Whitefish Market Prices in Shetland

Ian R. Napier

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A Report for Shetland Fish Producers' Organisation

Ian R. Napier

(ian.napier@uhi.ac.uk)

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www.shetland.uhi.ac.uk/research/statistics/reports

UHI Shetland

Port Arthur Scalloway Shetland ZE1 0UN

Tel: 01595 772000

Email: shetland@uhi.ac.uk
Web: www.shetland.ac.uk

Contents

Intro	oduction	2
	The Shetland Seafood Auction	2
Data	a & Analyses	3
	Data from the Marine Management Organisation	3
	Data from Shetland Seafood Auction	3
	Landings in Shetland	4
	Composition of Landings in Shetland	4
Res	sults	5
	Whitefish Landings in Scotland	5
	Composition of Whitefish Landings	7
	Whitefish Landings in Shetland	11
	Increased Diversity of Landings	14
	Sales Through the Shetland Seafood Auction	15
	Whitefish Prices in Shetland and Elsewhere	16
	Shetland Seafood Auction v. Other Landings in Shetland	16
	Shetland Seafood Auction v. Other Scottish Ports	16
	Value of Typical Whitefish Landings	25
Disc	cussion	28

Introduction

This analysis has been carried out at the request of the Shetland Fish Producers' Organisation (SFPO)¹ to compare the prices of whitefish² landed in Shetland and sold through the Shetland Seafood Auction with those landed elsewhere in Scotland.

The Shetland Seafood Auction

The current Shetland Seafood Auction is an electronic 'Dutch auction' which was introduced in 2003 to replace the previous 'shout' auctions held on the market floors³. (In a Dutch auction the bids count down automatically from an initial high price set by the auctioneer until a buyer accepts the price.)

The new system was part of an initiative to improve the marketing of Shetland whitefish and reverse the downward trend in landings which started in the late 1980s and continued throughout the 1990s (see Figure 6 on page 13). The introduction of the new auction was accompanied by a major "Land in Shetland" campaign aimed at encouraging more Scottish boats to land their catches in Shetland. (An added incentive to land in Shetland was also provided by regulations implemented about that time that limited the number of days that fishing boats could spend at sea⁴.)

The Shetland Seafood Auction operates as a single auction covering the fish markets in both Scalloway and Lerwick. Whitefish landed in Cullivoe (Yell) and at other places in Shetland may also be transported to one or other of these markets for sale through the Auction.

A significant amount of work is carried out to maintain and assure the quality and consistency of the fish sold through the Auction, including the grading and weighing of fish by the auction company (beyond statutory requirements) with detailed reports available to buyers, and quality and grading inspections of landings by SSQC Ltd. (which provides feedback to boats).

^{1 &}lt;a href="https://www.shetlandfishermen.com/about/sfpo">https://www.shetlandfishermen.com/about/sfpo.

Whitefish are generally bottom-living (demersal) fish that include, cod, haddock, saithe, whiting, ling, hake, monks, skates and rays and various flatfishes including plaice, megrim, lemon sole and witch. A few species that are technically shellfish, such as prawns (Nephrops) and squid, are also landed by whitefish boats and sold through whitefish markets.

³ The electronic auction is managed by Shetland Seafood Auctions: https://www.shetlandauction.com/.

⁴ See: https://www.legislation.gov.uk/ssi/2003/56/.

Data & Analyses

This analysis is primarily based on data published by the UK Marine Management Organisation (MMO) and by Shetland Seafood Auctions with some additional data from Scottish Sea Fisheries Statistics⁵.

NOTE:

Unless otherwise stated, all weights expressed in this report are <u>landed weights</u> – that is the weight of the fish as they were landed. For whitefish that is usually gutted (and head-on) although some small haddock and whiting are landed ungutted ('round').

Some publications, such as *Scottish Sea Fisheries Statistics* and *Shetland Fisheries Statistics*, and data published by Marine Scotland generally give the <u>live weights</u> of fish landed – that is the estimated weight of the fish as they would have been when they were alive (ungutted). Results based on these live weights will not match the weights or average prices expressed in this report.

Data from the Marine Management Organisation

Data published by the UK Marine Management Organisation⁶ give the weight and value of fish landed in the UK by species, by port of landing and by month (amongst other things). These data were collated to determine the total weights of individual species of whitefish landed in Shetland, in other principal Scottish ports, and in the whole of Scotland each year from 2017 to June 2022. Average prices were calculated in each case as the total value of landings divided by the total weight landed.

Data from Shetland Seafood Auction

Data published by Shetland Seafood Auctions⁷ were available from 2008 to June 2022 and give the total weight and average price of fish sold through the auction each day by species and by size grade. These data were used to calculate the total value of each grade of each species sold through the auction each day (total value = total weight \times average value). The daily weights and values were then totalled by species

⁵ Data supplied by the Marine Analytical Unit of Marine Scotland Science.

⁶ Available at: https://www.gov.uk/government/collections/monthly-uk-sea-fisheries-statistics

Oaily Fish Prices' spreadsheet available at: https://www.shetlandauction.com/ssa-today. Note that the spreadsheet available online includes data only for the last year or so. This analysis also drew on older data that had been downloaded and saved previously.



and by year and average prices were calculated for each species each year as the total value of landings divided by the total weight landed.

Landings in Shetland

Not all whitefish landed in Shetland is sold through the Shetland Seafood Auction – some whitefish landed by visiting fishing boats are shipped directly South. In general, it is believed that this reflects the direct sale of fish to Mainland processors under contract sale agreements.

No information is available on the quantities of whitefish that are shipped directly South without passing through local markets⁸. For the purposes of this analysis, the quantity of whitefish shipped directly South was estimated as the difference between the total weight (and value) landed in Shetland (from the MMO data) and the weight and value sold through the Shetland Seafood Auction.

Some whitefish is also sold directly to local processors without passing through the Auction, but the quantities involved are relatively very small (probably no more than a few 10s of tonnes per year).

Composition of Landings in Shetland

The price that a fishing boat receives for its landings, whether in Shetland or elsewhere, depends not only on the prices of individual species of fish but also on the composition of the landing; the quantities of each species included in the landing.

To allow for estimates of the total value of typical landings in Shetland by boats from elsewhere in Scotland the composition of 116 landings by 20 different non-local fishing boats during the first five months of 2022 was examined⁹. The total average value of each landing was estimated based on the average prices estimated from 2017 to 2021 if it had been made in Shetland (and sold through the Auction or not) and in other principal Scottish ports.

4

Official landings data, including those from the MMO, give landings by the port where the fish were first landed regardless of where they were sold. So, fish landed in Shetland is recorded as having been landed in Shetland even if it is shipped South and sold through another market or directly to a processor elsewhere in the UK.

⁹ Information on landings compositions was provided by the Shetland Fish Producers' Organisation.

Results

Whitefish Landings in Scotland

On average, about 110,000 tonnes of whitefish, worth some £221 million, were landed in Scotland annually from 2017 to 2021. More than two-thirds of those were landed in either Peterhead, Scrabster or Shetland (Figure 1). Peterhead accounted for the largest share by a considerable margin, but landings of whitefish in Shetland exceeded those in any other port in Scotland (or the UK).

The other principal Scottish ports for landings of whitefish were Fraserburgh, Lochinver, Ullapool and Kinlochbervie (Table 1).

Together, these seven ports (Shetland, Peterhead, Fraserburgh, Scrabster, Lochinver, Ullapool and Kinlochbervie) accounted for almost all the whitefish landed in Scotland 99% by weight, 97% by value).

More than half of the whitefish landed in Shetland was landed in Lerwick, just over one-quarter in Scalloway and almost all the remainder in Cullivoe (Table 1). All three of these ports were in the top-10 Scottish ports for whitefish landings.

