



### LOVE OUR LIVING SEAS

Dip below the surface and discover why our seas are worth protecting.



#### **ULSTER WILDLIFE**

Ulster Wildlife is your local wildlife charity. We've been champions of nature for over 35 years and are working hard to ensure that wildlife has a future in Northern Ireland.

We work with local people to secure space for nature in our countryside, towns, coastlines and seas. Our work is guided by our two key themes of Living Landscapes and Living Seas.

Ulster Wildlife is one of 47 independent Wildlife Trusts across the UK. The Wildlife Trusts partnership is the largest UK voluntary movement dedicated to protecting the full range of our native habitats and species.

www.ulsterwildlife.org

Protecting what's important to you



"The Wildlife Trusts play a very important part in protecting our natural heritage. I would encourage anyone who cares about wildlife to join them."

Sir David Attenborough
President Emeritus of
The Wildlife Trusts

### **ULSTER WILDLIFE'S VISION FOR OUR LOCAL SEAS**

#### **Living Seas**

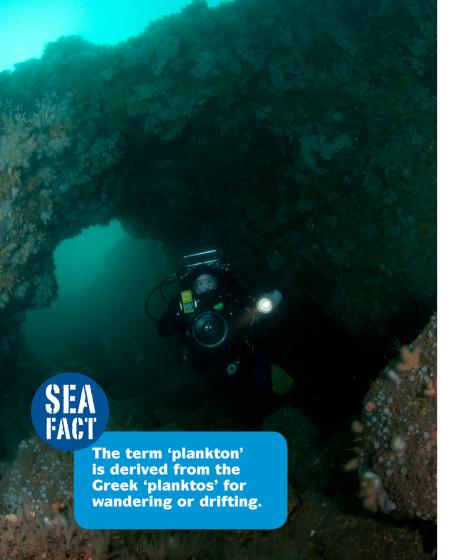
What does this phrase conjure up in your mind? A rocky reef bursting with brightly coloured fish, crabs and sponges? A boat trip in the company of leaping dolphins and playful seals? Plenty of fish in our seas, with enough for everyone for decades to come?

Ulster Wildlife has a vision - that sea life thrives from the depths of the ocean to our coastal shallows. Although the seas around Northern Ireland are full of amazing creatures, sadly there are not as many as there used to be. Our seas are busier than ever, with increasing use of their resources from fishing to renewable energy developments, recreational opportunities to communications cables being laid. Therefore we need to make sure we get the balance right so that we have healthy seas for our future.

Thankfully, it is not too late to turn around this decline. Our seas and sea life have a remarkable capacity to recover – but only if we give them the chance! If we act now, Living Seas are within our grasp.

Ulster Wildlife sees this as a marine decade, a real chance for us all to protect our local seas for now and for future generations.





### OUR HIDDEN TREASURES

In Northern Ireland we are never more than 35 miles from the sea and we are connected to it in so many ways. We depend on the sea for food, and it is part of our life support system.

Tiny plants called phytoplankton floating in the sea provide almost half the oxygen in the air we breathe. The sea is like a treasure chest providing food, medicines, transportation, recreation and inspiration.

Our seas are also home to a huge range of amazing sea life ranging from very big to very small. Many people are not aware of the wealth of nature that lives in and visits our local seas and shores.

Much of this world is hidden beneath the waves, and Ulster Wildlife is working to raise awareness of our hidden gems and why they are worth protecting.

Read on to find out more about some of the wildlife that depends upon our local seas.

### **BASKING SHARK**

(Cetorhinus maximus)

The basking shark belongs to the fish family and is in fact the second largest fish in the world, growing up to a massive 7 metres.

They can be seen all around our coasts in the summer months with their fins above the surface of the water and their mouths wide open while feeding.

Although they are a shark, they have no teeth and feed on tiny shrimp-like creatures (plankton). In winter, basking sharks move to depths of up to 900 metres to feed in deep water.

The basking shark can live to be around 50 years old.

#### **Local Hotspots:**

Portrush, Torr Head, Ballycastle, Malin Head.





### **PUFFIN**

(Fratercula arctica)

Puffins are striking and colourful birds, which can beat their wings up to 300 times per minute to stay in the air.

They spend their first three years of life out at sea before coming to land to breed. While on land they form colonies making their nests in burrows on islands or coastal cliffs. Rathlin Island is famous for its puffin colonies which come to visit and breed from March onwards and stay until mid-July.

The puffins beak is jagged to help it hold onto fish with sand eels being its favourite choice in the UK. It catches them by diving and pursuing the little fish underwater, often catching a few at a time. Puffins can dive up to 60 metres deep and can live for more than 20 years.



**Local Hotspots:** Rathlin Island

The Puffin has been recorded with up to 83 sand eels in its beak at once!

## **BOTTLENOSE DOLPHIN**

(Tursiops truncatus)

A curious and friendly dolphin with a fairly short beak, a rounded forehead and a sharp crease between the beak and forehead.

They sometimes travel in groups of up to 30 individuals together known as a pod. Dolphins use echolocation to search for prey. Similar to sonar, they emit clicking sounds and listen for the return echoes to locate the whereabouts of potential prey.

