

# SO MUCH TO SEA...

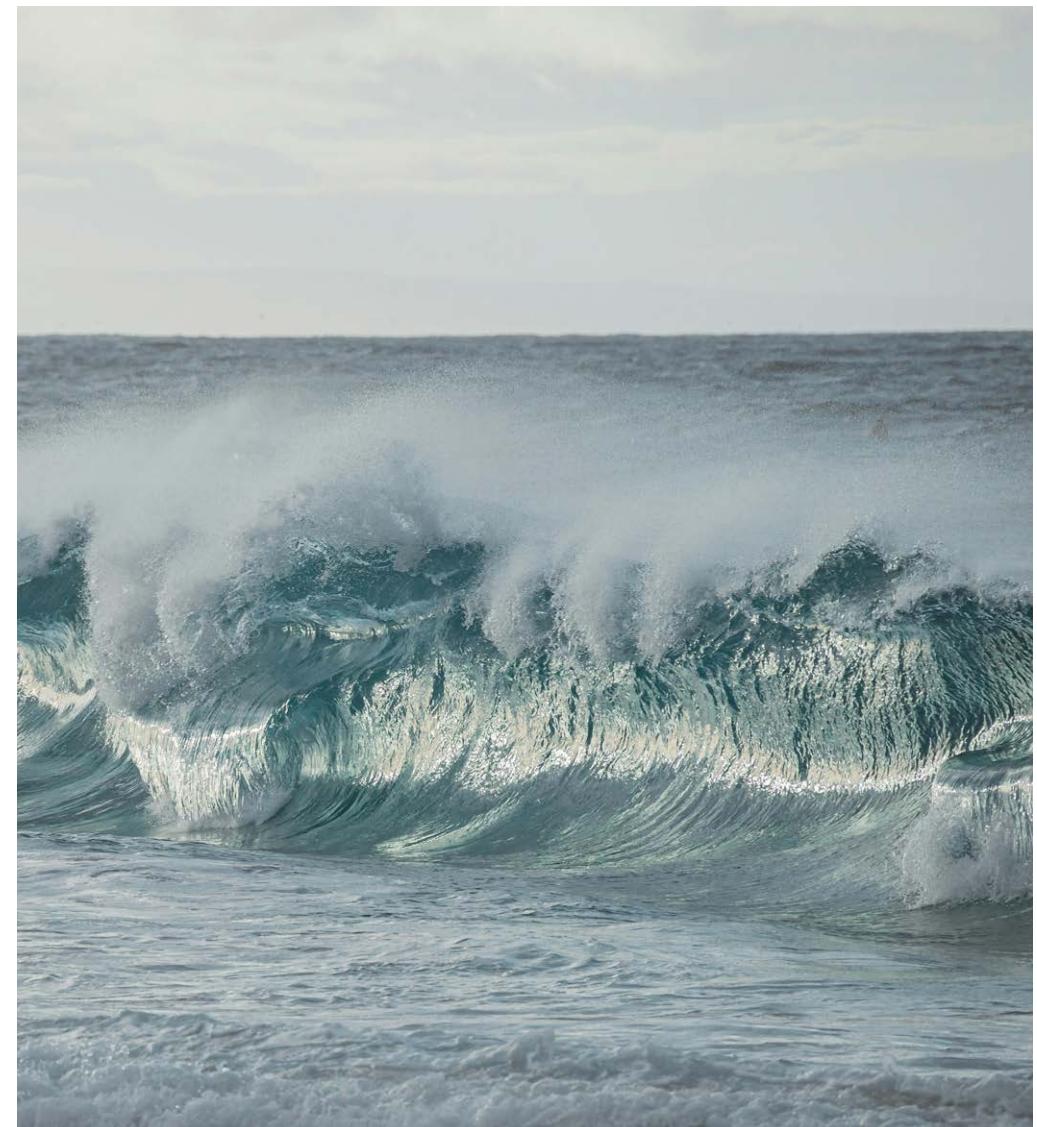
---

Shetland's species



## Shetland's Species

Pure, clean waters crash around Shetland's shoreline, providing a naturally rich habitat for numerous species of fish and shellfish to thrive.

[NEXT...](#)

As a result, Shetland has access to the very best – and freshest – seafood, right on its doorstep. This is an enviable position that we often take for granted.

