

The background image shows a harbor scene. In the foreground, there is a close-up of a fishing net, likely a lobster trap, with dark, thick ropes and a mesh structure. The net is covered in seaweed and other marine growth. In the background, several fishing boats are docked at a pier. A prominent white lighthouse stands on the pier, overlooking the water. The sky is clear and blue, and the water is a deep blue.

**SEAFISH**

**QUAY ISSUES  
FLEET ECONOMIC  
PERFORMANCE**

**DATASET 2008-16**









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The authors would like to thank the many people who contributed to this study and report.

We are especially grateful to:

The several hundred UK vessel owners and skippers who contributed their vessel accounts, completed questionnaires and participated in interviews.

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## CONTENTS

Introduction	2
Summary	3
Overview	4
Dataset Guide	6

### Segments

Area 7A demersal trawl	8
Area 7A nephrops over 250kW	10
Area 7A nephrops under 250kW	12
Area 7B-K trawlers 10-24m	14
North Sea beam trawl over 300kW	16
North Sea beam trawl under 300kW	18
North Sea nephrops trawl over 300kW	20
North Sea nephrops trawl under 300kW	22
NSWOS demersal trawl over 24m	24
NSWOS demersal pair trawl and seine	26
NSWOS demersal seiners	28
NSWOS demersal trawl under 24m, over 300kW	30
NSWOS demersal trawl under 24m, under 300kW	32
West of Scotland nephrops trawl over 250kW	34
West of Scotland nephrops trawl under 250kW	36
South West beam trawl over 250kW	38
South West beam trawl under 250kW	40
UK scallop dredge over 15m	42
UK scallop dredge under 15m	44
Gill netters	46
Longliners	48
Pots and traps over 12m	50
Pots and traps 10-12m	52
Under 10m demersal trawls and seine	54
Under 10m drift and/or fixed nets	56
Under 10m pots and traps	58
Under 10m using hooks	60
Methodology	62
Segmentation Criteria	63
Sample rates	64
Operating profit margin	65
Net profit margin	66
Further Reading	67

## INTRODUCTION

The Seafish Fleet Economic Performance Dataset provides a detailed insight into the financial and operational performance of the fleet between 2008 and 2016. We hope that the availability of accurate economic data and analysis of fleet performance will be used to enhance fisheries management and will benefit the UK fleet in the long-run.

Data for years up to and including 2015 are estimates based on the same year costs and earnings samples collected by Seafish combined with official statistics on landings, capacity and effort, along with the latest fuel price. Due to a time lag in the availability of company accounts, 2016 estimates are generated using up-to-date landings data, 2016 fuel prices and 2015 cost structures and should therefore be considered as provisional. Seafish will revise those estimates when 2016 vessel accounts becomes available in early 2018. Please consult our 'Dataset Guide' section even if you are experienced in handling Seafish's various published datasets.

This publication presents data from 27 Seafish-defined fleet segments. Further details on other segments, such as vessels making landings of less than £10,000 in a single year, are available in the Excel version of this report which is available to download from the Seafish website ([www.seafish.org](http://www.seafish.org)).

The Seafish website also offers access to our full suite of publications covering the economic performance of both the UK fishing fleet and the UK seafood processing industry. Bespoke analyses are available upon request and depending on sufficient data being available.

If you have any comments on this report, would like to suggest improvements to be made in future reports or would like more detailed information, please contact us at:

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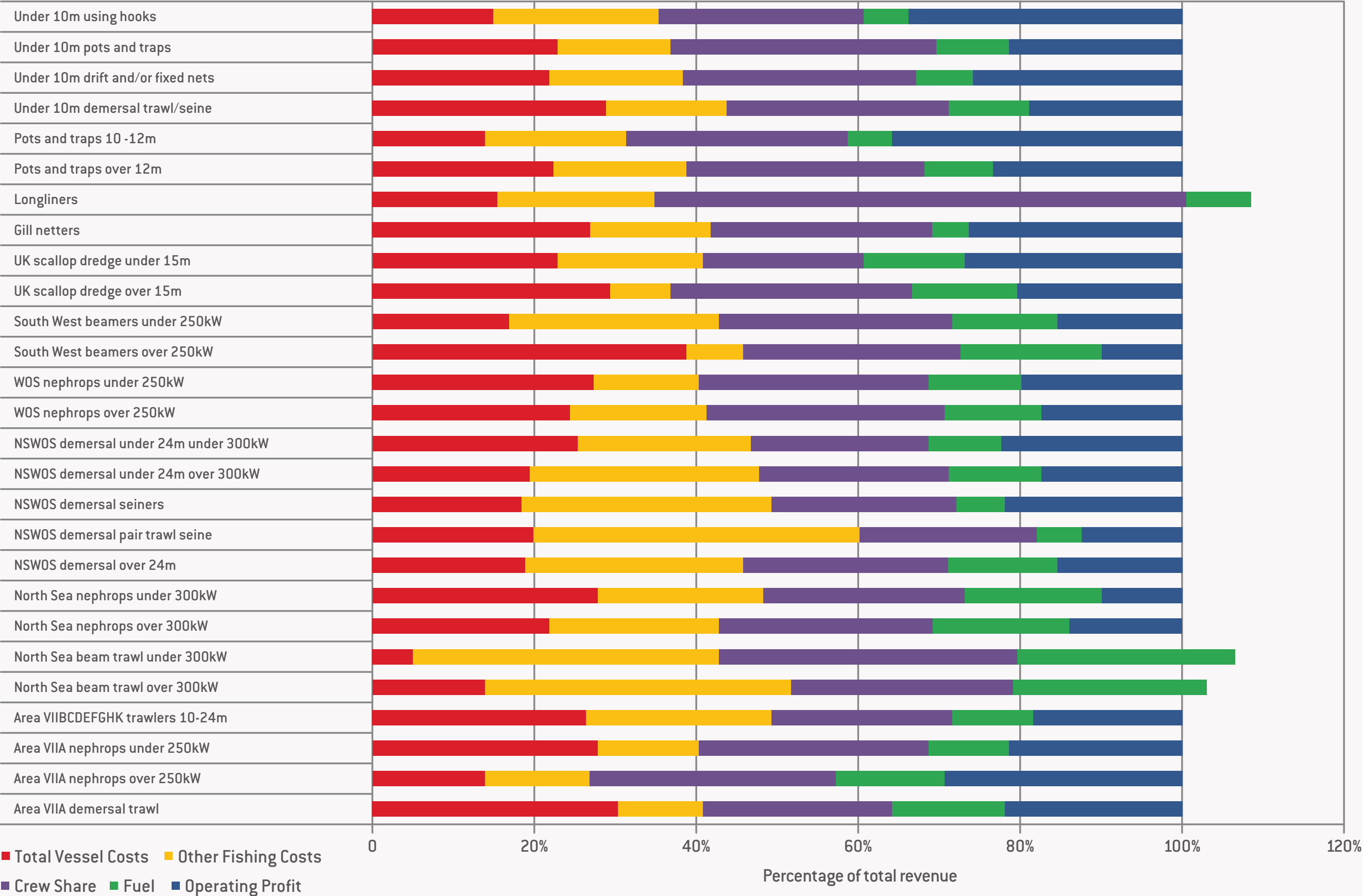
*Production of this report is only possible with the goodwill of vessel owners (and their accountants) who participated in the survey. We would like to thank everyone who took part.*

## 2016 SUMMARY TABLE

		2016 DATA							Ten Year Trend (2007-16)				
FLEET SEGMENT	Main stock by value	No. Vessels	Average days at sea per vessel	Total landings [tonnes]	Landing per kW day at sea (kg)	Income per kW day at sea (£)	Total cost per kW day at sea (£)	Operating profit per kW day at sea (£)	Landing per kW day at sea (kg)	Income per kW day at sea (£)	Total cost per kW day at sea (£)	Operating profit per kW day at sea (£)	Landing per kW day at sea 2007-2016 [% change]
AREA 7A DEMERSAL TRAWL	Scallops	14	124	1,335	3.5	7.2	5.6	1.6	Variable	Upward	Upward	Variable	15%
AREA 7A NEPHROPS OVER 250KW	Nephrops 7	32	140	4,147	2.4	5.1	3.7	1.5	Upward	Upward	Upward	Variable	23%
AREA 7A NEPHROPS UNDER 250KW	Nephrops 7	43	135	3,279	3.3	6.9	5.4	1.5	Upward	Upward	Upward	Variable	23%
AREA 7B-K TRAWLERS 10-24M	Cuttlefish	63	170	9,571	4.2	6.9	5.8	1.3	Upward	Upward	Upward	Variable	12%
NORTH SEA BEAM TRAWL OVER 300KW	Plaice NS	9	247	10,782	3.3	6.3	6.5	-0.2	Upward	Upward	Upward	Variable	79%
NORTH SEA BEAM TRAWL UNDER 300KW	Brown Shrimps	22	86	816	2.1	6.2	7.0	-0.4	Variable	Variable	Variable	Variable	-34%
NORTH SEA NEPHROPS TRAWL OVER 300KW	Nephrops NS	48	203	10,900	2.6	6.9	6.3	1.0	Downward	Downward	Stable	Variable	0%
NORTH SEA NEPHROPS TRAWL UNDER 300KW	Nephrops NS	62	135	4,594	3.0	7.6	7.2	0.8	Downward	Downward	Upward	Variable	-11%
NSWOS DEMERSAL TRAWL OVER 24M	Haddock NS (EC)	43	207	48,683	6.4	10.9	9.5	1.7	Upward	Upward	Upward	Variable	66%
NSWOS DEMERSAL PAIR TRAWLS AND SEINES	Haddock NS (EC)	25	199	27,196	10.0	16.1	15.2	2.1	Upward	Upward	Upward	Variable	74%
NSWOS DEMERSAL SEINERS	Haddock NS (EC)	16	158	11,530	9.6	14.9	13.4	3.8	Upward	Upward	Upward	Variable	79%
NSWOS DEMERSAL TRAWL UNDER 24M, OVER 300KW	Anglerfish NS & 2a (EC)	34	191	16,102	5.4	11.7	10.2	2.1	Upward	Upward	Upward	Variable	24%
NSWOS DEMERSAL TRAWL UNDER 24M, UNDER 300KW	Anglerfish NS & 2a (EC)	12	124	1,659	4.6	10.7	8.8	2.5	Variable	Upward	Variable	Variable	0%
WEST OF SCOTLAND NEPHROPS TRAWL OVER 250KW	Nephrops WS	51	185	8,662	2.8	6.6	5.6	1.2	Upward	Upward	Upward	Variable	19%
WEST OF SCOTLAND NEPHROPS TRAWL UNDER 250KW	Nephrops WS	84	157	5,926	2.7	7.0	5.7	1.4	Upward	Upward	Upward	Variable	5%
SOUTH WEST BEAM TRAWL OVER 250KW	Anglerfish 7	23	208	6,462	2.2	6.4	7.2	0.8	Upward	Upward	Upward	Variable	25%
SOUTH WEST BEAM TRAWL UNDER 250KW	Sole 7e	23	233	4,800	4.1	12.7	11.4	2.0	Upward	Upward	Upward	Variable	49%
UK SCALLOP DREDGE OVER 15M	Scallops	92	183	26,496	3.9	7.1	5.7	1.5	Variable	Downward	Upward	Variable	5%
UK SCALLOP DREDGE UNDER 15M	Scallops	179	112	15,808	5.0	8.7	6.8	2.5	Stable	Stable	Upward	Variable	-24%
GILL NETTERS	Anglerfish 7	30	171	7,846	4.0	9.0	7.7	2.7	Upward	Upward	Downward	Variable	59%
LOGLINERS	Hake WS incl 7	28	179	9,571	4.8	13.0	14.3	-1.1	Upward	Upward	Variable	Variable	133%
POTS AND TRAPS OVER 12M	Brown Crab	93	183	24,749	5.9	9.7	7.9	2.4	Upward	Upward	Upward	Variable	32%
POTS AND TRAPS 10-12M	Lobsters	174	158	11,533	3.0	6.3	4.1	2.3	Upward	Upward	Downward	Variable	22%
UNDER 10M DEMERSAL TRAWLS AND SEINES	Nephrops NS	188	110	5,498	2.4	5.9	4.8	1.1	Upward	Downward	Stable	Variable	-2%
UNDER 10M DRIFT AND/OR FIXED NETS	Sole 7d	217	83	3,999	2.5	5.8	4.4	1.5	Downward	Upward	Upward	Variable	1%
UNDER 10M POTS AND TRAPS	Lobsters	1,075	123	26,658	2.4	6.0	4.9	1.3	Upward	Downward	Upward	Downward	10%
UNDER 10M USING HOOKS	Razor Clam	165	71	2,155	2.6	7.6	5.1	2.6	Upward	Upward	Variable	Variable	33%

UK OVERVIEW

Average operating cost structure and operating profit as a % of revenue





## UK OVERVIEW

The graph (left) demonstrates average operating cost structure and operating profit as a percentage of total revenue for each of the 27 segments featured in this report. When the percentage of total revenue is greater than 100% it indicates that fleet segment made a loss in 2016.

- 24 of the 27 fleet segments analysed in this report made an operating profit in 2016. Total UK fleet operating profit was estimated to be £207 million in 2016, a 20% increase on the previous year. Operating profit as a percentage of total income remained stable at around 20%.
- 2016 was a comparatively strong year in terms of profit for the majority of the fleet segments, with over two thirds of these segments clearly benefitting from higher than average prices for many of their main target species.
- Higher prices and an increase in total landings led to total UK fishing income of £915 million in 2016 compared to £784 million in 2015.
- Not all fleet segments benefitted from higher prices in 2016. Two segments only achieved an operating profit due to significant non-fishing income.
- The three segments that made an operating loss in 2016 did have above average prices and compared to other years in the time series and increased weight of landings but high operating costs impacted on their financial performance.

The graph on the left highlights four main types of operating cost: crew share, fuel cost, other fishing costs and total vessel costs.

Fishing costs vary depending on the amount of vessel activity and the value and quantity of landings, and cover a wide range of elements. Crew share (wages) and fuel and oil comprise a significant part of fishing costs. Other fishing costs include: boxes, ice, food and stores, sales commissions, harbour dues, subscriptions and levies, shore labour, travel costs, quota leasing and days at sea purchases.

Vessel costs are independent of the level of vessel activity during the year. These fixed vessel costs comprise gear and vessel repairs, insurance, administration and the purchase, hire and maintenance of electronic equipment.

- Operating costs increased for all but three segments in 2016 compared to 2015. The average increase among all segments was 24% and the main cost increase was crew share which increased by 28%.
- Operating costs, expressed as a percentage of total income, ranged from 109% of total income for Longliners to 64% of total income for pots and traps vessels 10-12m in 2016. These percentages were largely unchanged in 2016 compared to 2015.
- Seafish estimates that total expenditure by the UK fishing fleet on marine fuel was £94 million in 2016. This is roughly the same spend as 2015 but a 35% decrease since 2014. Fuel costs per day at sea remained largely unchanged in 2016 compared to 2015 as average oil price remained at a similar level.
- Many fishermen are paid as a share of fishing income after deduction of fishing costs. With fishing income increasing crew share would also increase since fuel costs did not, and this is true for all of the 27 segments analysed for this report.

DATASET GUIDE

FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016

FLEET SEGMENT IN 2016

Number of Vessels	14
Total days at sea	1,734
Total value of landings	£2,734,466
Total weight landed (tonnes)	1,335
Main species landed (species over 20% of total value)	Scallops, Nephrops 7

Home nation of port of administration



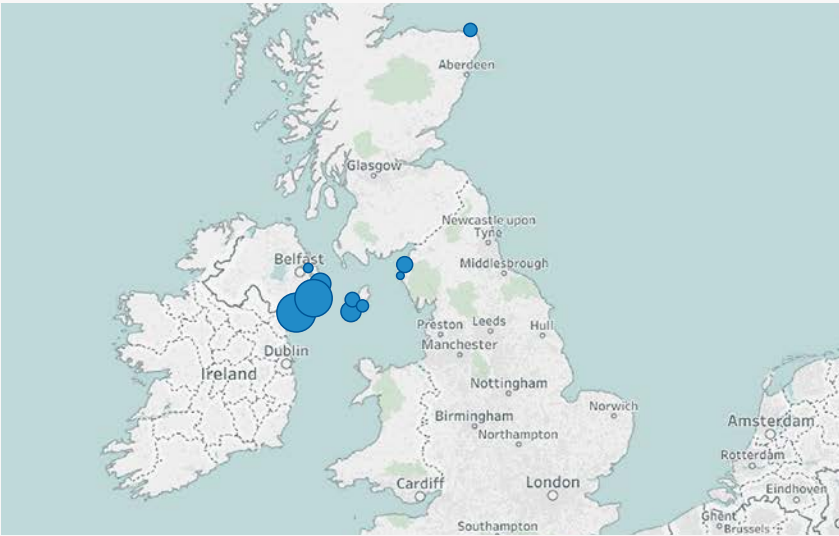
The first box provides a summary of the fleet segment’s total characteristics in 2016. ‘Main species’ refers to species refers to any species that individually make-up over 20% of the total value of landings by the segment.

The home nation breakdown of the fleet is dictated by the home nation of the administration port of the vessel and not necessarily where they fish or land.

The pie chart is used to show the breakdown of the fleet by registered home port:

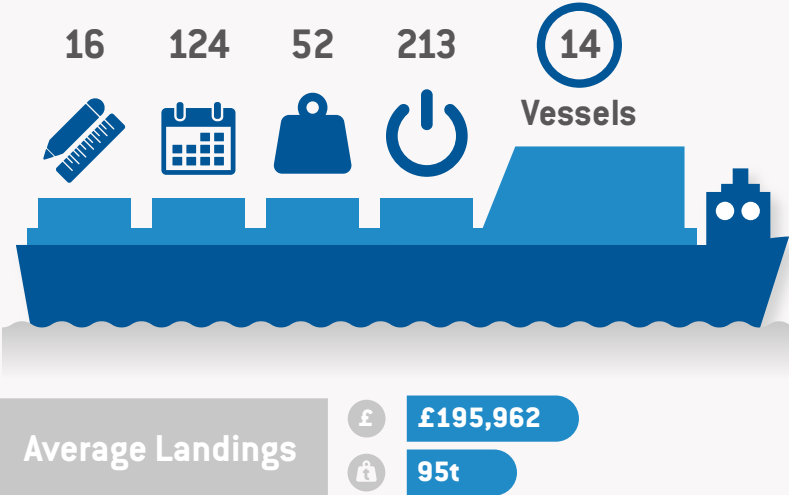


TOP 10 PORTS BY VALUE OF LANDINGS



The map shows the top 10 landing ports of the fleet segment by value. Each blue dot shown on the map represents a port. The size of the dot reflects the size of landings made at that port in 2016. These maps can include ports in other countries.

AVERAGE VESSEL CHARACTERISTICS IN 2016



Key

- Vessel Length
- Days at Sea
- Gross Tonnage
- Engine Power (kW)
- Number of Vessels



FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

The economics team at Seafish has prepared text to summarise the business performance of each segment and trends over time.

The text is presented in four sections:

**Vessel Numbers** – Vessel membership of a fleet segment is defined by main area fished, gear used, species landed by value, engine power and vessel length (see p.63 for full criteria). The trend in vessel numbers can be indicative of how attractive the fleet segment is to business owners.

**Business performance by kW day at sea** – kWdays at sea provides a standard measure of effort which can be used to compare performance (productivity, costs, income and profit) across years and between fleet segments.

**Catch and average price** - For vessel businesses, average price is a key driver of overall business performance. Monitoring the average price per tonne can highlight changes in the market response to the landings of the fleet

**Value added per vessel** – Gross Value Added (GVA) is the sum of operating profit and total wages (including payments to agency workers) and it is used as a measure of contribution to the economy.

*All monetary figures adjusted to 2016 prices to allow direct comparison between years.*

Figure 5 presents average per vessel income for the segment set against four main costs. Figure 6 compares operating cost to fishing income in terms of £ per kW day at sea. More detailed versions of segment tables are available to download from the Seafish website.

FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME  
(All values adjusted for inflation)

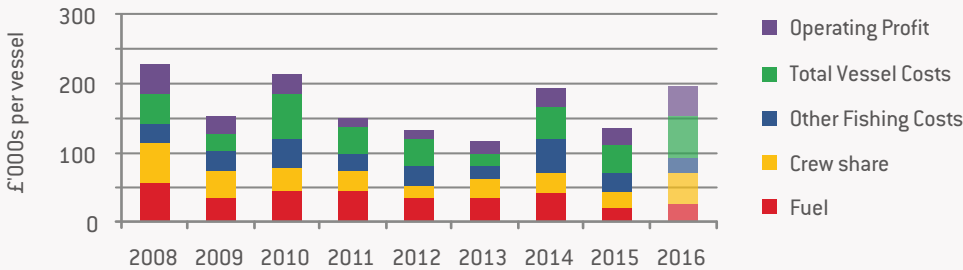
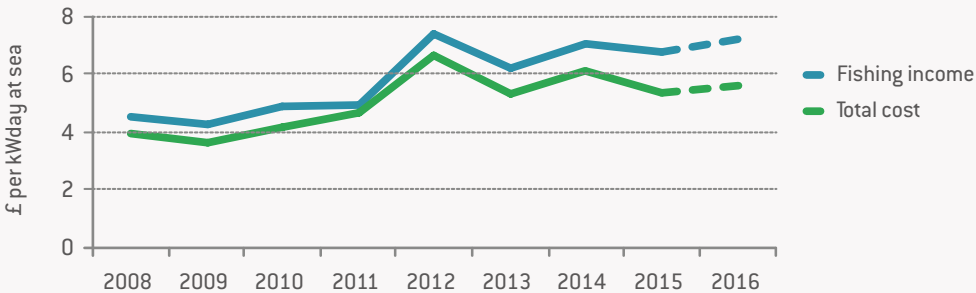
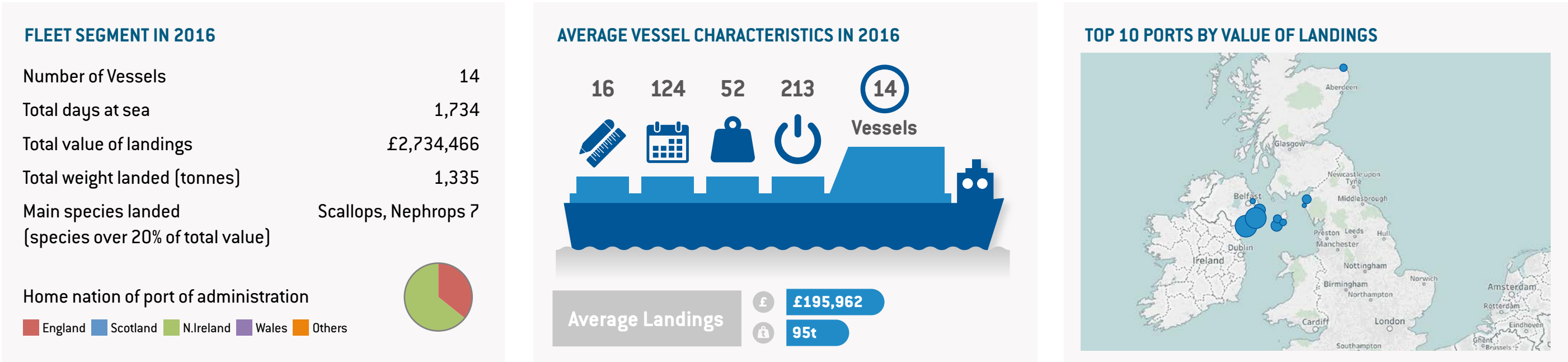


FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
Active Vessels (#)			15	15	14	12	5	5	9	13	14
AVERAGE PER VESSEL	Days at Sea (days)		131	108	121	107	104	114	131	100	124
	Landings (tonnes)		103.3	91.1	159.2	93.7	161.6	95.0	112.0	85.2	95.4
	Landings per day at sea (tonnes)		0.79	0.84	1.32	0.88	1.55	0.83	0.85	0.85	0.77
	Average price per tonne landed (£)		2,018	1,585	1,338	1,589	816	1,234	1,728	1,586	2,055
	Total Income (£'000)		226.0	148.2	213.5	149.2	132.0	117.2	193.8	135.0	196.0
	Total Operating Costs (£'000)		182.5	127.0	184.6	139.4	120.0	100.6	169.9	107.2	152.9
	Gross Value Added (£'000)		100.5	62.0	61.7	37.7	30.3	48.4	56.0	58.9	89.3
	Operating Profit (£'000)		43.5	21.2	28.9	9.7	12.1	16.6	23.9	27.9	43.1

AREA 7A DEMERSAL TRAWL: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016





## AREA 7A DEMERSAL TRAWL: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 14 vessels in the segment. The number of vessels was as low as five in 2012-13 and as high as 15 in 2008-09.

### Landings and average price

Two stocks represented 67% of the value of landings in 2016: scallops and nephrops (Area 7). Both stocks are seasonal. The proportion of total value represented by these stocks increased substantially in 2016 and this is perhaps reflected in the improved average price per tonne in 2016 (£2,055). In 2015, scallops and nephrops 7 represented 41% of the value of landings and the average price per tonne landed was £1,586. In the observed period to 2016, the average price per tonne was highest in 2016 at £2,055 and lowest in 2012 at £816.

### Business performance by kilowatt day at sea (kWdas)

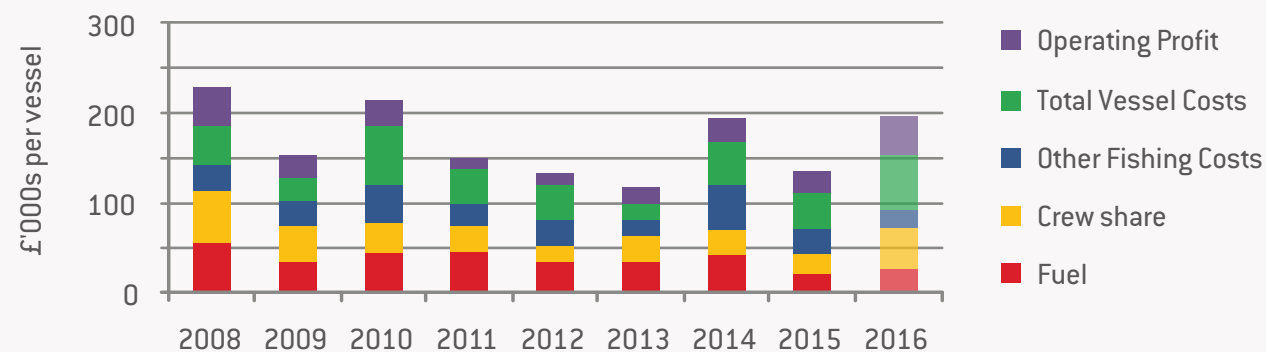
After 2009, the fishing income achieved per kWdas followed an upwards trend, with a peak in 2012. The peak in 2012 occurred despite the lowest average price per tonne in the observed period. This apparent anomaly between high income and low prices can be explained because on average vessels landed more tonnes per day at sea in 2012, indicating relatively high efficiency. Furthermore, by 2012 larger vessels, in terms of both length and power (kW), had left the fleet segment. The efficiency and size of vessels that remained in the segment in 2012, supported the observed peak in income per kWdas.

Compared to the period before 2012, operating profit per kWdas in 2012 was also relatively good. Since 2012, the operating profit per kWdas strengthened, helped by relatively stable costs per kWdas; improvements to average price; and because the vessels that entered the fleet in 2014 and 2015 are more efficient.

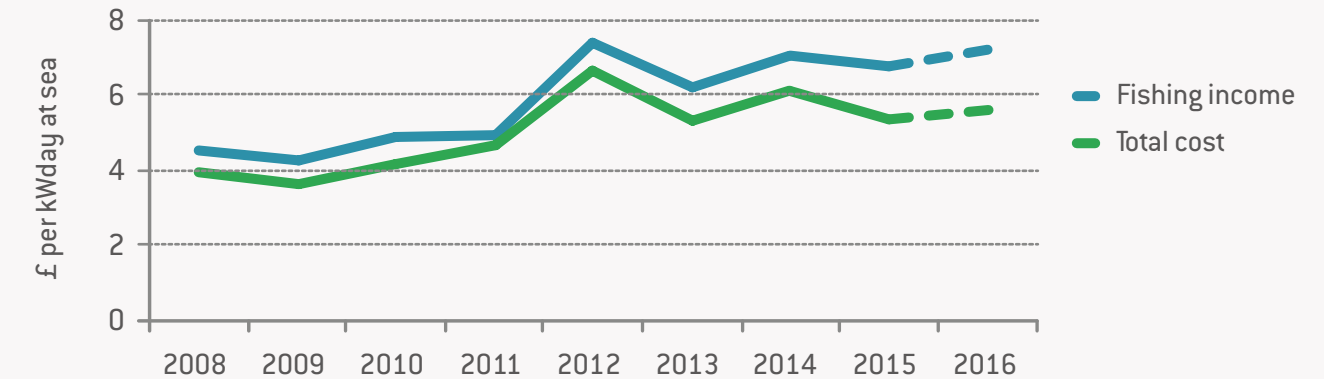
### Value added per segment

Despite the efficiencies noted in business performance by kWdas since 2012, the average GVA per vessel in the observed period was at its highest prior to 2011. This was because the larger vessels in the segment at that time had higher total income and more employees, and therefore paid more in crew share, a key contributor to GVA. However, GVA had been steadily rising since 2012 as the operating profit of the more efficient vessels that remain in the fleet improves.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		15	15	14	12	5	5	9	13	14
	Days at Sea (days)		131	108	121	107	104	114	131	100	124
	Landings (tonnes)		103.3	91.1	159.2	93.7	161.6	95.0	112.0	85.2	95.4
	Landings per day at sea (tonnes)		0.79	0.84	1.32	0.88	1.55	0.83	0.85	0.85	0.77
	Average price per tonne landed (£)		2,018	1,585	1,338	1,589	816	1,234	1,728	1,586	2,055
	Total Income (£'000)		226.0	148.2	213.5	149.2	132.0	117.2	193.8	135.0	196.0
	Total Operating Costs (£'000)		182.5	127.0	184.6	139.4	120.0	100.6	169.9	107.2	152.9
	Gross Value Added (£'000)		100.5	62.0	61.7	37.7	30.3	48.4	56.0	58.9	89.3
	Operating Profit (£'000)		43.5	21.2	28.9	9.7	12.1	16.6	23.9	27.9	43.1

AREA 7A NEPHROPS OVER 250KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016

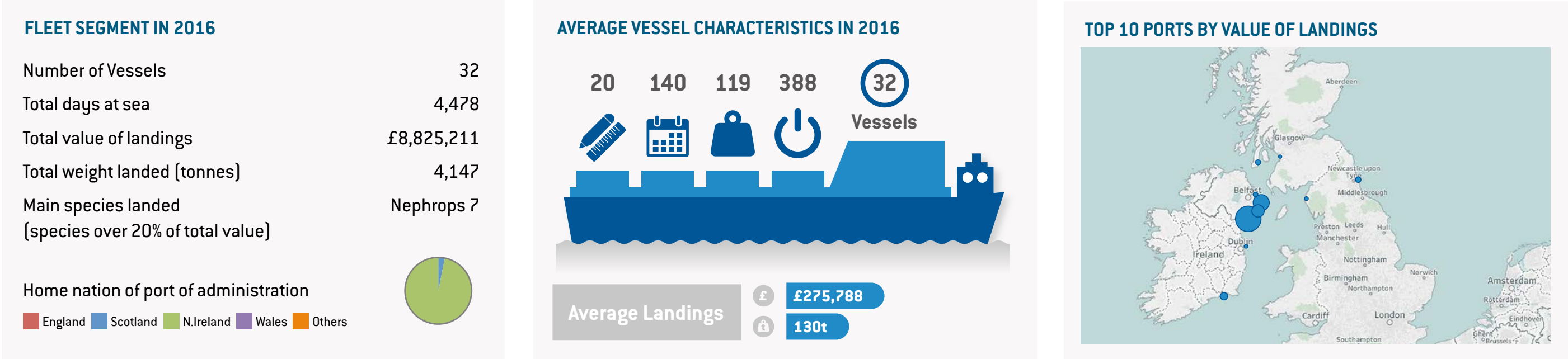


FIG 1. TOP SPECIES BY VALUE AS % OF TOTAL VALUE LANDED IN 2016

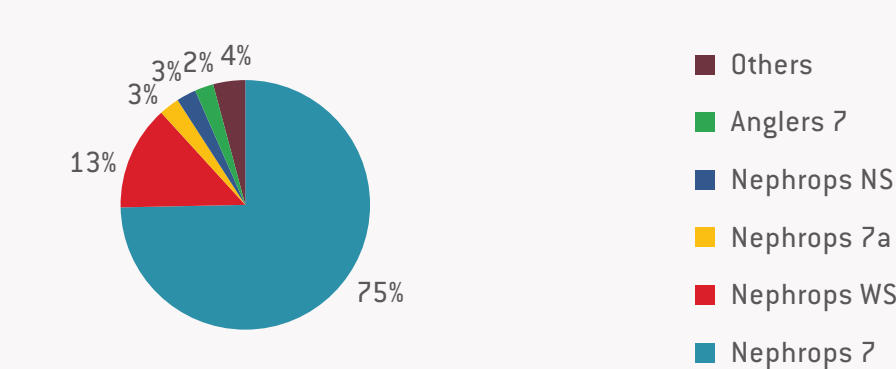


FIG.2 VALUE OF LANDINGS BY SPECIES AND MONTH IN 2016

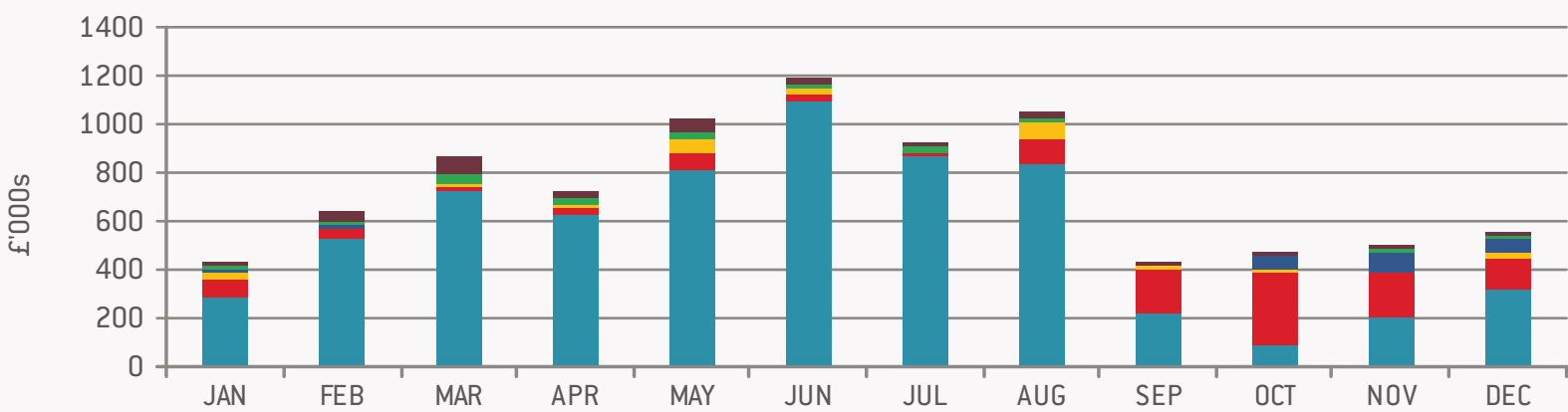


FIG.3 DAYS AT SEA BY GEAR TYPE AS % OF TOTAL DAYS AT SEA IN 2016

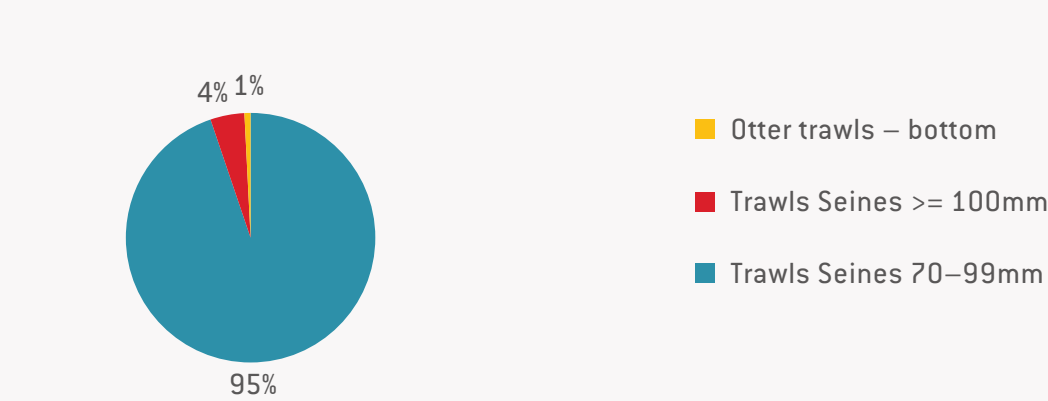
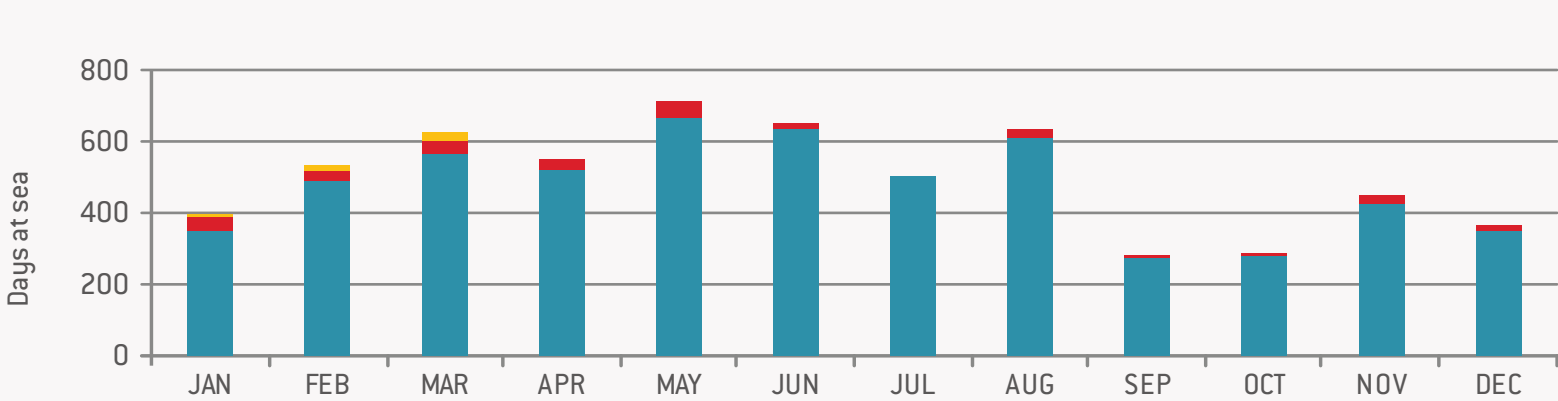


FIG.4 TOTAL DAYS AT SEA BY GEAR TYPE AND MONTH IN 2016





## AREA 7A NEPHROPS OVER 250KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 32 vessels in the segment, four fewer than in 2015. The number of vessels was as low as 34 in 2010 and as high as 42 in 2013.