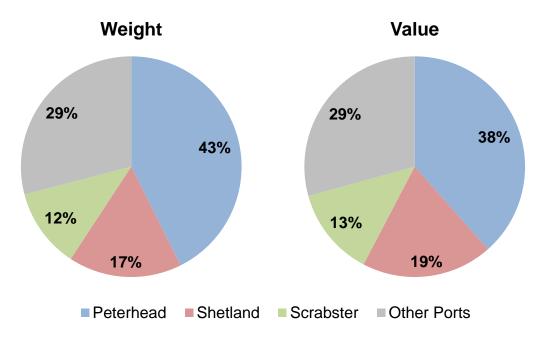


Figure 1 Breakdowns of the average weights (left) and values (right) of whitefish landed annually in Peterhead, Scrabster, Shetland and other Scottish ports from 2017 to 2021. See Table 1 for details.

Table 1 The average weights and values of whitefish landed annually in the principal Scottish ports (and in the principal landing places within Shetland) from 2017 to 2021. (Ports ranked by decreasing value of landings. Due to rounding, column totals may not exactly match the sums of the values shown.)

Average		Weight			Value	
2017 - 2022	tonnes	% Scot.	% Shet.	£ m	% Scot.	% Shet.
Peterhead	46,977	43%		£84.8	38%	
Shetland	18,332	17%	100%	£42.4	19%	100%
Lerwick	10,435	9%	57%	£23.5	11%	55%
Scalloway	5,144	5%	28%	£12.4	6%	29%
Cullivoe	2,503	2%	14%	£5.9	3%	14%
Other	250	0%	1%	£0.6	0%	1%
Scrabster	12,921	12%		£28.8	13%	
Lochinver	10,769	10%		£17.7	8%	
Ullapool	7,394	7%		£16.2	7%	
Kinlochbervie	5,978	5%		£12.8	6%	
Fraserburgh	6,843	6%		£12.0	5%	
Mallaig	255	0%		£0.6	0%	
Other Ports	773	1%		£5.4	2%	
ALL Scotland	110,242	100%		£220.6	100%	

Composition of Whitefish Landings

The principal whitefish species landed in Scotland from 2017 to 2021 were haddock cod, monks, hake, saithe and whiting which together accounted for about 80% of the total (Figure 2, Table 2). Haddock accounted for almost one-quarter of the total weight of whitefish landed and haddock, cod and monks each accounted for just under one-fifth of the total value.

The same six species dominated landings in Shetland, Peterhead and Scrabster although the relative proportions of each varied from port to port (Figure 3, Figure 4, Figure 5, Table 2). These differing proportions likely reflect to at least some extent the relative abundances of different species on the fishing grounds closest to each port.

Landings in Scrabster were dominated by haddock and hake, with relatively small amounts of saithe and whiting (Figure 5, Table 2) while landings in Peterhead were dominated by haddock, cod, saithe and whiting, with much smaller proportions of hake and monks (Figure 4, Table 2).

Haddock, cod and monks together accounted for about half of the whitefish landed in Shetland (well over half by value) but significant quantities of hake, saithe and whiting were also landed, giving Shetland perhaps the most 'even' distribution of landings between the species (Figure 3, Table 2).

ALL Scotland

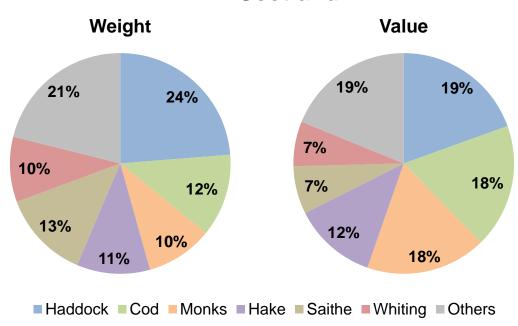


Figure 2 The species composition by weight (left) and value (right) of the whitefish landed in Scotland from 2017 to 2021. (See Table 2 for details.)

Shetland

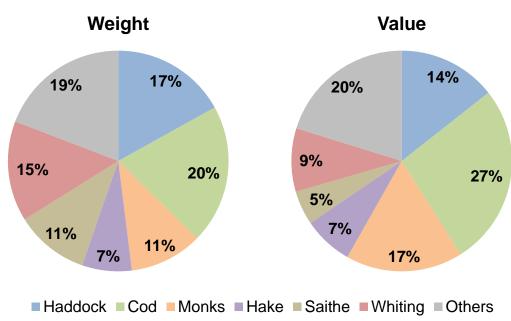


Figure 3 The species composition by weight (left) and value (right) of the whitefish landed in Shetland from 2017 to 2021. (See Table 2 for details.)

Peterhead Weight **Value** 11% 15% 25% 29% 10% 13% 11% 14% 9% 18% 24% 10% 5% 7% ■ Haddock ■ Cod ■ Monks ■ Hake ■ Saithe ■ Whiting ■ Others

Figure 4 The species composition by weight (left) and value (right) of the whitefish landed in Peterhead from 2017 to 2021. (See Table 2 for details.)

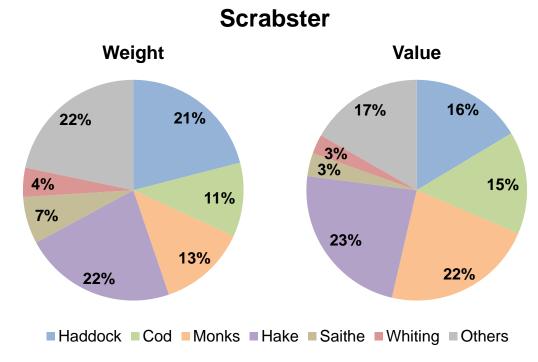


Figure 5 The species composition by weight (left) and value (right) of the whitefish landed in Scrabster from 2017 to 2021. (See Table 2 for details.)

Table 2 The average weights (top) and values (bottom) of the principal whitefish species landed annually from 2017 to 2021 in all of Scotland and in Shetland, Peterhead and Scrabster. (Species ranked by decreasing weight or value of landings in all Scotland. Due to rounding, column totals may not exactly match the sums of the values shown.)

Weight (000 tonnes)

	SCOTL	AND	Shetla	and	Peterh	ead	Scrab	ster
	000 t.	%						
Haddock	26.2	24%	3.1	17%	13.4	29%	2.7	21%
Saithe	14.3	13%	2.0	11%	8.3	18%	0.9	7%
Cod	13.4	12%	3.7	20%	6.8	14%	1.4	11%
Hake	11.8	11%	1.3	7%	3.2	7%	2.9	22%
Monks	10.8	10%	2.0	11%	2.2	5%	1.7	13%
Whiting	10.5	10%	2.7	15%	5.9	13%	0.6	4%
Ling	6.8	6%	1.2	6%	1.3	3%	1.5	11%
Megrim	2.7	2%	0.9	5%	0.4	1%	0.4	3%
Plaice	1.7	2%	0.6	3%	0.7	1%	0.2	1%
Witch	0.9	1%	0.1	0%	0.4	1%	0.0	0%
Lemon Sole	0.7	1%	0.2	1%	0.3	1%	0.1	1%
Skates & Rays	0.7	1%	0.2	1%	0.1	0%	0.1	1%
Lythe	0.5	0%	0.1	1%	0.3	1%	0.1	0%
Others	9.3	8%	0.2	1%	3.8	8%	0.5	4%
TOTAL	110.2	100%	18.3	100%	47.0	100%	12.9	100%

Value (£ million)