Seafood is the perfect food source: not only does it taste delicious, it is very versatile, takes minimal cooking and is high in protein, rich in vitamins, minerals and natural oils.

Buying locally-caught seafood means you are assured of absolute freshness.

Each species is very different; some with a firm texture, others more delicate. Some only need seconds on the pan, while others can be cooked longer and slower. Check out your local fishmonger and start experimenting with new varieties. Soak up the flavours of the sea and enjoy.

[FIND OUT MORE...](#)

Scallop processing at QA Fish.

## Marine Stewardship Council (MSC) Accreditation

**The MSC label guarantees a link with the specific fishery and is proof that it is from a sustainable, well-managed source.**

Shetland currently grows MSC accredited mussels and lands a variety of MSC accredited fish and shellfish species. Many of Shetland's seafood processors have also achieved MSC Chain of Custody standards for their facilities, which means that the MSC fish continue to be recognised as such, as they move through the supply chain.



**Brown crabs from Shetland were the first in the UK to achieve the prestigious Marine Stewardship Council (MSC) Certification.**

## Spring

The stars of the season tend to be flat fish, such as **Megrim** and **Plaice**. April is a good month for **Crab** when they are at their heaviest.

Spring's seasonal catches are:

[Ling](#)[Monkfish](#)[Mackerel](#)[Mussels](#)[Megrim](#)[Crab](#)[Scallops](#)[Gurnard](#)[Plaice](#)[NEXT SEASON...](#)

## Summer

The advent of the barbecue season means that oily fish such as **Herring** come into their own. **Plaice** is at its peak now. **Herring**: from May until Sept.

Summer's seasonal catches are:

[Ling](#)[Megrim](#)[Cod](#)[Haddock](#)[Gurnard](#)[Herring](#)[Plaice](#)[NEXT SEASON...](#)

## Autumn

**Great season for all types of fish - white, oily or shellfish. Brown Crabs:** the female **Brown Crabs** often have a large amount of orange roe in them which is highly regarded. **Mackerel:** from October - November and January to February.

**Autumn's seasonal catches are:**

[Cod](#)[Haddock](#)[Monkfish](#)[Gurnard](#)[Squid](#)[Mussels](#)[Scallops](#)[Brown crabs](#)[Mackerel](#)[NEXT SEASON...](#)

## Winter

**Monkfish:** available all year round but known to be more of a winter fishery. **Mussels** and **Scallops**. **Lobster** and **Salmon** are highly sought after at Christmas time and are available in large quantities.

Winter's seasonal catches are:

[Mussels](#)[Scallops](#)[Monkfish](#)[Lobster](#)[Salmon](#)[Haddock](#)[Mackerel](#)[Gurnard](#)[Cod](#)

Venturous LK 75 heading out

## Seafood Shetland in numbers

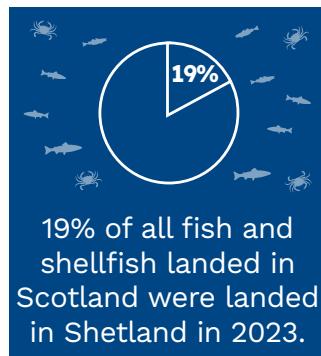
**Shetland's seafood industry is worth £440 million a year to the Shetland economy. It surpasses oil, gas, agriculture, tourism, and creative industries combined.**

**1**  
Industry

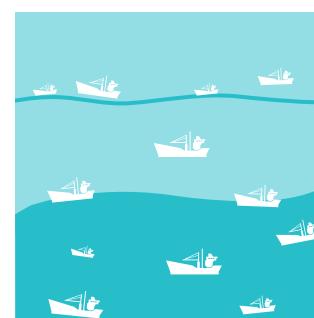


Largest port  
in the UK for  
landings of fish  
and shellfish

**8**  
pelagic boats



**256**  
fishing vessels  
registered in  
Shetland



Shetland's seafood  
industry is worth  
**£440  
million**

a year to the  
Shetland economy.  
More than any  
other industry or  
sector.