### Landings and average price

In 2016, nephrops (Area 7) represented 75% of the value of landings, and West of Scotland nephrops represented a further 13%. Landings of nephrops from the West of Scotland largely occurred in the period September to December. The average price per tonne in 2016 was £2,128. The fleet segment achieved a relatively high average price per tonne landed, over £2,000 per tonne, in 2011, 2012, 2014 and 2016.

### Business performance by kilowatt day at sea (kWdas)

The vessels in the fleet segment have remained broadly similar, in terms of size and power, throughout the observed period and the average kW per vessel remained at around 350kW.

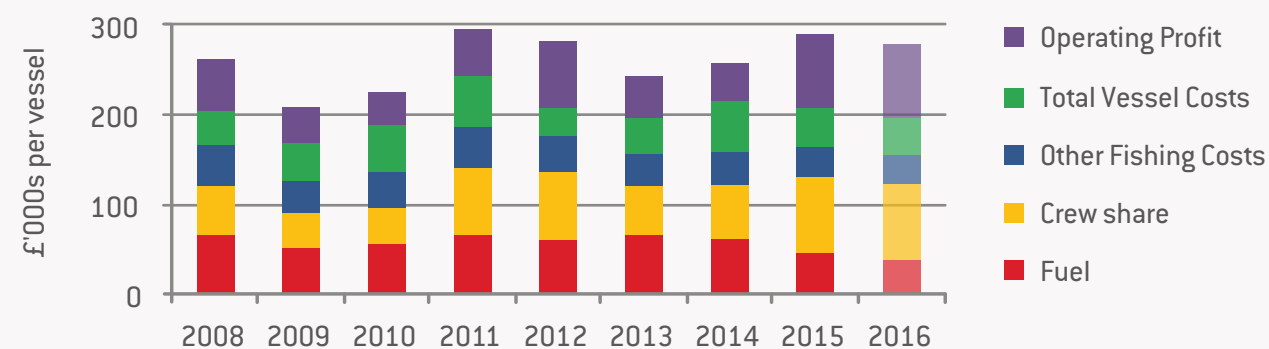
The income achieved per kWdas was highest in 2011 and 2012, with 2016 a close third. The higher fishing income in these years was supported by a heavier weight of landings per kWdas and high average prices. The benefit of landings weight and price can also be seen in the operating profit per kWdas in 2012 and 2016.

In 2015, operating profit per kWdas was also strong. The margin between costs and income per kWdas improved following a reduction in operating profit in 2013. The improvement in 2015 was largely due to maintaining relatively low costs alongside a continuous improvement in income per kWdas.

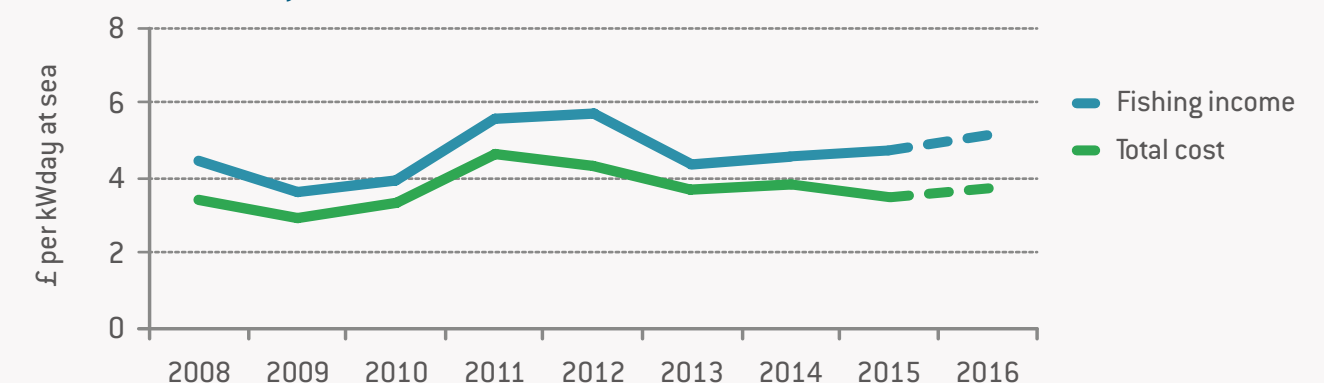
### Value added per segment

The average GVA per vessel in the observed period was at its highest in 2015 and 2016, which reflects the improvement in profit margins in these years. Success in these years was largely driven by a positive combination of average price, total weight of landings and a reduction in costs.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)

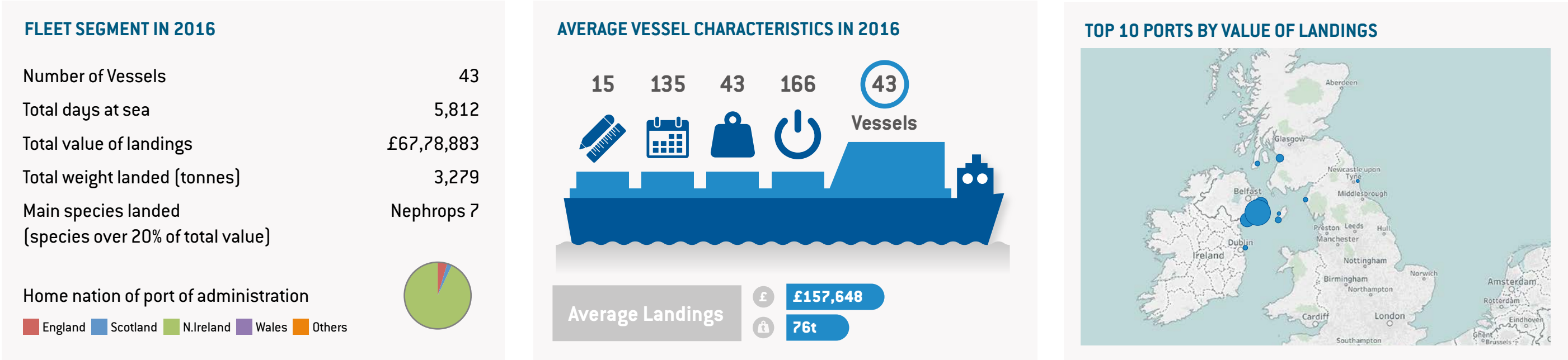


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		35	37	34	36	39	42	38	36	32
	Days at Sea (days)		172	171	169	149	142	143	151	158	140
	Landings (tonnes)		132.1	126.7	131.0	139.2	125.7	120.6	121.1	146.8	129.6
	Landings per day at sea (tonnes)		0.77	0.74	0.77	0.93	0.89	0.85	0.80	0.93	0.93
	Average price per tonne landed (£)		1,967	1,634	1,690	2,073	2,203	1,921	2,130	1,934	2,128
	Total Income (£'000)		259.8	207.0	223.5	294.6	280.5	241.0	258.0	286.5	278.4
	Total Operating Costs (£'000)		200.9	167.0	188.1	241.1	208.3	195.0	214.3	206.7	197.1
	Gross Value Added (£'000)		115.3	82.4	75.0	131.1	144.9	101.5	103.6	163.3	165.1
	Operating Profit (£'000)		58.8	40.1	35.4	53.5	72.2	46.0	43.7	79.8	81.3

AREA 7A NEPHROPS UNDER 250KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016





## AREA 7A NEPHROPS UNDER 250KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 41 vessels in the segment, which was the lowest number of vessels in the observed period. The number of vessels was as high as 62 in 2008.

### Landings and average price

In 2016, nephrops (Area 7) represented 68% of the value of landings, and West of Scotland nephrops represented 14%, scallops represented a further 11% of total value. Landings of nephrops from the West of Scotland largely occurred in the period September to December, and scallops in the period January to March and November to December. The average price per tonne in 2016 was £2,067. The fleet segment achieved a relatively high average price per tonne landed, over £2,000 per tonne, in 2011, 2012, 2014 and 2016.

### Business performance by kilowatt day at sea (kWdas)

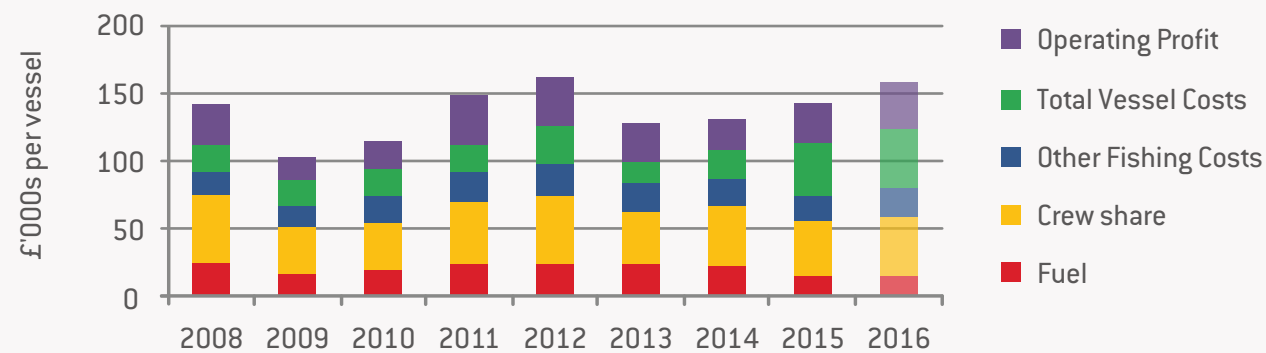
The vessels in the fleet segment have remained broadly similar, in terms of size and power, throughout the observed period and the average kW per vessel remained at around 170kW.

The income achieved per kWdas was highest in 2011, 2012 and 2016. The higher fishing income in these years was supported by a heavier weight of landings per kWdas and above average prices. The benefit of landings weight and price can also be seen in the operating profit per kWdas in 2011, 2012 and 2016. Fig. 7 also shows good operating profit margins between cost and income per kWdas in 2013 and 2014, despite reduced income per kWdas.

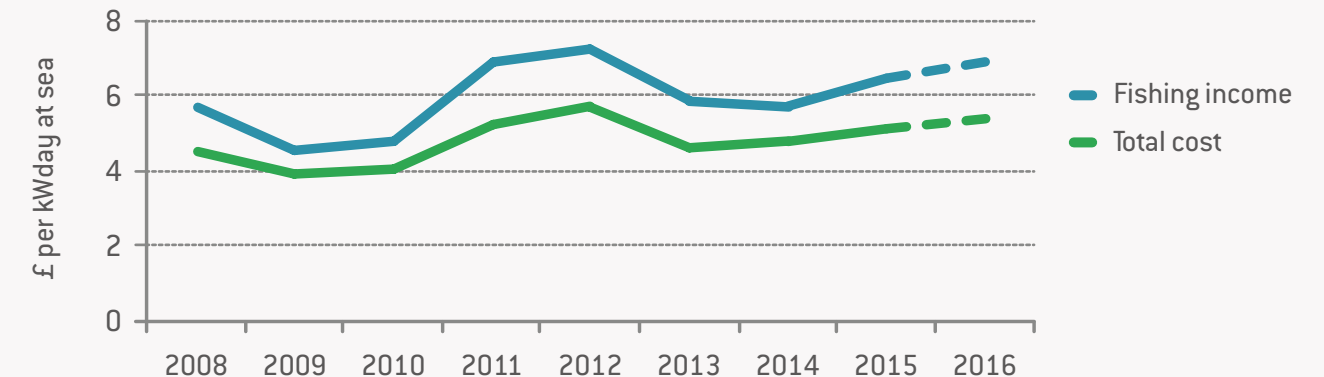
### Value added per segment

The average GVA per vessel in the observed period was highest in 2012.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		62	61	54	55	57	55	44	41	43
	Days at Sea (days)		142	129	138	130	130	126	130	127	135
	Landings (tonnes)		74.5	63.9	72.3	72.0	71.1	69.2	63.0	75.2	76.3
	Landings per day at sea (tonnes)		0.53	0.49	0.52	0.55	0.55	0.55	0.49	0.59	0.56
	Average price per tonne landed (£)		1,903	1,549	1,551	2,083	2,236	1,842	2,066	1,908	2,067
	Total Income (£'000)		141.9	102.7	113.6	150.0	163.0	128.6	130.8	143.4	157.6
	Total Operating Costs (£'000)		111.4	85.3	93.9	113.0	126.0	100.4	108.3	113.6	124.0
	Gross Value Added (£'000)		79.9	52.1	54.2	82.9	85.8	65.1	68.7	70.3	78.8
	Operating Profit (£'000)		30.5	17.4	19.7	37.0	37.1	28.2	22.6	29.8	33.7

AREA 7B-K TRAWLERS 10-24M: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016

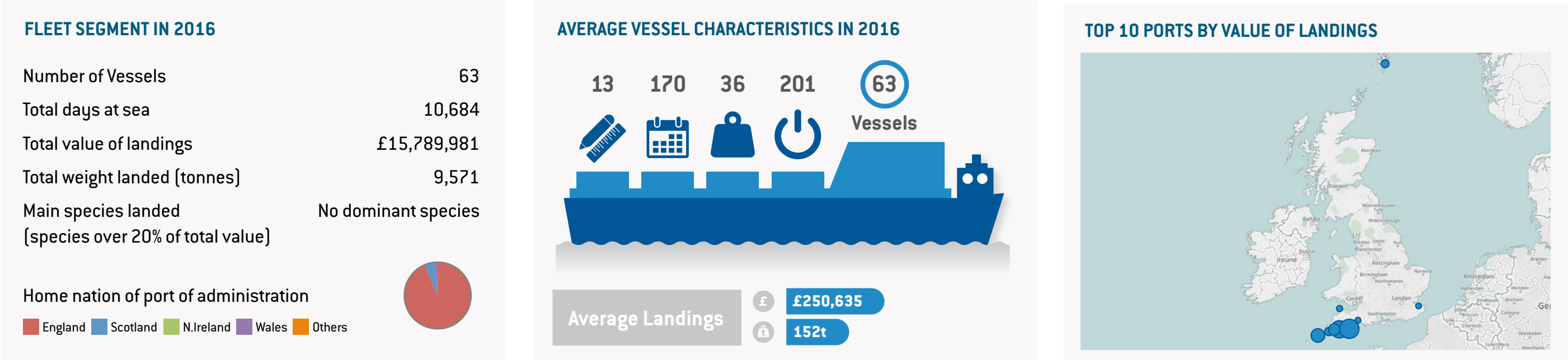


FIG 1. TOP SPECIES BY VALUE AS % OF TOTAL VALUE LANDED IN 2016

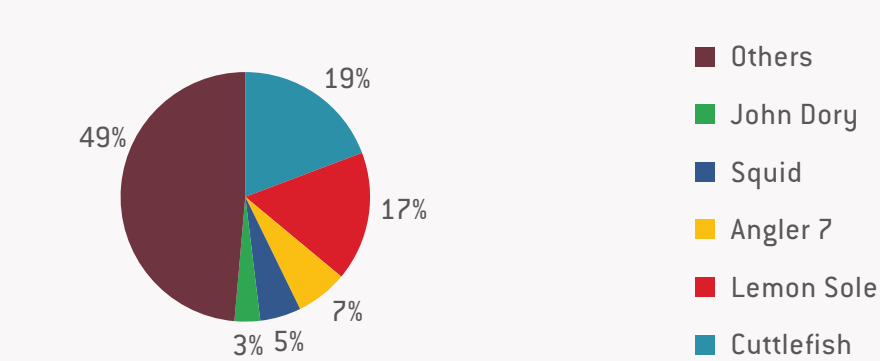


FIG.2 VALUE OF LANDINGS BY SPECIES AND MONTH IN 2016

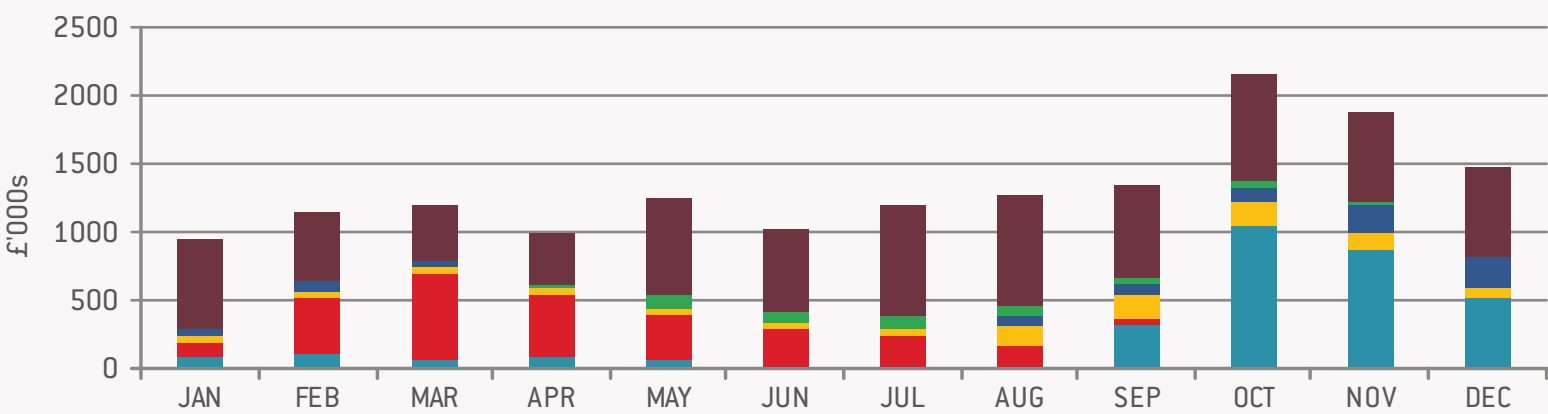


FIG.3 DAYS AT SEA BY GEAR TYPE AS % OF TOTAL DAYS AT SEA IN 2016

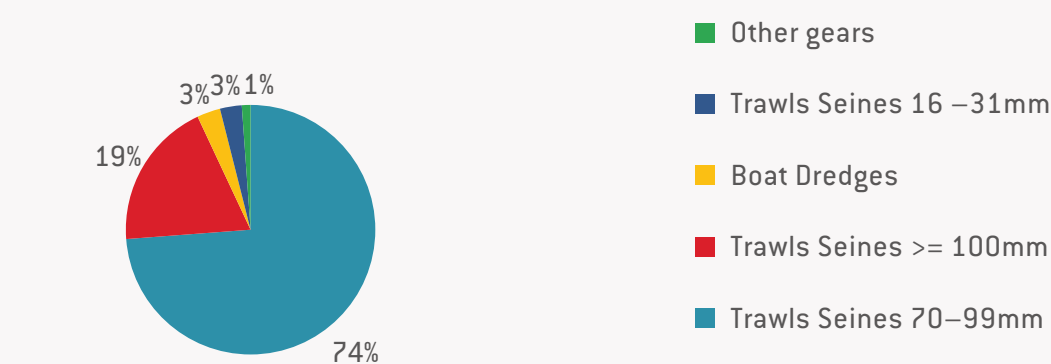
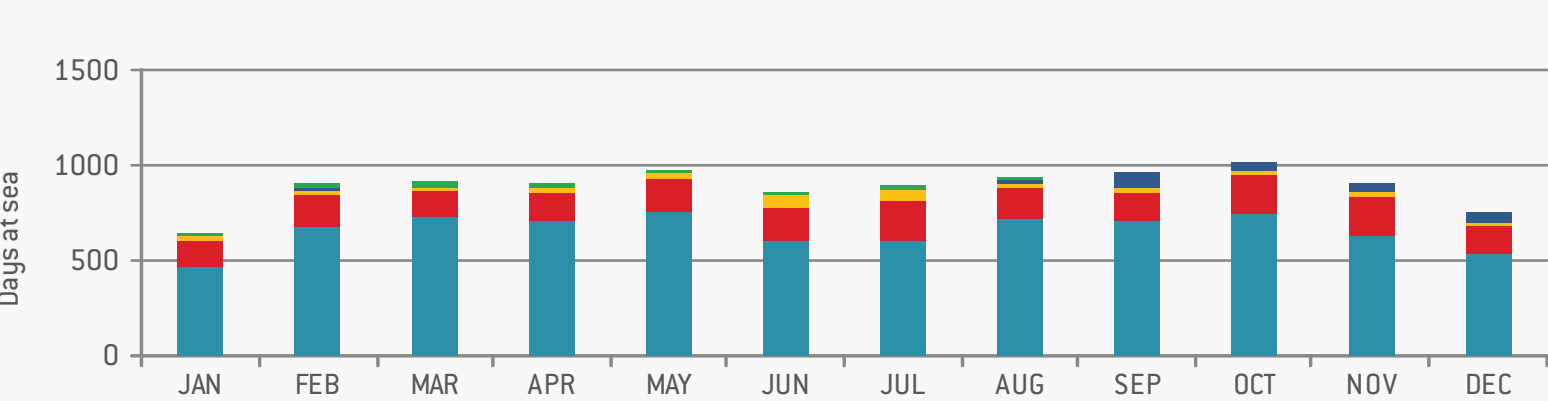


FIG.4 TOTAL DAYS AT SEA BY GEAR TYPE AND MONTH IN 2016



## AREA 7B-K TRAWLERS 10-24M: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 63 vessels in the segment. The number of vessels was as low as 60 in 2009 and as high as 68 in 2015.

### Landings and average price

The fleet segment has very diverse landings but two stocks represented 36% of the value of landings in 2016: cuttlefish and lemon sole. Both stocks are seasonal. In 2016, the average price per tonne was £1,650, which was the highest average price in the observed period. The lowest average price was £1,374 in 2010.

### Business performance by kilowatt day at sea (kWdas)

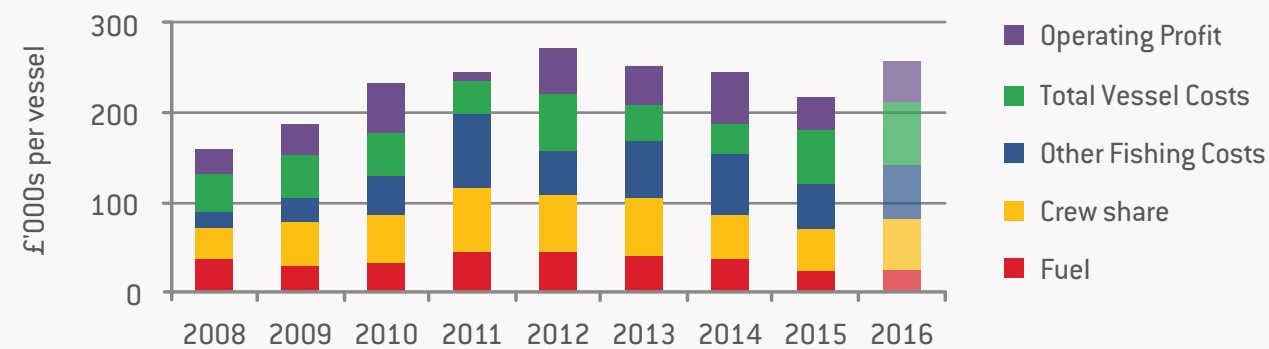
Following 2009, the fishing income achieved per kWdas followed an upwards trend, with a peak in 2012. The peak in 2012 occurred despite a relatively low price of £1,394. This apparent anomaly between high income and low prices can be explained because on average vessels landed more tonnes per day at sea in 2012, indicating relatively high efficiency.

Operating profit per kWdas was at its highest in 2014, supported by lower cost per kWdas.

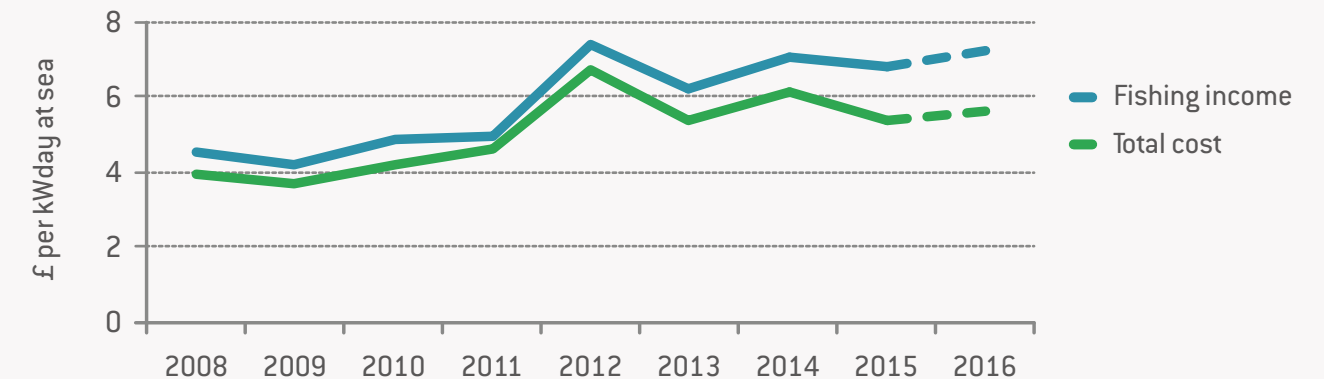
### Value added per segment

In 2016, the average GVA per vessel was £105k. This followed similar GVAs in 2010, 2013 and 2014. A higher GVA was recorded in 2012, when high landings weight and non-fishing income supported a strong operating profit margin; and crew share was high compared to other years, such as 2014, when a higher operating profit per kWdas was reported.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



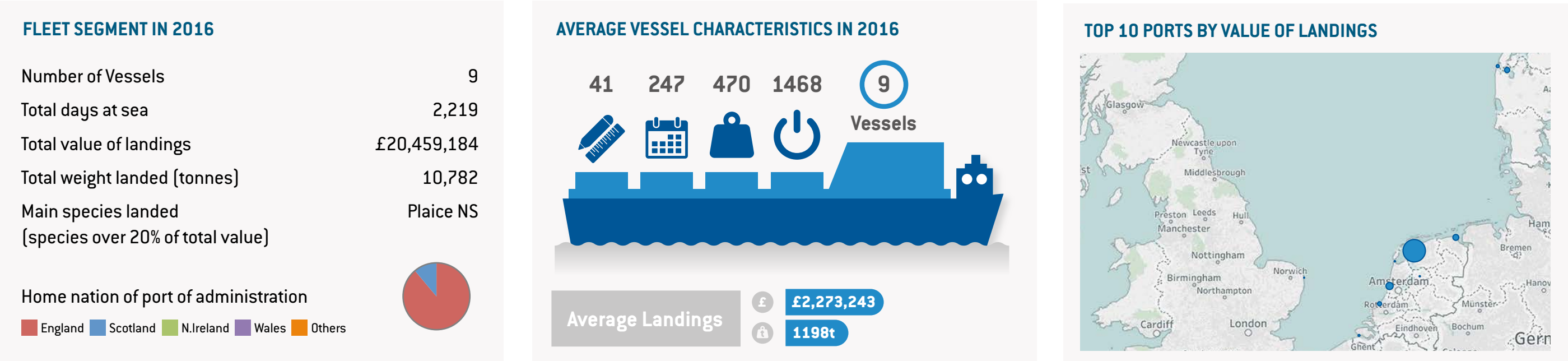
**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		67	60	64	63	61	61	65	68	63
	Days at Sea (days)		158	174	178	167	162	165	163	149	170
	Landings (tonnes)		115.7	122.8	163.1	150.6	185.7	164.1	152.9	128.5	151.9
	Landings per day at sea (tonnes)		0.73	0.71	0.92	0.90	1.15	0.99	0.94	0.86	0.90
	Average price per tonne landed (£)		1,375	1,506	1,374	1,620	1,394	1,498	1,584	1,645	1,650
	Total Income (£'000)		160.4	186.1	232.4	244.0	270.8	248.7	244.5	217.0	257.2
	Total Operating Costs (£'000)		132.2	154.2	178.8	233.7	219.5	207.0	186.8	179.0	210.3
	Gross Value Added (£'000)		61.6	80.2	105.3	83.9	117.0	102.3	106.5	86.2	105.0
	Operating Profit (£'000)		28.2	31.8	53.6	10.3	51.3	41.8	57.7	38.0	46.9



NORTH SEA BEAM TRAWL OVER 300KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016



## NORTH SEA BEAM TRAWL OVER 300KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 9 vessels in the segment. The number of vessels in the observed period was as low as 8 in 2012 and as high as 14 in 2008.

### Catch and average price

In 2016, plaice represented 63% of the value of landings, and sole represented a further 22%.

The average price per tonne in 2016 was £1,897. This is the highest achieved price since 2011. In the years 2008-11 the average price per tonne achieved by the segment was consistently higher than £1,900.

### Business performance by kilowatt day at sea (kWdas)

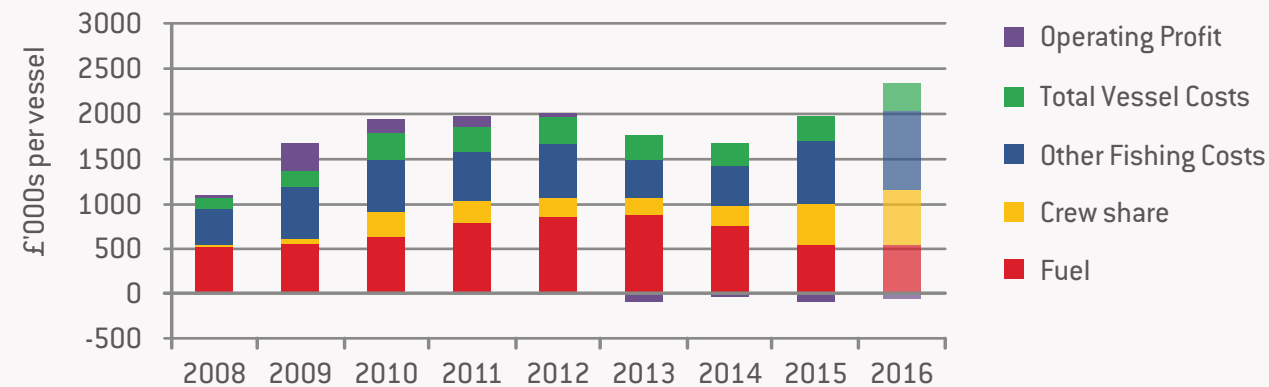
The average kW per vessel remained at around 1,400kW throughout the observed period.

Figure 7 shows that since 2012, there was very little between fishing income per kWdas and cost per kWdas. When income per kWdas rises, so does cost. This reduction in profit margin aligns with the reduction in average price. Following 2012, the operating profit per kWdas was zero or negative.

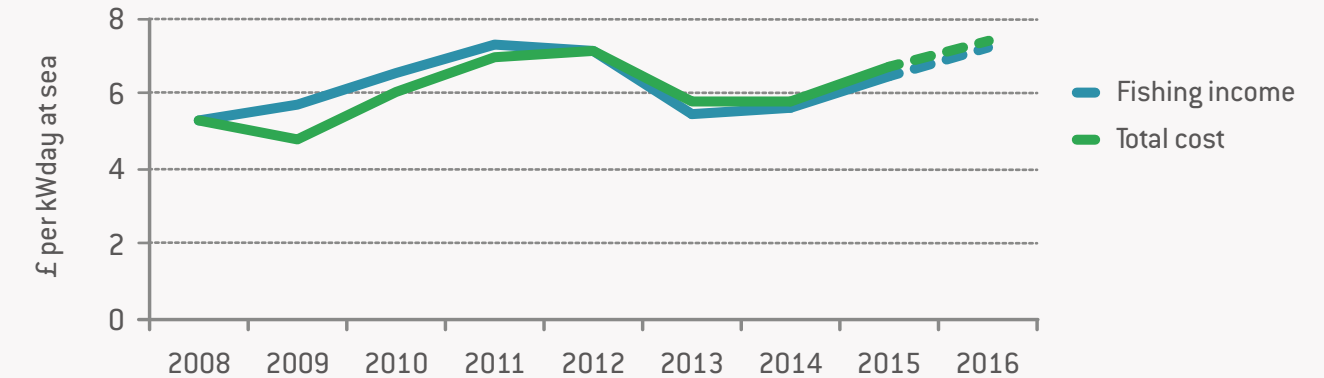
### Value added per segment

The average GVA per vessel in the observed period was at its highest in 2016, despite operating losses, this was because crew share nearly doubled between 2014 and 2015 and then increased again between 2015 and 2016. High GVA in this segment was supported by high crew share, in 2015 vessels in this segment supported an average of 12.8 FTEs.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)

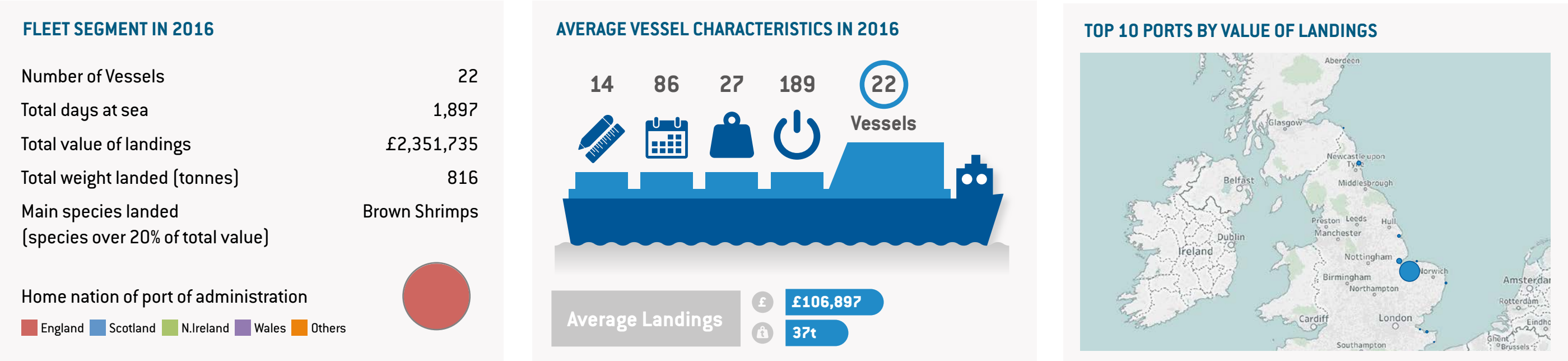


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		14	9	10	9	8	11	11	10	9
	Days at Sea (days)		163	230	236	209	217	236	224	230	247
	Landings (tonnes)		535.5	849.2	977.7	1,017.1	1,168.7	1,053.0	995.4	1,065.4	1,198.0
	Landings per day at sea (tonnes)		3.28	3.70	4.15	4.86	5.39	4.46	4.45	4.64	4.86
	Average price per tonne landed (£)		1,982	1,912	1,961	1,933	1,688	1,556	1,622	1,772	1,898
	Total Income (£'000)		1,095.1	1,675.4	1,922.5	1,972.1	1,978.9	1,660.4	1,621.0	1,888.0	2,273.9
	Total Operating Costs (£'000)		1,064.6	1,362.7	1,770.0	1,855.5	1,977.8	1,751.8	1,649.5	1,966.0	2,337.8
	Gross Value Added (£'000)		42.0	350.3	420.6	341.2	211.4	83.1	204.0	376.6	556.3
	Operating Profit (£'000)		30.5	312.7	152.5	116.5	1.1	-91.5	-28.5	-78.0	-64.0

NORTH SEA BEAM TRAWL UNDER 300KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016





## NORTH SEA BEAM TRAWL UNDER 300KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 22 vessels in the segment. This was a substantive increase from the eight vessels allocated to the fleet segment in 2015. The highest number of vessels in the observed period was 29 in 2008.

### Landings and average price

In 2016, brown shrimps represented 91% of the value of landings and these were largely caught in the last four months of the year. The average price per tonne in 2016 was £2,881. Which was the highest average price achieved since 2008. Average price per tonne was as low as £926 in 2014, which appears to have been an exceptional year for prices.

