.

Low activity vessel Any vessel that recorded a total value of landings under £10,000 in the year considered.

Net profit The result of subtracting finance costs, depreciation and interest costs from operating profit.

Operating costs Costs incurred by vessel owners. Operating costs comprise fishing costs, which are dependent on the level of fishing activity; and vessel costs, which tend to be fixed regardless of the level of activity.

Operating profit The difference between total income and operating costs.

Vessel costs Costs incurred by vessel owners regardless of the level of fishing activity. Vessel costs include gear and vessel repairs, insurance, electronic equipment and administration costs.

Acronyms

FTE Full-Time Equivalent

GDP Gross Domestic Product

GVA Gross Value Added

MMO Marine Management Organisation

NS North Sea

NSWoS North Sea and West of Scotland

TAC Total Allowable Catch

VCU Vessel Capacity Unit

WC Western Channel

WoS West of Scotland

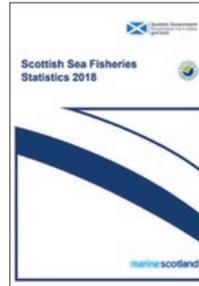
Further reading

Fisheries statistics



Marine Management Organisation – UK Sea Fisheries Statistics 2018

UK Sea Fisheries Statistics 2018 provides a broad picture of the UK fishing industry. This publication includes data on the structure, activity and landings of the UK fleet along with additional information on overseas trade, exploitation of stocks and the world's fishing industry. This report uses the same underlying dataset.



Marine Scotland – Scottish Sea Fisheries Statistics 2018

A detailed overview of landings of sea fish, the Scottish fishing fleet and the number of fishermen employed in 2018.



Fuel efficiency

Quay Issues Volume 6

This edition of Quay Issues magazine looks at options to improve the fuel efficiency of the fishing fleet and analyses the cost-effectiveness of fishing gear recycling among other topics.

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Seafish Economics
Seafish
18 Logie Mill
Logie Green Road
Edinburgh
EH7 4HS