Value of wild  
shellfish landed in  
Shetland in 2023  
**£5.9 million**



**more  
stats**

## Seafood Shetland in numbers



In 2024 Shetland harvested  
**21,000 tonnes**  
of salmon



**20.5 million mussel meals produced annually**



**585**  
people are directly employed in fish catching



of Shetland's exports are seafood

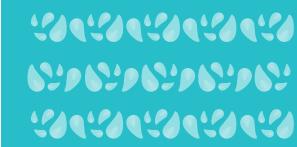
**390 direct and 530 indirect jobs in salmon farming**



Shetland accounted for

**88%**  
of rope-grown mussels in 2023, valued at

**£10.7 million**



**65,800 tonnes**  
of pelagic fish worth  
**£86.9 million**  
landed in Shetland in 2024

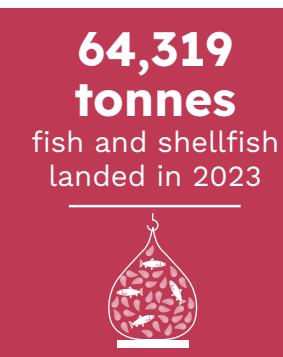
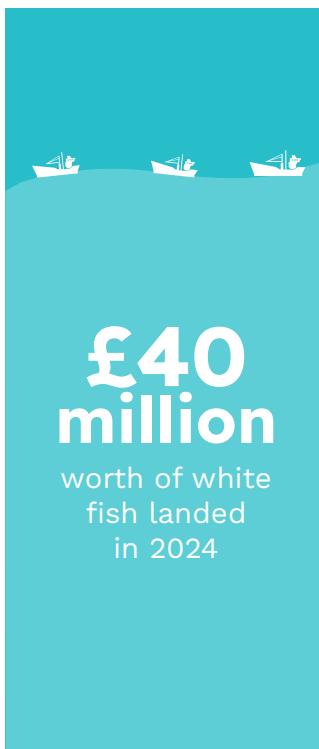


**more stats**

## Seafood Shetland in numbers



More than 1,000 people are directly employed in the sector and around 3,000 more are employed in supporting industries, such as engineering and transport.



We've displayed this data about Shetland's seafood industry as infographics. Infographics use visuals and text to highlight key information or data - they also make it more interesting and engaging to read. Can you create some infographics of your own using this data?

## Shetland's most popular fishing

**Shetland is close to rich fishing grounds, with boats making short trips, and landing a mix of species.**

The most common species landed at Shetland's fish markets are Haddock, Cod, Megrime, Monkfish, Coley, Ling, Whiting and Plaice.

Other species include: Halibut, Skate, Catfish, Pollock, Hake, Eels, John Dory, Lemon Sole, Squid, Turbot and Witches

Shetland's pelagic fleet land Mackerel and Herring direct to the processor - Shetland Catch in Lerwick.

[READ ON...](#)

Monkfish at QA fish

## Cephalopods

### Squid (Skeeticks)

- Very elusive fish but when found it is usually on softer, sandy bottoms
- A number of squid species exist in coastal waters
- Can be found in a variety of depths
- Mainly caught as a by-catch around Shetland
- Growth is temperature dependant
- Spawn in depths of 20-80 metres.



#### Did you know?

Squids only breed once, and then they die



## Farmed Salmon

### Salmon (*Salmo salar*)

- Shetland's salmon sites are perfectly located for producing strong, healthy fish – located between the powerful currents created by the North Atlantic and the North Sea
- It typically takes around 24 months from egg to harvest



#### Did you know?

Once the eggs have hatched, the baby salmon, or alevins, eat from their own yolk sac, which contains all the nutrients they need for their development



1) Salmon start life as eggs in freshwater tanks which are laid out in incubation trays

2) They live in freshwater until they reach 'smolt' stage - now they have learnt to adapt to saltwater conditions.

3) Smolts are transferred to sea when they are about 15cm long, 80-100g

6) Fish are fed pellets containing the optimum nutrition to grow strong and healthy: a scientifically tested combination of vegetable and marine oils and proteins.