### Business performance by kilowatt day at sea (kWdas)

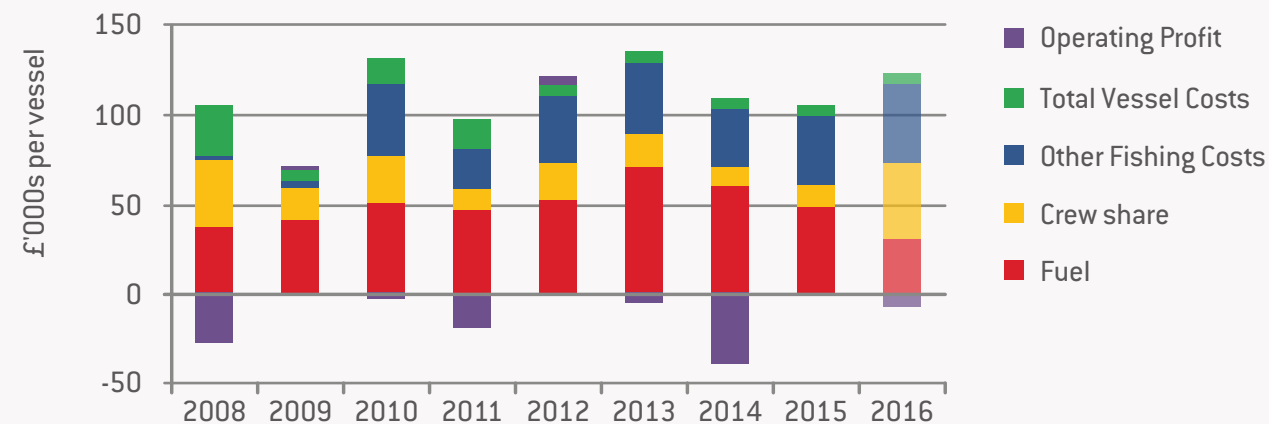
The average kW per vessel remained at around 190kW throughout the observed period.

Fig. 7 shows that there was not a notable trend in either fishing income or total cost per kWdas across the observed period. In the nine-year period since 2008, operating profit per kWdas was negative in seven of the nine years.

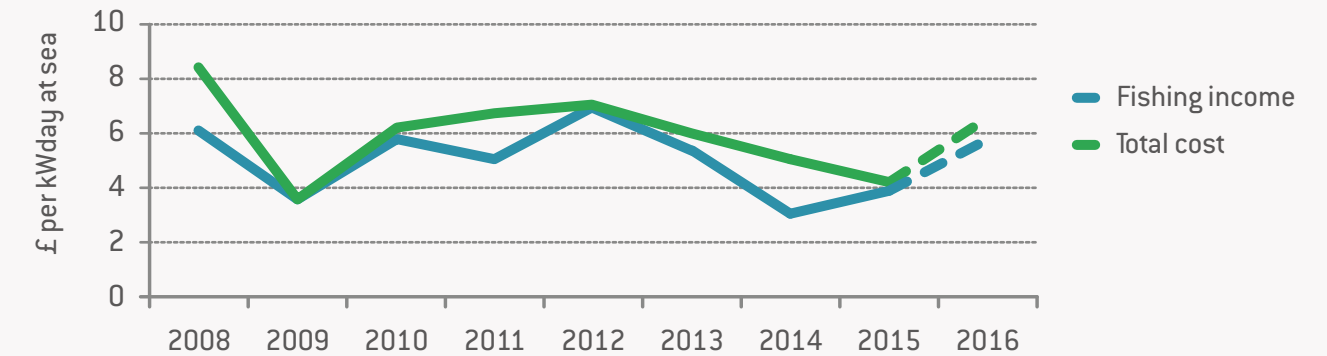
### Value added per segment

The average GVA per vessel in the observed period was at its highest in 2016, despite operating losses, because of the high crew share reported.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		29	27	27	13	25	18	20	8	22
	Days at Sea (days)		73	104	110	79	89	117	115	120	86
	Landings (tonnes)		20.8	38.3	57.9	46.6	65.1	61.2	70.7	82.6	37.1
	Landings per day at sea (tonnes)		0.28	0.37	0.53	0.59	0.74	0.52	0.61	0.69	0.43
	Average price per tonne landed (£)		3,646	1,777	2,100	1,575	1,771	1,954	926	1,173	2,881
	Total Income (£'000)		75.7	70.6	127.6	77.8	120.5	127.9	68.6	103.5	114.2
	Total Operating Costs (£'000)		104.1	67.4	131.3	97.1	116.9	134.7	109.2	104.5	121.7
	Gross Value Added (£'000)		9.5	21.3	20.8	-7.0	24.0	12.0	-30.7	10.1	34.4
	Operating Profit (£'000)		-28.4	3.2	-3.6	-19.3	3.6	-6.9	-40.6	-1.0	-7.5

NORTH SEA NEPHROPS TRAWL OVER 300KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016

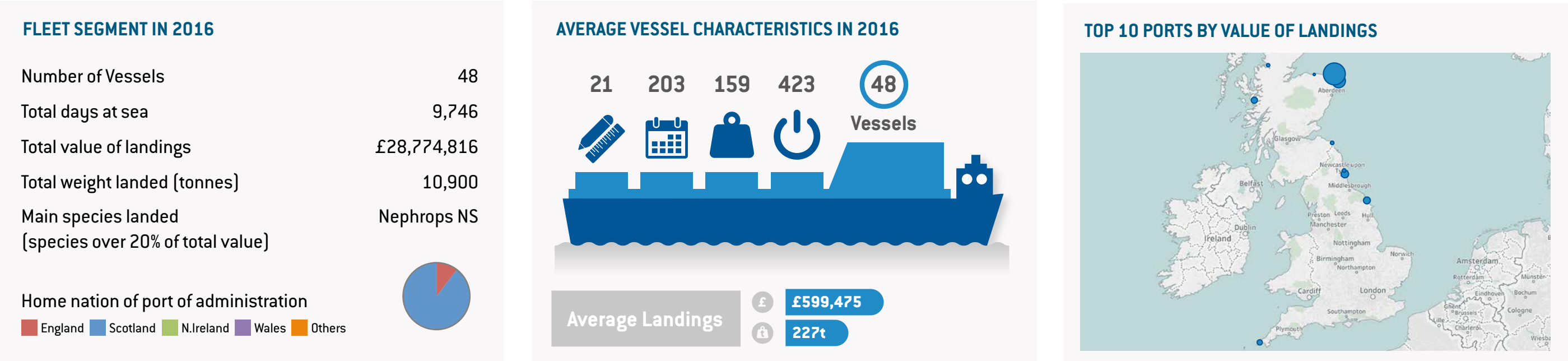


FIG 1. TOP SPECIES BY VALUE AS % OF TOTAL VALUE LANDED IN 2016

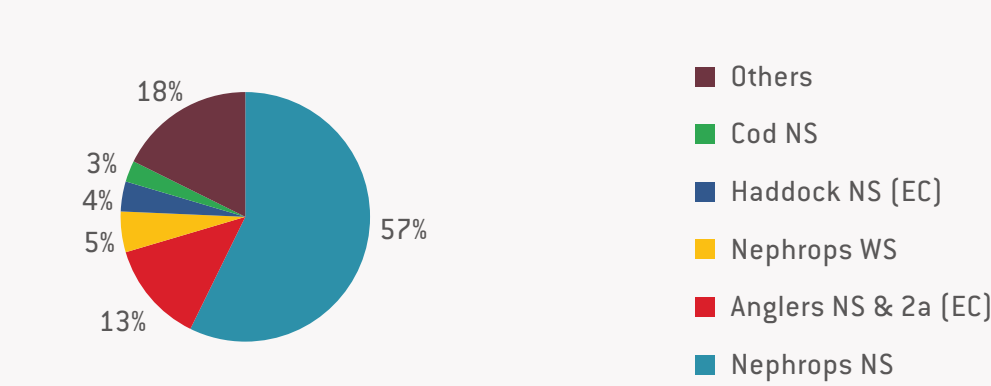


FIG.2 VALUE OF LANDINGS BY SPECIES AND MONTH IN 2016

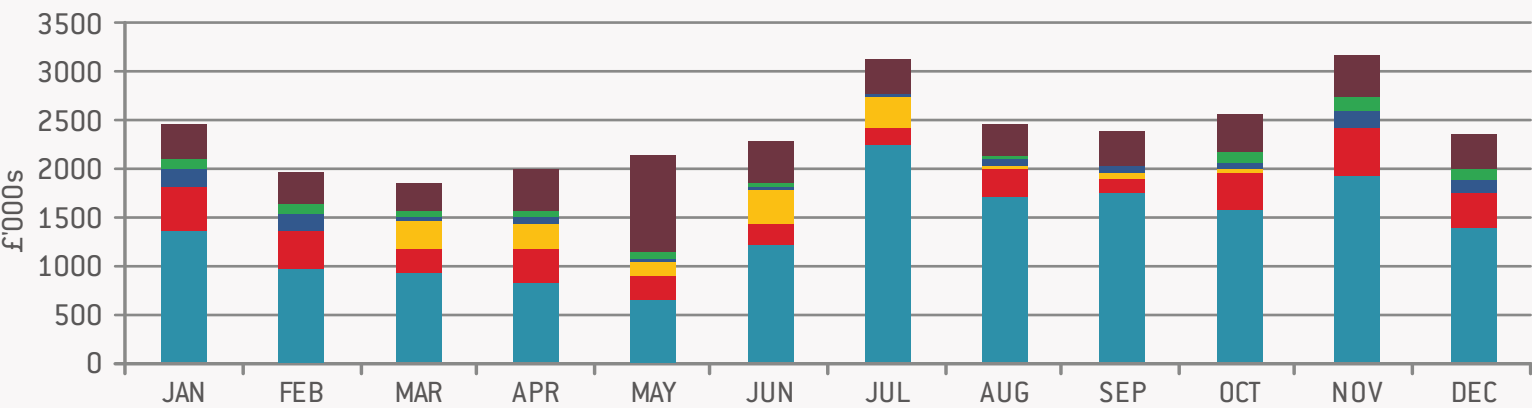


FIG.3 DAYS AT SEA BY GEAR TYPE AS % OF TOTAL DAYS AT SEA IN 2016

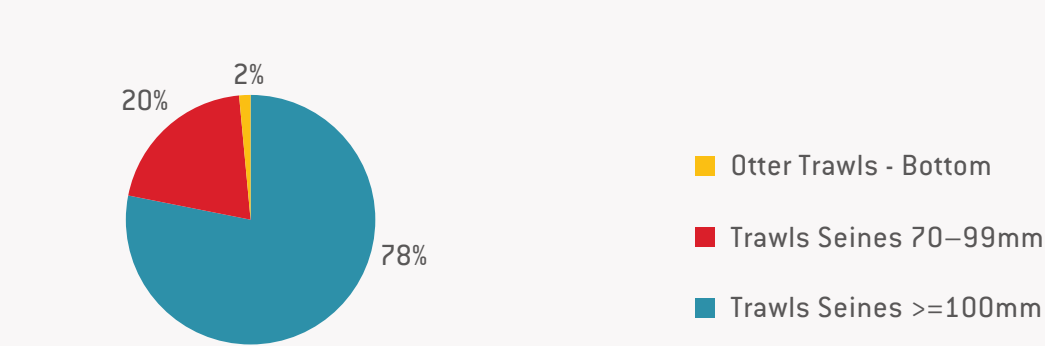
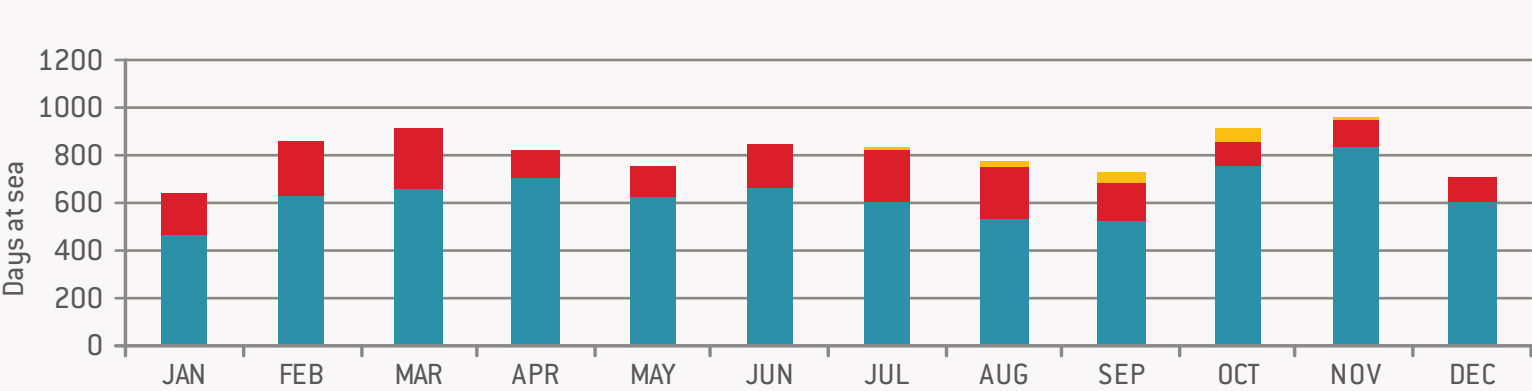


FIG.4 TOTAL DAYS AT SEA BY GEAR TYPE AND MONTH IN 2016



## NORTH SEA NEPHROPS TRAWL OVER 300KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 48 vessels in the segment. The number of vessels was as low as 43 in 2015 and as high as 97 in 2008.

### Landings and average price

This fleet segment has more diverse landings than nephrops vessels in Area 7. In 2016, nephrops represented 57% of the value of landings, and anglerfish represented a further 13%. The fleet also caught nephrops in the West of Scotland (5% of total value) mainly in the March-July period. The average price per tonne in 2016 was £2,640, which was the highest average price since 2011 (£3,104) and 2012 (£2,741). The lowest average prices occurred in 2009 and 2013.

### Business performance by kilowatt day at sea (kWdas)

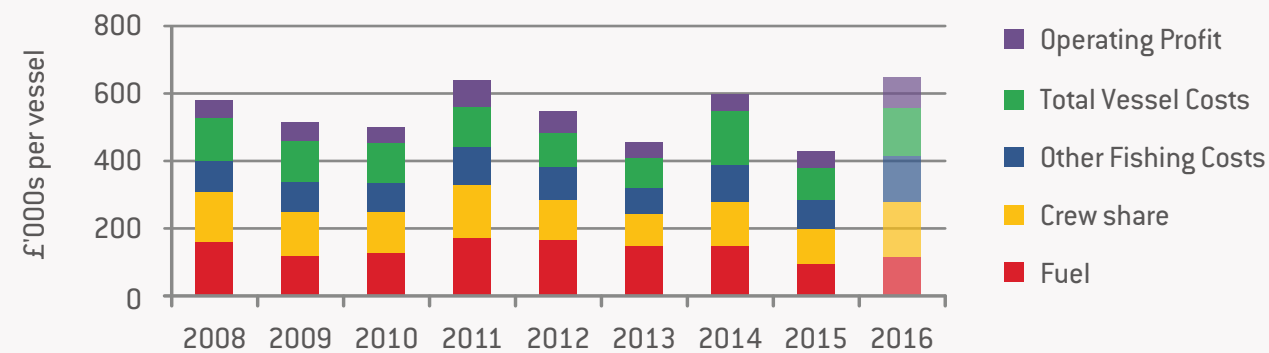
The fishing income achieved per kWdas was highest in 2011, with 2012 and 2016 a close second. This aligns with high average prices. The benefit of high average prices negated a reduction in landings weight per kWdas in 2011 and 2012.

In 2016, operating profit per kWdas was at its highest in the observed period, supported by a strong average price and a good weight of landings per kWdas.

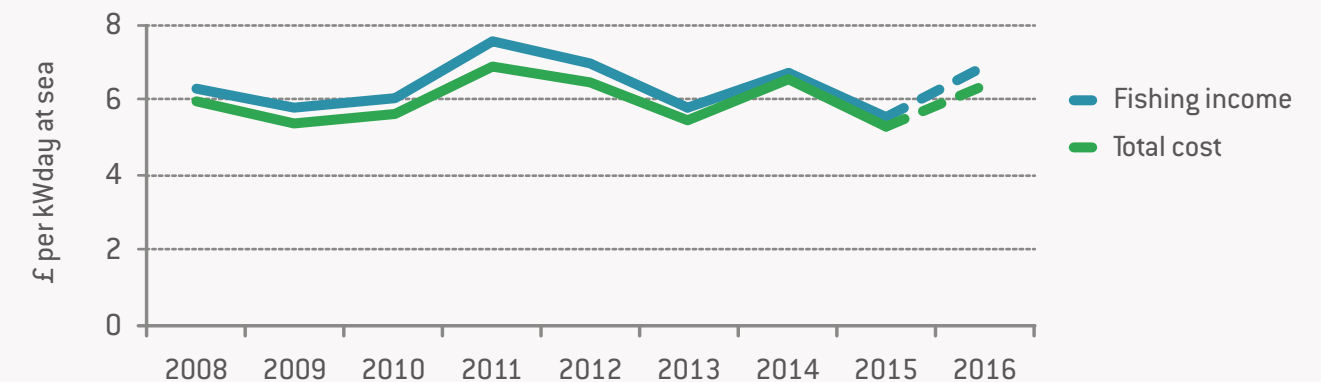
### Value added per segment

The average GVA per vessel in the observed period was at its highest in 2016, which reflects the improvement in profit margins in this year and that crew share increased by two-thirds between 2015 and 2016.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



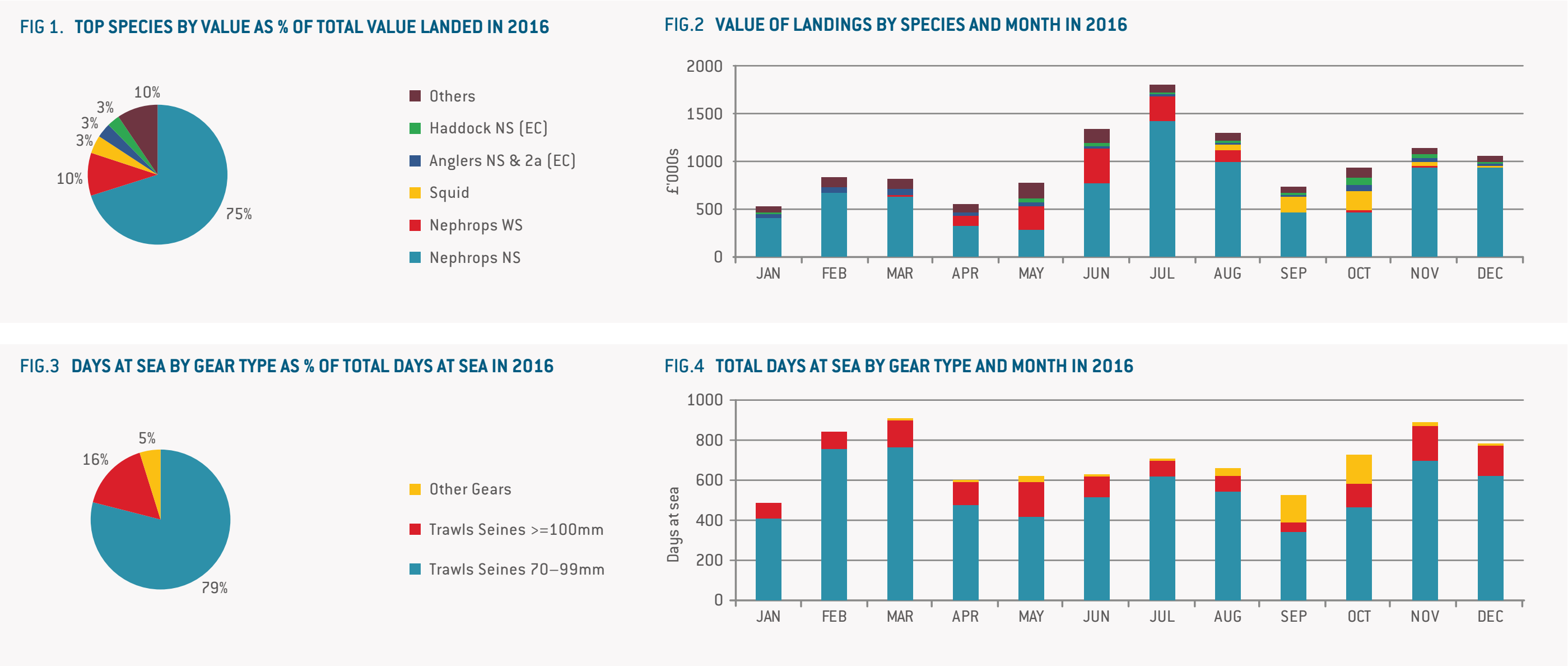
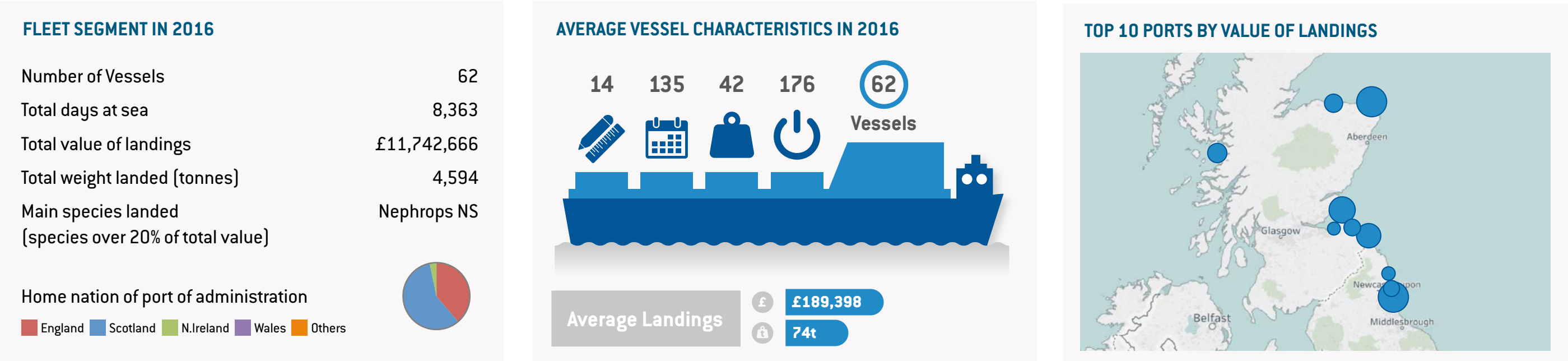
**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		97	83	95	83	73	55	59	43	48
	Days at Sea (days)		199	195	183	182	174	163	187	168	203
	Landings (tonnes)		225.7	240.7	208.0	197.3	187.5	195.5	224.4	173.0	227.1
	Landings per day at sea (tonnes)		1.13	1.23	1.14	1.08	1.08	1.20	1.20	1.03	1.12
	Average price per tonne landed (£)		2,464	2,027	2,322	3,104	2,741	2,183	2,487	2,294	2,640
	Total Income (£'000)		575.6	505.6	491.9	632.3	538.3	446.6	592.8	421.8	637.4
	Total Operating Costs (£'000)		523.3	448.4	448.0	557.7	478.1	403.2	540.8	375.3	550.6
	Gross Value Added (£'000)		191.8	182.3	161.4	227.7	180.3	134.9	173.3	147.8	254.2
	Operating Profit (£'000)		52.3	57.2	43.9	74.7	60.1	43.4	52.0	46.6	86.8



NORTH SEA NEPHROPS TRAWL UNDER 300KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016



## NORTH SEA NEPHROPS TRAWL UNDER 300KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 62 vessels in the segment. The number of vessels was as low as 57 in 2015 and as high as 83 in 2009.

### Landings and average price

In 2016, North Sea nephrops represented 70% of the value of landings, and nephrops in the West of Scotland represented a further 10%. The landings of this fleet segment were much less diverse than the North Sea nephrops fleet segment with engine power greater than 300kW. Although, like the over 300kW vessels, landings on the West of Scotland were focused in May to July. In 2016, the average price per tonne was £2,556. The average price for this segment was relatively strong following 2011, with an average across the six years of £2,600. However, like other nephrops segments, the average price was higher in 2011 and 2012. The lowest average price was £1,869 in 2009.

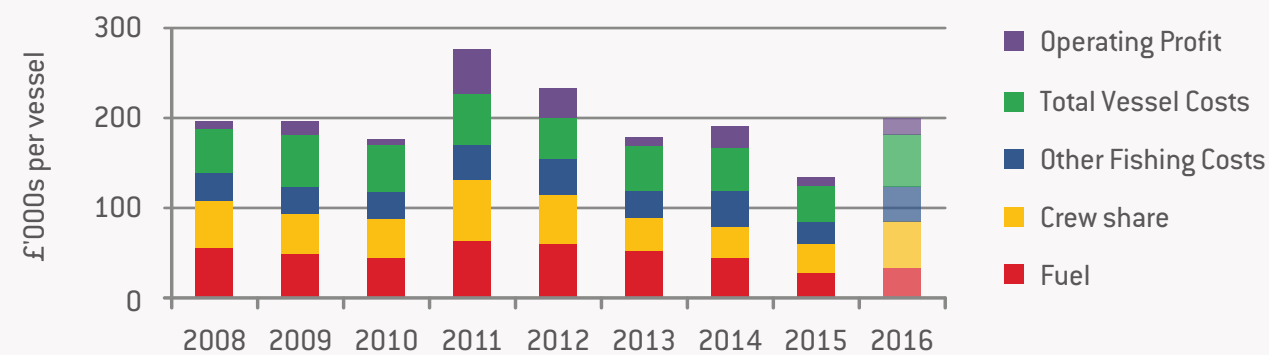
### Business performance by kilowatt day at sea (kWdas)

In the observed period, operating profit per kWdas was highest in the years that the fleet segment secured relatively high non-fishing income (2011 and 2012). In 2013, non-fishing income appears to have helped the segment to avoid operating losses. Non-fishing income is not included in Fig.7. Since 2013, the segment has earned less non-fishing income but has maintained an operating profit due to lower costs relative to fishing income.

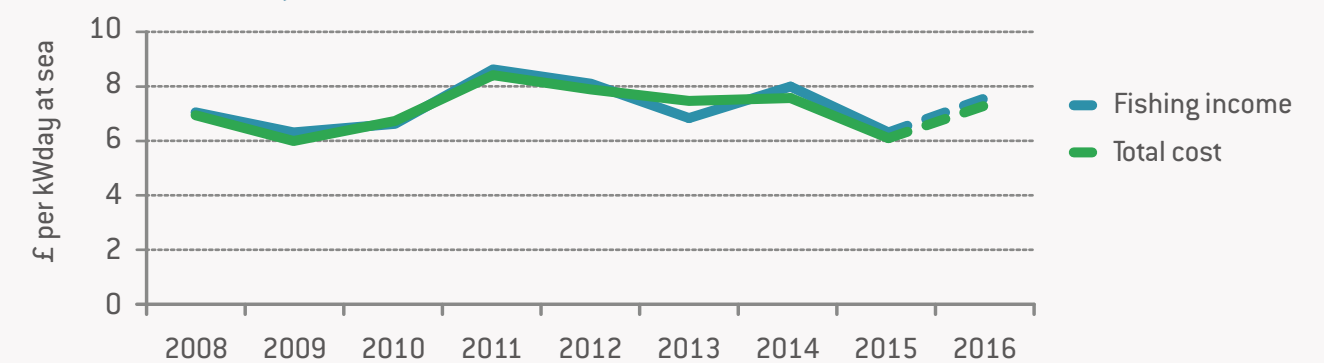
### Value added per segment

In 2016, the average GVA per vessel was £68,800. In the observed period, the average GVA per vessel was at its highest in 2011 and 2012, when high average prices were achieved.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
[All values adjusted for inflation]

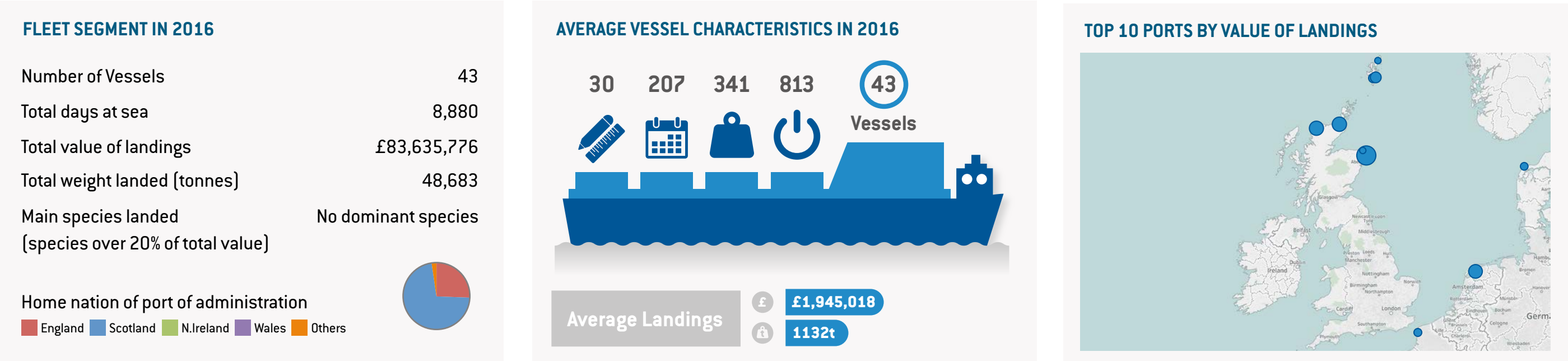


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
[All values adjusted for inflation]



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		82	83	74	64	66	58	70	57	62
	Days at Sea (days)		135	149	125	141	136	125	119	108	135
	Landings (tonnes)		84.4	100.7	77.0	80.8	72.5	63.3	67.5	47.3	74.1
	Landings per day at sea (tonnes)		0.63	0.68	0.62	0.57	0.53	0.51	0.57	0.44	0.55
	Average price per tonne landed (£)		2,257	1,869	2,161	2,863	2,791	2,413	2,604	2,635	2,556
	Total Income (£'000)		197.0	196.4	174.7	273.2	231.4	178.8	188.4	131.3	199.4
	Total Operating Costs (£'000)		187.8	180.3	168.2	226.7	198.5	167.2	166.5	121.9	179.8
	Gross Value Added (£'000)		61.5	62.3	49.4	113.9	87.5	51.7	55.8	39.3	68.8
	Operating Profit (£'000)		9.3	16.1	6.5	46.5	32.9	11.6	21.9	9.4	19.5

NSWOS DEMERSAL TRAWL OVER 24M: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016





## NSWOS DEMERSAL TRAWL OVER 24M: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 43 vessels in the segment. The number of vessels was as low as 35 in 2014 and as high as 48 in 2013.

### Landings and average price

In 2016, the segment had mixed whitefish landings and five North Sea stocks represented 51% of the value of landings: cod, plaice, haddock, anglerfish and saithe. The value of plaice and haddock was higher in June to October. In 2016, the average price per tonne was £1,718, which was the highest average price since 2011 (£1,848). Average price was lowest in the observed period in 2013 (£1,498).

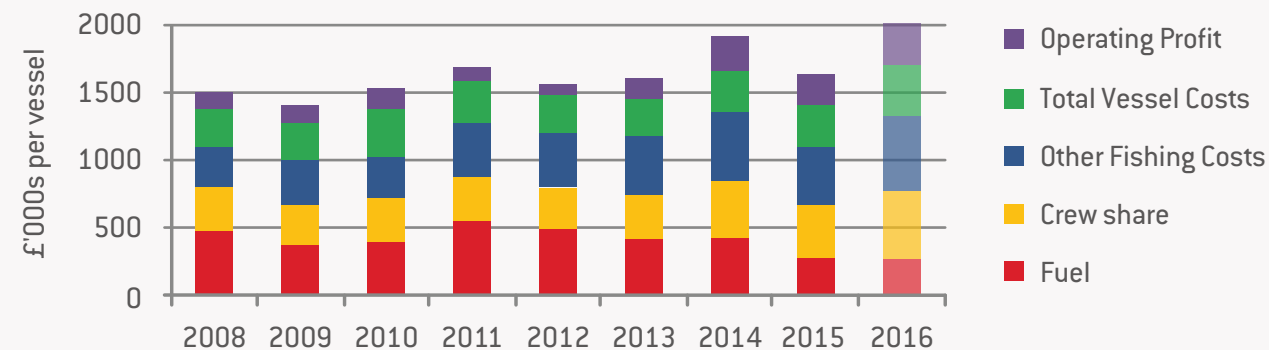
### Business performance by kilowatt day at sea (kWdas)

Following 2009, the fishing income achieved per kWdas followed a broadly upwards trend. Although a peak in 2013 was followed by modest reductions in 2014 and 2015. The peak in 2013 occurred because of a high landings weight per kWdas. In 2016, income per kWdas and operating profit per kWdas were at their highest in the observed period. This was due to a combination of strong prices and a relatively high weight of landings per kWdas.

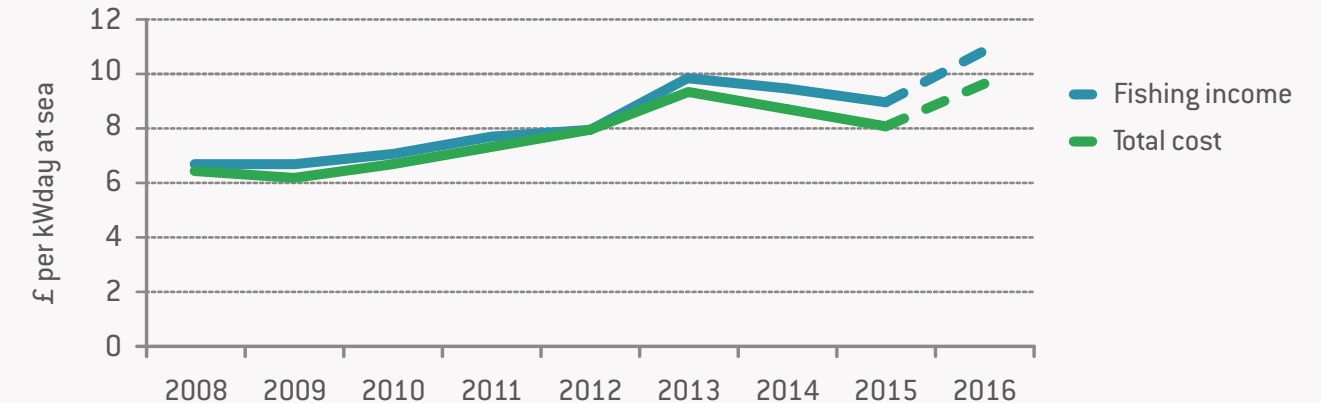
### Value added per segment

Following on from strong income and profit margins in 2016, the average GVA per vessel in 2016 was also at its highest (£812k) in the observed period. This was supported by low fuel costs, high crew share and relatively strong operating profits.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
[All values adjusted for inflation]



**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
[All values adjusted for inflation]



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		44	47	47	42	44	48	35	42	43
	Days at Sea (days)		227	228	221	218	200	195	216	207	207
	Landings (tonnes)		867.3	854.7	858.3	898.3	920.7	1,031.4	1,122.9	1,019.8	1,132.2
	Landings per day at sea (tonnes)		3.82	3.75	3.88	4.12	4.60	5.28	5.19	4.92	5.48
	Average price per tonne landed (£)		1,649	1,622	1,722	1,848	1,610	1,498	1,598	1,548	1,718
	Total Income (£'000)		1,507.9	1,399.3	1,525.6	1,689.4	1,560.4	1,592.8	1,896.3	1,628.2	2,005.5
	Total Operating Costs (£'000)		1,382.6	1,281.5	1,377.7	1,579.0	1,478.3	1,464.7	1,657.8	1,415.3	1,699.7
	Gross Value Added (£'000)		453.7	436.3	481.7	451.4	383.4	462.9	654.3	595.4	812.4
	Operating Profit (£'000)		125.3	117.8	147.9	110.4	82.1	128.1	238.5	212.8	305.9

NSWOS DEMERSAL PAIR TRAWL AND SEINES: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016