Value	SCOTLAND		Shetla	and	Peterh	ead	Scrab	ster
	£ m	%	£ m	%	£m	%	£m	%
Haddock	£43.0	19%	£6.1	14%	£21.5	25%	£4.7	16%
Cod	£40.1	18%	£11.3	27%	£20.2	24%	£4.3	15%
Monks	£39.0	18%	£7.3	17%	£8.2	10%	£6.4	22%
Hake	£27.0	12%	£3.1	7%	£7.6	9%	£6.7	23%
Saithe	£15.5	7%	£2.1	5%	£9.3	11%	£1.0	3%
Whiting	£14.5	7%	£3.9	9%	£8.2	10%	£0.8	3%
Ling	£10.6	5%	£1.8	4%	£2.2	3%	£2.2	8%
Megrim	£8.1	4%	£3.1	7%	£1.2	1%	£1.2	4%
Lemon Sole	£2.9	1%	£1.2	3%	£1.1	1%	£0.3	1%
Plaice	£2.7	1%	£1.1	3%	£1.0	1%	£0.2	1%
Lythe	£1.6	1%	£0.4	1%	£0.9	1%	£0.2	1%
Witch	£1.0	0%	£0.1	0%	£0.5	1%	£0.0	0%
Skates & Rays	£0.7	0%	£0.2	1%	£0.1	0%	£0.1	0%
Others	£13.9	6%	£1.4	3%	£4.2	5%	£0.9	3%
TOTAL	£220.6	100%	£42.4	100%	£84.8	100%	£28.8	100%

Whitefish Landings in Shetland

Whitefish landings in Shetland generally increased in the decades after the Second World War, reaching more than 17,000 tonnes in 1987 (Figure 6)¹⁰. Until the early 1980s landings were dominated by haddock and whiting which typically accounted for 80% or more of the total (Figure 8). The increase in landings during this period partly reflected an increase in the abundance of these species around Shetland as well as increasing local market demand and increased catching capacity.

Much of the whitefish landed in Shetland during this period was processed locally, and there was a great increase in whitefish processing capacity in the islands, mainly producing frozen blocks of whitefish fillets for export, especially to the USA. There were no quotas or limits on how much fish could be caught at that time (other than local agreements to try to prevent over-supplies of fish on local markets) and the quantities of whitefish landed were dictated largely by the abundance of fish and the level of local demand.

Virtually all whitefish landings in Shetland during this period were made by local fishing boats – landings by non-local boats were relatively rare. In addition, at times significant quantities of fish caught around Shetland by local boats were landed in mainland Scottish ports (especially Aberdeen) in a practice known as 'tripping' – because prices were often higher in mainland ports than in Shetland.

Whitefish landings in Shetland declined rapidly after 1987 and by 2003 had fallen from over 17,000 tonnes to only just over 6,000 tonnes – a decline of almost two-thirds in in 15 years. This fall was due to a combination of factors: declines in the abundances of haddock and whiting around Shetland; decreasing market demand due to declines in the local processing sector (in turn affected by falling global demand for frozen whitefish blocks); a great increase in local boats 'tripping' to land in Mainland ports (Figure 7); increasingly restrictive management measures introduced under the Common Fisheries Policy; and a reduction in the size of the local fishing fleet due to the decommissioning of fishing boats (part of an EU-wide effort to reduce fishing capacity).

Landings of whitefish in Shetland increased rapidly after 2003, when the electronic auction was introduced (see page 2), and had more than doubled by 2008 (Figure 6). This was accompanied by a large increase in the quantity of whitefish landings in Shetland by visiting (non-Shetland) boats and by the end of the practice of local boats 'tripping' to mainland markets (Figure 7).

Landings by British fishing boats. Generally, relatively little whitefish has been landed in Shetland by foreign boats. Excludes sandeels.

The increase in the quantity of whitefish landed in Shetland between 2003 and 2008 contrasted with a fall in the overall quantity landed in Scotland (from 93,000 to 84,000 tonnes). As a result, Shetland's share of Scottish whitefish landings increased from about 8% in 2003 to 18% in 2008.

The quantity of whitefish landed by Shetland boats outside Shetland, which had grown substantially in the early 1990s had fallen to almost zero by 2008 (Figure 7). Although local boats have at times landed significant quantities of whitefish outside Shetland since then that was a result of them pursuing fishing opportunities in other areas around the UK (for example off NE Scotland, NE England and in the English Channel) and landing in local ports.

At the same time, the quantity of whitefish landed in Shetland by visiting fishing boats, more than doubled between 2003 and 2008 and increased still further to a peak in 2019 more than three times greater than in 2003 (Figure 7).

Overall, whitefish landings in Shetland continued to increase after 2008, reaching a record high of just over 20,000 tonnes in 2018, more than three times what they had been in 2003, and the highest ever recorded (Figure 6). Whitefish landings have fallen since then, largely due to substantial cuts in important quotas (the Covid-19 pandemic and post-Brexit trade barriers may also have had an effect) but remain relatively high in historical terms.

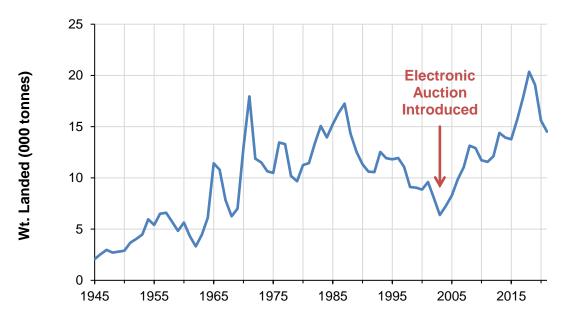


Figure 6 The weight of whitefish landed annually in Shetland by British fishing boats from 1945 to 2021 (estimated landed weights). The electronic auction was introduced in 2003. (I. Napier: analysis of *Scottish Sea Fisheries Statistics*.)

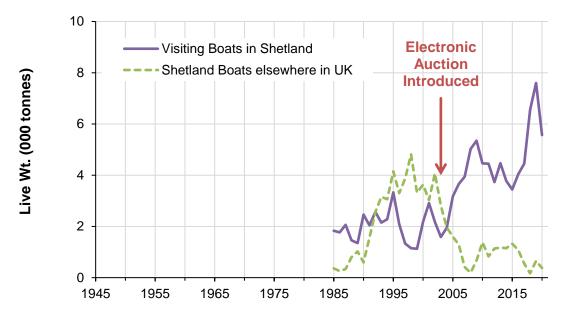


Figure 7 The weights of whitefish landed annually in Shetland by visiting (non-Shetland) fishing boats and by Shetland boats elsewhere in the UK from 1985 to 2020. The electronic auction was introduced in 2003. NOTE: These are live weights and so are not directly comparable with other figures in this report – see note on page 3. (I. Napier: analysis of Scottish Sea Fisheries Statistics.)

Increased Diversity of Landings

A notable feature of whitefish landings in Shetland since the 1980s has been their increased diversity. While whitefish landings in the 1950s, 1960s and 1970s were dominated by haddock and whiting, which accounted for as much as 90% of the total, their contribution fell from the 1980s onwards as other species such as cod and monks became increasingly important (Figure 8). Haddock and whiting now typically account for about one-third of the whitefish landed in Shetland.

Several factors contributed to the increased diversity of landings from the 1980s: the widespread adoption of the trawl net by Shetland fishing boats enabled them to catch a greater variety of species; market demand increased for a wider range of species encouraging fishermen to land species that might previously have been discarded (such as monks); and the abundances of some species, such as hake and plaice, has increased in the waters around Shetland.

By 2020, 'other' species – species other than haddock, whiting, cod and monks – including catfish, hake, lemon sole, ling, lythe, megrim, plaice, saithe, skates and rays, tusk and witch accounted for as much as 40% of the whitefish landed in Shetland (Figure 8).

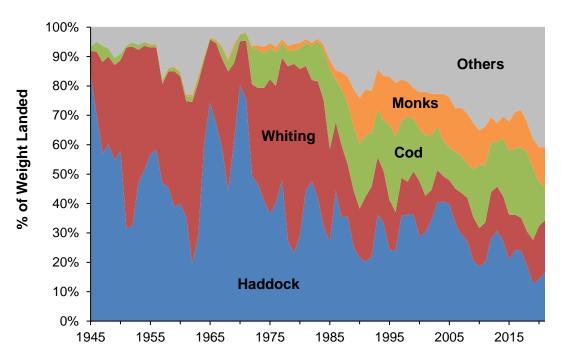


Figure 8 The composition of whitefish landings in Shetland by British fishing boats annually from 1945 to 2021. (Weight of selected species as % of total whitefish landings.) (I. Napier: analysis of *Scottish Sea Fisheries Statistics*.)