5) Fish farmers feed them using automated feeders, according to the smolts' appetite. This can be impacted by weather, brightness, and temperature

4) At sea, they are stocked in pens in low densities to allow room to grow

7) Diet develops over the life cycle of the fish  
Fish grow for 18-24 months

8) Sites are fallowed for a period prescribed by SEPA to ensure that the benthic environment in and around the salmon sites remains in balance

9) Diet develops over the life cycle of the fish



**12)** In Shetland, the salmon arrive at the primary processing unit on the same day that they have been harvested

**11)** An automated system ensures the welfare of the fish

**10)** Fish are pumped live from pens and either taken to a harvest facility onshore or harvested on a wellboat

**13)** Automated gutting line; graded, sorted on weight

**14)** Secondary processing: portioning, filleting and smoking

**15)** Despatched in refrigerated units all over the world

## Pelagic

### Herring (*Clupea harengus*)

- Caught seasonally in Shetland waters using purse, trawl or drift nets
- Spawns in late summer
- Migratory fish that moves in huge schools or shoals
- Can live for up to 16 years
- Very rich in oils, especially Vitamin D.



#### Did you know?

Herring means 'army' in Old Norse – which would go some way to explaining the way that these fish are constantly on the move.



1) Highly efficient pelagic trawlers locate shoals using sonar and echo sounders

2) Trawl net is shot away and towed

3) Some vessels use automatic jigging lines to give a guide as to fish size before shooting

5) Fish are pumped onboard via a pipe which is inserted into the net. During this operation, samples are taken by the crew to determine the fish size, and the sales process begins electronically

4) Sophisticated sensors determine approximately how much fish is in the net

6) Fish are stored in large tanks in the hold and kept cold using refrigerated seawater

7) Taken to port (if Shetland, Shetland Catch in Lerwick) where they are landed and pumped into the processing factory

8) Processed: here the fish are graded to meet customer requirements; and either filleted or left whole; frozen; packed and shipped

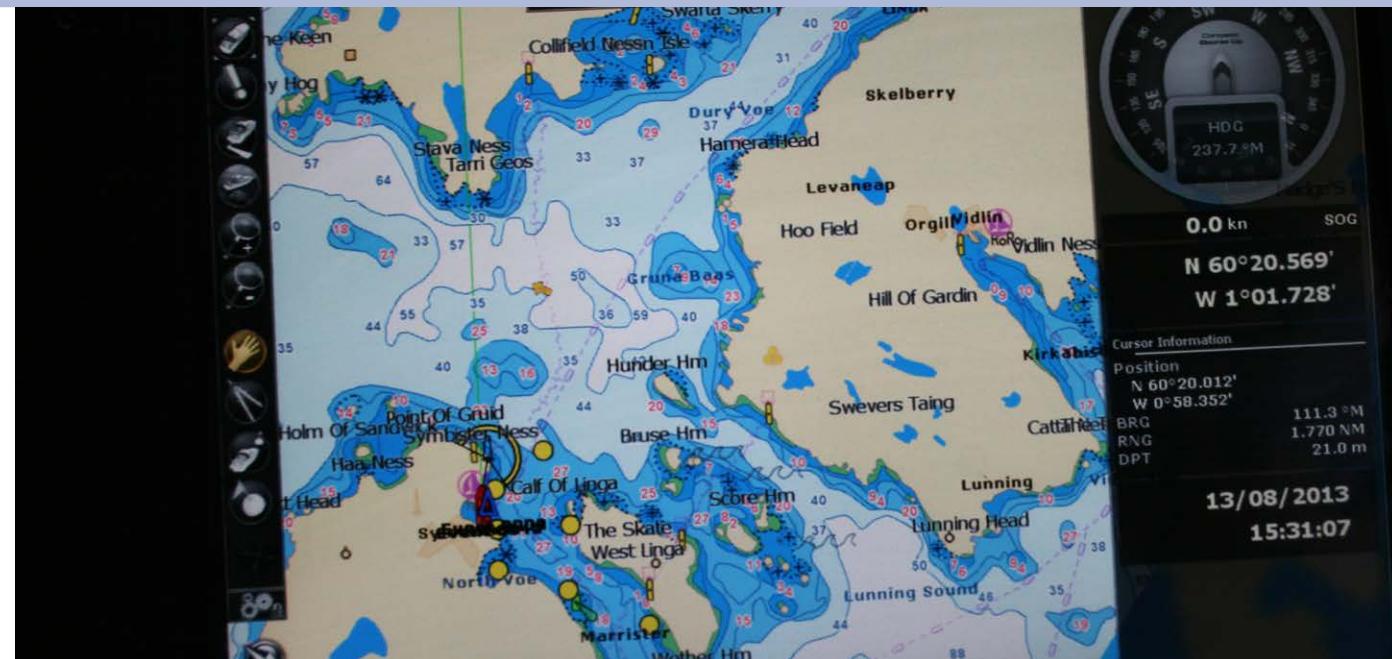
## Mackerel (*Scomber scombrus*)