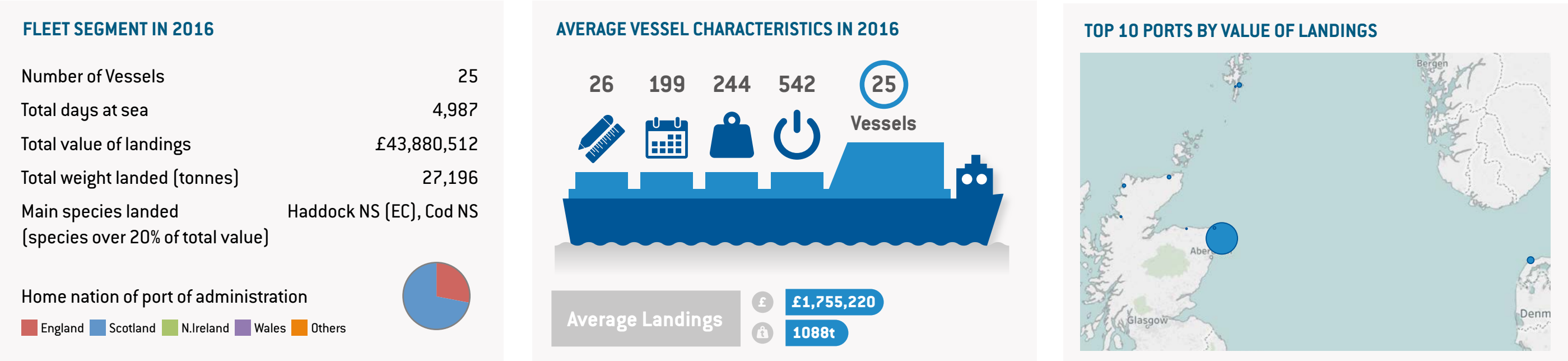


FIG 1. TOP SPECIES BY VALUE AS % OF TOTAL VALUE LANDED IN 2016

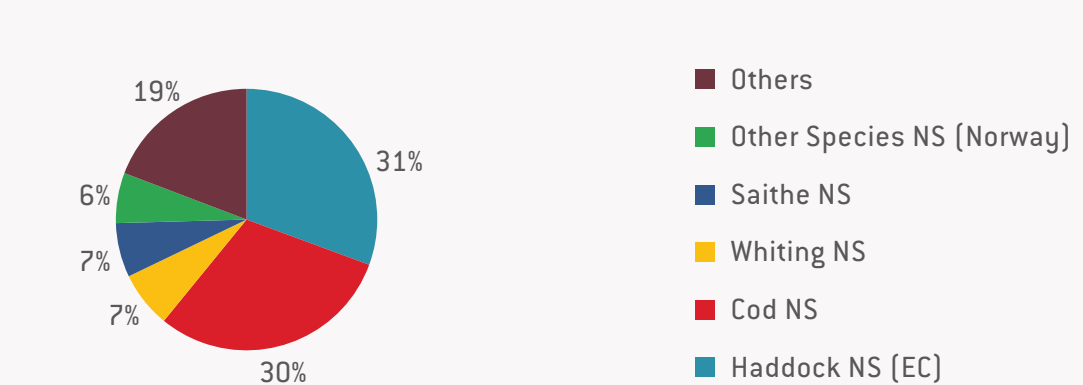


FIG.2 VALUE OF LANDINGS BY SPECIES AND MONTH IN 2016

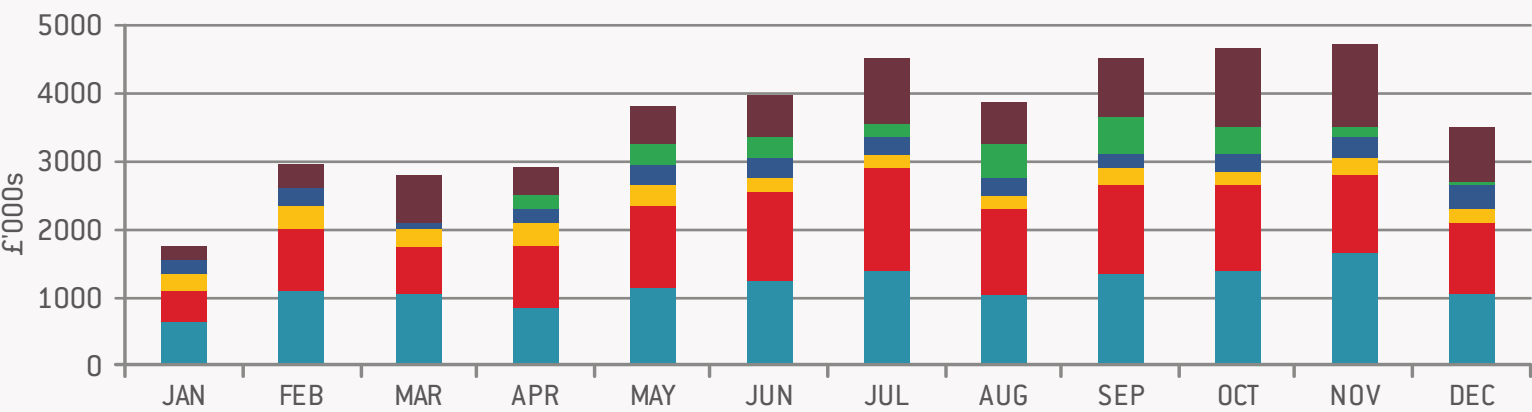


FIG.3 DAYS AT SEA BY GEAR TYPE AS % OF TOTAL DAYS AT SEA IN 2016

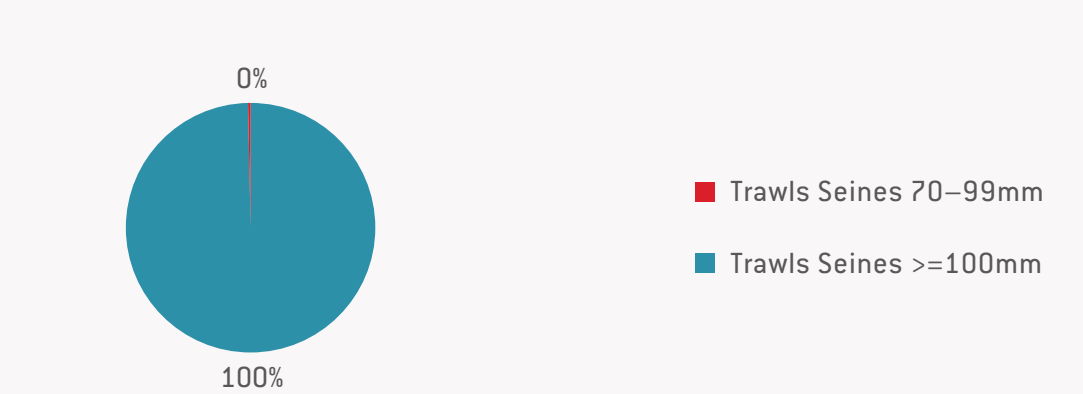
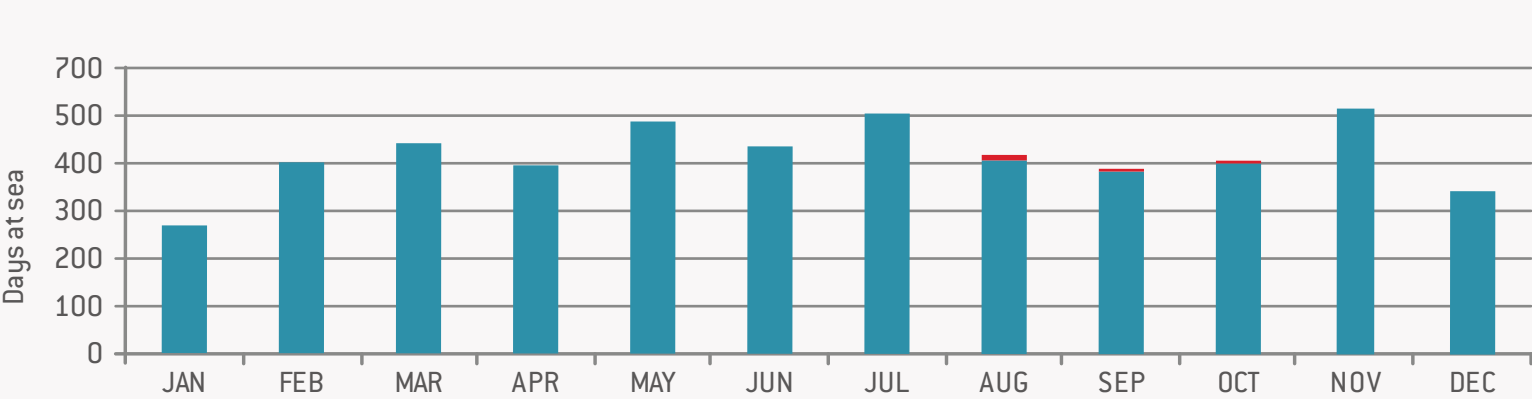


FIG.4 TOTAL DAYS AT SEA BY GEAR TYPE AND MONTH IN 2016



## NSWOS DEMERSAL PAIR TRAWL AND SEINES: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 25 vessels in the segment. The number of vessels was as low as 20 in 2013 and as high as 41 in 2008-09.

### Landings and average price

In 2016, the fleet segment had mixed whitefish landings and four North Sea stocks represented 75% of the value of landings: cod, haddock, whiting and saithe.

In 2016, the average price per tonne of landings was £1,614, which was the highest average price since 2011 (£1,619). Average price was lowest in the observed period in 2009 (£1,309).

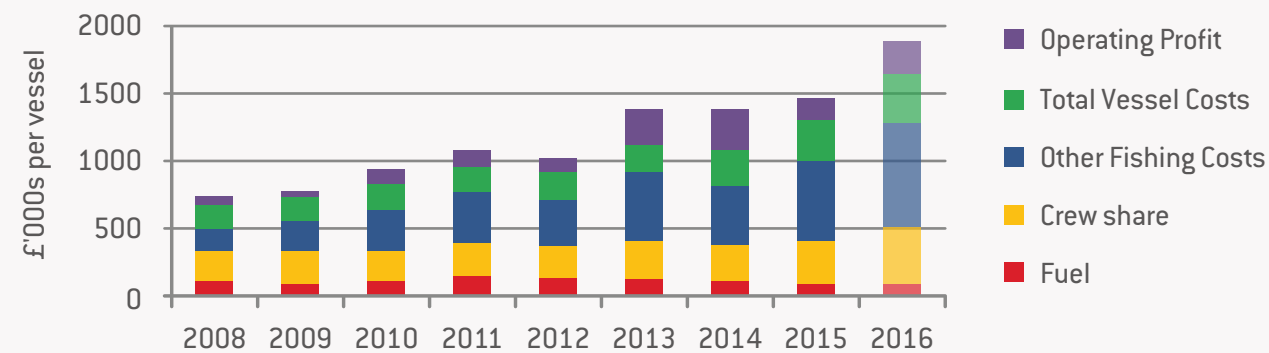
### Business performance by kilowatt day at sea (kWdas)

Fig. 7 does not include non-fishing income which, following 2013, was important in supporting operating profits in this segment. Apart from 2014, Fig. 7 shows that fishing income and costs per kWdas are closely matched, with a profit margin always maintained. In 2014, the improved profit margin between fishing income and total costs per kWdas was supported by strong prices and a high weight of landings per kWdas. Fig 6. shows that profit margins between total income and costs have improved since 2013, when non-fishing income increased substantially.

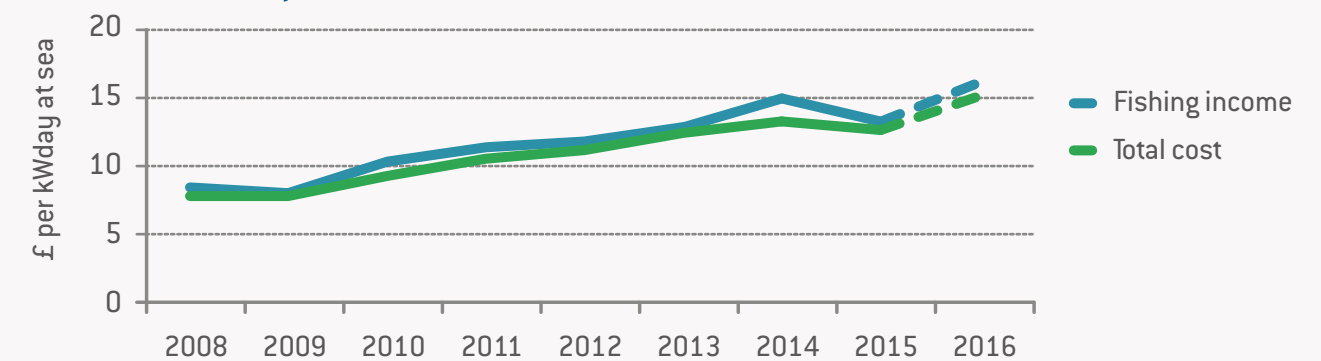
### Value added per segment

In 2016, the average GVA per vessel was £641k, the highest in the observed period. This was supported by strong operating profits per vessel (£232k) and crew share per vessel (£410k). GVA was as low as £270k in 2008.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)

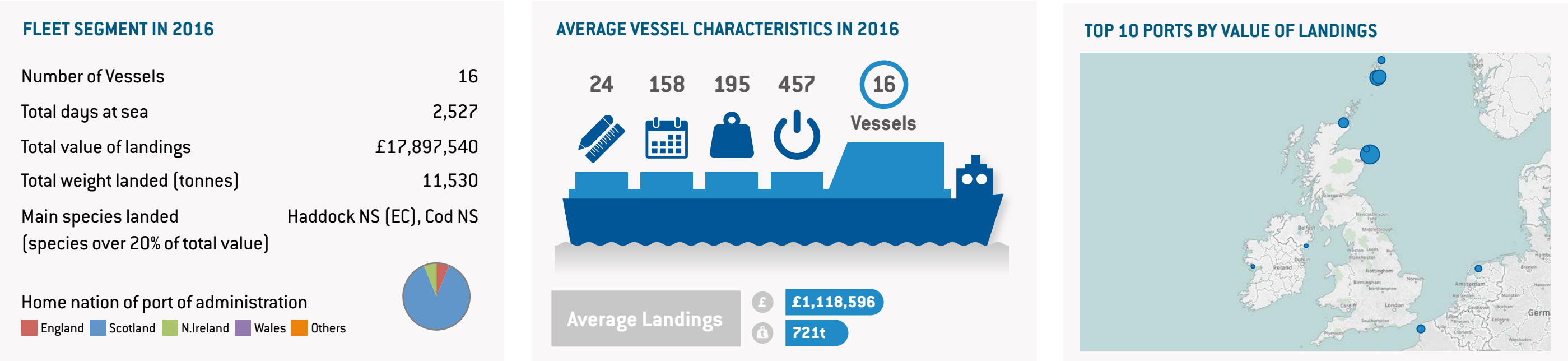


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		41	41	38	32	30	20	30	28	25
	Days at Sea (days)		173	190	177	171	151	162	151	191	199
	Landings (tonnes)		500.8	592.0	623.1	645.6	687.2	851.2	805.2	929.7	1,087.8
	Landings per day at sea (tonnes)		2.89	3.12	3.52	3.78	4.56	5.27	5.35	4.87	5.45
	Average price per tonne landed (£)		1,452	1,309	1,509	1,619	1,422	1,378	1,513	1,472	1,614
	Total Income (£'000)		736.7	788.9	949.3	1,075.8	1,027.5	1,393.5	1,381.5	1,469.5	1,884.7
	Total Operating Costs (£'000)		678.3	741.4	845.4	966.1	923.2	1,131.3	1,091.4	1,301.2	1,652.6
	Gross Value Added (£'000)		269.8	273.5	338.2	352.6	351.0	537.4	559.6	477.0	641.9
	Operating Profit (£'000)		58.5	47.5	103.9	109.7	104.3	262.2	290.1	168.3	232.1

NSWOS DEMERSAL SEINERS: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016





## NSWOS DEMERSAL SEINERS: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 16 vessels in the segment. The number of vessels was as low as 13 in 2012 and as high as 26 in 2008.

### Landings and average price

In 2016, the fleet segment had mixed whitefish landings but two North Sea stocks represented almost half (48%) of the value of landings: cod and haddock.

In 2016, the average price per tonne of landings was £1,552, which was the highest average price since 2011 (£1,571). Average price was lowest in the observed period in 2009 (£1,244).

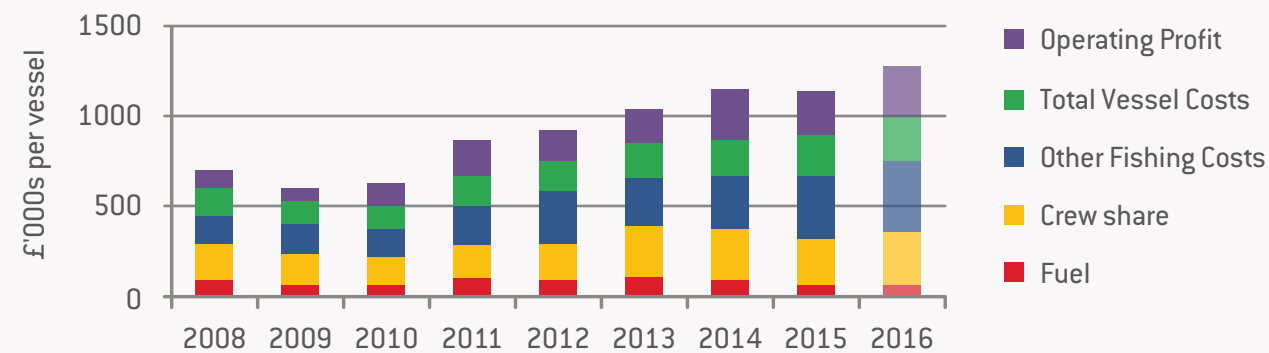
### Business performance by kilowatt day at sea (kWdas)

Fig. 7 does not include non-fishing income, which has been an important income stream for the fleet segment since 2012 (£166k in 2016). However, Fig. 7 shows that fishing income has always exceeded costs per kWdas, and therefore, even without non-fishing income, the fleet segment would have maintained a profit margin. In 2014, the improved profit margin between fishing income and total costs per kWdas shown in Fig. 7 was supported by strong prices and a high weight of landings per kWdas. The profit margin between fishing income and total costs was also relatively good in 2011 but, in 2012, a fall in average price and an increase in fishing costs narrowed the margin between fishing income and total costs. However, as can be seen in Fig. 6, a relatively good operating profit was maintained in 2012 because of a substantial increase in non-fishing income.

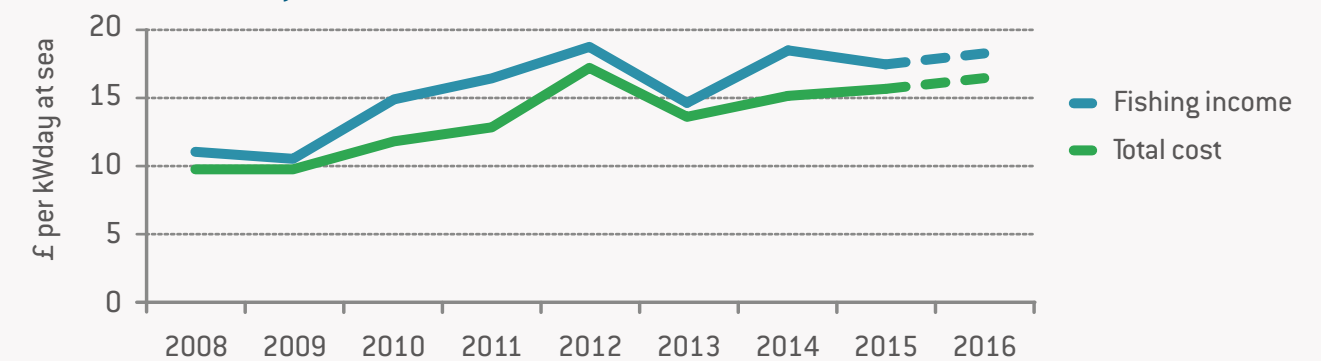
### Value added per segment

In 2016, the average GVA per vessel was £573k, the highest in the observed period. This was supported by the best average operating profits per vessel (£282k) and crew share per vessel (£291k) in the observed period. GVA was as low as £233k in 2009.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)

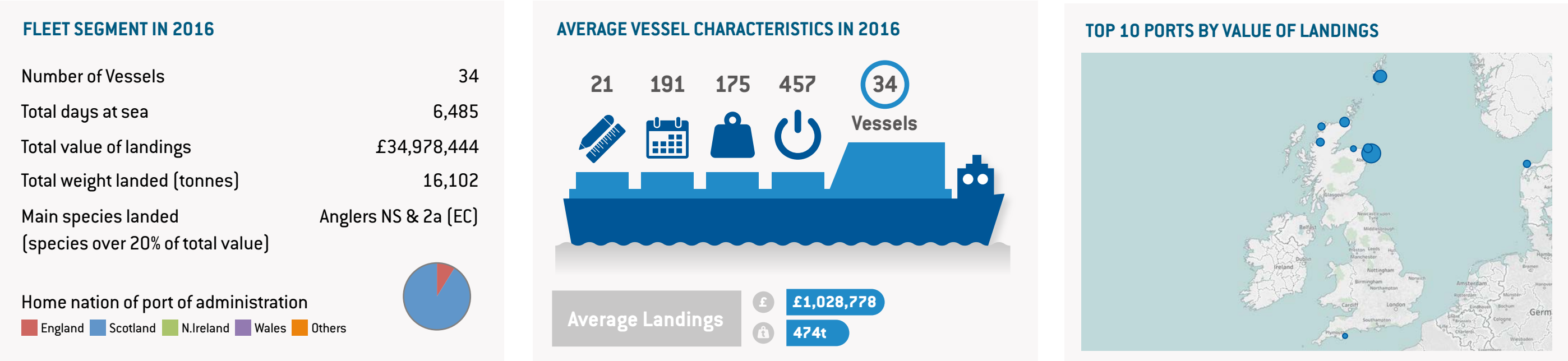


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		26	25	20	17	13	17	19	16	16
	Days at Sea (days)		148	145	122	136	120	141	141	144	158
	Landings (tonnes)		436.3	460.9	440.7	543.8	619.3	682.5	715.2	682.0	720.6
	Landings per day at sea (tonnes)		2.94	3.18	3.60	4.00	5.17	4.84	5.07	4.75	4.56
	Average price per tonne landed (£)		1,546	1,244	1,426	1,571	1,333	1,351	1,472	1,459	1,552
	Total Income (£'000)		697.2	601.5	637.1	875.8	926.8	1,039.0	1,149.5	1,142.5	1,284.2
	Total Operating Costs (£'000)		603.9	532.4	507.5	676.9	754.4	856.6	874.9	893.7	1,002.5
	Gross Value Added (£'000)		286.1	232.7	276.1	387.2	362.3	458.7	554.9	506.5	573.0
	Operating Profit (£'000)		93.3	69.2	129.5	198.9	172.4	182.5	274.6	248.8	281.7

NSWOS DEMERSAL TRAWL UNDER 24M OVER 300KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016



## NSWOS DEMERSAL TRAWL UNDER 24M OVER 300KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 34 vessels in the segment, which was the lowest number of vessels in the period since 2009. In 2008, there were also 34 vessels. The number of vessels was as high as 45 in 2009 and 2015.

### Landings and average price

In 2016, the segment had mixed landings and three North Sea whitefish stocks represented 49% of the value of landings: anglers, cod and haddock. North Sea nephrops represented a further 7% of value, and West of Scotland anglers represented a further 6% of total value in 2016. Anglers were 30% of the total value of landings.

In 2016, the average price per tonne of landings was £2,172, which was the highest average price in the observed period. Average price was lowest in the observed period in 2013 (£1,681).

### Business performance by kilowatt day at sea (kWdas)

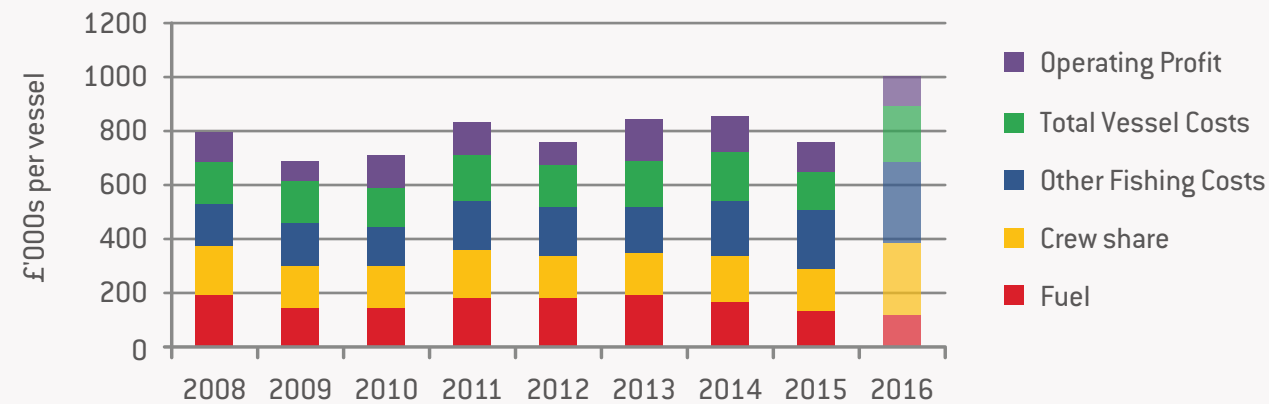
In 2016, the operating profit per kWdas was at its highest in the observed period, supported by a strong landings weight per kWdas and strong average prices. In 2012 and 2013, Fig.7 shows a narrowing of the profit margin per kWdas. In 2013, despite landings per kWdas similar to 2016, the lowest average price achieved in the observed period significantly restricted operating profits from fishing activity. However, the fleet maintained good operating profit through a substantial increase in non-fishing income, which is not included in the income shown in Fig. 7.

Fig 6 shows that, with the benefit of non-fishing income in 2012 and 2013, the segment maintained a relatively stable operating profit margin.

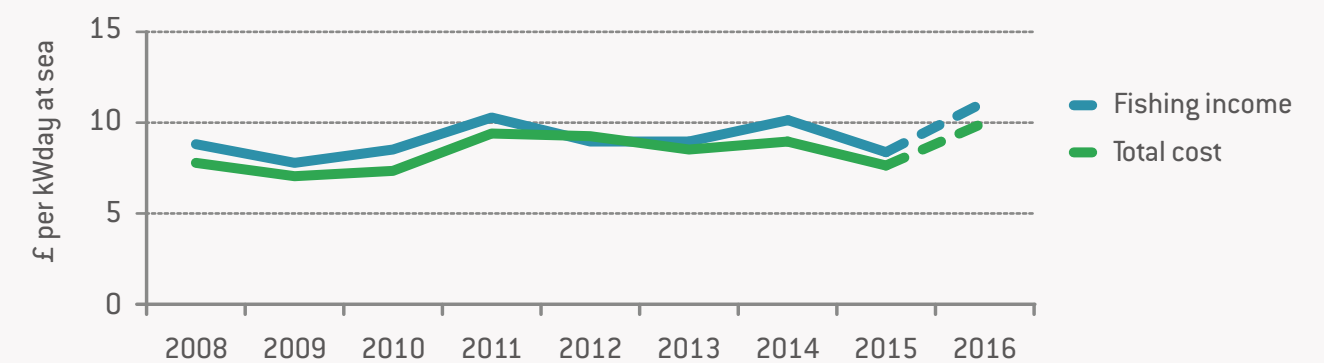
### Value added per segment

In 2016, the average GVA per vessel was £442k, the highest in the observed period. This was supported by strong operating profits per vessel (£186k) and crew share per vessel (£256k). The lowest GVA (£235k) was reported in 2009.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)

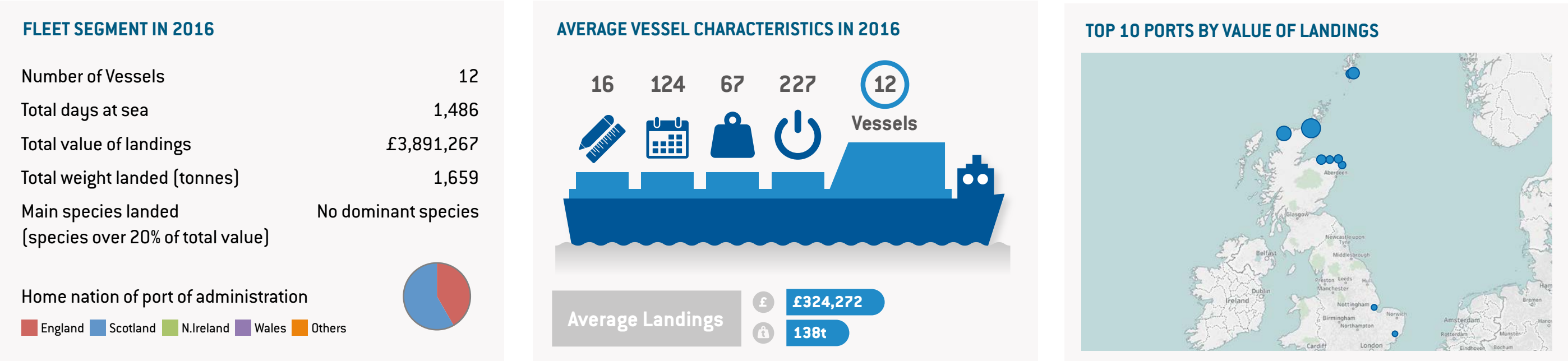


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		34	45	42	38	38	40	35	45	34
	Days at Sea (days)		194	190	177	161	157	175	173	186	191
	Landings (tonnes)		370.3	350.2	340.9	342.1	340.0	427.9	428.0	398.0	473.6
	Landings per day at sea (tonnes)		1.91	1.84	1.92	2.13	2.16	2.45	2.48	2.14	2.48
	Average price per tonne landed (£)		2,087	1,940	2,029	2,267	1,956	1,681	1,900	1,823	2,172
	Total Income (£'000)		798.1	687.4	711.0	836.3	758.5	837.6	860.1	763.6	1,082.6
	Total Operating Costs (£'000)		685.7	609.2	593.8	708.8	679.4	690.2	719.9	655.6	896.2
	Gross Value Added (£'000)		301.7	235.6	262.4	302.4	242.3	305.9	301.9	271.0	442.0
	Operating Profit (£'000)		112.4	78.1	117.2	127.4	79.1	147.4	140.3	108.0	186.4

NSWOS DEMERSAL TRAWL UNDER 24M UNDER 300KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016





## NSWOS DEMERSAL TRAWL UNDER 24M UNDER 300KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 12 vessels in the segment, which was the lowest number of vessels in the observed period. The number of vessels was as high as 34 in 2008.

### Landings and average price

In 2016, the segment had mixed landings across both the North Sea and West of Scotland as shown in Fig. 1, although anglers and squid represented 44% of the value of all landings.

In 2016, the average price per tonne of landings was £2,346, which was the highest average price in the observed period by a significant margin. The next highest average price was £462 per tonne lower in 2015 (£1,884). Average price was lowest in 2013 (£1,325). The high average price for landings in 2016, compared to 2015, may be influenced by the rising proportion of value represented by anglers and squid, in 2015 these stocks represented less of the total value of landings (28%).

### Business performance by kilowatt day at sea (kWdas)

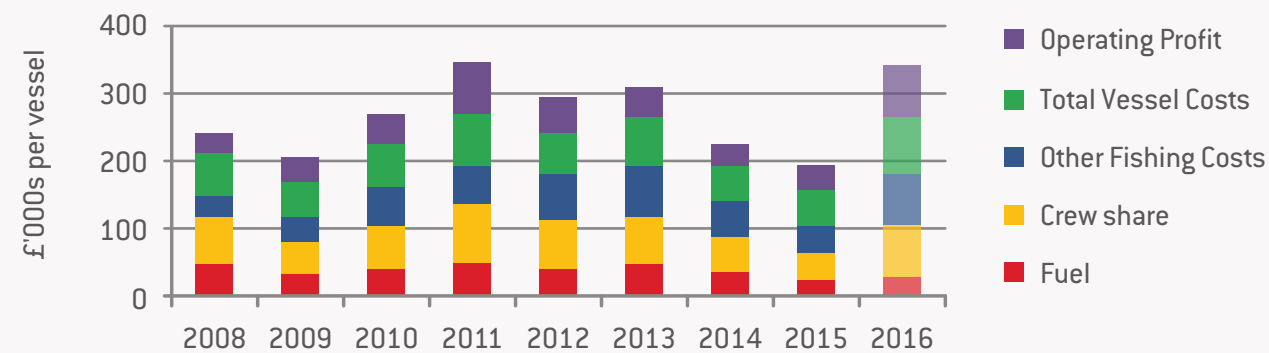
In 2016, the operating profit per kWdas was at its highest since 2011. In 2011, the operating profit per kWdas was supported by non-fishing income, which is not included in the income shown in Fig.7. In 2016, operating profit per kWdas was generated by fishing income, driven by a high average price per tonne landed. The improvement in operating profit per kWdas due to higher fishing income is evident in Fig.7.

Fig 6 shows that, with the benefit of non-fishing income in 2011 and 2012, the fleet segment maintained a relatively stable operating profit margin.

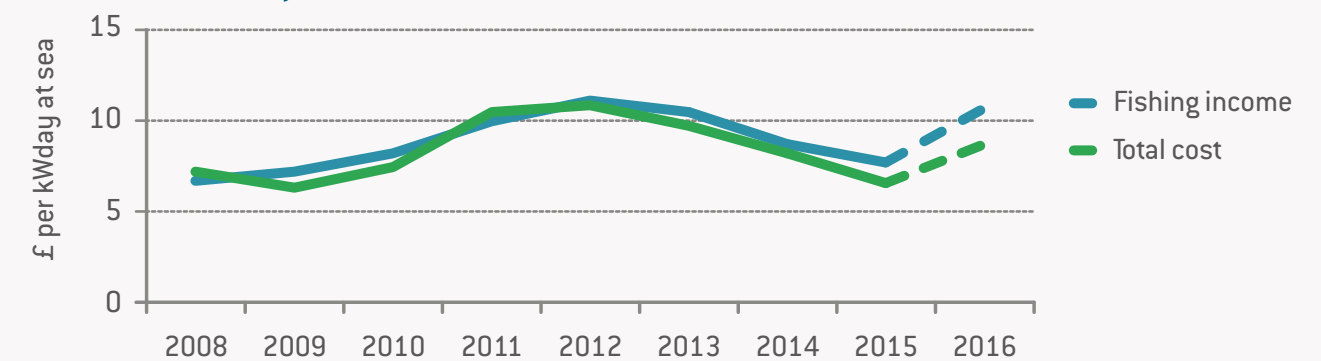
### Value added per segment

In 2016, the average GVA per vessel was £153k, the highest since 2011. As observed above, the strength in 2011 was non-fishing income and the strength in 2016 was high average price per tonne landed. The lowest GVA (£84k) was reported in 2014.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)

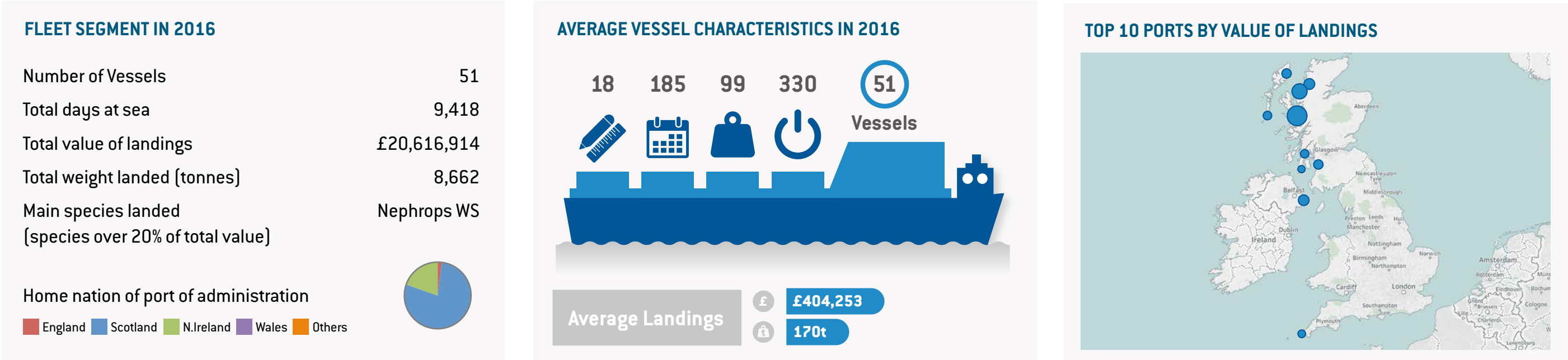


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		34	32	33	28	22	21	15	23	12
	Days at Sea (days)		139	134	142	126	101	123	113	105	124
	Landings (tonnes)		114.6	113.4	151.3	140.6	171.4	212.1	116.7	96.3	138.2
	Landings per day at sea (tonnes)		0.83	0.84	1.06	1.11	1.69	1.72	1.03	0.92	1.12
	Average price per tonne landed (£)		1,709	1,699	1,641	1,831	1,446	1,325	1,761	1,884	2,346
	Total Income (£'000)		241.6	203.7	270.5	344.4	291.7	310.8	223.4	191.8	342.9
	Total Operating Costs (£'000)		210.7	166.5	225.4	268.8	241.7	263.1	192.1	154.2	265.9
	Gross Value Added (£'000)		101.2	85.6	109.3	166.1	122.6	115.4	83.6	76.8	152.6
	Operating Profit (£'000)		30.8	37.2	45.1	75.7	50.0	47.7	31.2	37.5	77.1

WEST OF SCOTLAND NEPHROPS TRAWL OVER 250KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016



## WEST OF SCOTLAND NEPHROPS TRAWL OVER 250KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 51 vessels in the segment, nine more than in 2015 and the most vessels reported in the observed period. The number of vessels was as low as 29 in 2010.

### Landings and average price

The fleet segment caught the majority of its nephrops in West of Scotland but also fished in the North Sea and Area 7. Nephrops represented 92% of the total value of landings by the fleet segment in 2016. The average price per tonne in 2016 was £2,380. In the observed period, the average annual price achieved was approximately £2,200 and the 2016 price was the highest achieved.

### Business performance by kilowatt day at sea (kWdas)

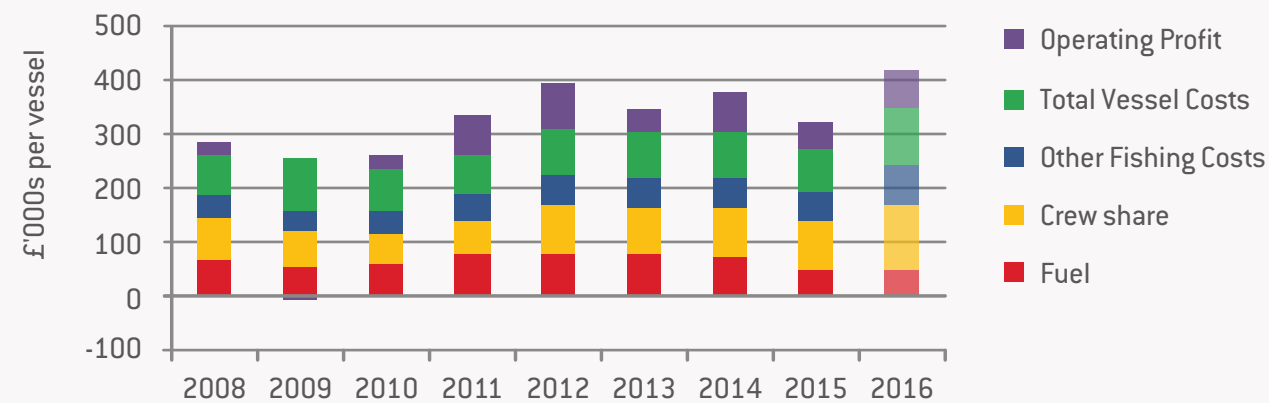
In 2016, the fishing income achieved per kWdas was the highest it had been in the observed period. The relatively high income was supported by a good price and relatively high weight of landings per kWdas. This followed a period of relative stability in income per kWdas between 2011 and 2015.

Since 2013, Fig.7 shows that the fleet segment maintained a relatively stable profit margin between fishing income and total cost per kWdas. In 2011 and 2012, as common with other nephrops segments, there was a boost to profit margins. However, in this segment it was not all about price. In 2011, a relatively high price did make a difference, but in 2012, it appears to be weight of landings per kWdas that was the most important factor in creating the margin between fishing income and total cost (Fig.7).