Sales Through the Shetland Seafood Auction

The quantity of whitefish sold through the Shetland Seafood Auction (electronic auction) increased from around 11,000 tonnes per year in the late 2000s and early 2010s to a peak of over 17,000 tonnes in 2018 (Figure 9). It has fallen somewhat since then in line with the general reduction in whitefish landings in Shetland, mainly due to quota restrictions.

It is estimated that between about 80% and 90% of the whitefish landed in Shetland each year since 2008 was sold through the Shetland Seafood Auction, although this proportion dipped slightly in 2019 and 2020 (Figure 9). This suggests that almost 4,000 tonnes of whitefish, worth almost £8 million, was landed in Shetland but not sold through the Auction on average each year from 2017 to 2021 (Figure 9).

The quantity of whitefish not sold through the Auction appears to have peaked at just over 6,000 tonnes, worth almost £12 million, in 2019 (28% of total landings) Most whitefish landed in Shetland and not sold through the Auction is shipped directly South (see page 4).

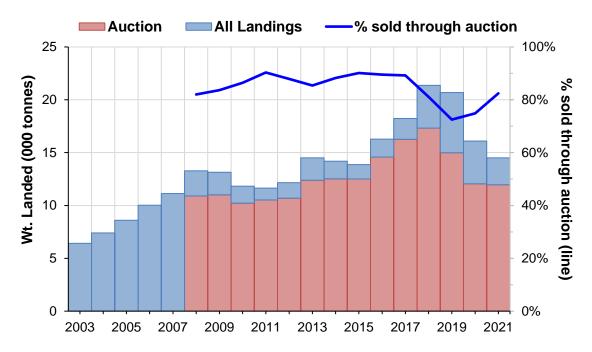


Figure 9 The total weight of whitefish landed annually in Shetland by all fishing boats from 2003 to 2021 ('All Landings') and the weight sold through the Shetland Seafood Auction from 2008 (the first year for which these data are available) to 2021. The line (right axis) shows the estimated proportion of the whitefish landed in Shetland that was sold through the Auction in each year.

Whitefish Prices in Shetland and Elsewhere

Shetland Seafood Auction v. Other Landings in Shetland

The average prices of whitefish landed in Shetland are summarised in Figure 10 and in Table 3 (whitefish sold through the Shetland Seafood Auction), Table 4 (all whitefish landed in Shetland) and Table 6 (whitefish landed in Shetland but not sold through the Auction).

For most of the principal whitefish species the prices of the fish sold through the Shetland Seafood Auction ('the Auction') tended to be similar to or greater than the prices of the fish that was landed in Shetland but not sold through the Auction (mostly shipped directly South) (Figure 11, Table 7).

The price differential was significant (from 20 to 45 pence per kg) for cod, haddock, monks and hake sold through the Auction and was particularly large for megrim (£1.25 per kg) and lemon sole (£1.86 per kg) (Figure 11, Table 7).

The principal exception was ling where the average price for fish sold through the Auction from 2017 to 2021 was some 33 pence per kg lower than the estimated price of ling landed in Shetland but not sold through the Auction (Table 7). The overall average prices of fish sold through the Auction from 2017 to 2021 were also slightly lower for plaice and witch (Table 7).

Shetland Seafood Auction v. Other Scottish Ports

For most of the principal whitefish species the prices of the fish sold through the Shetland Seafood Auction tended to be similar to or greater than the prices in Peterhead, Scrabster or in Scotland as whole (Figure 12, Table 8, Table 10, Table 12).

The average prices of megrim and lemon sole sold through the Auction from 2017 to 2021 were substantially greater than in Peterhead or Scrabster, or in Scotland as a whole, with price differences of between £1.10 and £1.50 per kg (Figure 13, Table 9, Table 11, Table 13). Prices were also significantly (more than 10 pence per kg) higher for haddock, hake, lythe, plaice and skates and rays sold through the Auction (Table 9, Table 11, Table 13).

The principal exception was ling (Figure 13) with an average price for fish sold through the Auction from 2017 to 2021 some 26 pence per kg lower than that in Peterhead (Table 9), although only 5 pence per kg lower than in Scrabster (Table 11). The only other negative price differentials – where the average prices for fish sold through the Auction were lower than in Peterhead or Scrabster – were relatively small (less than 5 pence per kg) (Table 9, Table 11).

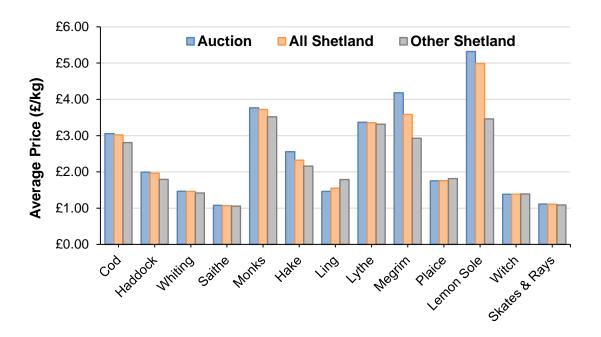


Figure 10 Comparisons of the average prices (2017 – 2021) of selected whitefish species sold through the Shetland Seafood Auction with all those landed in Shetland and with those landed in Shetland but not sold through the Auction. (For values see Table 3, Table 4 and Table 6.)

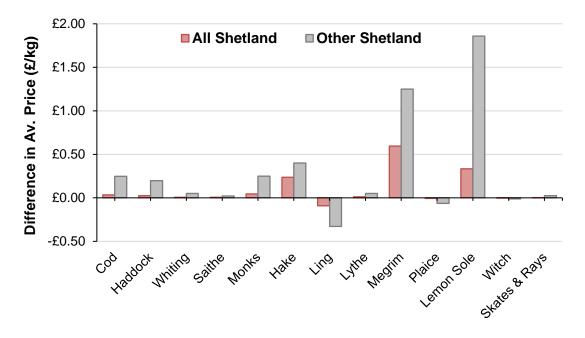


Figure 11 The differences between the average prices (2017 – 2021) of selected whitefish species sold through the Shetland Seafood Auction and all those landed in Shetland and those landed in Shetland but not sold through the Auction. Where the value is positive (>0) the Auction price was higher. For values see Table 5 and Table 7.)

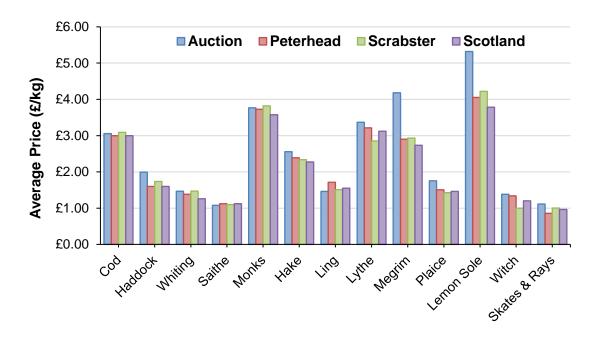


Figure 12 Comparisons of the average prices (2017 – 2021) of selected whitefish species sold through the Shetland Seafood Auction and landed in Peterhead, Scrabster and all of Scotland. (For values see Table 3, Table 8, Table 10 and Table 12.)

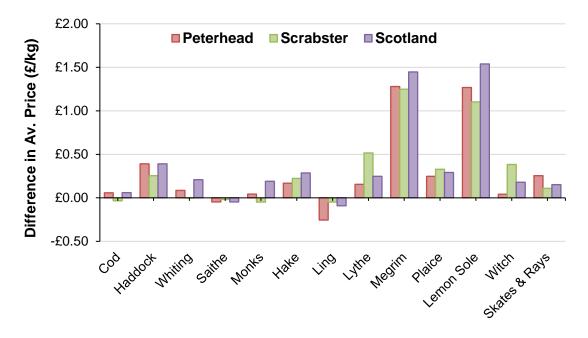


Figure 13 The differences between the average prices (2017 – 2021) of selected whitefish species sold through the Shetland Seafood Auction and those landed in Peterhead, Scrabster and all of Scotland (Auction price minus other price). Where the value is positive (>0) the Auction price was higher. (For values see Table 9, Table 11, Table 13.)