- Caught inshore on lines in the summer months and seasonally caught by the pelagic fleet from October – November and January – February
- A beautiful fish, with stunning green black tiger stripes
- Designed for speed and distance, they follow the annual patterns of migration through the seas searching for food
- Require a constant flow of water across the gills which means they have to swim constantly
- No swim bladder, which means they can change depth quickly
- In winter months they almost stop feeding.



### Did you know?

Female mackerel produce 200,000 to 450,000 eggs which are 0.9 to 1.4mm in diameter



## Demersal

### FLATFISH

#### Megrim

(*Lepidorhombus whiffiagonis*)

- Live in depths of 50 - 400m, but most common in depths of around 200m.
- The stock in the North Sea has expanded in recent years
- Has a relatively large mouth and is an active predator
- Has a high commercial value.



#### Did you know?

Being flat helps megrim hide from their prey on the seabed



#### Lemon sole

(*Microstomus kitt*)

- Lives on gravelly bottoms at depths of about 20-200 metres
- Right sided flatfish
- Upper surface is reddish brown in colour with mottling, the underside is white
- High value species.



#### Did you know?

Lemon sole is mainly caught to the south of Shetland



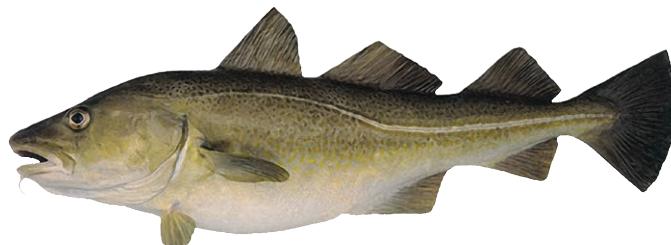
## Cod (*Gadus morhua*)

- Adult cod are active predators, feeding on a variety of fish and shellfish species including sand eels, whiting, haddock, and even small cod
- Cod stocks are recovering and have increased significantly in Shetland waters in recent years
- Still very important commercially
- Cod will feed in a range of depths They have two distinct colour phases – grey/green and reddish/brown.



### Did you know?

Cod can grow up to 1.5 metres long



1) Whitefish trawlers locate the fish, mainly using echo-sounder

2) Seine nets and single or twin rig trawls are used

3) Once onboard the fish are gutted, washed and packed with ice in boxes. Sometimes the fish are left 'round' or whole

6) Fish which have not been graded by size are graded and quality assessed before the sale

5) Arrive at the port – Scalloway or Lerwick market

4) Kept in refrigerated holds onboard

7) Unloaded and taken into the refrigerated unit in the market

8) Buyers arrive in the early hours of the morning to inspect the fish landed the night before

9) At the auction, fish are bought, packed, loaded onto trucks and transported to local processors or exported south

## Haddock

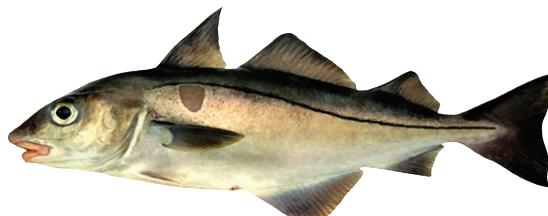
(*Melanogrammus aeglefinus*)

- Less fertile than cod (female haddock are known to spawn up to 1.8 million eggs, unlike cod at 9 million)
- Commonly found in depths up to 150m
- Silvery grey colour with a distinctive black spot above the pectoral fin described as a 'thumbprint', 'St Peter's' mark or the 'Devil's thumbprint'
- Makes up a large proportion of the annual catch of the Shetland whitefish fleet.



### Did you know?

The deep cool waters of the North Atlantic are the perfect habitat for haddock



## Monkfish

(*Lophius piscatorius*)

- Dubbed the ugly fish
- Occur in a wide range of depths, down to about 1,000m
- Tagging by NAFC has shown they can swim impressive distances – for example, from Shetland to Iceland
- They are very unusual in that the eggs are released in a large gelatinous ribbon that may be up to 2 metres wide and 10 metres long. This floats near the surface until the larvae hatch.