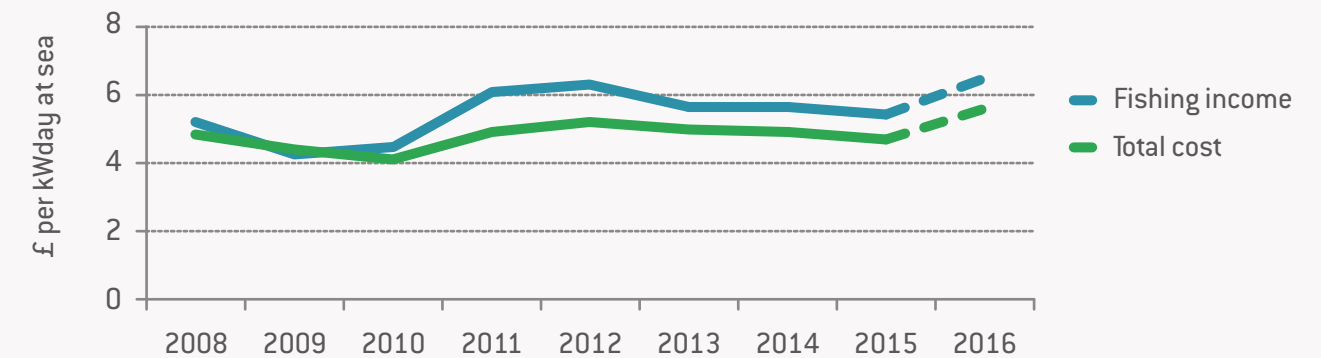
### Value added per segment

The average GVA per vessel in the observed period was at its highest in 2016, which reflects the strength of total fishing income. One consequence of the improvement in fishing income was that crew share in 2016 was up by approximately 40% from 2015, a key component of GVA.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		37	32	29	30	33	37	41	42	51
	Days at Sea (days)		178	187	188	179	184	188	187	175	185
	Landings (tonnes)		113.0	119.1	125.3	140.6	173.2	152.0	160.3	133.9	169.9
	Landings per day at sea (tonnes)		0.63	0.64	0.67	0.78	0.94	0.81	0.86	0.77	0.92
	Average price per tonne landed (£)		2,473	2,059	2,048	2,328	2,166	2,238	2,160	2,336	2,380
	Total Income (£'000)		284.8	246.2	262.9	331.2	393.9	346.6	374.8	321.2	415.2
	Total Operating Costs (£'000)		259.9	252.4	235.8	263.3	310.1	301.8	302.6	271.8	343.1
	Gross Value Added (£'000)		100.6	61.8	81.3	130.7	171.8	123.9	163.7	139.9	195.0
	Operating Profit (£'000)		24.8	-6.2	27.2	67.9	83.8	44.7	72.1	49.5	72.1

WEST OF SCOTLAND NEPHROPS TRAWL UNDER 250KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016

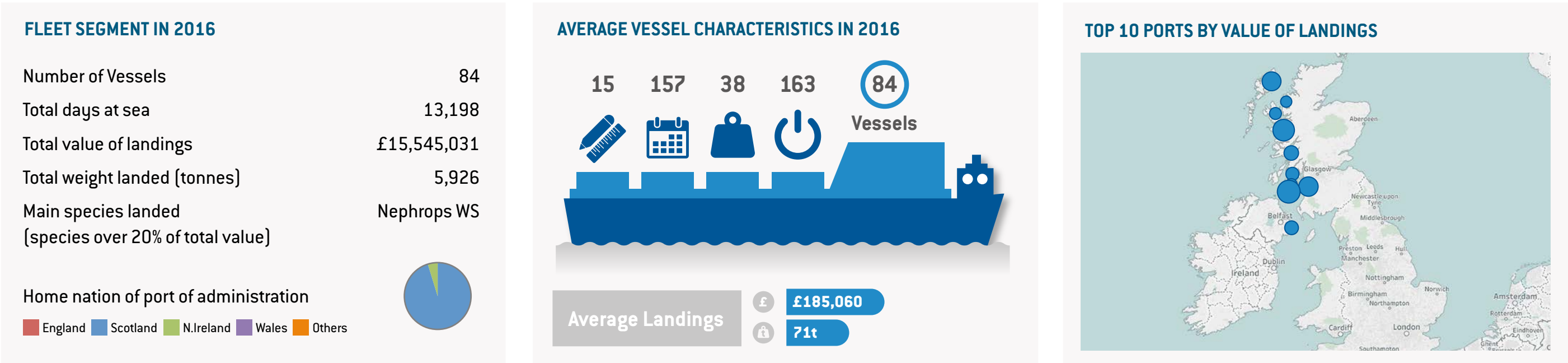


FIG 1. TOP SPECIES BY VALUE AS % OF TOTAL VALUE LANDED IN 2016

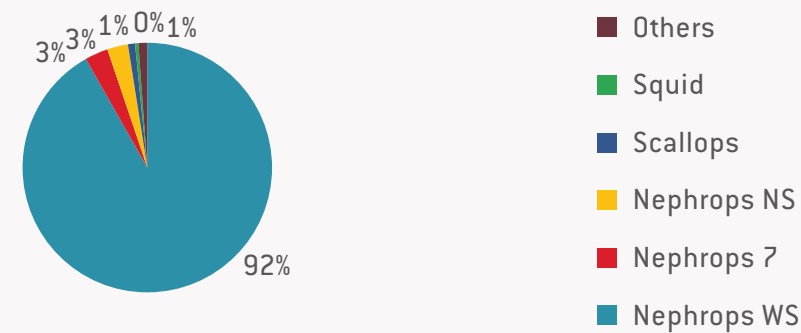


FIG.2 VALUE OF LANDINGS BY SPECIES AND MONTH IN 2016

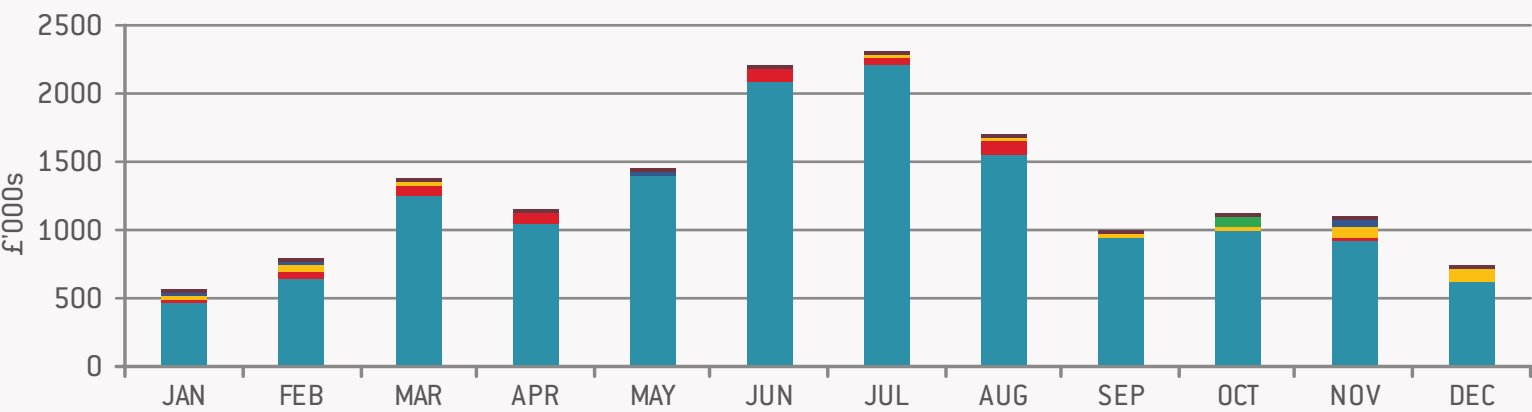


FIG.3 DAYS AT SEA BY GEAR TYPE AS % OF TOTAL DAYS AT SEA IN 2016

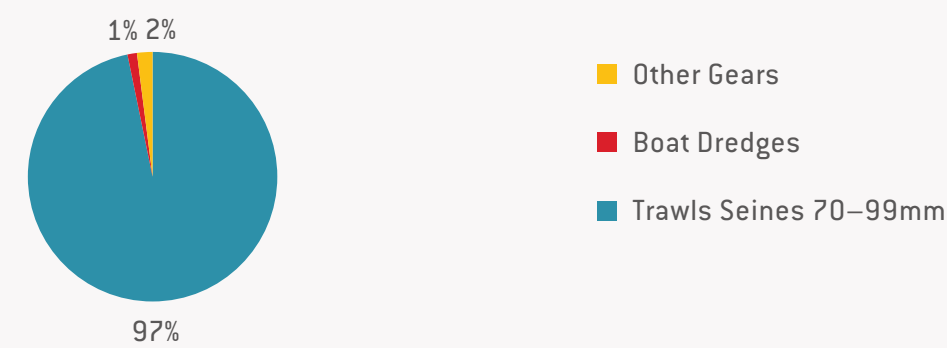
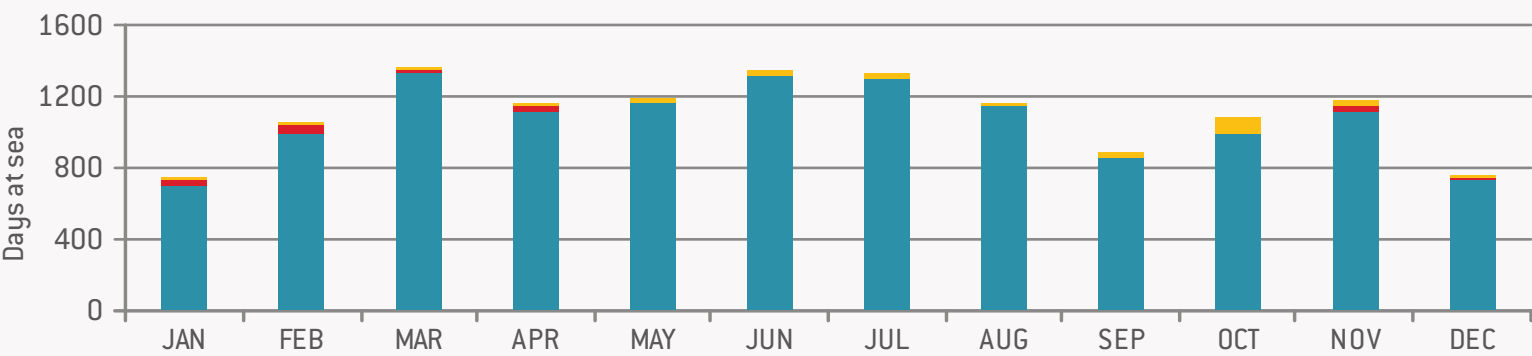


FIG.4 TOTAL DAYS AT SEA BY GEAR TYPE AND MONTH IN 2016





## WEST OF SCOTLAND NEPHROPS TRAWL UNDER 250KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 84 vessels in the segment, six fewer than in 2015. Since 2008, when there were 138 vessels, the number of vessels steadily declined.

### Landings and average price

The segment caught almost all its nephrops landings in West of Scotland but there was a small amount of activity in the North Sea and Area 7. Nephrops represented 98% of the total value of landings by the fleet segment in 2016. The average price per tonne in 2016 was £2,623. In the observed period since 2008, the highest average price was achieved in 2012 (£2,950) and the lowest average price occurred in 2009 (£2,257).

### Business performance by kilowatt day at sea (kWdas)

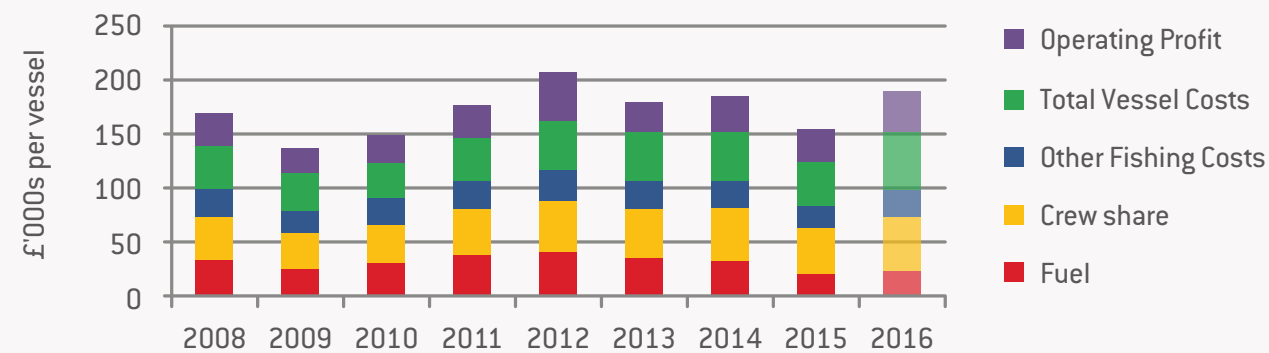
In 2016, the fishing income achieved per kWdas was the highest it had been since 2012, when the average price at a peak in the observed period. The difference in 2016, was that the segment landed the highest weight of landings per kWdas since 2008 which, combined with a good price, boosted fishing income.

Fig.7 shows that the fleet segment maintains a relatively stable profit margin between fishing income and total cost per kWdas. In 2011 and 2012, as common with other nephrops fleets, there was a boost to income through high prices, with a similar jump in total income in 2016.

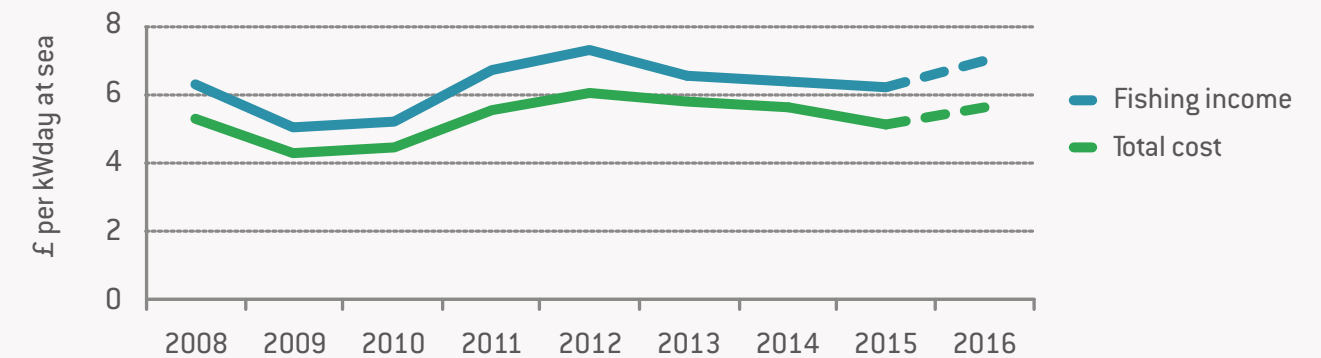
### Value added per segment

In 2016, the average GVA per vessel in the observed period was relatively high, second only to the GVA reported in 2012.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)

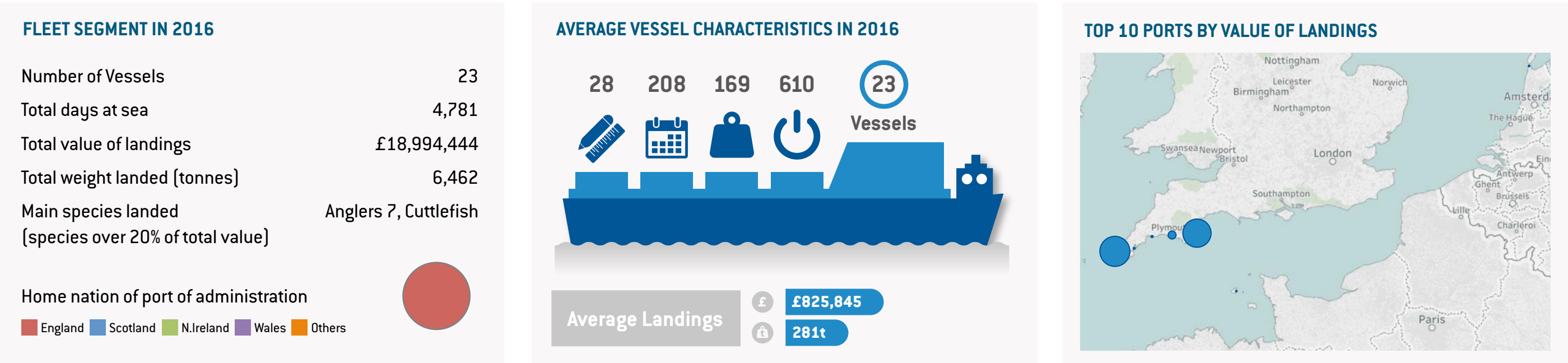


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		138	120	104	94	99	98	91	90	84
	Days at Sea (days)		162	163	168	158	165	157	162	150	157
	Landings (tonnes)		61.5	59.3	62.4	62.1	66.2	65.6	61.9	54.1	70.5
	Landings per day at sea (tonnes)		0.38	0.36	0.37	0.39	0.40	0.42	0.38	0.36	0.45
	Average price per tonne landed (£)		2,663	2,257	2,329	2,797	2,950	2,610	2,745	2,784	2,623
	Total Income (£'000)		168.9	135.6	147.9	176.7	206.9	179.2	181.8	152.2	187.0
	Total Operating Costs (£'000)		138.2	113.8	123.8	144.3	161.5	150.6	150.5	124.0	149.8
	Gross Value Added (£'000)		72.1	53.4	60.0	75.3	93.6	73.5	79.0	69.5	89.6
	Operating Profit (£'000)		30.6	21.8	24.1	32.4	45.3	28.6	31.3	28.2	37.3

SOUTH WEST BEAM TRAWL OVER 250KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016



## SOUTH WEST BEAM TRAWL OVER 250KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 23 vessels in the segment. The highest number in the observed period was 31 in 2008 and the lowest number of vessels was 19 in 2012-13.

### Landings and average price

In 2016, three stocks represented over half (56%) of the total value of landings: anglers (22%), cuttlefish (20%) and sole 7e (14%). Cuttlefish was seasonal in January to March and October to December. In 2016, the average price per tonne landed was £2,940 which, in the observed period, is second only to the average price of £3,020 achieved in 2011. The lowest average price was £2,406 in 2015. In 2015, the three stocks mentioned above represented a lower proportion of total value (41%).

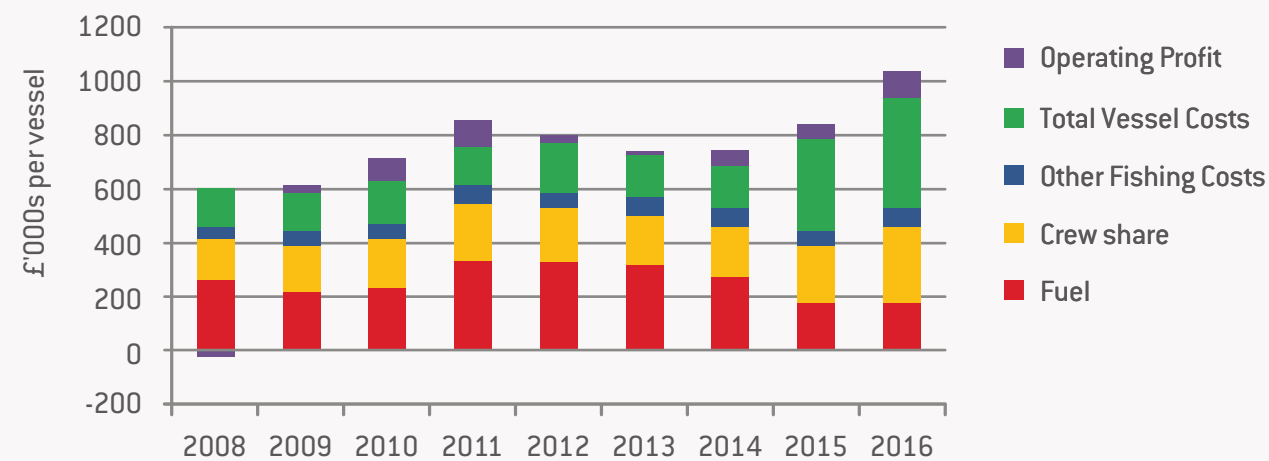
### Business performance by kilowatt day at sea (kWdas)

Fig. 7 shows that the margin between fishing income and total costs per kWdas was small up until 2015. In 2015 and 2016 total cost exceeded fishing income per kWdas. However, the segment benefitted from a substantial amount of non-fishing income in 2015 and 2016, which is not included in Fig.7, and this supported the segment to improve operating profits in 2015 and 2016.

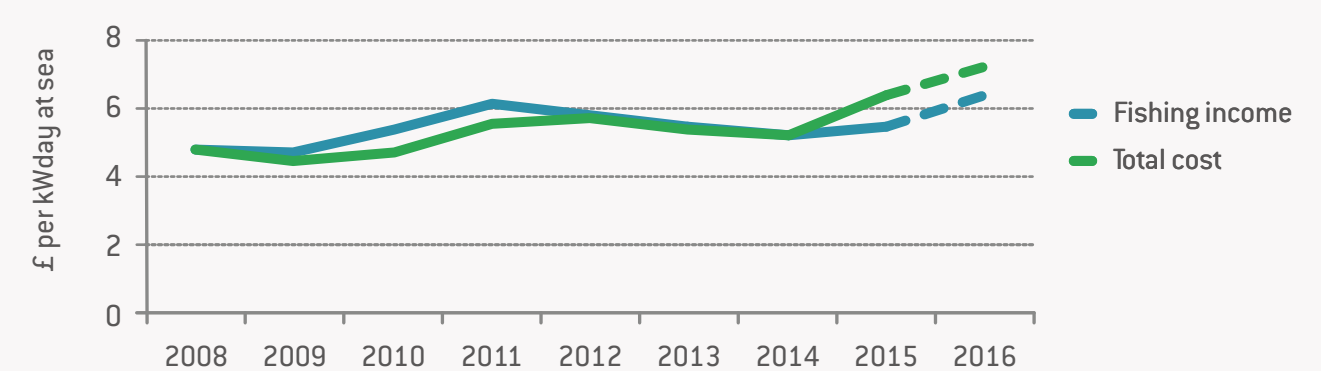
### Value added per segment

The average GVA per vessel was £381k in 2016, the highest in the observed period and up from £276k in 2015. The operating profit per vessel improved between 2013 and 2016. However, without the non-fishing income earned in 2015 and 2016, operating losses would have been reported.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)

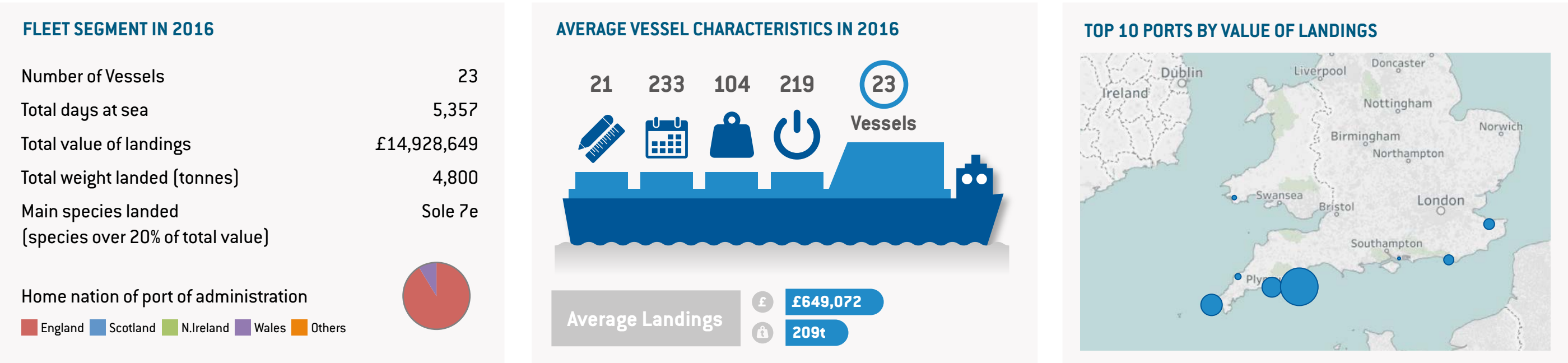


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		31	24	22	22	19	19	20	22	23
	Days at Sea (days)		200	213	212	223	217	216	216	202	208
	Landings (tonnes)		214.3	223.7	253.6	278.7	305.1	291.5	268.0	279.7	280.9
	Landings per day at sea (tonnes)		1.07	1.05	1.20	1.25	1.41	1.35	1.24	1.38	1.35
	Average price per tonne landed (£)		2,754	2,736	2,793	3,020	2,544	2,518	2,572	2,406	2,940
	Total Income (£'000)		594.2	612.0	719.6	855.6	802.7	736.6	744.7	845.1	1,037.4
	Total Operating Costs (£'000)		596.2	580.5	622.4	760.1	768.3	723.7	687.3	781.0	937.2
	Gross Value Added (£'000)		157.3	207.5	279.9	315.0	229.5	193.7	229.8	275.7	380.7
	Operating Profit (£'000)		-2.0	31.4	97.1	95.5	34.4	12.9	57.4	64.0	100.2

SOUTH WEST BEAM TRAWL UNDER 250KW: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016





## SOUTH WEST BEAM TRAWL UNDER 250KW: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 23 vessels in the segment. The highest number in the observed period was 27 in 2012 and the lowest number of vessels was 19 in 2010.

### Landings and average price

In 2016, three stocks represented over half (52%) of the total value of all segment landings: sole 7e (20%), cuttlefish (20%) and anglers (12%). Cuttlefish was seasonal in January to March and October to December. In 2016, the average price per tonne landed was £3,110, which, in the observed period, is second only to the average price of £3,347 achieved in 2011. The lowest average price was £2,599 in 2013.

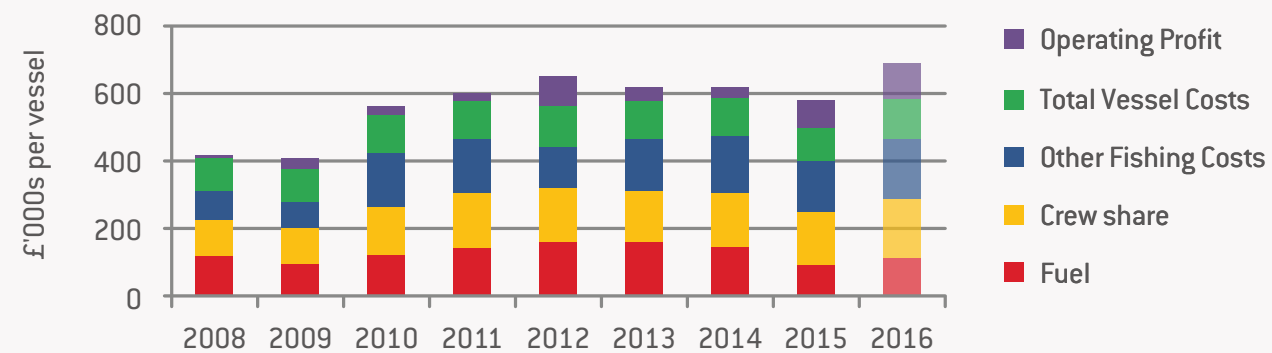
### Business performance by kilowatt day at sea (kWdas)

Fig. 7 shows that the margin between fishing income and total costs per kWdas was small up until 2015. In 2015 and 2016 total cost exceeded fishing income per kWdas. However, the fleet segment benefitted from non-fishing income in 2015 and 2016, which is not included in Fig.7, and this supported the segment to improve operating profits in 2015 and 2016.

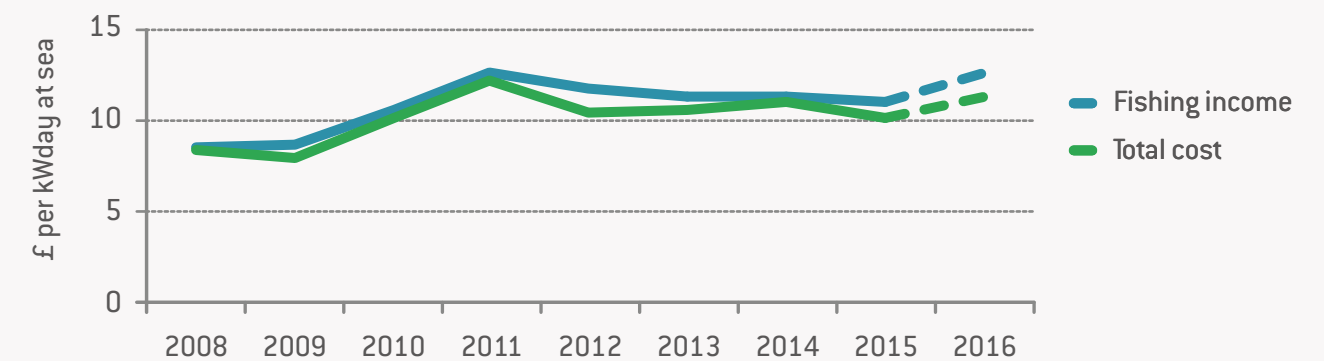
### Value added per segment

The average GVA per vessel was £104k in 2016, the highest in the observed period and up from £79k in 2015. However, without the non-fishing income earned in 2015 and 2016, operating losses would have been reported.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
[All values adjusted for inflation]



**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
[All values adjusted for inflation]



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		22	22	19	23	27	25	23	24	23
	Days at Sea (days)		224	220	246	215	244	248	239	222	233
	Landings (tonnes)		132.4	134.7	182.4	178.5	228.0	235.9	220.9	218.3	208.7
	Landings per day at sea (tonnes)		0.59	0.61	0.74	0.83	0.93	0.95	0.92	0.99	0.90
	Average price per tonne landed (£)		3,093	3,041	3,078	3,347	2,726	2,599	2,688	2,485	3,110
	Total Income (£'000)		409.7	410.4	563.5	597.8	648.3	616.5	614.0	574.8	688.0
	Total Operating Costs (£'000)		406.4	375.8	538.9	574.3	557.0	576.7	581.7	495.5	583.8
	Gross Value Added (£'000)		107.9	138.9	171.2	182.8	247.6	190.0	191.9	238.8	305.0
	Operating Profit (£'000)		3.3	34.5	24.6	23.4	91.3	39.8	32.3	79.3	104.1

UK SCALLOP DREDGE OVER 15M: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016

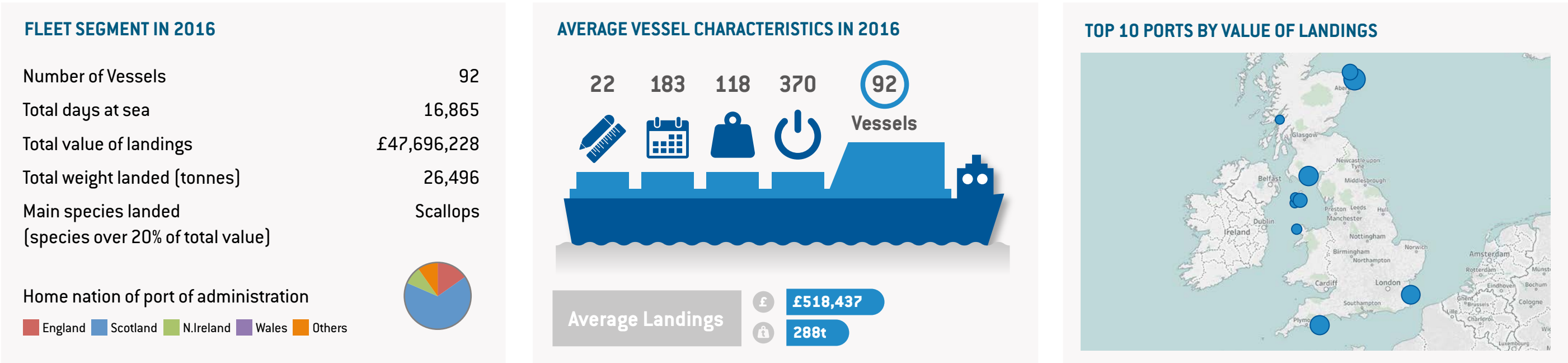


FIG 1. TOP SPECIES BY VALUE AS % OF TOTAL VALUE LANDED IN 2016

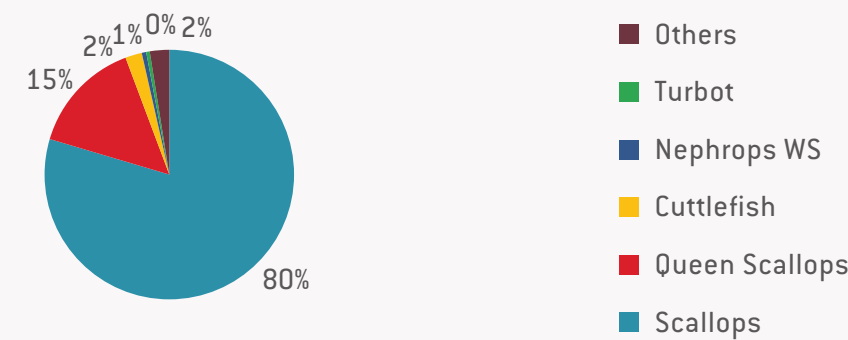


FIG.2 VALUE OF LANDINGS BY SPECIES AND MONTH IN 2016

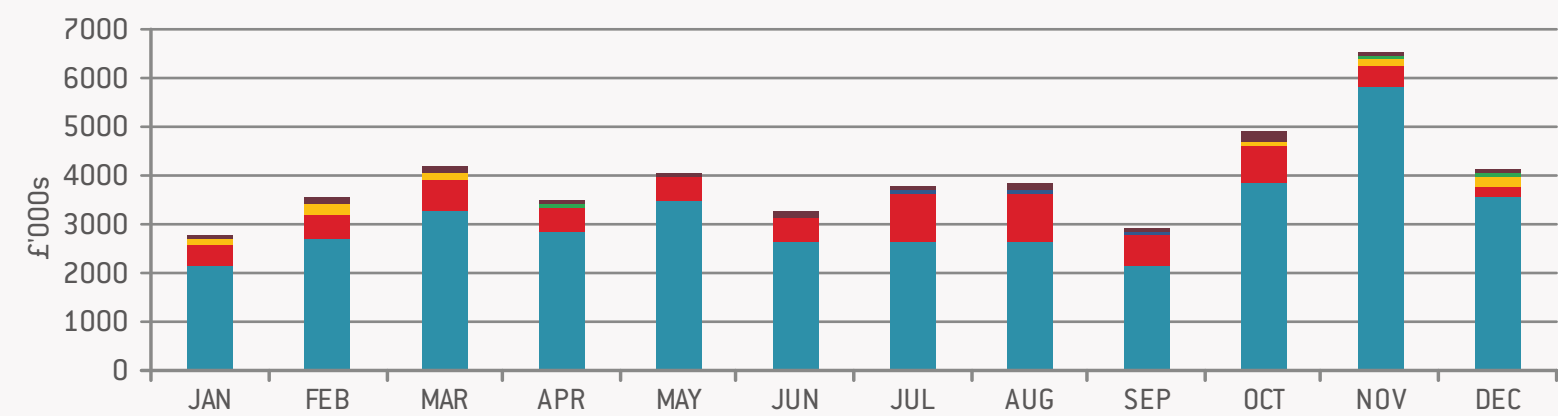


FIG.3 DAYS AT SEA BY GEAR TYPE AS % OF TOTAL DAYS AT SEA IN 2016

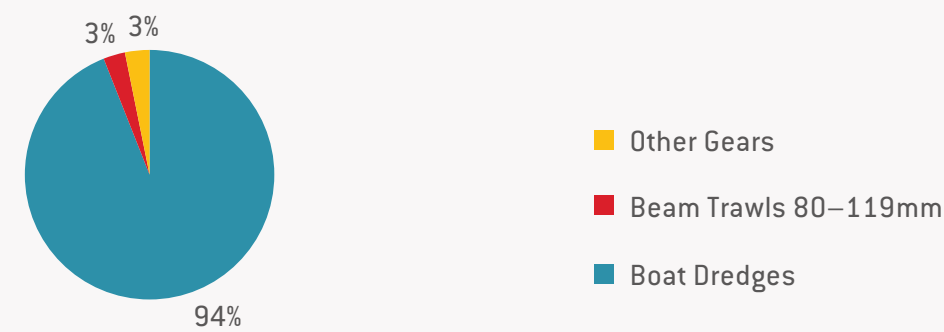
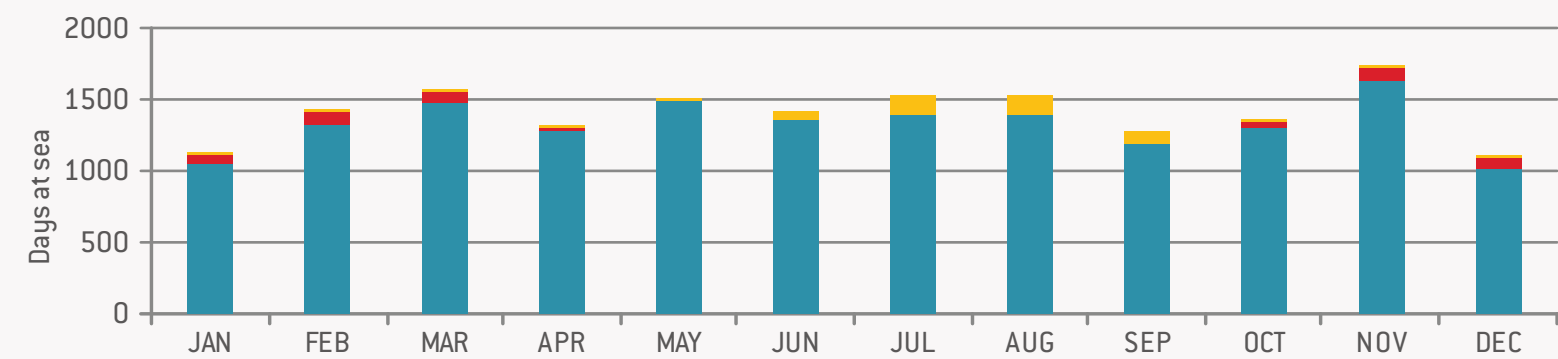


FIG.4 TOTAL DAYS AT SEA BY GEAR TYPE AND MONTH IN 2016



## UK SCALLOP DREDGE OVER 15M: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 92 vessels in the segment. The highest number in the observed period was 99 in 2014, and the lowest number of vessels was 63 in 2008. There was a year-on-year increase in vessel numbers from 2008 to 2014.