Table 3 The average prices (£/kg) of selected whitefish species sold through the Shetland Seafood Auction in each year from 2017 to 2022 (to end June) and over the five-year period from 2017 to 2021.

Shetland Seafood Auction

	Average Price (£/kg)									
	0047	0040		•	` •	0000	0047.04			
	2017	2018	2019	2020	2021	2022	2017-21			
Cod	£2.70	£2.75	£3.23	£3.43	£4.09	£4.21	£3.06			
Haddock	£1.93	£1.96	£2.25	£1.90	£1.98	£1.92	£1.99			
Whiting	£1.44	£1.41	£1.42	£1.48	£1.59	£1.71	£1.47			
Saithe	£1.16	£0.92	£1.12	£1.10	£1.12	£1.56	£1.08			
Monks	£3.70	£4.03	£4.05	£3.52	£3.57	£3.59	£3.77			
Hake	£2.39	£2.44	£2.57	£2.46	£3.15	£3.09	£2.56			
Ling	£1.63	£1.60	£1.57	£1.42	£1.21	£1.57	£1.46			
Lythe	£3.14	£3.26	£3.54	£3.36	£3.37	£3.61	£3.37			
Megrim	£4.05	£3.99	£4.33	£4.57	£3.95	£3.78	£4.18			
Plaice	£1.35	£1.81	£1.98	£1.80	£2.02	£2.34	£1.75			
Lemon Sole	£5.30	£5.09	£5.10	£5.38	£5.96	£7.34	£5.32			
Witch	£1.55	£1.45	£1.42	£1.29	£1.22	£1.74	£1.38			
Skates & Rays	£1.35	£1.11	£1.01	£0.99	£1.13	£1.42	£1.11			
ALL Whitefish	£2.31	£2.34	£2.51	£2.30	£2.47	£2.61	£2.39			
Nephrops					£5.81	£4.06	£5.81			
Squid	£3.92	£4.64	£4.14	£2.88	£3.64	£5.15	£3.86			

Table 4 The average prices (£/kg) of selected whitefish species landed in Shetland in each year from 2017 to 2022 (to end June) and over the five-year period from 2017 to 2021.

All Landings in Shetland

	Average Price (£/kg)									
	2017	2018	2019	2020	2021	2022	2017-21			
Cod	£2.65	£2.74	£3.15	£3.40	£4.01	£4.22	£3.02			
Haddock	£1.85	£1.97	£2.18	£1.94	£1.97	£1.95	£1.97			
Whiting	£1.41	£1.44	£1.37	£1.49	£1.59	£1.74	£1.46			
Saithe	£1.12	£0.90	£1.06	£1.19	£1.13	£1.61	£1.07			
Monks	£3.66	£3.96	£3.98	£3.52	£3.49	£3.59	£3.72			
Hake	£2.40	£2.39	£2.10	£2.37	£2.72	£2.97	£2.32			
Ling	£1.76	£1.73	£1.54	£1.58	£1.24	£1.58	£1.55			
Lythe	£3.14	£3.36	£3.42	£3.39	£3.37	£3.54	£3.36			
Megrim	£3.33	£3.48	£3.56	£3.87	£3.52	£3.76	£3.58			
Plaice	£1.38	£1.84	£1.92	£1.80	£2.00	£2.32	£1.76			
Lemon Sole	£5.10	£5.03	£4.77	£4.64	£5.53	£7.36	£4.99			
Witch	£1.44	£1.45	£1.45	£1.34	£1.25	£1.74	£1.38			
Skates & Rays	£1.33	£1.15	£0.99	£1.00	£1.10	£1.38	£1.11			
ALL Whitefish	£2.23	£2.29	£2.33	£2.33	£2.42	£2.57	£2.31			
Nephrops	£5.76	£5.66	£5.07	£4.70	£3.99	£5.29	£4.95			
Squid	£4.02	£4.69	£3.89	£2.81	£3.73	£4.32	£3.83			

Table 5 The differences between the average prices (£/kg) of selected whitefish species sold through the Shetland Seafood Auction and those of all landed in Shetland over the five-year period from 2017 to 2021 (Auction price minus other price). Where the value is positive (>0) the Auction price was higher.

All Landings in Shetland

	Price Difference from Auction (£/kg)									
	2017	2018	2019	2020	2021	2022	2017-21			
Cod	£0.05	£0.00	£0.08	£0.03	£0.08	-£0.01	£0.03			
Haddock	£0.08	-£0.00	£0.08	-£0.04	£0.00	-£0.03	£0.03			
Whiting	£0.02	-£0.02	£0.05	-£0.02	£0.00	-£0.04	£0.01			
Saithe	£0.04	£0.02	£0.06	-£0.10	-£0.01	-£0.04	£0.01			
Monks	£0.04	£0.07	£0.06	£0.00	£0.08	-£0.00	£0.05			
Hake	-£0.01	£0.04	£0.47	£0.08	£0.43	£0.12	£0.24			
Ling	-£0.13	-£0.13	£0.03	-£0.16	-£0.04	-£0.01	-£0.09			
Lythe	£0.00	-£0.10	£0.13	-£0.03	-£0.00	£0.07	£0.01			
Megrim	£0.72	£0.51	£0.78	£0.70	£0.42	£0.03	£0.59			
Plaice	-£0.03	-£0.03	£0.06	-£0.00	£0.02	£0.02	-£0.01			
Lemon Sole	£0.20	£0.06	£0.32	£0.74	£0.43	-£0.01	£0.33			
Witch	£0.10	-£0.00	-£0.03	-£0.04	-£0.03	-£0.00	-£0.00			
Skates & Rays	£0.03	-£0.03	£0.02	-£0.01	£0.03	£0.05	£0.00			
ALL Whitefish	£0.08	£0.05	£0.17	-£0.03	£0.06	£0.04	£0.07			
Nephrops					£1.82	-£1.23	£0.86			
Squid	-£0.10	-£0.04	£0.25	£0.07	-£0.08	£0.83	£0.03			

Table 6 The average prices (£/kg) of selected whitefish species landed in Shetland but not sold through the Shetland Seafood Auction in each year from 2017 to 2022 (to end June) and over the five-year period from 2017 to 2021.

Other Landings in Shetland (Not Sold Through Auction)

	Average Price (£/kg)								
	2017	2018	2019	2020	2021	2022	2017-21		
Cod	£2.14	£2.72	£2.78	£3.26	£3.50	£4.25	£2.81		
Haddock	£0.75	£2.01	£1.89	£2.17	£1.95	£2.08	£1.79		
Whiting	£0.95	£1.65	£1.11	£1.59	£1.58	£1.97	£1.42		
Saithe	£1.05	£0.88	£0.96	£1.41	£1.17	£1.77	£1.06		
Monks	£3.27	£3.60	£3.83	£3.52	£2.83	£3.60	£3.52		
Hake	£2.42	£2.37	£1.92	£2.32	£2.07	£2.64	£2.16		
Ling	£2.47	£2.01	£1.50	£1.89	£1.56	£1.66	£1.79		
Lythe	£3.14	£3.65	£2.98	£3.46	£3.39	£6.17	£3.32		
Megrim	£2.01	£2.77	£2.65	£3.26	£3.14	£3.49	£2.93		
Plaice	£1.90	£2.05	£1.60	£1.80	£1.73	£1.90	£1.82		
Lemon Sole	£3.89	£4.71	£3.54	£2.35	£3.08	£7.63	£3.46		
Witch	£1.09	£1.46	£1.54	£1.44	£1.38	£1.76	£1.39		
Skates & Rays	£1.16	£1.40	£0.86	£1.13	£0.61	£0.22	£1.09		
ALL Whitefish	£1.59	£2.07	£1.91	£2.40	£2.15	£2.32	£2.05		
Nephrops					£3.98	£5.44			
Squid	£4.55	£4.82	£2.38	£2.57	£4.21		£3.70		

Table 7 The differences between the average prices (£/kg) of selected whitefish species sold through the Shetland Seafood Auction and those landed in Shetland but not sold through the Auction over the five-year period from 2017 to 2021 (Auction price minus other price). Where the value is positive (>0) the Auction price was higher.