### Did you know?

Monkfish have an expandable stomach which means they can eat fish as large as themselves



## Ling (*Molva molva*)

- Demersal fish often found on hardy rocky bottoms and natural reefs
- Ling can live up to 25 years and can reach 2 metres in length
- They are not fussy when it comes to food and will eat just about anything
- Salted ling roe is a delicacy in Spain.



### Did you know?

A giant ling weighing more than 67lb was reeled in off Shetland in 2013



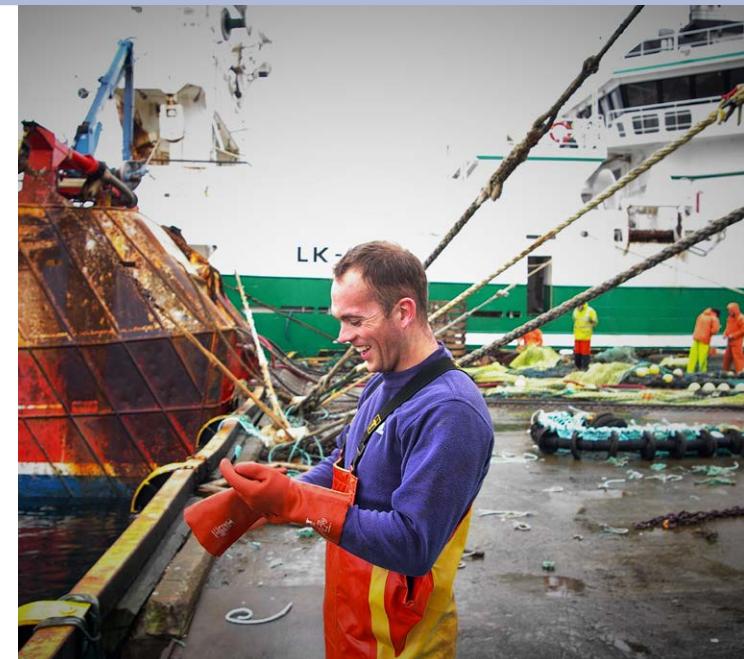
## Whiting (*Merlangius merlangus*)

- Caught in demersal mixed fishery
- Important species to Shetland whitefish fleet
- Spend their first few months on the upper layers and then move deeper to the seabed
- Feed on smaller fish, crustaceans and other invertebrates.



### Did you know?

Whiting can live for up to 20 years



## Saithe, 'Pillocks' (*Pollachius virens*)

- Caught in demersal mixed fishery
- Usually caught at depths of 200 metres
- Move in dense shoals
- Offshore migration of young fish usually occurs in springtime.



### Did you know?

Saithe are fast growers – reaching approximately 1m in 11 years



## Shellfish

### Mussels (*Mytilus edulis*)

- Mussels are bivalves which means they have two shells
- They suck in up to 50 litres of water a day
- Rope grown mussels grow in voes and other sheltered areas around Shetland.



#### Did you know?

The orange meats are females; white meats are males – they both taste the same



**1)** Mussels spawn

Spat or larvae look for somewhere to settle

**2)** If conditions are favourable they will settle on droppers, ropes that mussel farmers have put in the sea which are hanging from a buoy

**3)** After 2 – 3 years, the mussels should be ready to harvest

**6)** Boats use davits to pull the line up to working height

**5)** If the spat is too thick on a rope they will be removed and put back onto the ropes at a lesser density – this process is called 'thinning'

**4)** Mussels that are undersized are collected re-soaked on the site so that they can keep on growing until they reach market size

**7)** Ropes are pulled through a stripping machine, mussels are declumped, given a wash, graded and put into 1 tonne bags or 1,000 litre bins on the boat.

**8)** Taken to shore for debassing, grading by machine, and packing

**9)** Packed into mesh bags or 25 kilo poly boxes, and iced, to suit customer specifications

## Lobster (*Homarus gammarus*)

- They are invertebrates – protecting themselves with their hard exoskeleton
- Bottom dwellers – they like to hide on harder rock bottoms and natural reefs and rocks
- Out of 10,000 eggs it is thought that only 10 will survive
- They navigate by smell, taste with their feet and listen with their legs.