### Landings and average price

In 2016, scallops and queen scallops represented 95% of the total value of all landings for the segment. In 2016, the average price per tonne landed was £1,800, which was the highest average price achieved in the observed period. The lowest average price was £1,187 in 2012.

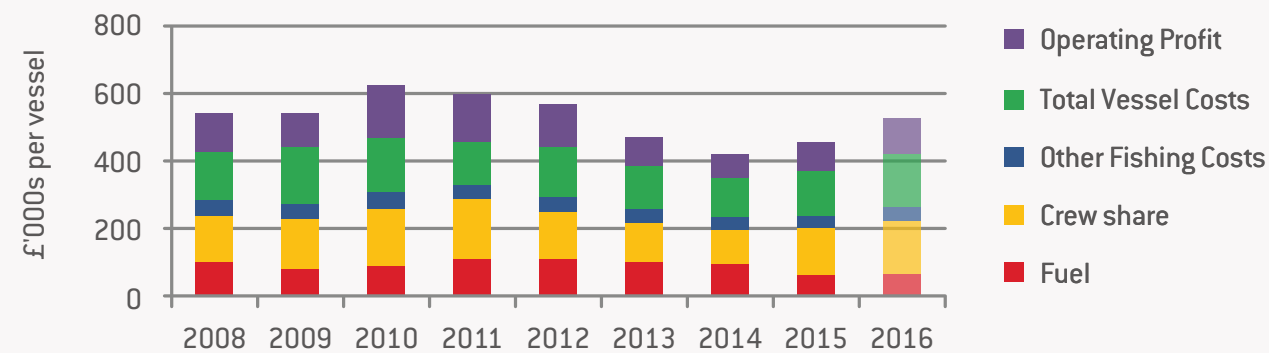
### Business performance by kilowatt day at sea (kWdas)

Landings per kWdas reduced year-on-year between 2011 and 2016, which was not, until 2016, compensated by an increase in average price. This led to a dip in profit margins, although the segment did appear to reduce costs in response to lower fishing income.

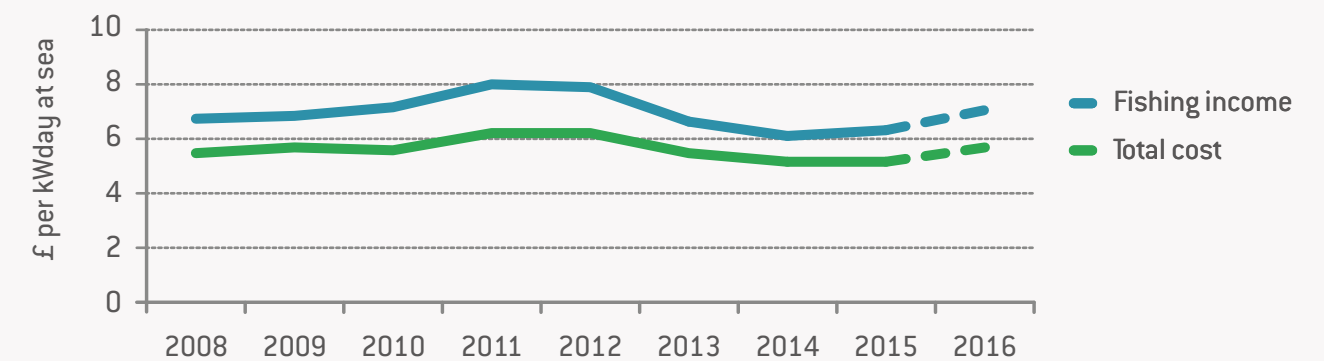
### Value added per segment

The average GVA per vessel was £265k in 2016, which was the highest GVA since 2011. Both crew share and operating profit benefitted from the increase in fishing income, driven by an increase in average price.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)

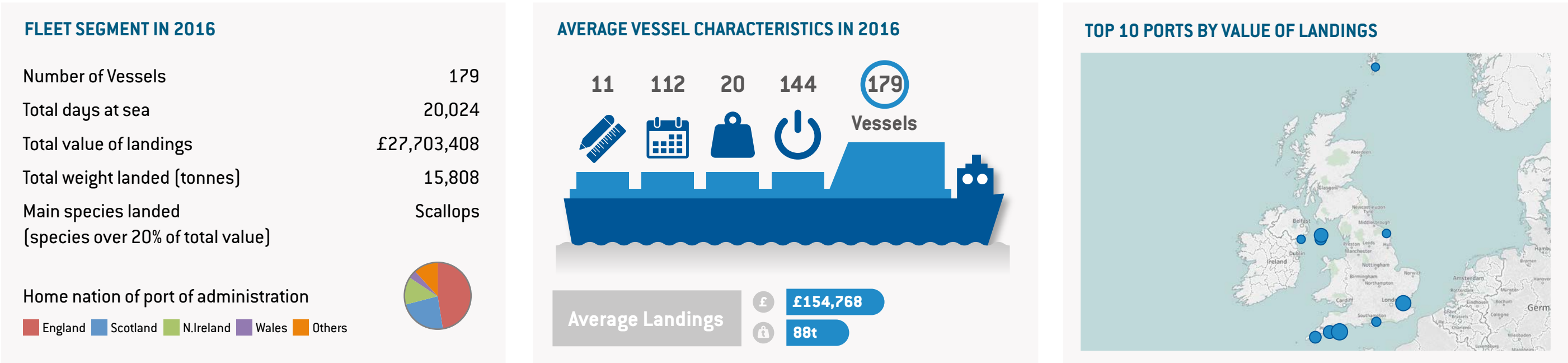


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		63	75	83	82	88	98	99	94	92
	Days at Sea (days)		187	187	187	175	175	170	171	174	183
	Landings (tonnes)		310.8	349.8	414.4	490.8	470.0	358.0	277.2	302.5	288.0
	Landings per day at sea (tonnes)		1.66	1.87	2.22	2.80	2.69	2.11	1.62	1.74	1.57
	Average price per tonne landed (£)		1,690	1,511	1,444	1,205	1,187	1,296	1,494	1,478	1,800
	Total Income (£'000)		536.4	539.7	625.9	597.5	567.2	468.8	417.8	454.3	526.8
	Total Operating Costs (£'000)		428.6	440.3	466.5	455.1	443.9	384.7	352.3	368.1	419.3
	Gross Value Added (£'000)		242.0	251.5	330.0	315.0	261.0	196.2	165.9	217.7	264.7
	Operating Profit (£'000)		107.8	99.4	159.3	142.5	123.3	84.0	65.5	86.2	107.5

UK SCALLOP DREDGE UNDER 15M: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016





## UK SCALLOP DREDGE UNDER 15M: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 179 vessels in the segment, down from a high of 223 vessels in 2015. The lowest number of vessels in the observed period was 123 in 2008.

### Landings and average price

In 2016, three stocks represented 90% of the total value of all segment landings: scallops (74%), cockles (12%) and queen scallops (4%). Cockles and queen scallops were seasonal in the months July to September. In 2016, the average price per tonne landed was £1,753, which was the highest average price achieved since 2009, and up 46% compared to 2015. The lowest average price was £1,069 in 2013.

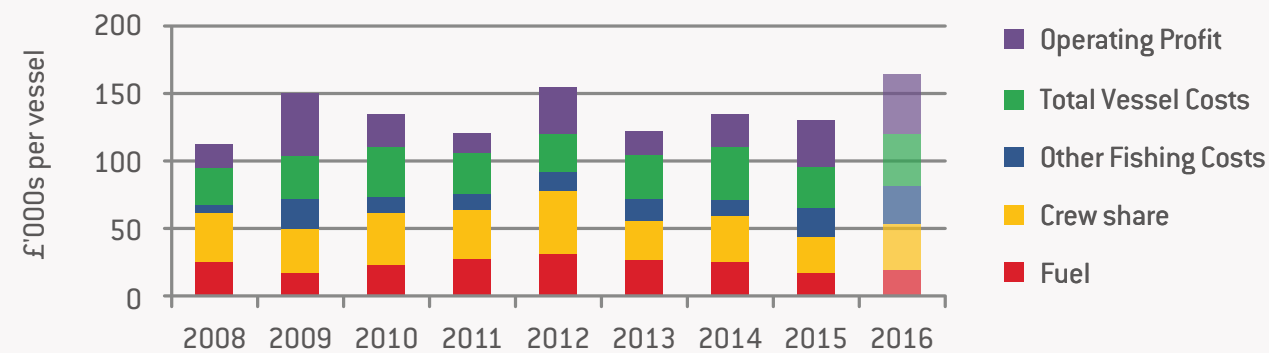
### Business performance by kilowatt day at sea (kWdas)

In 2016, landings weight per kWdas fell by approximately 30%, compared to 2015. This was the lowest weight of landings per kWdas in the observed period. However, fishing income and operating profit was supported by the substantial increase in average price per tonne landed. The differences observed between 2015 and 2016 do not appear to be caused by a significant shift in landings composition as the three stocks listed above represented 84% of total value in 2015.

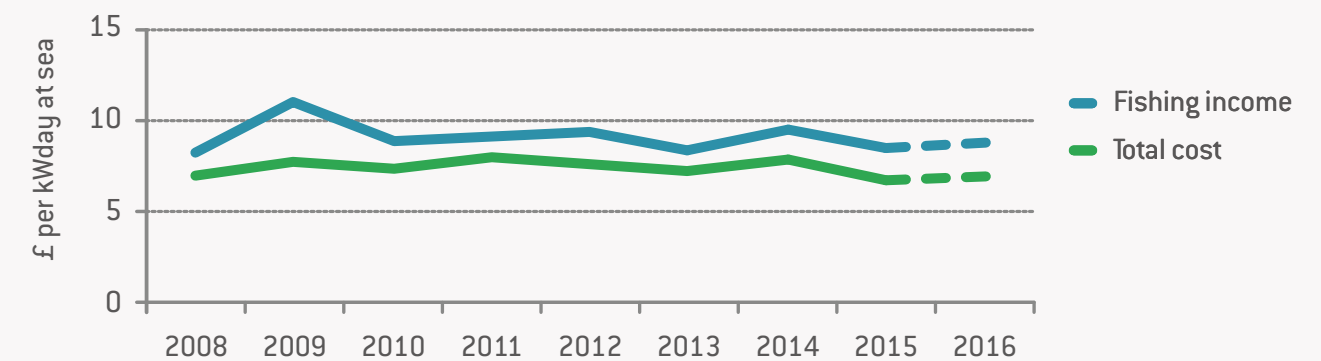
### Value added per segment

The average GVA per vessel was £77k in 2016, which was the highest GVA since 2012. As previously stated, operating profit benefitted from the increase in average price.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		123	141	133	178	157	194	190	223	179
	Days at Sea (days)		105	100	106	92	106	94	90	97	112
	Landings (tonnes)		92.8	74.0	92.9	89.6	103.8	111.6	100.7	102.7	88.3
	Landings per day at sea (tonnes)		0.88	0.74	0.88	0.97	0.98	1.18	1.11	1.06	0.79
	Average price per tonne landed (£)		1,207	1,998	1,416	1,344	1,443	1,069	1,324	1,200	1,753
	Total Income (£'000)		113.0	151.4	133.7	121.1	155.4	123.1	135.0	130.8	164.2
	Total Operating Costs (£'000)		94.7	103.7	110.2	106.0	120.3	103.5	110.0	97.2	120.6
	Gross Value Added (£'000)		54.4	79.3	61.8	51.2	80.2	47.9	59.3	59.3	76.6
	Operating Profit (£'000)		18.4	47.7	23.5	15.2	35.1	19.6	25.0	33.6	43.6

GILL NETTERS: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016

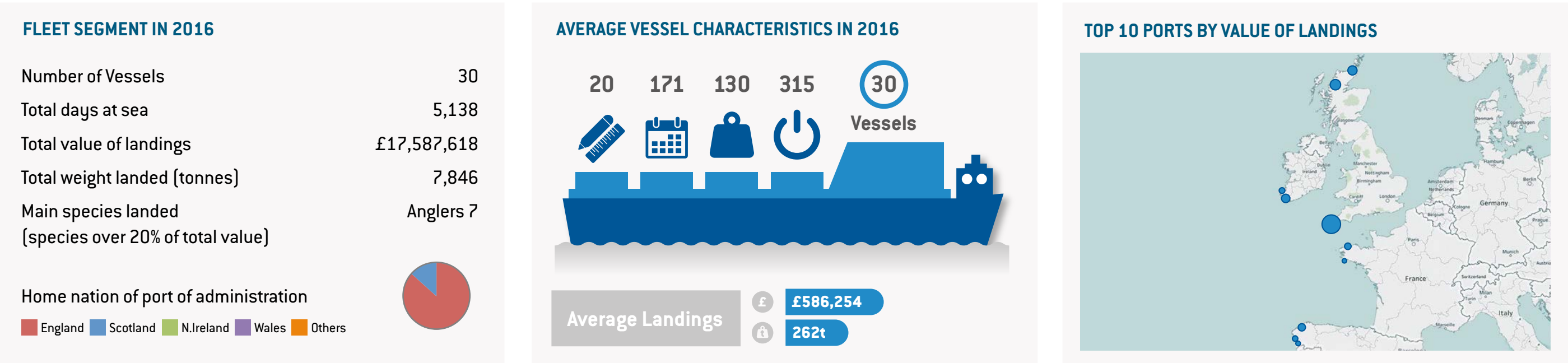


FIG 1. TOP SPECIES BY VALUE AS % OF TOTAL VALUE LANDED IN 2016

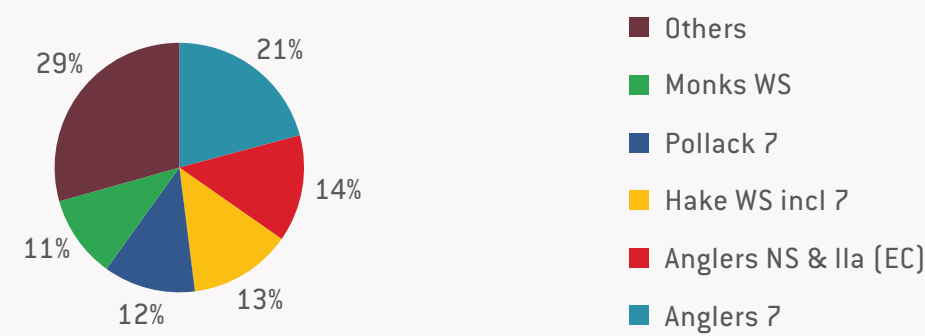


FIG.2 VALUE OF LANDINGS BY SPECIES AND MONTH IN 2016

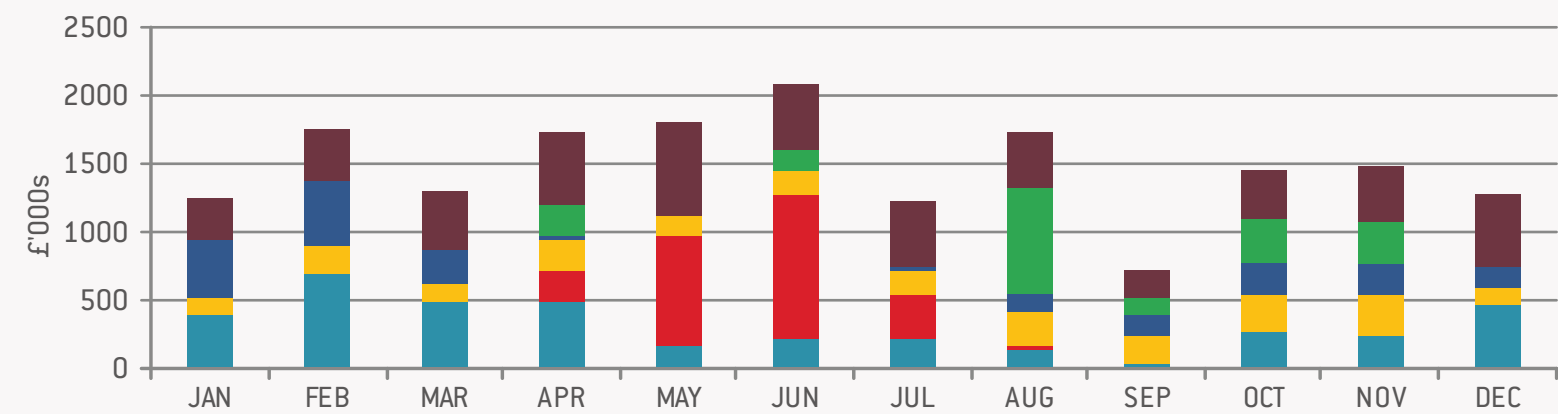


FIG.3 DAYS AT SEA BY GEAR TYPE AS % OF TOTAL DAYS AT SEA IN 2016

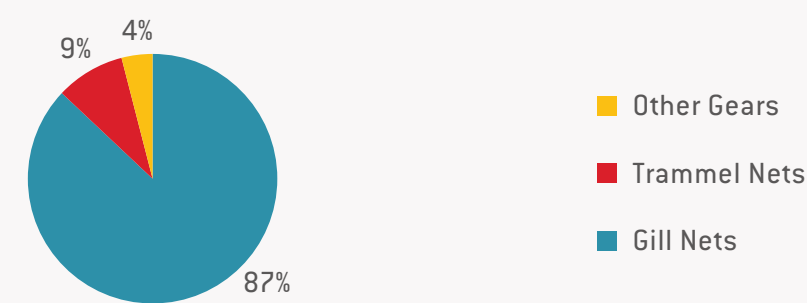
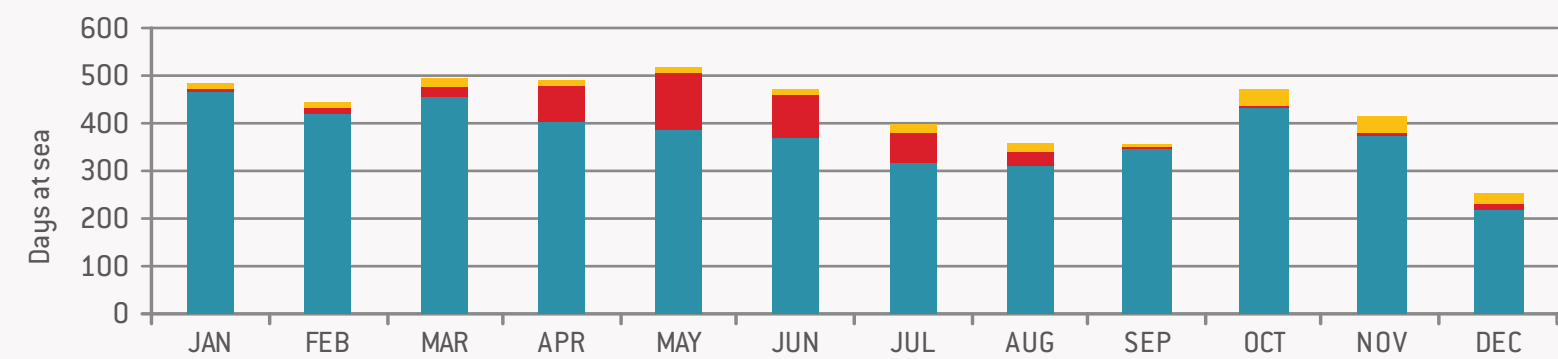


FIG.4 TOTAL DAYS AT SEA BY GEAR TYPE AND MONTH IN 2016



## GILL NETTERS: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 30 vessels in the segment, the lowest number of vessels in the observed period. The highest number in the observed period was 41 in 2011-12.

### Landings and average price

In 2016, anglers represented 46% of the total value of landings. Pollock and hake represented a further 25% of value. In 2016, the average price per tonne landed was £2,242, which was the highest average price since 2012. The lowest average price in the observed period was £1,943 in 2013.

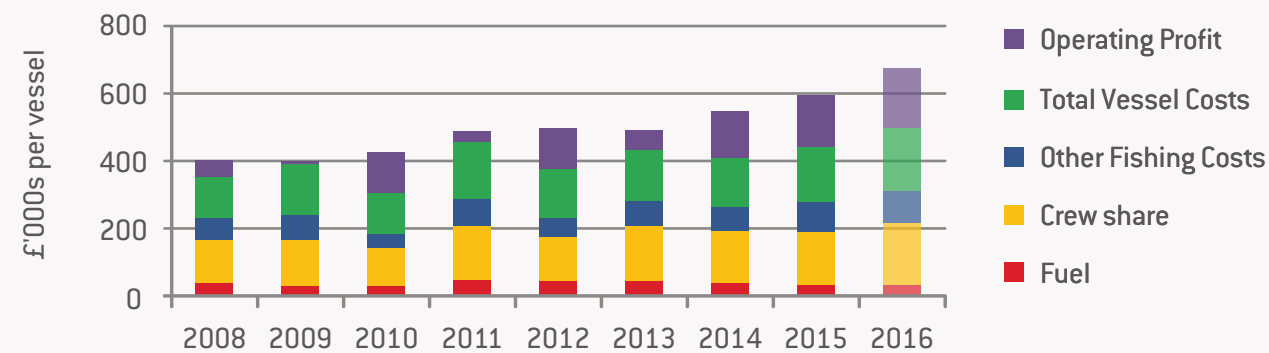
### Business performance by kilowatt day at sea (kWdas)

Following 2009, the fishing income achieved per kWdas hovered around the £8 mark, with a notable improvement between 2015 and 2016. The improvement in 2016 was supported by the highest landings weight per kWdas reported in the observed period and the improvement in average price. In 2016, the combination of price and landings weight resulted in the highest fishing income and operating profit per kWdas reported in the observed period.

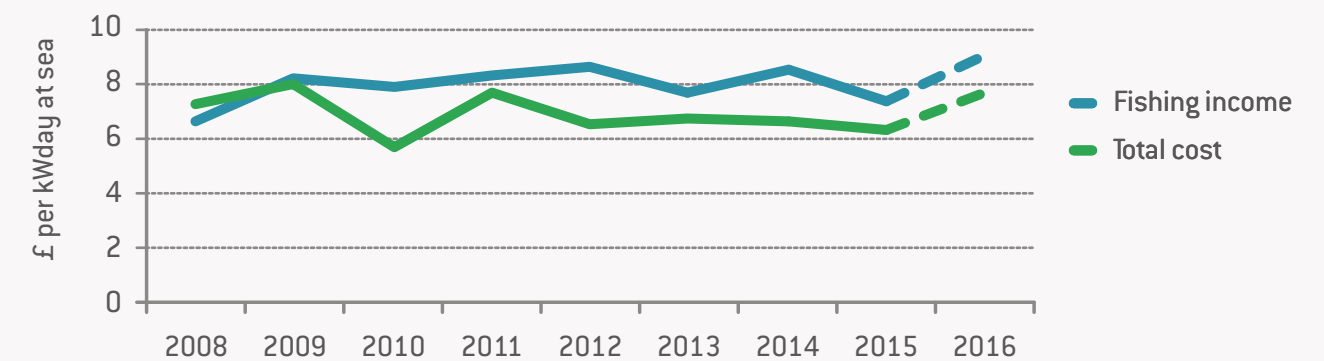
### Value added per segment

The average GVA per vessel was £360k in 2016, up from £309k in 2015, and the highest GVA in the observed period. Both operating profit and crew share benefitted from the improved performance of the fleet segment in 2016.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)

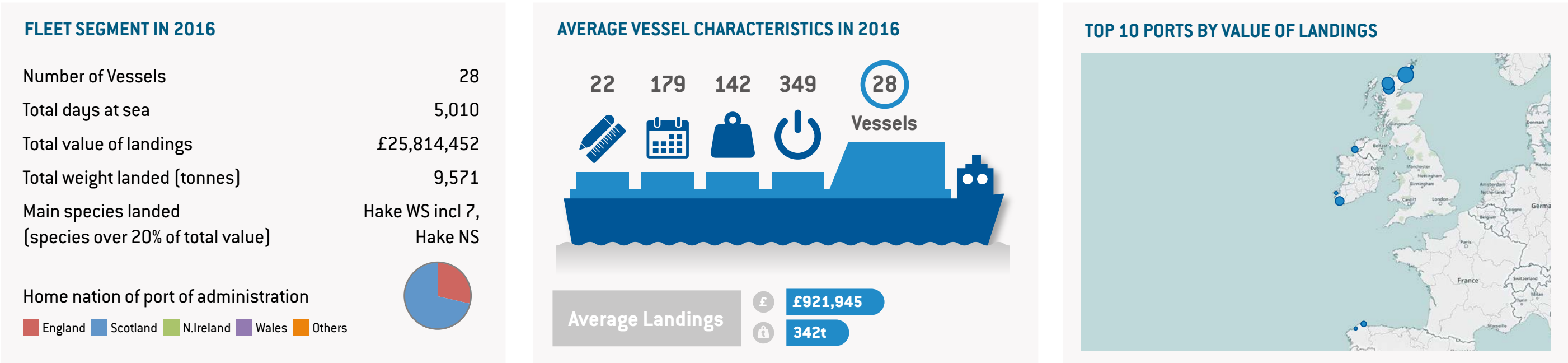


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		40	38	40	41	41	38	37	31	30
	Days at Sea (days)		149	156	162	167	159	166	166	177	171
	Landings (tonnes)		123.2	146.1	136.3	186.9	218.7	250.8	241.2	248.5	261.5
	Landings per day at sea (tonnes)		0.83	0.94	0.84	1.12	1.38	1.51	1.46	1.40	1.53
	Average price per tonne landed (£)		2,618	2,741	3,107	2,616	2,263	1,943	2,176	2,070	2,242
	Total Income (£'000)		399.4	400.4	423.5	489.3	495.0	487.4	546.6	591.8	674.6
	Total Operating Costs (£'000)		356.3	390.9	301.8	455.6	377.8	431.7	406.1	440.8	498.0
	Gross Value Added (£'000)		177.6	149.1	230.4	197.4	247.5	215.5	287.7	309.2	360.1
	Operating Profit (£'000)		43.0	9.5	121.6	33.7	117.2	55.7	140.5	151.0	176.6

LONGLINERS: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016



## LOGLINERS: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 28 vessels in the segment. The highest number of vessels in the observed period was 31 in 2008, and the lowest number was 24 in 2011.

### Landings and average price

In 2016, hake represented 83% of the total value of landings. Ling was a secondary species for the segment, worth 7% of total value. In 2016, the average price per tonne landed was £2,697, which was a relatively good price in the observed period. The lowest average price in the observed period was £1,732 in 2008.

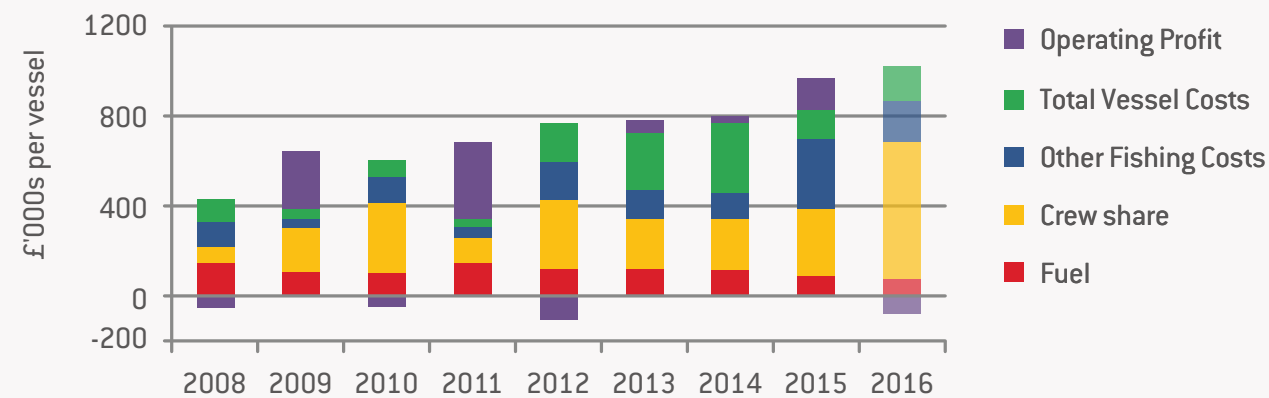
### Business performance by kilowatt day at sea (kWdas)

In 2016, the landings per kWdas was at its highest in the observed period and combined with a good average price, fishing income per kWdas improved. Fig. 7 shows that income per kWdas steadily increased between 2008 and 2016. However, total cost per kWdas was more variable, and in 2008, 2010, 2012 and 2016 on average vessels made an operating loss. Crew share is one important element of total costs and, unlike in many other segments, crew share does not appear to follow the trend in income. Therefore, despite continual improvements in income, the fleet segment does not always produce an operating profit.

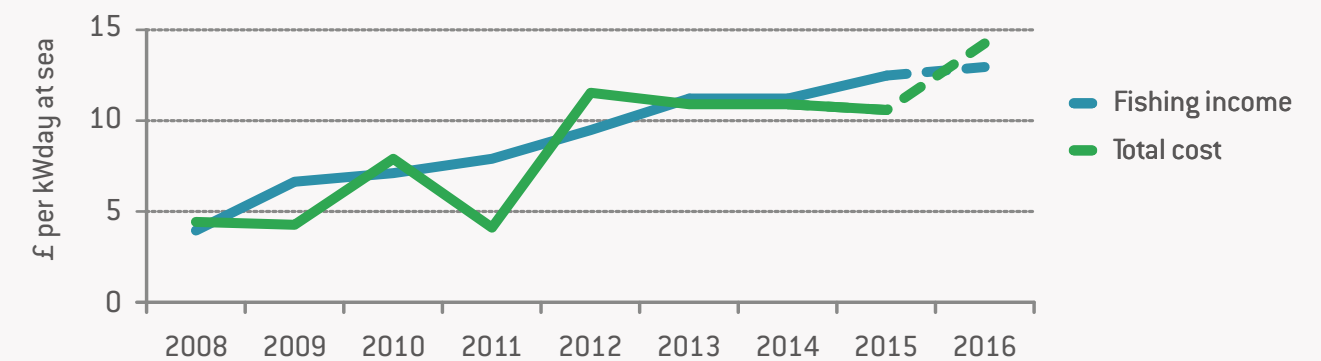
### Value added per segment

Despite reporting an operating loss in 2016, the average GVA per vessel was £527k, the highest reported in the observed period. This was entirely driven by crew share which, in 2016, was £609k.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
[All values adjusted for inflation]



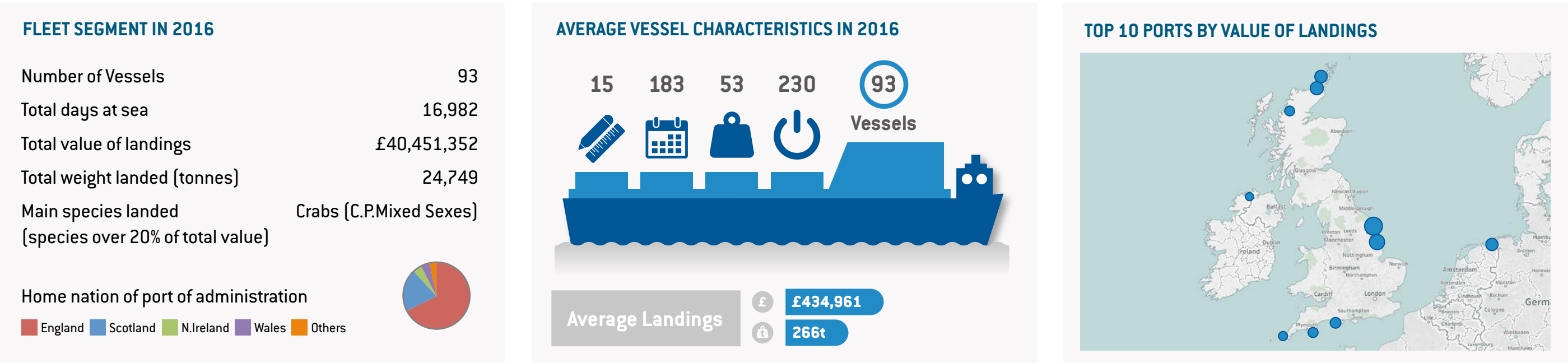
**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
[All values adjusted for inflation]



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		31	29	29	24	28	27	29	25	28
	Days at Sea (days)		197	194	179	180	157	177	167	183	179
	Landings (tonnes)		217.9	256.4	245.4	290.7	247.1	247.8	304.9	344.1	341.8
	Landings per day at sea (tonnes)		1.11	1.32	1.37	1.61	1.57	1.40	1.83	1.88	1.91
	Average price per tonne landed (£)		1,732	2,334	2,275	2,294	2,547	3,041	2,611	2,779	2,697
	Total Income (£'000)		379.1	643.2	565.4	675.4	667.4	781.6	801.6	960.4	933.6
	Total Operating Costs (£'000)		434.8	383.3	619.2	343.6	765.8	727.4	767.3	816.3	1,014.7
	Gross Value Added (£'000)		21.7	452.9	260.3	451.4	202.0	275.4	269.9	438.9	527.5
	Operating Profit (£'000)		-55.7	259.9	-53.8	331.8	-98.3	54.1	34.3	144.1	-81.1



POTS AND TRAPS OVER 12M: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016



## POTS AND TRAPS OVER 12M: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 92 vessels in the segment. The highest number of vessels in the observed period was 95 in 2015 and the lowest number was 81 in 2010.

### Landings and average price

In 2016, three stocks represented 98% of the value of all segment landings: crabs (66%), lobsters (16%) and whelks (16%); and 62% of total value was landed in the last 6 months of the year. In 2015, the same three stocks represented a lower proportion (85%) of the total value of landings. In 2016, the average price per tonne landed was £1,628, which was the highest average price achieved in the observed period. The lowest average price was £1,416 in 2009.

### Business performance by kilowatt day at sea (kWdas)

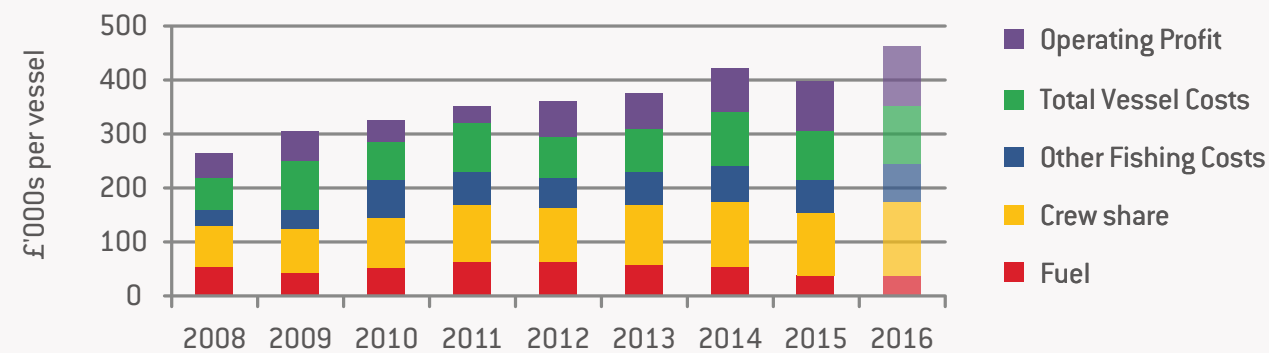
Since 2009, the fishing income achieved per kWdas followed an upwards trend, with strong performance since 2014. The improvement in 2014 was supported by relatively high weight of landings per kWdas and a stable average price.

Following 2012, the operating profit margin between fishing income and total cost per kWdas improved and, in 2016, was at its highest in the observed period. This was because income per kWdas improved, as described above, and cost per kWdas remained relatively stable, helped in 2015 by a reduction in fuel cost.