All Landings in Shetland (Not Sold Through Auction)

	Price Difference from Auction (£/kg)									
	2017	2018	2019	2020	2021	2022	2017-21			
Cod	£0.56	£0.03	£0.45	£0.17	£0.59	-£0.04	£0.25			
Haddock	£1.18	-£0.05	£0.36	-£0.26	£0.03	-£0.17	£0.20			
Whiting	£0.49	-£0.23	£0.31	-£0.11	£0.01	-£0.26	£0.05			
Saithe	£0.11	£0.04	£0.16	-£0.31	-£0.05	-£0.21	£0.02			
Monks	£0.43	£0.43	£0.21	£0.00	£0.74	-£0.01	£0.25			
Hake	-£0.03	£0.07	£0.66	£0.14	£1.08	£0.45	£0.40			
Ling	-£0.85	-£0.41	£0.08	-£0.48	-£0.36	-£0.09	-£0.33			
Lythe	£0.00	-£0.39	£0.56	-£0.10	-£0.02	-£2.56	£0.05			
Megrim	£2.04	£1.23	£1.69	£1.31	£0.81	£0.29	£1.25			
Plaice	-£0.55	-£0.23	£0.38	-£0.00	£0.29	£0.44	-£0.06			
Lemon Sole	£1.41	£0.38	£1.56	£3.03	£2.89	-£0.28	£1.86			
Witch	£0.46	-£0.01	-£0.12	-£0.15	-£0.15	-£0.02	-£0.01			
Skates & Rays	£0.20	-£0.28	£0.15	-£0.13	£0.52	£1.20	£0.03			
ALL Whitefish	£0.73	£0.27	£0.60	-£0.10	£0.33	£0.29	£0.34			
Nephrops					£1.83	-£1.38				
Squid	-£0.63	-£0.17	£1.76	£0.31	-£0.56		£0.16			

Table 8 The average prices (£/kg) of selected whitefish species landed in Peterhead in each year from 2017 to 2022 (to end June) and over the five-year period from 2017 to 2021.

Landings in Peterhead

		Average Price (£/kg)									
	2017	2018	2019	2020	2021	2022	2017-21				
Cod	£2.73	£2.70	£2.97	£3.40	£4.10	£4.54	£3.00				
Haddock	£1.68	£1.66	£1.65	£1.51	£1.44	£1.39	£1.60				
Whiting	£1.39	£1.41	£1.37	£1.27	£1.49	£1.61	£1.38				
Saithe	£1.18	£0.95	£1.17	£1.20	£1.26	£1.78	£1.12				
Monks	£3.75	£4.06	£3.96	£3.34	£3.45	£3.65	£3.72				
Hake	£2.27	£2.29	£2.65	£2.17	£2.91	£2.81	£2.39				
Ling	£1.88	£1.76	£1.81	£1.59	£1.38	£1.66	£1.71				
Lythe	£3.06	£3.41	£3.42	£2.97	£3.17	£3.22	£3.21				
Megrim	£3.15	£2.95	£2.79	£2.69	£2.89	£2.45	£2.90				
Plaice	£1.30	£1.88	£1.73	£1.22	£1.23	£1.40	£1.51				
Lemon Sole	£4.53	£4.61	£4.30	£3.12	£3.75	£4.62	£4.05				
Witch	£1.30	£1.34	£1.56	£1.39	£1.15	£1.35	£1.34				
Skates & Rays	£1.07	£0.95	£0.70	£0.73	£0.81	£0.66	£0.86				
ALL Whitefish	£1.83	£1.77	£1.87	£1.63	£1.97	£2.08	£1.80				
Nephrops	£5.46	£5.06	£4.81	£3.43	£4.20	£4.86	£4.44				
Squid	£3.96	£3.96	£3.75	£3.19	£3.23	£3.48	£3.66				

Table 9 The differences between the average prices (£/kg) of selected whitefish species sold through the Shetland Seafood Auction and those landed in Peterhead over the five-year period from 2017 to 2021 (Auction price minus other price). Where the value is positive (>0) the Auction price was higher.

Landings in Peterhead

	Price Difference from Auction (£/kg)									
	2017	2018	2019	2020	2021	2022	2017-21			
Cod	-£0.03	£0.04	£0.26	£0.03	-£0.02	-£0.33	£0.06			
Haddock	£0.25	£0.30	£0.60	£0.40	£0.54	£0.53	£0.39			
Whiting	£0.05	£0.00	£0.05	£0.21	£0.11	£0.10	£0.08			
Saithe	-£0.02	-£0.03	-£0.05	-£0.10	-£0.15	-£0.21	-£0.05			
Monks	-£0.06	-£0.03	£0.08	£0.18	£0.12	-£0.05	£0.04			
Hake	£0.12	£0.15	-£0.08	£0.28	£0.24	£0.28	£0.17			
Ling	-£0.25	-£0.16	-£0.24	-£0.17	-£0.18	-£0.09	-£0.26			
Lythe	£0.08	-£0.15	£0.12	£0.40	£0.20	£0.39	£0.15			
Megrim	£0.90	£1.04	£1.55	£1.88	£1.06	£1.33	£1.28			
Plaice	£0.05	-£0.07	£0.25	£0.58	£0.79	£0.94	£0.25			
Lemon Sole	£0.77	£0.48	£0.80	£2.26	£2.21	£2.72	£1.27			
Witch	£0.24	£0.11	-£0.14	-£0.10	£0.08	£0.39	£0.04			
Skates & Rays	£0.29	£0.16	£0.31	£0.26	£0.32	£0.76	£0.25			
ALL Whitefish	£0.48	£0.57	£0.64	£0.67	£0.50	£0.53	£0.58			
Nephrops					£1.61	-£0.80	£1.37			
Squid	-£0.04	£0.68	£0.39	-£0.31	£0.41	£1.67	£0.20			

Table 10 The average prices (£/kg) of selected whitefish species landed in Scrabster in each year from 2017 to 2022 (to end June) and over the five-year period from 2017 to 2021.

Landings in Scrabster

	Average Price (£/kg)								
	2017	2018	2019	2020	2021	2022	2017-21		
Cod	£2.71	£2.78	£3.24	£3.31	£3.92	£3.89	£3.09		
Haddock	£1.69	£1.69	£1.73	£1.68	£1.91	£1.93	£1.74		
Whiting	£1.40	£1.50	£1.48	£1.34	£1.57	£1.45	£1.47		
Saithe	£1.18	£0.93	£1.18	£1.14	£1.11	£1.48	£1.10		
Monks	£3.65	£4.30	£4.02	£3.70	£3.58	£3.65	£3.82		
Hake	£2.54	£2.58	£1.50	£2.55	£2.33	£2.83	£2.33		
Ling	£1.87	£1.78	£1.30	£1.68	£1.25	£1.58	£1.51		
Lythe	£3.35	£3.40	£3.57	£3.15	£2.20	£2.24	£2.85		
Megrim	£3.12	£3.13	£2.84	£3.04	£2.65	£3.01	£2.93		
Plaice	£1.19	£1.71	£1.46	£1.30	£1.19	£1.18	£1.42		
Lemon Sole	£5.12	£5.09	£4.30	£2.95	£3.87	£4.35	£4.22		
Witch	£1.09	£1.01	£1.23	£0.99	£0.68	£0.89	£1.00		
Skates & Rays	£1.34	£1.08	£0.73	£1.00	£1.10	£0.90	£1.00		
ALL Whitefish	£2.32	£2.30	£2.06	£2.28	£2.18	£2.37	£2.23		
Nephrops	£4.95	£4.66	£4.38	£3.35	£3.57	£5.14	£4.07		
Squid	£5.23	£4.49	£4.39	£4.08	£3.65	£5.14	£4.34		

Table 11 The differences between the average prices (£/kg) of selected whitefish species sold through the Shetland Seafood Auction and those landed in Scrabster over the five-year period from 2017 to 2021 (Auction price minus other price). Where the value is positive (>0) the Auction price was higher.