### Did you know?

Lobsters have 10 walking legs and blue blood



1) Buoys mark where the creels are.

2) Creels are left for between 1 – 5 days, depending on how good the fishing is

3) Fishermen haul up the creels, and the shellfish is sorted onboard. Anything too small or spawning (berried lobsters are landed) is thrown back

6) Lobsters are placed in trays and put in creels with some food.

5) Claws of lobster are banded to prevent injury

4) Creels are rebaited and returned to sea

7) Up until September they are usually sold straightaway, but in the build up to Christmas they are kept in creels until they can fetch the best price

8) The live shellfish are landed and either collected by processors or exported by vivier trucks (trucks with sea water tanks that transport live shellfish)

9) The live shellfish are sold to local shops and restaurants, or shipped to markets in France and Spain

## Velvet Crab (*Necora puber*)

- Found on rocky substrates down to depths of 25m, tucked away in crevices
- Get their name from the fine velvety texture of their shell



### Did you know?

Velvet crab have red eyes and are sometimes called the Devil or Witch crab



## Brown Crab or edible crab 'Partans' (*Cancer pagurus*)

- Females (hens) tend to have more rich brown meat. Males (cocks) tend to have more of the sweet white meat



### Did you know?

Females are known to cover large distances - sometimes hundreds of miles

1) Buoys mark where the creels are. There could be over 25 creels per leader if fishing brown crabs

2) Creels are left for between 1 – 5 days, depending on how good the fishing is

3) Fishermen haul up the creels, and the shellfish is sorted onboard. Anything too small is thrown back to sea.

6) The live shellfish are landed and either collected by processors or exported by vivier trucks (trucks with sea water tanks that transport live shellfish)

5) Creels are rebaited and returned to sea

4) Crabs are sorted into brown and velvets. Browns are sorted into male and female and velvets by size: medium and large

7) The live shellfish are sold to local shops and restaurants, or shipped to markets in France and Spain

## Scallops (*Pecten maximus*)

- Surprisingly fast – they swim by rapidly opening and closing their shells
- Hermaphrodites – they are both male and female
- Filter feeder – they suck and squirt water all day
- King scallops can live up to 20 years
- Once in position, scallops will settle down and camouflage themselves on the seabed with a thin layer of sand.

### Did you know?

Scallops have 60 – 100 blue eyes which detect light, dark and motion – usually from predators



1) Vessels operate within the 6-mile inshore limit

2) The Shetland Shellfish Management Organisation (SSMO) limits vessels in Shetland to no more than 10 dredges

3) King Scallops brought ashore live and collected by the processors

6) Despatched in refrigerated units. Processors have their own markets and sell both locally and across the UK

5) Cleaned and packed into tubs

4) In Shetland they are shucked, which is when the scallop is removed from its shell



**What was the most interesting fact you learnt about a Shetland species?**



**How many of these species have you seen or eaten?**



**Can you answer our quick-fire questions?**

1. Which species has blue blood?
2. Which flatfish is usually right sided?
3. A giant 67lb fish of which species was reeled in off Shetland in 2013?
4. Which species has green black tiger stripes?
5. Which species gets its name from its texture?
6. Which species sucks in up to 50 litres of water a day?

7. Which species eggs are released in a large ribbon which floats near the surface?
8. What are vivier trucks?
9. Which species name means 'army' in Old Norse?
10. Which fish has a distinctive black spot above the pectoral fin?



**Did you expect there to be so many steps involved in fishing and processing these species?**



**Which species would you like to have a go at harvesting and why?**

## Eating Shetland Seafood

**Seafood is at its very best, when it's fresh from the sea.**

In Shetland, we are very fortunate to be surrounded by rich fishing grounds, with boats landing their catches at the markets, often within hours of being caught. We also have rope-grown mussels, oysters, and salmon freshly harvested. All are readily available from local fishmongers.

### Monkfish

Robust fish that packs a powerful punch in terms of flavour. A little goes a long way. Why not swap it with your Sunday roast, bake in the oven and serve with your favourite vegetables.

### Ling

This is one weird looking fish, but as a member of the cod family, has sweet, white meat that is ideal for baking, frying or adding to fish soups, stews and curries.