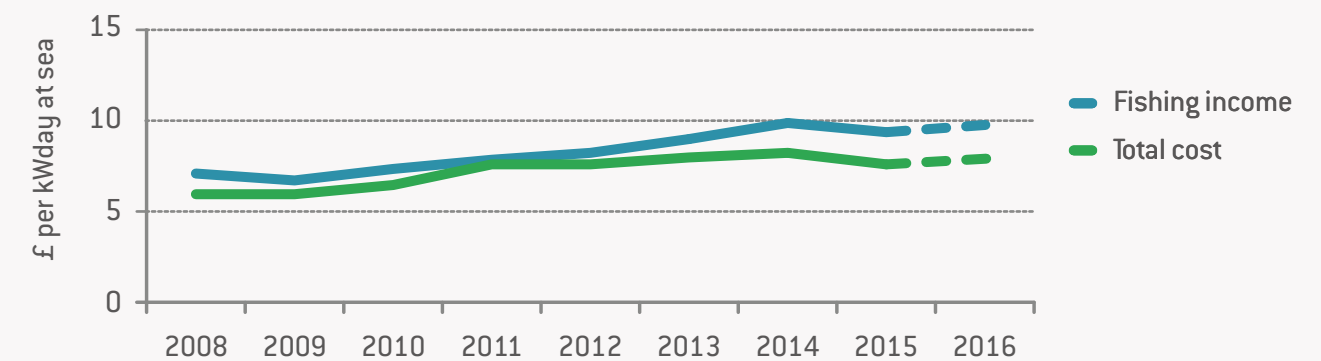
### Value added per segment

In 2016, the average GVA per vessel was £241k, the highest GVA reported in the observed period. This continued an upward trend in GVA since 2010.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		90	82	81	82	85	89	92	95	93
	Days at Sea (days)		167	179	191	177	172	170	176	171	183
	Landings (tonnes)		177.3	195.7	213.4	218.1	212.9	220.0	257.2	243.4	266.1
	Landings per day at sea (tonnes)		1.06	1.09	1.12	1.24	1.24	1.30	1.46	1.42	1.46
	Average price per tonne landed (£)		1,490	1,416	1,516	1,513	1,492	1,604	1,564	1,545	1,634
	Total Income (£'000)		265.7	306.0	325.9	349.5	362.5	374.6	422.7	397.1	459.3
	Total Operating Costs (£'000)		220.2	247.6	284.8	319.6	293.9	311.2	338.6	307.0	351.7
	Gross Value Added (£'000)		120.3	140.2	132.5	137.0	170.6	174.1	202.7	203.8	241.3
	Operating Profit (£'000)		45.5	58.3	41.2	29.8	68.6	63.3	84.2	90.2	107.6

POTS AND TRAPS 10-12M: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016

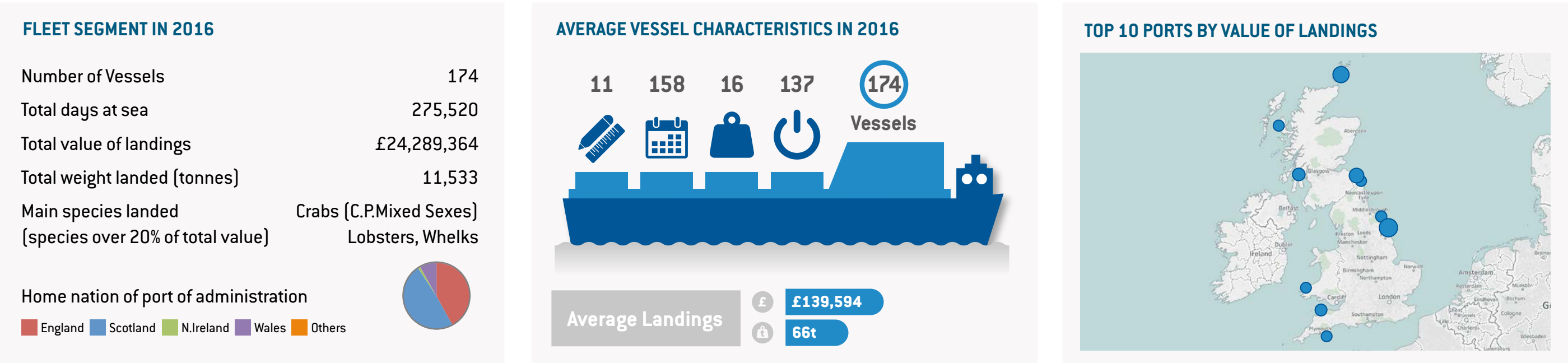


FIG 1. TOP SPECIES BY VALUE AS % OF TOTAL VALUE LANDED IN 2016

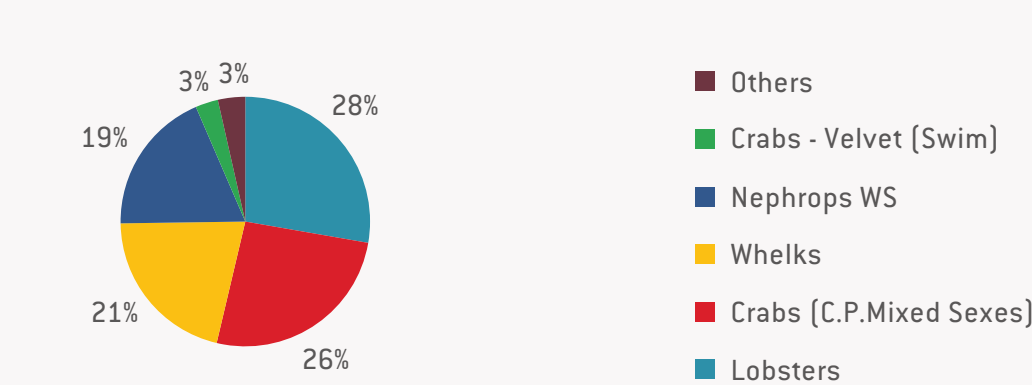


FIG.2 VALUE OF LANDINGS BY SPECIES AND MONTH IN 2016

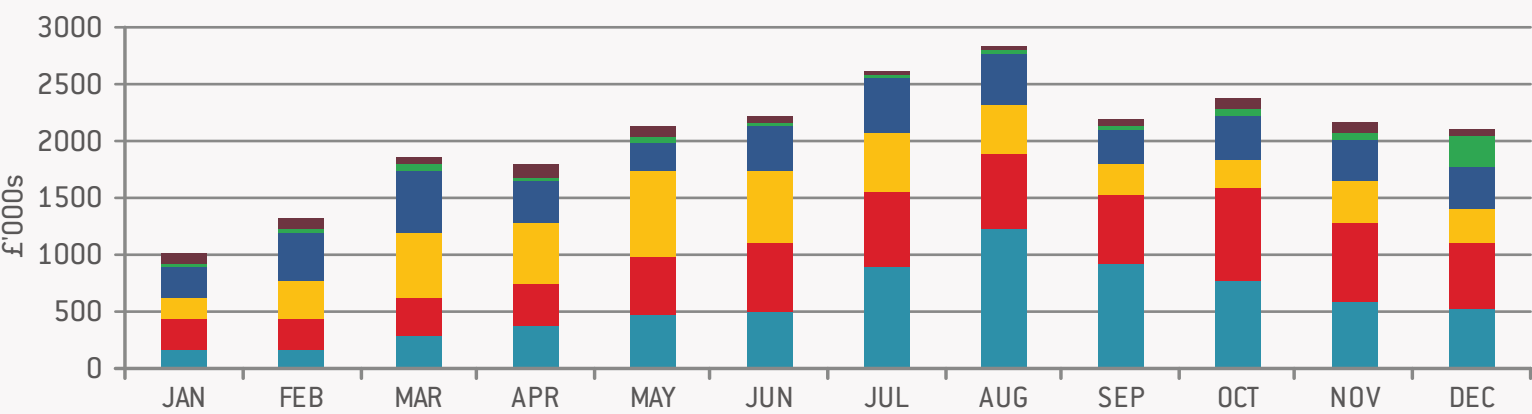


FIG.3 DAYS AT SEA BY GEAR TYPE AS % OF TOTAL DAYS AT SEA IN 2016

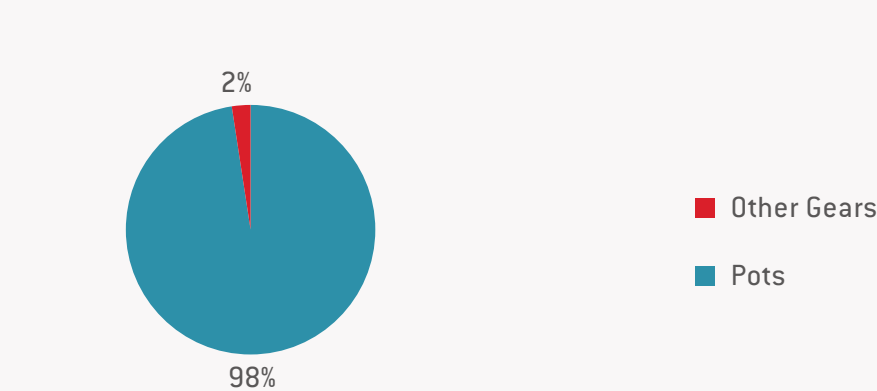
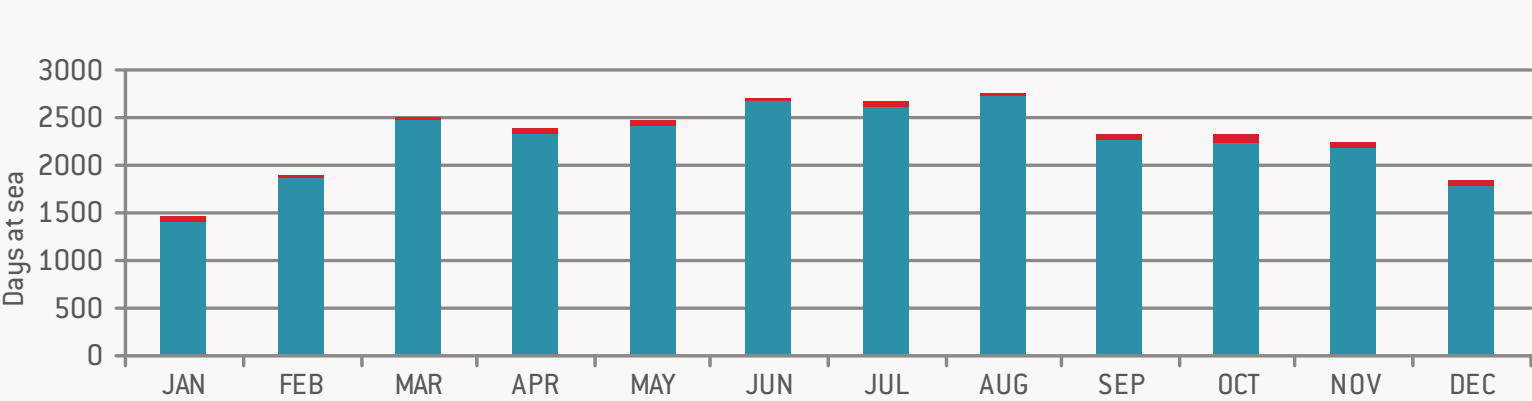


FIG.4 TOTAL DAYS AT SEA BY GEAR TYPE AND MONTH IN 2016



## POTS AND TRAPS 10-12M: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 174 vessels in the segment. The highest number of vessels in the observed period was 178 in 2011 and the lowest number was 161 in 2015.

### Landings and average price

In 2016, four stocks represented 94% of the value of all segment landings: lobsters (28%), crabs (26%), whelks (21%) and nephrops WS (19%). In 2016, the average price per tonne landed was £2,106, which was the highest average price achieved since 2012. The lowest average price was £1,787 in 2013.

### Business performance by kilowatt day at sea (kWdas)

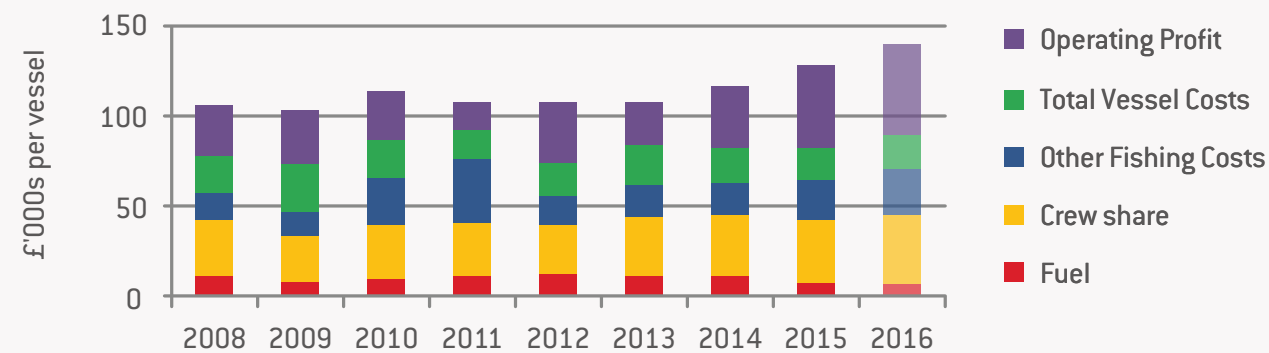
Since 2009, the fishing income achieved per kWdas followed a modest upward trend, with a relatively strong performance in 2015 and 2016. The improvements in 2015 and 2016 were supported by a relatively high weight of landings per kWdas whilst maintaining a good average price.

The improvement in income in 2015 and 2016, combined with stable costs, supported an improvement in the margin between fishing income and cost per kWdas, as presented in Fig.7. Since 2008, operating profit per kWdas was at its highest in 2016.

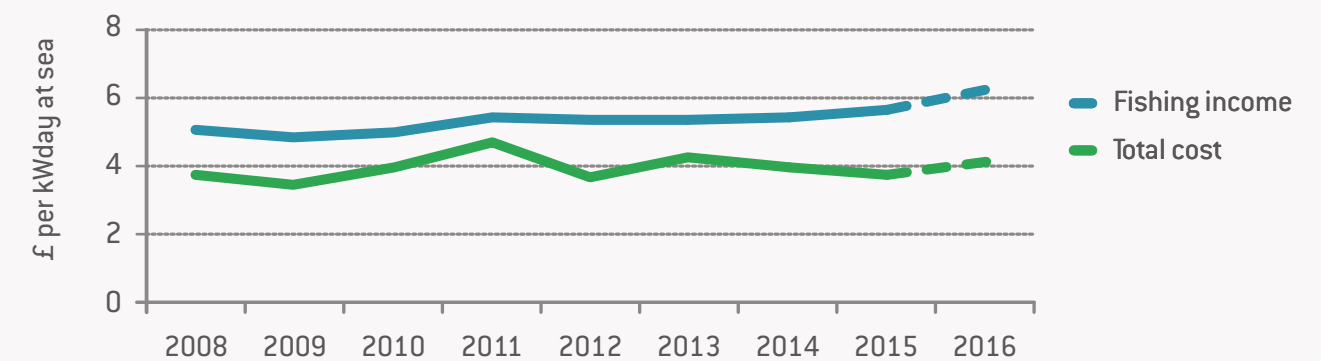
### Value added per segment

In 2016, the average GVA per vessel was £90k, the highest GVA reported in the observed period. The lowest GVA of £44k was reported in 2011.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
[All values adjusted for inflation]

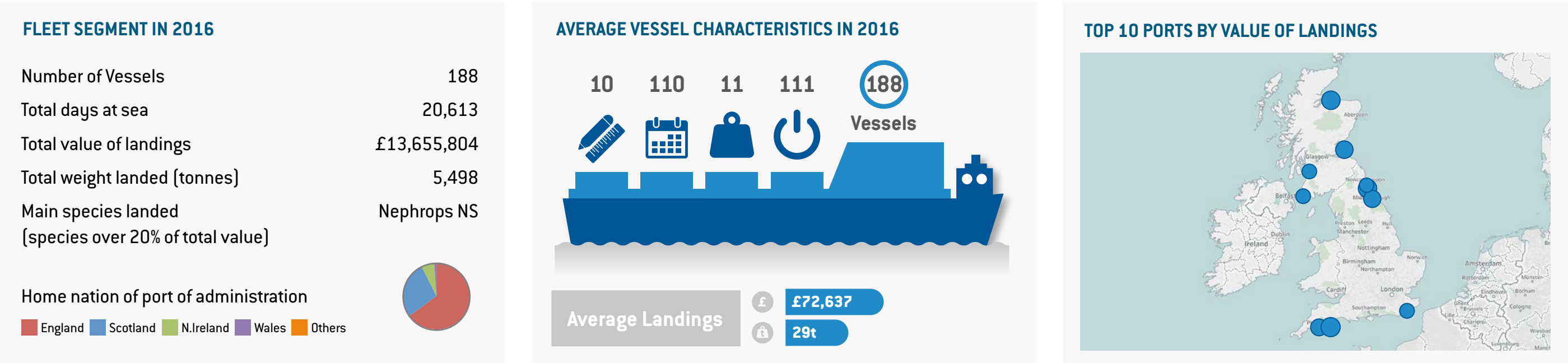


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
[All values adjusted for inflation]



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		177	177	175	178	167	169	166	161	174
	Days at Sea (days)		165	167	171	155	155	152	160	163	158
	Landings (tonnes)		46.3	46.2	49.9	48.5	51.8	60.1	58.8	61.8	66.3
	Landings per day at sea (tonnes)		0.28	0.28	0.29	0.31	0.34	0.40	0.37	0.38	0.42
	Average price per tonne landed (£)		2,311	2,265	2,223	2,249	2,110	1,787	1,976	2,066	2,106
	Total Income (£'000)		108.8	104.8	115.2	109.4	110.5	109.6	118.7	130.5	142.7
	Total Operating Costs (£'000)		79.8	74.7	88.5	94.4	74.7	85.5	84.3	84.7	91.8
	Gross Value Added (£'000)		60.2	55.3	57.4	43.9	62.5	56.9	69.6	81.0	89.9
	Operating Profit (£'000)		28.9	30.1	26.8	15.0	35.7	24.1	34.3	45.8	50.9

UNDER 10M DEMERSAL TRAWLS AND SEINES: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016





## UNDER 10M DEMERSAL TRAWLS AND SEINES: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 188 vessels in the segment, the lowest number of vessels reported for this fleet segment in the observed period. The number of vessels was as high as 253 in 2008.

### Landings and average price

In 2016, nephrops stocks represented 50% of the value of landings, squid and lemon sole were of secondary importance in terms of total value and the remainder of the value consisted of a wide mix of species. The average price per tonne in 2016 was £2,484. Average prices have been relatively stable at around £2,400 per tonne in the observed period, although there was a peak in average price in 2011 at £2,614 per tonne – as observed in other fleets with a high proportion of nephrops.

### Business performance by kilowatt day at sea (kWdas)

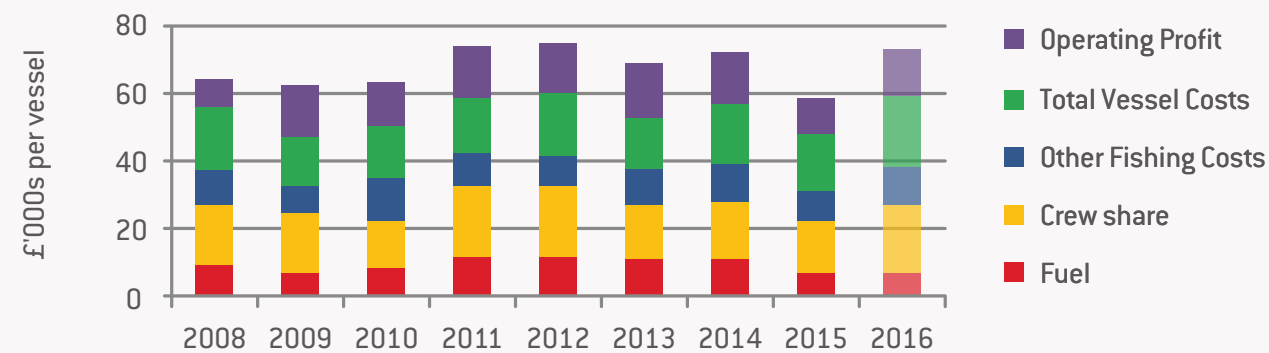
In 2012, landings weight per kWdas was at its highest in the observed period and, combined with an average price, supported high fishing income per kWdas. However, total cost per kWdas also increased in 2012, which limited any potential improvement in profit margin.

In 2015, operating profit per kWdas was relatively low compared to the rest of the observed period. This was due to a relatively low landings weight per kWdas and a relatively low average price. In 2016, both price and landings weight improved and this is reflected in an improved operating profit margin.

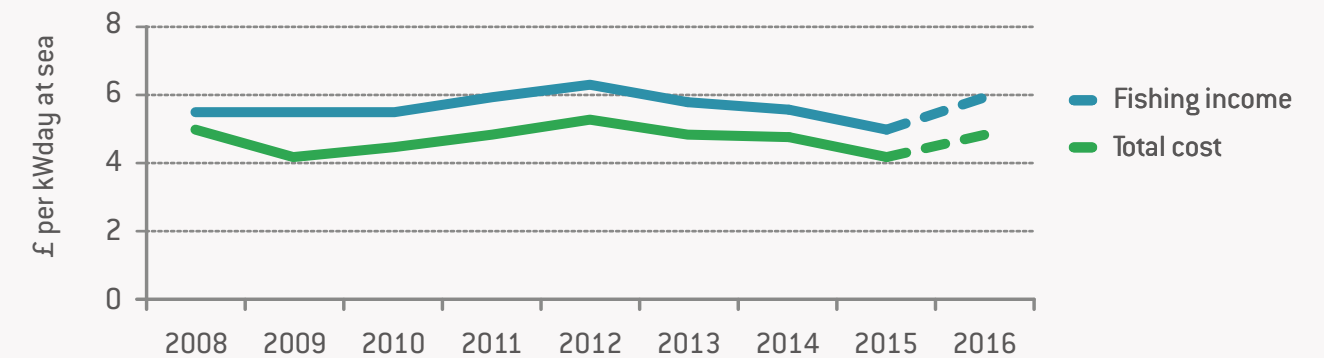
### Value added per segment

The average GVA per vessel remained relatively stable in the observed period, with the exception of 2008, 2010 and 2015. In 2016, GVA per vessel was £34k.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		253	231	216	213	222	201	202	191	188
	Days at Sea (days)		98	97	98	103	100	97	107	106	110
	Landings (tonnes)		24.9	27.5	25.6	27.4	29.1	29.4	27.7	25.7	29.2
	Landings per day at sea (tonnes)		0.25	0.28	0.26	0.27	0.29	0.30	0.26	0.24	0.27
	Average price per tonne landed (£)		2,501	2,251	2,446	2,614	2,438	2,183	2,403	2,274	2,484
	Total Income (£'000)		64.0	62.8	63.6	73.5	74.5	68.8	71.9	58.7	73.1
	Total Operating Costs (£'000)		56.3	47.3	50.7	58.4	59.8	53.3	56.9	48.5	59.2
	Gross Value Added (£'000)		25.2	32.7	26.6	35.9	35.7	32.2	32.5	25.6	33.8
	Operating Profit (£'000)		7.8	15.5	12.9	15.1	14.7	15.5	15.0	10.2	13.9

UNDER 10M DRIFT AND /OR FIXED NETS: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016

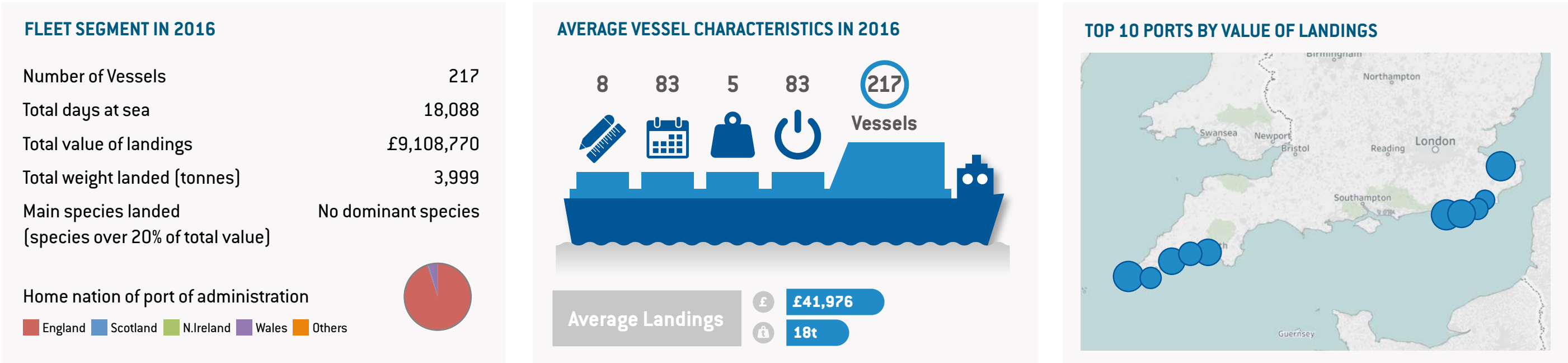


FIG 1. TOP SPECIES BY VALUE AS % OF TOTAL VALUE LANDED IN 2016

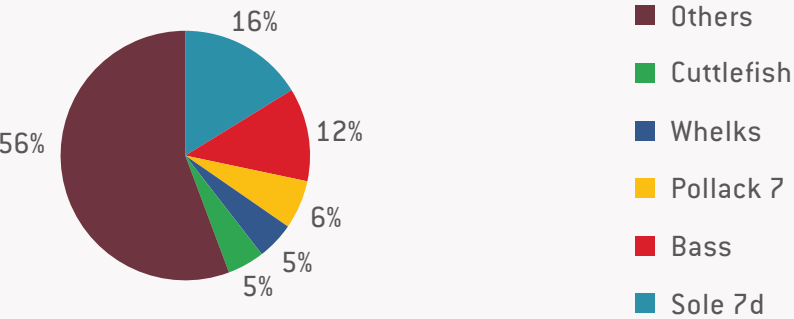


FIG.2 VALUE OF LANDINGS BY SPECIES AND MONTH IN 2016

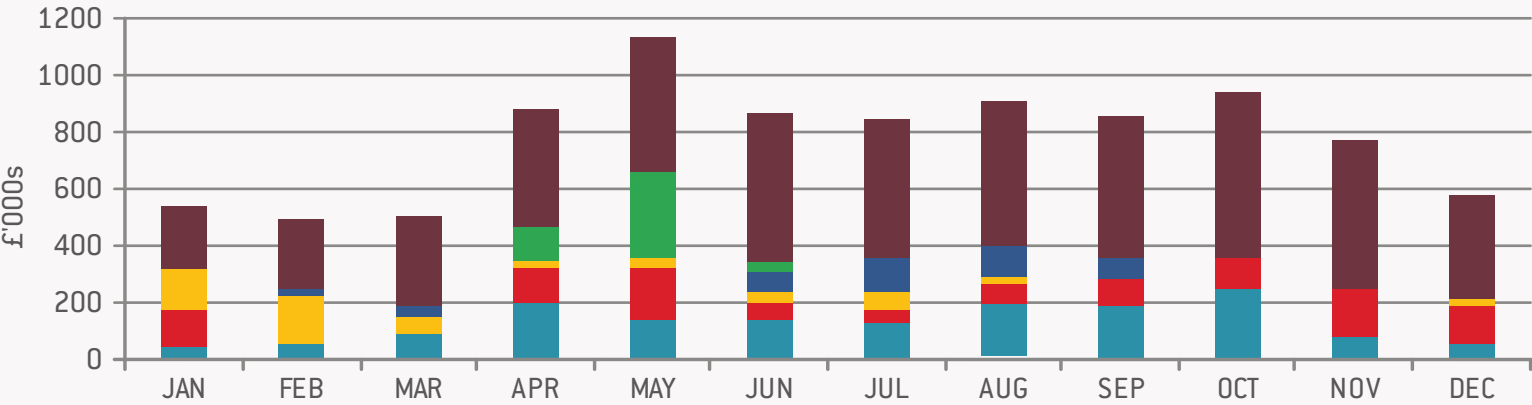


FIG.3 DAYS AT SEA BY GEAR TYPE AS % OF TOTAL DAYS AT SEA IN 2016

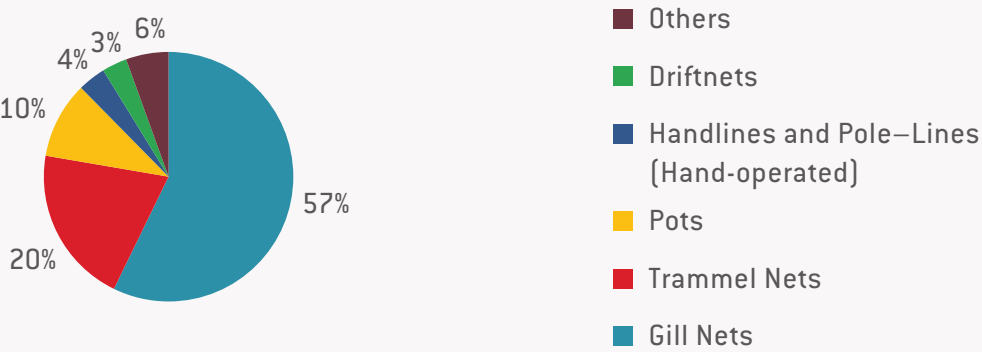
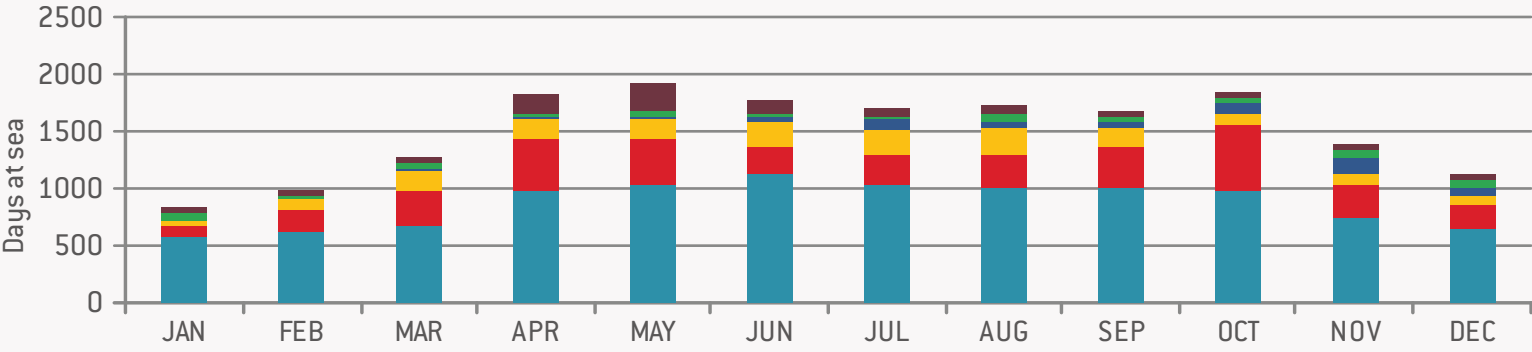


FIG.4 TOTAL DAYS AT SEA BY GEAR TYPE AND MONTH IN 2016



## UNDER 10M DRIFT AND /OR FIXED NETS: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 217 vessels in the segment, the lowest number of vessels reported for this fleet segment in the observed period. The number of vessels was as high as 260 in 2012.

### Landings and average price

In 2016, the diverse landings by the segment means that no one species was particularly dominant. Sole and bass were the two main stocks in terms of value and together represented 28% of the value of landings. The average price per tonne in 2016 was £2,278, which was the lowest it had been since 2010. The highest average price per tonne of £2,493 was reported in 2014.

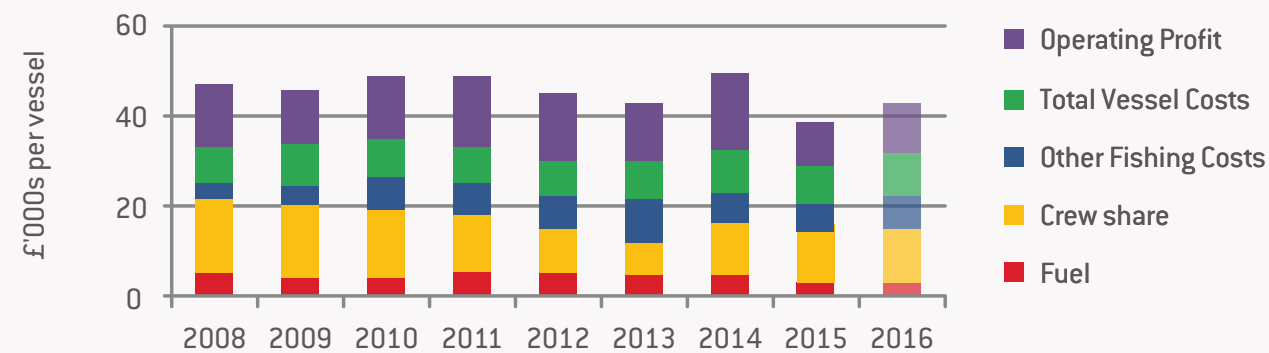
### Business performance by kilowatt day at sea (kWdas)

Fig. 7 shows that the margin between fishing income and total cost per kWdas reduced in 2015, and this continued into 2016. A reduction in fishing income per kWdas was the cause. In 2015, this was due to the lowest weight of landings per kWdas in the observed period. In 2016, the weight of landings improved but average price reduced, affecting total income in 2016. Costs have remained relatively stable in the observed period.

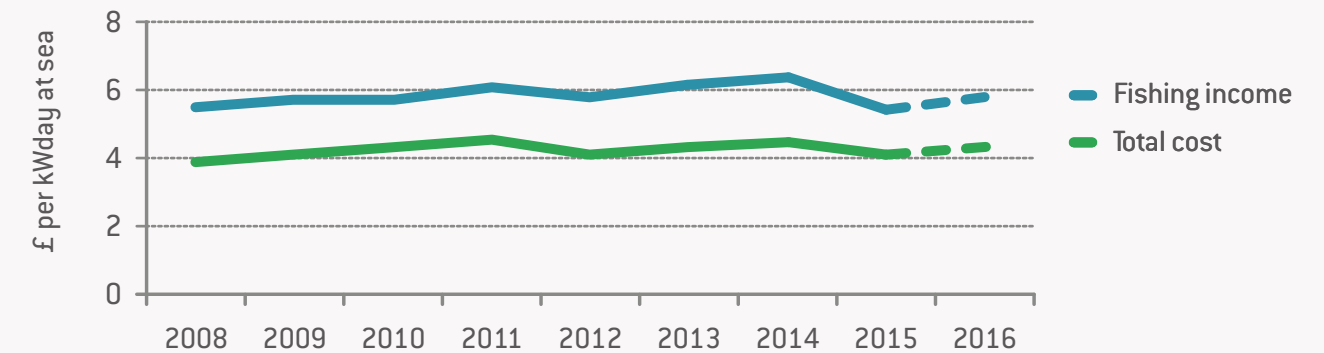
### Value added per segment

In 2016, average GVA per vessel was £23k, which was below average in the observed period. In 2008, GVA per vessel was £30k, which was the highest in the observed period.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
[All values adjusted for inflation]

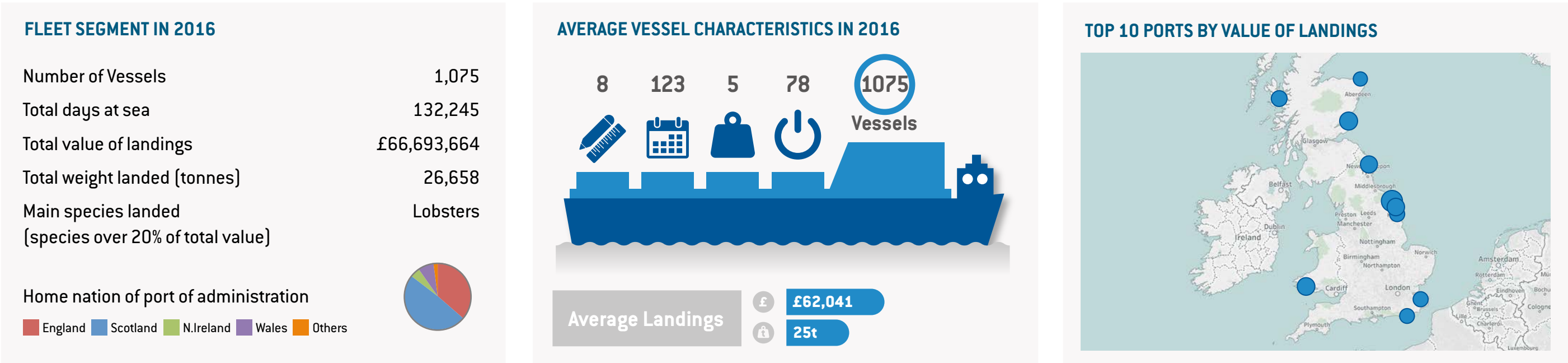


**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
[All values adjusted for inflation]



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		230	240	255	291	260	250	251	218	217
	Days at Sea (days)		102	93	90	87	84	85	89	81	83
	Landings (tonnes)		23.2	20.7	22.0	18.8	18.1	18.5	18.6	16.3	18.4
	Landings per day at sea (tonnes)		0.23	0.22	0.25	0.22	0.21	0.22	0.21	0.20	0.22
	Average price per tonne landed (£)		2,016	2,220	2,080	2,353	2,341	2,300	2,493	2,345	2,278
	Total Income (£'000)		46.8	46.0	48.5	48.6	45.2	43.0	49.6	38.8	42.6
	Total Operating Costs (£'000)		33.0	33.4	34.6	33.2	29.9	30.0	32.5	29.0	31.6
	Gross Value Added (£'000)		29.9	29.2	29.0	28.1	24.9	19.8	28.7	20.9	23.3
	Operating Profit (£'000)		13.7	12.6	13.9	15.4	15.3	12.9	17.1	9.8	11.0

UNDER 10M POTS AND TRAPS: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016



## UNDER 10M POTS AND TRAPS: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 1,075 vessels in the segment. The total number of vessels was as high as 1,088 in 2011 and as low as 989 in 2009.

### Landings and average price

In 2016, lobsters represented 28% of the value of total landings for the segment, with nephrops and crabs representing a further 12% each. The fleet segment lands a higher value of species in the second half of the year. The average price per tonne in 2016 was £2,502, which was the highest it had been since 2011. The lowest average price per tonne of £2,046 was reported in 2013.

### Business performance by kilowatt day at sea (kWdas)

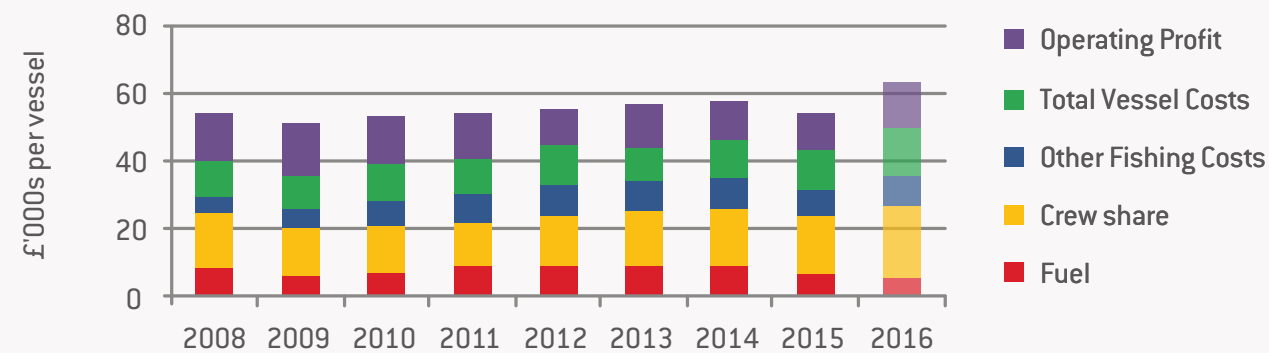
In the observed period, the fishing income per kWdas was at its highest in 2016. This was largely supported by a high average price per tonne although a good weight of landings per kWdas also contributed.