Landings in Scrabster

	Price Difference from Auction (£/kg)						
	2017	2018	2019	2020	2021	2022	2017-21
Cod	-£0.00	-£0.03	-£0.01	£0.12	£0.16	£0.32	-£0.03
Haddock	£0.24	£0.27	£0.52	£0.22	£0.06	-£0.01	£0.25
Whiting	£0.04	-£0.08	-£0.07	£0.14	£0.02	£0.26	-£0.00
Saithe	-£0.02	-£0.01	-£0.05	-£0.04	£0.00	£0.09	-£0.02
Monks	£0.05	-£0.27	£0.03	-£0.18	-£0.01	-£0.06	-£0.05
Hake	-£0.15	-£0.14	£1.08	-£0.09	£0.83	£0.26	£0.22
Ling	-£0.24	-£0.19	£0.28	-£0.26	-£0.05	-£0.01	-£0.05
Lythe	-£0.21	-£0.14	-£0.03	£0.21	£1.17	£1.37	£0.52
Megrim	£0.93	£0.86	£1.49	£1.53	£1.30	£0.77	£1.25
Plaice	£0.16	£0.10	£0.53	£0.50	£0.83	£1.16	£0.33
Lemon Sole	£0.18	-£0.00	£0.80	£2.43	£2.10	£3.00	£1.10
Witch	£0.45	£0.44	£0.19	£0.30	£0.54	£0.85	£0.38
Skates & Rays	£0.02	£0.04	£0.27	-£0.01	£0.03	£0.52	£0.11
ALL Whitefish	-£0.00	£0.05	£0.45	£0.03	£0.29	£0.25	£0.16
Nephrops					£2.24	-£1.08	£1.74
Squid	-£1.31	£0.16	-£0.25	-£1.20	-£0.00	£0.01	-£0.47

Table 12 The average prices (£/kg) of selected whitefish species landed in all of Scotland in each year from 2017 to 2022 (to end June) and over the five-year period from 2017 to 2021.

All Landings in Scotland (including Shetland)

	Average Frice (z/kg)						
	2017	2018	2019	2020	2021	2022	2017-21
Cod	£2.71	£2.71	£3.04	£3.32	£4.00	£2.89	£3.00
Haddock	£1.66	£1.60	£1.64	£1.52	£1.57	£1.31	£1.60
Whiting	£1.30	£1.19	£1.22	£1.22	£1.37	£1.25	£1.26
Saithe	£1.19	£0.97	£1.17	£1.18	£1.21	£1.36	£1.12
Monks	£3.43	£3.90	£3.79	£3.37	£3.41	£3.17	£3.58
Hake	£2.39	£2.38	£1.87	£2.37	£2.31	£1.70	£2.27
Ling	£1.89	£1.77	£1.32	£1.58	£1.19	£1.36	£1.55
Lythe	£3.05	£3.38	£3.41	£2.95	£2.73	£2.64	£3.12
Megrim	£2.99	£2.88	£2.40	£2.75	£2.67	£2.28	£2.73
Plaice	£1.23	£1.77	£1.60	£1.27	£1.16	£1.02	£1.46
Lemon Sole	£4.29	£4.36	£3.94	£2.86	£3.44	£2.75	£3.78
Witch	£1.17	£1.18	£1.41	£1.27	£1.01	£1.12	£1.20
Skates & Rays	£1.10	£1.06	£0.74	£0.92	£1.02	£0.78	£0.96
ALL Whitefish	£1.97	£1.93	£1.91	£1.86	£2.04	£1.81	£1.94
Nephrops	£5.23	£5.36	£5.06	£4.43	£4.52	£5.00	£4.92
Squid	£3.64	£4.28	£3.94	£3.61	£3.48	£3.96	£3.83

Table 13 The differences between the average prices (£/kg) of selected whitefish species sold through the Shetland Seafood Auction and those landed in all of Scotland over the five-year period from 2017 to 2021 (Auction price minus other price). Where the value is positive (>0) the Auction price was higher.

All Landings in Scotland (including Shetland)

Price Difference from Auction (£/kg)

	2017	2018	2019	2020	2021	2022	2017-21
Cod	-£0.00	£0.03	£0.19	£0.11	£0.08	£1.31	£0.06
Haddock	£0.27	£0.36	£0.61	£0.38	£0.41	£0.61	£0.39
Whiting	£0.14	£0.23	£0.20	£0.25	£0.23	£0.46	£0.21
Saithe	-£0.03	-£0.05	-£0.05	-£0.09	-£0.10	£0.20	-£0.05
Monks	£0.26	£0.13	£0.26	£0.15	£0.16	£0.43	£0.19
Hake	£0.00	£0.06	£0.70	£0.09	£0.84	£1.39	£0.29
Ling	-£0.26	-£0.17	£0.25	-£0.16	£0.01	£0.21	-£0.09
Lythe	£0.09	-£0.11	£0.13	£0.42	£0.64	£0.96	£0.25
Megrim	£1.06	£1.11	£1.93	£1.82	£1.27	£1.50	£1.45
Plaice	£0.12	£0.04	£0.38	£0.52	£0.86	£1.32	£0.29
Lemon Sole	£1.01	£0.72	£1.16	£2.52	£2.52	£4.59	£1.54
Witch	£0.38	£0.27	£0.01	£0.02	£0.21	£0.62	£0.18
Skates & Rays	£0.25	£0.05	£0.27	£0.07	£0.11	£0.65	£0.15
ALL Whitefish	£0.34	£0.42	£0.60	£0.45	£0.43	£0.80	£0.45
Nephrops					£1.29	-£0.94	£0.89
Squid	£0.29	£0.37	£0.20	-£0.73	£0.16	£1.19	£0.03

Value of Typical Whitefish Landings

The analysis of whitefish landings in Shetland by visiting (non-Shetland) fishing boats covered 116 landings by 20 different boats during the first five months of 2022. Those landings included a total of just over 1,000 tonnes of whitefish, an average of 8.9 tonnes per landings (Table 14).

Whiting made up almost one-quarter by weight of these landings. The other principal species landed were monks, haddock and cod, followed by megrim, saithe and ling (Figure 14, Table 14).

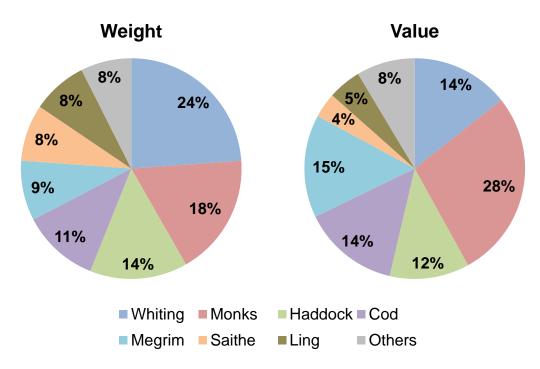


Figure 14 Breakdowns of the compositions of 116 landings of whitefish in Shetland by visiting (non-Shetland) fishing boats during the first five months of 2022: By weight of whitefish landed (left) and by estimated value (right), based on the average values of whitefish sold through the Shetland Seafood Auction from 2017 to 2021 (Table 3). See Table 14 for details.

Based on average market prices over the five-year period from 2017 to 2021 the estimated average value of those landings would have been just under £22,000 if sold through the Shetland Seafood Auction, compared to between £19,000 and £20,000 if landed in Shetland but not sold through the Auction, or in Peterhead or Scrabster (Table 14).