**Looking for a recipe to try? Use ling, cod, or monkfish in this Thai Green Fish Curry...**





This simple recipe combines white fish and mashed potatoes to make delicious fishcakes! >

### Halibut

A large and meaty white flat fish. A true delicacy baked or pan fried with a rich butter sauce.

Have you ever tried  
Halibut? You could  
make this fillet of  
Shetland halibut,  
butternut, leek and  
mussel stew recipe >

### Plaice and Lemon Sole

White and tender flesh from these flat fish, will taste delicious classically pan-fried in flour or baked en papillote.

### Skate

A white fish for frying, poaching or baking en papillote. It marries well with very delicate and also quite bold flavours.

### Hake

A member of the cod family and equally versatile. Bake, fry or add to a fish soup, stew or curry.

### Saithe/Pillocks

These were once the staple of the Shetland diet. Today it is the perfect addition to fish soups, stews and curries.

### **Mackerel – fresh or smoked**

At their best when really fresh, these beautiful fish are packed full of nutrients and a great source of omega 3 fatty acids. Try griddling or barbecuing sprinkled with sea salt, fresh herbs and a squeeze of lemon. Smoked, they are perfect with horseradish cream on canapes or flaked into a simple paté.

### **Haddock and Whiting – fresh or smoked**

Haddock is traditionally Scotland's first choice in fish. It is popular battered or breaded with chips. Grill or bake as a healthier alternative. Whiting is very similar in taste, appearance and texture. Smoked haddock is particularly versatile – delicious poached with an egg and served with wilted spinach.

### **Cod – fresh and salt**

Moist, flaky white meat. This is the most popular and versatile of white fish, ideal for baking or frying, or as the base for a fish pie or a stew.

### **Salmon – fresh and smoked**

Extremely versatile, nutritious and available all year round. Sear and serve with lemon or lime, ginger and fresh herbs. Smoked salmon is at its best served on brown bread with a squeeze of lemon and a grind of black pepper.



**If you want to cook with lots to seafood, this Fisherman's Pie recipe uses cod, salmon, haddock and prawns!**





Want to make a pasta dish with local shellfish?  
Try this Scallops on Smoked Haddock Carbonara.



### Herring – fresh, salted and kippered

A rich oily flesh perfectly suited to sharp flavours, such as mustard and citrus fruits. Fresh, it is often simply rolled in oatmeal and gently frying in butter. Salted herring is traditionally soaked to remove the salt, then boiled and served with potatoes. Kippers are delicious grilled.

### Scallops

Available from the fishmonger already 'shucked' or removed from their shell, King scallops are larger and most popular, while Queen scallops are smaller and sweeter. Both require minimal cooking – just one or two minutes either side in a very hot pan, until golden brown.

If you've not  
cooked with crab  
meat before, but  
want to give it a  
go, try making  
some delicious  
crab cakes



### Megrim

This white-fleshed flat fish is becoming very popular on restaurant menus. It has a soft texture and sweet flavour. Try baking it with fresh ginger and garlic and a touch of butter.

### Crab

Brown crab is the most readily available. Best cooked as soon as possible after it has been caught. Boil for 15 minutes in salted water and cool before removing the claws and legs. Crack the claws to extract the white meat. The brown meat is found in the back. Delicious served simply with mayonnaise and a wedge of lemon.

### Lobster

Lobsters are currently plentiful in Shetland waters. The shell goes from dark blue to orange when cooked. Simmer in salted water according to the lobster weight. The luxurious sweet meat is found in the tail and by twisting off the claws and breaking into sections.

### Oysters

Native European and Pacific oysters are now cultivated in Shetland. To prepare, the shells are first rinsed in fresh water before prizing the flat top shell away. The oyster meat is then loosened from the bottom by running a knife under the flesh. They are mostly enjoyed raw with a squeeze of lemon – straight from the shell.



If you want to try making something simple with no cooking required, this hot smoked salmon pâté is a great recipe to try! >

### Mussels

Very nutritious and ready in minutes – rope-grown mussels have a thin shell and a high meat content. Only shells that are closed (or close with a tap) should be cooked. They cook very quickly over a high heat and are ready to serve when the shells open.

 **Which of these recipes would you like to make?**

 **What's your favourite fish to eat? And how do you like it cooked?**

 **What types of fish haven't you eaten before, and how could you cook them to try them?**