The highest operating profit per kWdas was reported in 2009, and was supported by a low cost per kWdas. Following 2009, operating profit per kWdas was variable but improved in 2016 because of average price and landings, as discussed above.

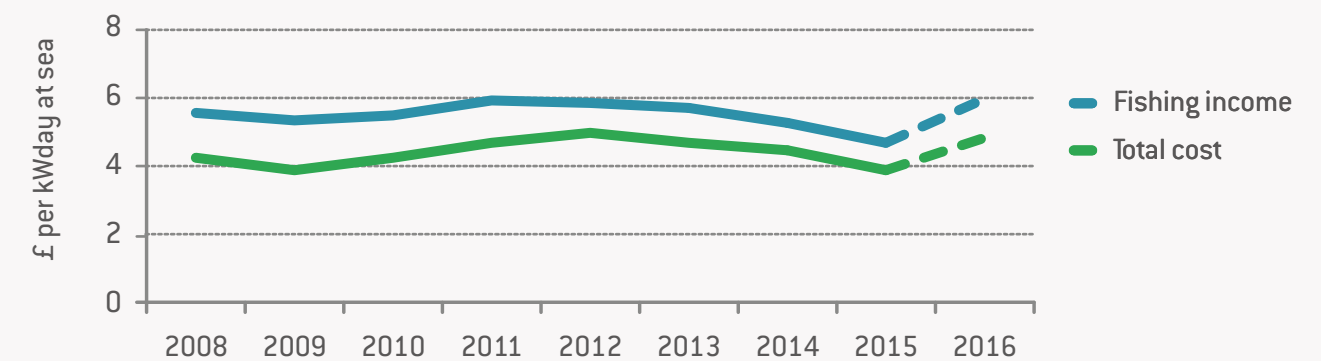
### Value added per segment

In 2016, average GVA per vessel was £34k, which was the highest in the observed period.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



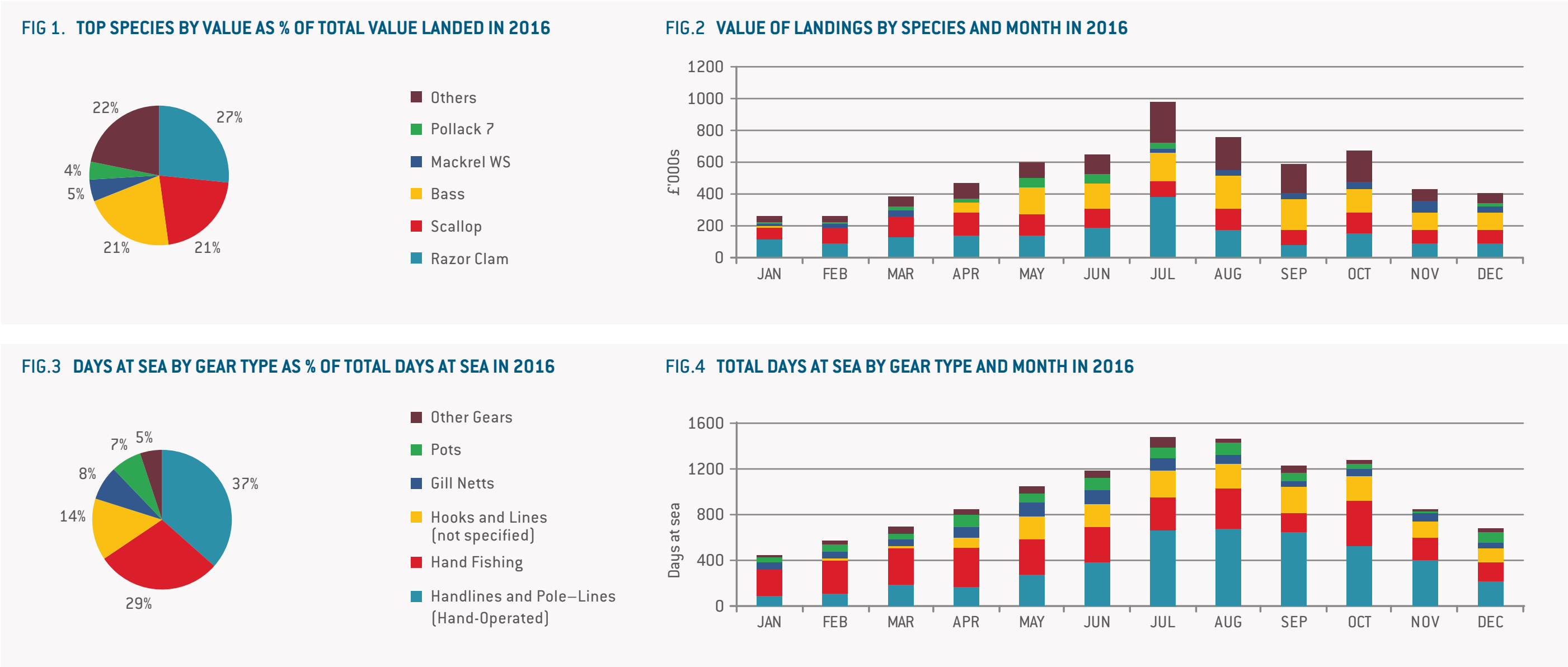
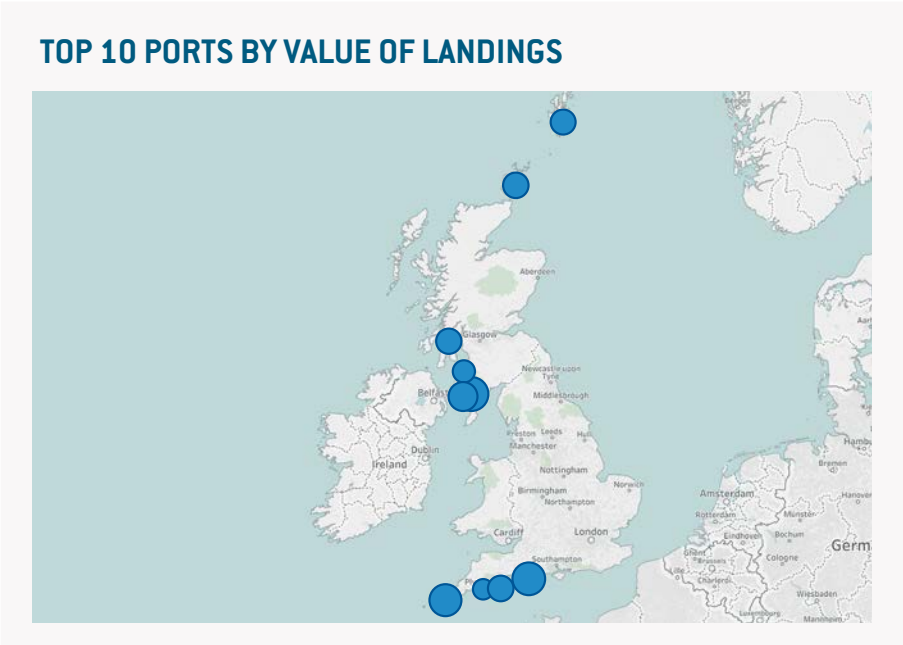
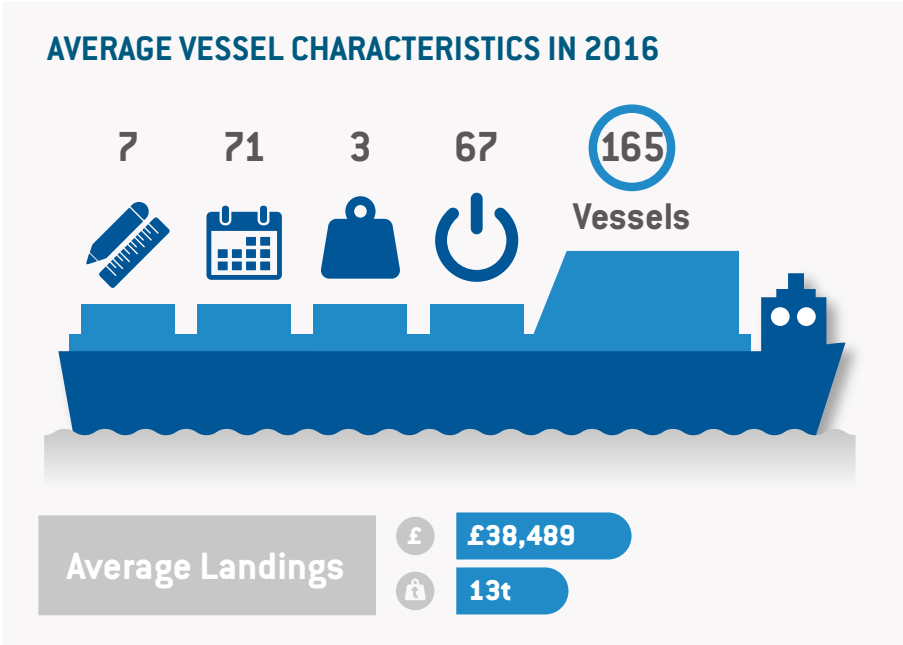
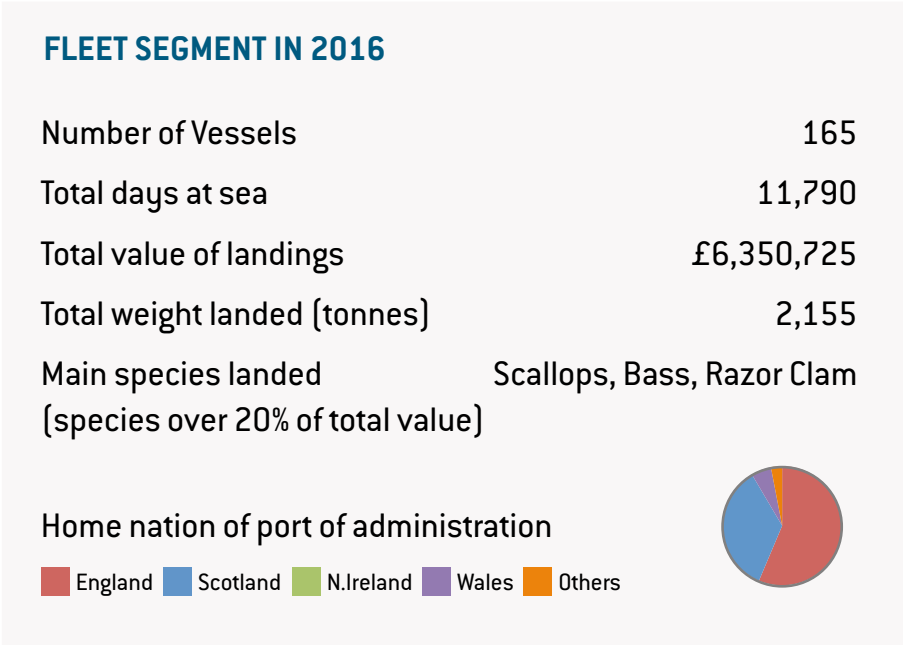
**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		1,068	989	1,008	1,088	1,079	1,003	1,041	1,004	1,075
	Days at Sea (days)		117	114	114	110	109	111	126	136	123
	Landings (tonnes)		18.9	19.2	21.0	20.1	23.6	26.5	25.4	24.1	24.8
	Landings per day at sea (tonnes)		0.16	0.17	0.18	0.18	0.22	0.24	0.20	0.18	0.20
	Average price per tonne landed (£)		2,779	2,568	2,442	2,579	2,231	2,046	2,177	2,198	2,502
	Total Income (£'000)		54.4	51.4	53.1	54.1	55.2	56.9	57.5	54.3	63.5
	Total Operating Costs (£'000)		40.1	36.0	39.3	40.7	44.8	44.4	46.1	43.7	50.0
	Gross Value Added (£'000)		30.5	29.1	28.1	26.5	25.1	28.7	28.1	27.7	34.4
	Operating Profit (£'000)		14.2	15.3	13.9	13.4	10.4	12.5	11.4	10.6	13.5



UNDER 10M USING HOOKS: FLEET SEGMENT BUSINESS CHARACTERISTICS IN 2016



## UNDER 10M USING HOOKS: FLEET SEGMENT BUSINESS PERFORMANCE, 2008-2016

### Vessel numbers

In 2016, there were 165 vessels in the segment the highest number of vessels reported for this fleet segment in the observed period. The number of vessels was as low as 72 in 2008.

### Landings and average price

In 2016, three stocks represent 69% of the total value of landings: razor clam (27%), scallops (21%) and bass (21%). The average price per tonne in 2016 was £2,947, which was the lowest it had been since 2012. The highest average price per tonne of £3,142 was reported in 2014.

### Business performance by kilowatt day at sea (kWdas)

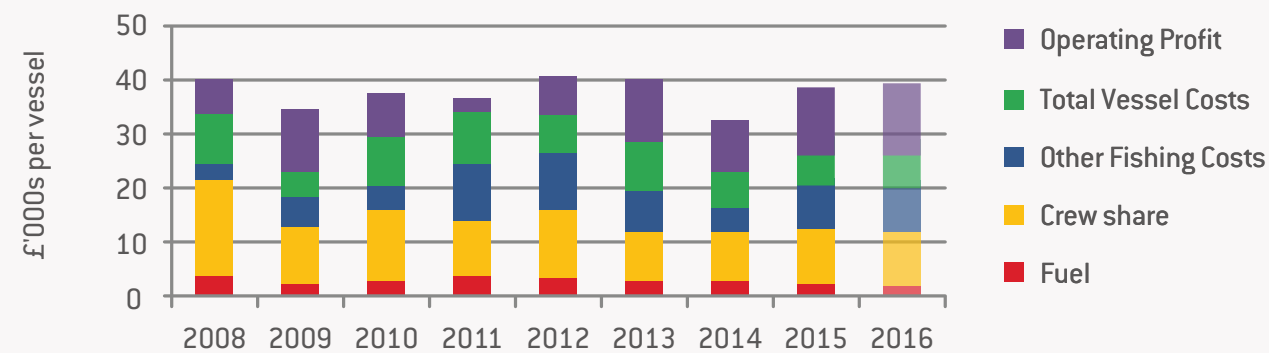
In 2016, although price was low compared to the previous two years, landings weight per kWdas had increased. This supported strong fishing income and operating profit per kWdas in 2016.

The margin between fishing income and total cost per kWdas narrowed in 2011. In 2011, income dropped due to a combination of relatively poor average price and landings weight per kWdas this, combined with an increase in cost per kWdas, resulted in a reduction in profit margins within the fleet.

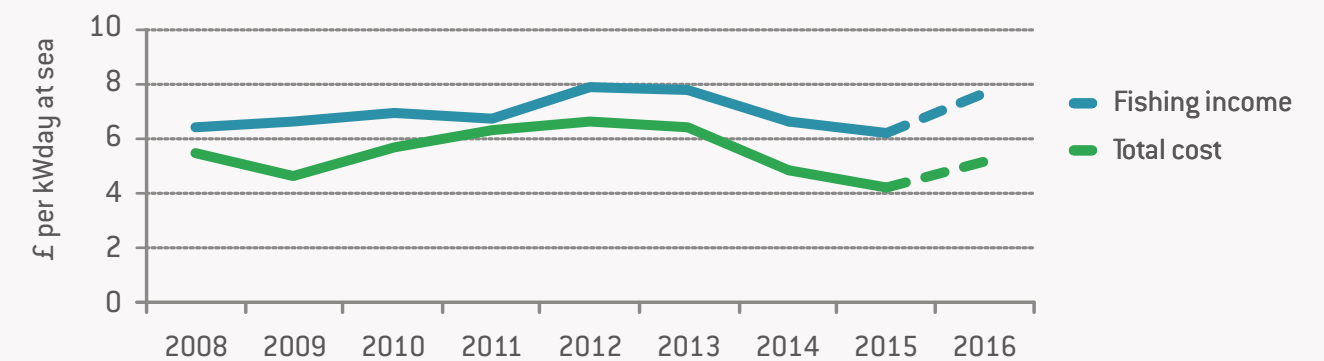
### Value added per segment

In 2016, average GVA per vessel was £23k, which was the highest average GVA since a similar GVA in 2008.

**FIG.5 AVERAGE PER VESSEL: OPERATING COST STRUCTURE COMPARED TO INCOME**  
(All values adjusted for inflation)



**FIG.6 OPERATING COSTS COMPARED TO INCOME PER KW DAY AT SEA (£)**  
(All values adjusted for inflation)



Economic Performance, 2008-2016		Trend 2008-2016	2008	2009	2010	2011	2012	2013	2014	2015	2016
AVERAGE PER VESSEL	Active Vessels (#)		72	105	134	138	143	150	149	137	165
	Days at Sea (days)		84	75	81	82	84	73	77	82	71
	Landings (tonnes)		14.4	12.7	13.4	12.9	13.9	11.7	10.0	12.5	13.1
	Landings per day at sea (tonnes)		0.17	0.17	0.16	0.16	0.17	0.16	0.13	0.15	0.18
	Average price per tonne landed (£)		2,758	2,602	2,729	2,801	2,875	2,970	3,142	3,067	2,947
	Total Income (£'000)		39.9	34.4	37.8	36.6	40.8	39.9	32.5	38.8	39.1
	Total Operating Costs (£'000)		33.7	23.0	29.6	33.9	33.4	28.5	23.3	26.1	25.9
	Gross Value Added (£'000)		23.8	21.8	21.4	12.7	19.7	20.5	18.4	22.3	23.1
	Operating Profit (£'000)		6.2	11.4	8.2	2.7	7.4	11.4	9.3	12.6	13.1

## METHODOLOGY

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

### Fisheries administrations data collection

Fisheries administrations gather data on vessel numbers and characteristics, landings and effort. This information is transmitted to a unique 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 and obtaining their permission to access their financial and operational performance data. To gather an adequate sample size of financial data for each fleet segment 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, capital value indicators as well as the contact details of vessel owners' accountancy firms. In addition, researchers gather qualitative data.

We collect financial data after the survey with the objective of gathering a large sample of vessel accounts. In early 2017, Seafish Economics collected 570 sets of 2015 financial accounts (12% of the UK fleet).

### Fleet segmentation

The population of the UK fishing fleet comprises all vessels recorded in the UK fishing fleet register that are active during the year considered. This includes a wide range of vessel types, gear types and activity levels. Therefore, we define homogeneous groups or fleet segments in order to be able to provide information on the operational and financial performance of groups of comparable vessels.

Each fleet segment has a set of criteria that define which vessels are included in it, 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 with approximately 1,000 vessels, while others have very few, such as the Area VIIA demersal trawlers with 13 vessels in 2015. It is important

to note that individual vessels may change from one segment in one year to another in the following year depending on their activity and gear use. Segments contain at least five vessels so that reliable data can be collected, robust estimates of costs and profits can be produced, and confidentiality is assured.

We allocate costs and earnings data from the sampled vessel accounts to particular fleet segments and extrapolate to the total population of the segment using official statistics covering every vessel in the fleet.

### Costs and earnings estimation

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

We then calculate 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;
- b) The sum of 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 capacity (VCUs) and fishing effort (days at sea) of each vessel to estimate its fuel consumption in litres, which is then combined with the average annual red diesel price (excluding duty) to calculate the fuel cost estimates for each vessel. To calculate crew share costs, we allocate a minimum of £100 per day in instances where the actual observed amount within the 'combined segment sample cost structure' is lower.

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 provides details on 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 the 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 (an FTE is assumed to be 2,000 hours worked a year).

### 2016 estimates

Data for the years 2008-2015 are estimates based on Government data and data collected by Seafish. Data for 2016 are estimates using provisional official statistics on landings, numbers of vessels and effort, along with 2016 fuel prices and previous years' cost structures. Therefore, the 2016 values should be considered robust preliminary estimates. Seafish will revise these estimates when 2016 vessel accounts are available later in the year.

## SEGMENTATION CRITERIA

SEAFISH SEGMENTS	Main Area	Main Days at Sea Gear	Main Species by value	Gear Sub-type	Power Main Engine	Vessel Length
AREA 7A DEMERSAL TRAWL	AREA 7A	DEMERSAL TRAWLS AND SEINES				>= 10M
AREA 7A NEPHROPS OVER 250KW	AREA 7A	DEMERSAL TRAWLS AND SEINES	NEPHROPS		>= 250 KW	>= 10M
AREA 7A NEPHROPS UNDER 250KW	AREA 7A	DEMERSAL TRAWLS AND SEINES	NEPHROPS		<250 KW	>= 10M
AREA 7B-K TRAWLERS 10-24M	AREA 7DE, AREA 7FG, AREA 7 OTHER	DEMERSAL TRAWLS AND SEINES	NOT NEPHROPS			>= 10M & <24M
NORTH SEA BEAM TRAWL OVER 300KW	NORTH SEA	BEAM TRAWL	NOT NEPHROPS		>= 300 KW	>= 10M
NORTH SEA BEAM TRAWL UNDER 300KW	NORTH SEA	BEAM TRAWL	NOT NEPHROPS		< 300 KW	>= 10M
NORTH SEA NEPHROPS TRAWL OVER 300KW	NORTH SEA	DEMERSAL TRAWLS AND SEINES	NEPHROPS		>= 300 KW	>= 10M
NORTH SEA NEPHROPS TRAWL UNDER 300KW	NORTH SEA	DEMERSAL TRAWLS AND SEINES	NEPHROPS		< 300 KW	>= 10M
NSWOS DEMERSAL TRAWL OVER 24M	NORTH SEA, WEST OF SCOTLAND		NOT NEPHROPS			>= 24M
NSWOS DEMERSAL PAIR TRAWLS AND SEINES	NORTH SEA, WEST OF SCOTLAND	DEMERSAL TRAWLS AND SEINES	NOT NEPHROPS	PAIRED TRAWL		>= 10M
NSWOS DEMERSAL SEINERS	NORTH SEA, WEST OF SCOTLAND	DEMERSAL TRAWLS AND SEINES	NOT NEPHROPS	SCOTTISH SEINER		>= 10M
NSWOS DEMERSAL TRAWL UNDER 24M, OVER 300KW	NORTH SEA, WEST OF SCOTLAND	DEMERSAL TRAWLS AND SEINES	NOT NEPHROPS		>= 300 KW	>= 10M & <24M
NSWOS DEMERSAL TRAWL UNDER 24M, UNDER 300KW	NORTH SEA, WEST OF SCOTLAND	DEMERSAL TRAWLS AND SEINES	NOT NEPHROPS		< 300 KW	>= 10M & <24M
WEST OF SCOTLAND NEPHROPS TRAWL OVER 250KW	WEST OF SCOTLAND	DEMERSAL TRAWLS AND SEINES	NEPHROPS		>= 250 KW	>= 10M
WEST OF SCOTLAND NEPHROPS TRAWL UNDER 250KW	WEST OF SCOTLAND	DEMERSAL TRAWLS AND SEINES	NEPHROPS		< 250 KW	>= 10M
SOUTH WEST BEAM TRAWL OVER 250KW	AREA 7DE, AREA 7FG, AREA 7 OTHER	BEAM TRAWL			>= 250 KW	>= 10M
SOUTH WEST BEAM TRAWL UNDER 250KW	AREA 7DE, AREA 7FG, AREA 7 OTHER	BEAM TRAWL			< 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
GILL NETTERS		DRIFT NETS AND FIXED NETS	NOT NEPHROPS			>= 10M
LOGLINERS		GEARS USING HOOKS	NOT NEPHROPS			>= 10M
POTS AND TRAPS OVER 12M		POTS AND TRAPS				>= 12M
POTS AND TRAPS 10-12M		POTS AND TRAPS				>= 10M & <12M
UNDER 10M DEMERSAL TRAWLS AND SEINES		DEMERSAL TRAWLS AND SEINES				< 10M
UNDER 10M DRIFT AND/OR FIXED NETS		DRIFT NETS AND FIXED NETS				< 10M
UNDER 10M POTS AND TRAPS		POTS AND TRAPS				< 10M
UNDER 10M USING HOOKS		GEARS USING HOOKS				< 10M




























SAMPLE RATES

Sample rate for vessel characteristics and fishing income is 100%, taken from official data.  
Sample rates on this page are for non-fishing income and costs, taken from financial accounts.









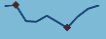




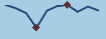













SEGMENT	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
AREA 7A DEMERSAL TRAWL	25%	6%	13%	27%	21%	8%	0%	40%	11%	23%
AREA 7A NEPHROPS OVER 250KW	12%	11%	20%	14%	18%	22%	13%	21%	16%	17%
AREA 7A NEPHROPS UNDER 250KW	22%	15%	15%	5%	24%	24%	14%	16%	25%	22%
AREA 7B-K TRAWLERS 10-24M	14%	25%	18%	22%	17%	5%	15%	15%	18%	15%
NORTH SEA BEAM TRAWL OVER 300KW	54%	20%	36%	56%	70%	56%	63%	18%	9%	40%
NORTH SEA BEAM TRAWL UNDER 300KW	0%	50%	17%	19%	56%	69%	64%	39%	35%	50%
NORTH SEA NEPHROPS TRAWL OVER 300KW	42%	41%	47%	52%	43%	45%	47%	36%	46%	42%
NORTH SEA NEPHROPS TRAWL UNDER 300KW	27%	22%	22%	25%	27%	22%	14%	17%	24%	33%
NSWOS DEMERSAL TRAWL OVER 24M	50%	45%	43%	40%	53%	48%	59%	50%	69%	69%
NSWOS DEMERSAL PAIR TRAWLS AND SEINES	44%	58%	59%	59%	61%	56%	47%	45%	60%	43%
NSWOS DEMERSAL SEINERS	59%	58%	46%	48%	40%	47%	69%	41%	63%	63%
NSWOS DEMERSAL TRAWL UNDER 24M, OVER 300KW	51%	37%	32%	44%	48%	47%	50%	50%	49%	49%
NSWOS DEMERSAL TRAWL UNDER 24M, UNDER 300KW	13%	11%	9%	13%	24%	14%	36%	43%	27%	22%
WEST OF SCOTLAND NEPHROPS TRAWL OVER 250KW	41%	27%	5%	19%	24%	20%	21%	38%	32%	38%
WEST OF SCOTLAND NEPHROPS TRAWL UNDER 250KW	27%	23%	14%	16%	31%	19%	32%	26%	25%	23%
SOUTH WEST BEAM TRAWL OVER 250KW	54%	43%	55%	54%	77%	82%	84%	16%	20%	73%
SOUTH WEST BEAM TRAWL UNDER 250KW	6%	37%	41%	32%	37%	22%	30%	32%	39%	38%
UK SCALLOP DREDGE OVER 15M	24%	20%	14%	25%	17%	17%	31%	26%	30%	29%
UK SCALLOP DREDGE UNDER 15M	8%	12%	7%	4%	11%	11%	13%	13%	18%	12%
GILL NETTERS	8%	0%	5%	8%	8%	20%	17%	11%	14%	19%
LOGLINERS	0%	4%	10%	10%	14%	8%	7%	7%	7%	8%
POTS AND TRAPS OVER 12M	10%	8%	11%	5%	14%	10%	21%	30%	27%	21%
POTS AND TRAPS 10-12M	13%	10%	14%	9%	11%	11%	14%	16%	17%	19%
UNDER 10M DEMERSAL TRAWLS AND SEINES	10%	18%	7%	10%	12%	7%	11%	13%	12%	9%
UNDER 10M DRIFT AND/OR FIXED NETS	8%	8%	3%	3%	7%	7%	10%	5%	8%	10%
UNDER 10M POTS AND TRAPS	6%	7%	6%	5%	7%	5%	8%	12%	13%	13%
UNDER 10M USING HOOKS	3%	9%	6%	8%	5%	5%	10%	7%	5%	6%



OPERATING PROFIT MARGIN

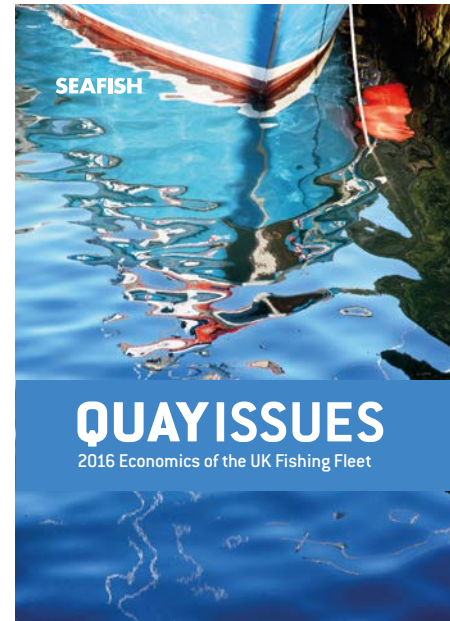
SEGMENT	Trend 2006-2016	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
AREA 7A DEMERSAL TRAWL		8%	5%	19%	14%	14%	7%	9%	14%	12%	21%	22%
AREA 7A NEPHROPS OVER 250KW		14%	21%	23%	19%	16%	18%	26%	19%	17%	28%	29%
AREA 7A NEPHROPS UNDER 250KW		17%	20%	21%	17%	17%	25%	23%	22%	17%	21%	21%
AREA 7B-K TRAWLERS 10-24M		23%	36%	18%	17%	23%	4%	19%	17%	24%	18%	18%
NORTH SEA BEAM TRAWL OVER 300KW		11%	12%	3%	19%	8%	6%	0%	-6%	-2%	-4%	-2%
NORTH SEA BEAM TRAWL UNDER 300KW		-2%	19%	-37%	5%	-3%	-25%	3%	-5%	-59%	-1%	-7%
NORTH SEA NEPHROPS TRAWL OVER 300KW		19%	19%	9%	11%	9%	12%	11%	10%	9%	11%	14%
NORTH SEA NEPHROPS TRAWL UNDER 300KW		16%	14%	5%	8%	4%	17%	14%	6%	12%	7%	10%
NSWOS DEMERSAL TRAWL OVER 24M		14%	14%	8%	8%	10%	7%	5%	8%	13%	13%	15%
NSWOS DEMERSAL PAIR TRAWLS AND SEINES		19%	17%	8%	6%	11%	10%	10%	19%	21%	11%	12%
NSWOS DEMERSAL SEINERS		20%	18%	13%	11%	20%	23%	19%	18%	24%	22%	22%
NSWOS DEMERSAL TRAWL UNDER 24M, OVER 300KW		16%	21%	14%	11%	16%	15%	10%	18%	16%	14%	17%
NSWOS DEMERSAL TRAWL UNDER 24M, UNDER 300KW		16%	19%	13%	18%	17%	22%	17%	15%	14%	20%	22%
WEST OF SCOTLAND NEPHROPS TRAWL OVER 250KW		19%	15%	9%	-3%	10%	21%	21%	13%	19%	15%	17%
WEST OF SCOTLAND NEPHROPS TRAWL UNDER 250KW		23%	19%	18%	16%	16%	18%	22%	16%	17%	19%	20%
SOUTH WEST BEAM TRAWL OVER 250KW		16%	16%	0%	5%	14%	11%	4%	2%	8%	8%	10%
SOUTH WEST BEAM TRAWL UNDER 250KW		6%	12%	1%	8%	4%	4%	14%	6%	5%	14%	15%
UK SCALLOP DREDGE OVER 15M		14%	25%	20%	18%	25%	24%	22%	18%	16%	19%	20%
UK SCALLOP DREDGE UNDER 15M		10%	20%	16%	32%	18%	13%	23%	16%	18%	26%	27%
GILL NETTERS		15%	15%	11%	2%	29%	7%	24%	11%	26%	26%	26%
LOGLINERS		-7%	-9%	-15%	40%	-10%	49%	-15%	7%	4%	15%	-9%
POTS AND TRAPS OVER 12M		13%	12%	17%	19%	13%	9%	19%	17%	20%	23%	23%
POTS AND TRAPS 10-12M		33%	15%	27%	29%	23%	14%	32%	22%	29%	35%	36%
UNDER 10M DEMERSAL TRAWLS AND SEINES		18%	25%	12%	25%	20%	21%	20%	23%	21%	17%	19%
UNDER 10M DRIFT AND/OR FIXED NETS		29%	35%	29%	27%	29%	32%	34%	30%	34%	25%	26%
UNDER 10M POTS AND TRAPS		22%	31%	26%	30%	26%	25%	19%	22%	20%	19%	21%
UNDER 10M USING HOOKS		39%	44%	16%	33%	22%	7%	18%	29%	28%	33%	34%

## NET PROFIT MARGIN

SEGMENT	Trend 2006-2015	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
AREA 7A DEMERSAL TRAWL		2%	-6%	18%	12%	13%	-2%	9%	9%	11%	13%
AREA 7A NEPHROPS OVER 250KW		8%	15%	19%	16%	12%	13%	23%	7%	11%	12%
AREA 7A NEPHROPS UNDER 250KW		13%	16%	19%	8%	15%	22%	19%	19%	12%	18%
AREA 7B-K TRAWLERS 10-24M		17%	30%	12%	14%	19%	2%	13%	12%	19%	13%
NORTH SEA BEAM TRAWL OVER 300KW		5%	-17%	-13%	4%	0%	-4%	-9%	-13%	-14%	-18%
NORTH SEA BEAM TRAWL UNDER 300KW		-2%	16%	-48%	-16%	-18%	-35%	-9%	-12%	-69%	-10%
NORTH SEA NEPHROPS TRAWL OVER 300KW		15%	15%	-2%	1%	-3%	3%	3%	-1%	2%	2%
NORTH SEA NEPHROPS TRAWL UNDER 300KW		12%	11%	-3%	-2%	-3%	12%	9%	1%	6%	0%
NSWOS DEMERSAL TRAWL OVER 24M		7%	8%	0%	0%	3%	0%	-3%	2%	6%	8%
NSWOS DEMERSAL PAIR TRAWLS AND SEINES		15%	11%	0%	0%	6%	5%	4%	13%	18%	6%
NSWOS DEMERSAL SEINERS		13%	11%	4%	3%	9%	12%	9%	12%	17%	13%
NSWOS DEMERSAL TRAWL UNDER 24M, OVER 300KW		9%	14%	5%	0%	7%	7%	2%	10%	9%	7%
NSWOS DEMERSAL TRAWL UNDER 24M, UNDER 300KW		15%	13%	3%	14%	12%	17%	11%	10%	8%	8%
WEST OF SCOTLAND NEPHROPS TRAWL OVER 250KW		14%	11%	4%	-15%	7%	13%	15%	6%	13%	8%
WEST OF SCOTLAND NEPHROPS TRAWL UNDER 250KW		17%	15%	13%	6%	8%	11%	17%	11%	8%	12%
SOUTH WEST BEAM TRAWL OVER 250KW		13%	15%	-2%	5%	10%	10%	3%	0%	7%	6%
SOUTH WEST BEAM TRAWL UNDER 250KW		1%	3%	-6%	4%	1%	-1%	11%	3%	2%	10%
UK SCALLOP DREDGE OVER 15M		3%	21%	13%	12%	20%	19%	16%	14%	12%	13%
UK SCALLOP DREDGE UNDER 15M		-1%	14%	10%	22%	11%	4%	17%	6%	12%	16%
GILL NETTERS		8%	15%	8%	1%	26%	4%	20%	4%	19%	18%
LOGLINERS		-7%	-14%	-20%	32%	-16%	40%	-16%	0%	-2%	8%
POTS AND TRAPS OVER 12M		8%	6%	12%	15%	5%	1%	13%	10%	14%	16%
POTS AND TRAPS 10-12M		27%	11%	19%	20%	19%	9%	26%	13%	21%	27%
UNDER 10M DEMERSAL TRAWLS AND SEINES		11%	18%	6%	16%	14%	14%	13%	16%	14%	13%
UNDER 10M DRIFT AND/OR FIXED NETS		23%	29%	20%	21%	20%	24%	25%	19%	28%	18%
UNDER 10M POTS AND TRAPS		13%	22%	17%	20%	18%	18%	12%	13%	11%	11%
UNDER 10M USING HOOKS		27%	34%	9%	25%	15%	-1%	11%	18%	20%	26%

## FURTHER READING

The Seafish Economics team produce a number of different annual reports using our fleet economic performance data. In addition, this data can also be used to produce bespoke datasets suited to individual needs and to assist out experts in replying to a wide range of ad-hoc enquiries.



### 2016 ECONOMICS OF THE UK FISHING FLEET

This report aims to deliver a comprehensive analysis of the economic performance of the UK fishing fleet using the latest available data. It looks in detail at the income and costs of the UK fleet as well as individual fleet segments. In addition we look at the ambitions and expectations of the fleet for the future.



### QUAY ISSUES MAGAZINE

The free publication, authored by Seafish, highlights the often untold stories from across the UK fishing industry. Quay Issues shares inspiring stories about the innovative and creative solutions fishermen across the country have developed to overcome the challenges they encounter in their working lives. (New issue due November 2017)

Seafish Economics also gather economic data on the performance of seafood processors in the UK via our annual financial data survey and biennial census.



### 2016 UK SEAFOOD PROCESSING INDUSTRY REPORT

This publication is the definitive report on seafood processing in the UK. It provides an overview of the size and structure of the industry, including processing units, employment levels, regional distribution, types of processing activity and the species being processed. Furthermore, the report includes qualitative research findings about the business environment in the industry, with analysis dedicated to market, trade and regulatory developments.

# SEAFISH

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***Our Mission:** supporting a profitable, sustainable and socially responsible future for the seafood industry*