It is estimated that those landings would have fetched about £2,600 more if they had been sold through the Shetland Seafood Auction than if they had been landed in Shetland but not sold through the Auction (14% more), £2,300 more than if they had been landed in Peterhead (12% more), or £1,800 more that if they had been landed in Scrabster (9% more) (Table 14, Figure 15).

Table 14 The average weights of selected whitefish species landed in Shetland by visiting (non-Shetland) fishing boats during the first five months of 2022 and the estimated values of those landings if sold through the Shetland Seafood Auction, if landed in Shetland but not sold through the Auction (shipped directly South), or if landed in Peterhead or Scrabster (based on average prices from 2017 to 2021 - Table 3, Table 6, Table 8, Table 10).

			E	stimated Average Value				
	Average Weight Landed		Shetland (Auction)	Shetland (Shipped)	Peter- head	Scrabster		
	kg	%	£ 000		£ 000	£ 000		
Cod	1,007	11%	£3.08	£2.83	£3.02	£3.11		
Haddock	1,276	14%	£2.54	£2.29	£2.04	£2.22		
Whiting	2,126	24%	£3.12	£3.01	£2.94	£3.12		
Saithe	741	8%	£0.80	£0.78	£0.83	£0.81		
Monks	1,593	18%	£6.00	£5.61	£5.93	£6.08		
Hake	171	2%	£0.44	£0.37	£0.41	£0.40		
Ling	723	8%	£1.06	£1.29	£1.24	£1.09		
Lythe	51	1%	£0.17	£0.17	£0.16	£0.15		
Megrim	784	9%	£3.28	£2.30	£2.27	£2.30		
Plaice	119	1%	£0.21	£0.22	£0.18	£0.17		
Lemon Sole	37	0%	£0.20	£0.13	£0.15	£0.16		
Witch	88	1%	£0.12	£0.12	£0.12	£0.09		
Skates & Rays	19	0%	£0.02	£0.02	£0.02	£0.02		
Others	177	2%	£0.71	£0.00	£0.13	£0.21		
TOTAL	8,912	100%	£21.74	£19.13	£19.44	£19.92		
Diff' from Auctio	n			-£2,606	-£2,296	-£1,817		

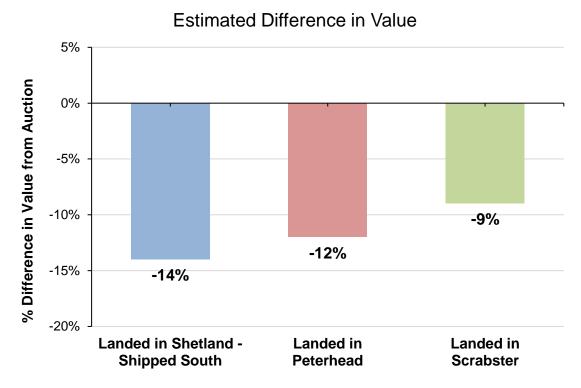


Figure 15 The estimated percentage differences in the values of typical whitefish landings if made in Shetland and shipped directly South and if landed in Peterhead or Scrabster, compared to being sold through the Shetland Seafood Auction. Based on average composition of landings and average prices from 2017 to 2021. See Table 14.

Discussion

Shetland is one of the principal landing places for whitefish in Scotland (and the UK), second only to Peterhead, with an average of over 20,000 tonnes worth almost £50 million landed annually from 2017 to 2021. Most of the whitefish landed in Shetland (about 80%) is sold on the Lerwick and Scalloway fish markets through the electronic auction which was introduced in 2003 and is operated by Shetland Seafood Auctions.

It is estimated that about 20% of the whitefish landed in Shetland – some 4,000 tonnes per year between 2017 and 2021 – is shipped directly South without passing through the local markets. This is believed to mainly reflect the direct sale of fish to Mainland processors by visiting (non-Shetland) fishing boats under contract sale agreements.

After four decades of general growth, whitefish landings in Shetland began a rapid decline after the late 1980s, due to several factors that included tighter regulation of fisheries under the Common Fisheries Policy and a great increase in the quantity of fish being 'tripped' to Mainland markets by local boats seeking better prices.

There was a dramatic reversal in the fortunes of Shetland's whitefish markets after 2003, which coincided with the introduction of the electronic auction and a major "Land in Shetland" campaign aimed at encouraging more Scottish boats to land their catches in Shetland. This was backed by initiatives to improve and assure the quality of the whitefish sold through the Auction, including the weighing and grading of landings and quality assurance inspections by SSQC Ltd. with feedback to boats. An added incentive to land in Shetland was provided by regulations implemented about that time that limited the number of days that fishing boats could spend at sea.

The quantity of whitefish landed in Shetland more than doubled in weight in the five years after the introduction of the electronic auction. This increase reflected a substantial change in landing practices by both local and visiting fishing boats, coinciding as it did with an overall decrease in the quantity of whitefish landed in Scotland. The practice of local boats 'tripping' to Mainland markets virtually ended during this period and there was a substantial increase also in the quantity of whitefish landed in Shetland by visiting boats. As a result, Shetland's share of Scottish whitefish landings more than doubled from about 8% in 2003 to 18% in 2008 (it averaged 17% from 2017 to 2021).

Another change in landing practices seen since the introduction of the electronic auction – and encouraged by the increased focus on quality – has been a shortening of fishing trips with boats now typically landing every few days to maximise the freshness of their fish when it reaches the market.

Buyers too have developed their practices with the establishment of new markets (especially in Europe) where quality is at a premium, resulting in better prices and greater demand, which in turn encourages landings of the species concerned.

A notable feature of whitefish landings in Shetland since the 1980s – aided by the development of markets – has been the great increase in their diversity. While haddock and whiting accounted for as much as 90% of the whitefish landed in Shetland in the 1960s and 1970s, they now typically account for only about one-third of the total. As a result, whitefish landings in Shetland may arguably be more varied than those in the other principal Scottish ports.

Over the five-year period from 2017 to 2021 the average prices of most of the principal whitefish species sold through the Shetland Seafood Auction tended to be higher than in either Peterhead of Scrabster, or in Scotland as a whole. Overall, the average price differential was almost 60 pence per kilogram for Peterhead, 16 pence per kilogram for Scrabster and 45 pence per kilogram Scotland as a whole.

The price differentials were particularly large for megrim and lemon sole with average prices in the Shetland Seafood Auction between £1.00 and £1.50 per kilogram higher than in Peterhead, Scrabster or all Scotland. Haddock, hake, lythe, plaice, witch and skates and rays also generally showed prices in the Auction more than 20 pence per kilogram higher than elsewhere.

The only principal whitefish species for which the average price in the Shetland Seafood Auction tended to be lower than elsewhere were ling and saithe, although for saithe the price difference was relatively small. It is not clear why the prices of these species tend to be lower in Shetland.

There was also a marked difference, amounting about 29 pence per kilogram overall, between the value of whitefish sold through the Shetland Seafood Auction and whitefish landed in Shetland but shipped directly South.

Based on the compositions of a sample of landings in Shetland by visiting fishing boats it is estimated that these price differentials represent a difference in the value of an average landing of some £1,800 (9%) if sold through the Shetland Seafood Auction rather than in Scrabster, or £2,300 (12%) in Peterhead. And an average catch landed in Shetland but shipped directly South would be worth about £2,600 (14%) less than if sold through the Auction.

These results suggest that there are significant financial benefits for boats fishing for whitefish around Shetland who land their catches in Shetland and sell it through the Shetland Seafood Auction rather than landing it in Peterhead or Scrabster, even before taking account of the additional time and fuel costs required to return to Mainland markets. These benefits would also extend to boats fishing in a wider area

of the northern North Sea where the journey times to Shetland or other landing ports might be more equal.

There also appear to be substantial financial benefits for boats who choose to sell their fish through the Shetland Seafood Auction rather than landing it in Shetland and shipping it directly South.