Bottlenose dolphins also use sound for communication, including squeaks and whistles emitted from the blowhole and sounds emitted through behaviour, such as leaping from the water and slapping their tails on the water surface.

**Local Hotspots:** 

All along the North Coast.



### HARBOUR PORPOISE

(Phocoena phocoena)

The harbour porpoise is one of the smallest marine mammals, with a blunt beak and mouth that turns up like a smile at the edges.

The harbour porpoise can be found all around the British Isles. As their name suggests they can be spotted in harbours, close to the shore or sometimes even in rivers.

They like to eat fish such as herring, mackerel, sprat and pollack, with an occasional squid or octopus. When the harbour porpoise captures its prey it turns the unlucky victim around so that it can be swallowed head first, so that the bones don't get stuck in its throat.

#### **Local Hotspots:**

Skerries near Portrush, the Maidens (off Islandmagee), Belfast Harbour, Strangford Lough.





### **GREY SEAL**

(Halichoerus grypus)

This is the larger of the two seals native to our waters, and just to make things confusing is actually much more common than the common seal.

Males grow to about 2.3 metres, while females are smaller and average 1.8 metres in length.

Over 40% of the world's population of grey seals is found around the coasts of Britain and Ireland, and their numbers continue to increase.

Grey seals inhabit most coastal regions around Ireland, including many harbours, piers and marinas, though they prefer more remote, exposed rocky locations for coming on land or hauling out.

#### **Local Hotspots:**

Minerstown,
Skerries and Causeway, the Maidens,
Strangford Lough.



### COMMON SEAL

(Phoca vitulina)

The common seal, also known as the harbour seal, is the smaller of the two species of seal in our waters.

Males average 1.5 metres in length, while females are slightly smaller and average 1.4 metres.

Compared with grey seals, common seal distribution is more coastal and they are often seen in estuaries (river mouths) and may even venture upstream. Common seals spend most of the day in the water, which includes active foraging, resting at the sea floor and drifting with currents and tidal movements.

#### **Local Hotspots:**

Minerstown, Skerries and Causeway, the Maidens, Strangford Lough.



### **SKATES AND RAYS**

Skates and rays are related to sharks as they are cartilaginous fish, meaning their skeleton is made of cartilage, not bone.

They have flattened bodies with the front paired fins forming extended 'wings'. They like to live on sandy, shingle and muddy sea beds. In Northern Ireland the common skate (*Dipturus batis*) is a priority species and one of the largest fish in our waters.

It was one of the first fish species to be brought to the brink of extinction by overfishing and is now very rare. It is globally listed as critically endangered. The thornback ray (*Raja clavata*) pictured, is a more common diamond-shaped ray covered with numerous prickles along its back giving the thornback ray its name.

They grow to around 1 metre in length and live for up to 12 years. The thornback ray likes to eat bottom feeding creatures, with crabs and shrimp being its primary source of food, however they will also eat small fish such as herring, sprat and sand eels.

#### **Local Hotspots:**

The Maidens, Dundrum Bay, Strangford Lough, Rathlin Island and the North Coast.



Common skate are known to live up to 100 years old and females can grow to almost 3m wide.

### **CONGER EEL**

(Conger conger)

A large powerful snakelike fish, they grow to over 2 metres in length and 70kg in weight.

The largest congers are all females, as males don't grow more than a few kilos in weight. The conger eel has no scales but smooth blue-grey skin. Unlike most fish which have separate back and tail fins, the conger eel's fin is fused forming a fringe around its body.

The conger eel hunts at night and preys upon other fish including smaller conger eels. They have strong jaws which are used to catch prey such as crabs and lobsters, which they then crack against rocks before devouring them. During the daytime conger eels take refuge in crevices, nooks and crannies, and artificial environments such as shipwrecks.

When they reach maturity, at around 10 years of age, they go through a dramatic change. All their energy goes into producing eggs, their skeleton starts to dissolve and their teeth fall out. The toothless conger then swims into the mid Atlantic, towards the Azores, where it meets up with large numbers of other congers to mate and release its eggs at up to 4000 metres deep, before dying of exhaustion. When the baby eels (elvers) hatch, they begin the long journey back in the opposite direction.

#### **Local Hotspots:**

In rocky reefs all around our coast.



### **CUCKOO WRASSE**

(Labrus mixtus)

This colourful fish may look like it belongs in the tropics, but it can commonly be found off the coasts of Northern Ireland.

Males have a striking blue head with blue lines and patches mixed together with beautiful orange and gold. Females are rosy pink and display a row of black and whites blotches near the tail.

They like to eat small crabs, shrimp and barnacles.

The cuckoo wrasse, like all wrasse, has an amazing life cycle. All wrasse fish are born female, and remain female for the first five to seven years of their life. They are then able to change sex and become male. It is thought when the male wrasse of a group dies, the dominant female changes sex to take his place and mates with the remaining females. It is then possible for the male cuckoo wrasse to become female again later in life.

SEA FACT

> Male cuckoo wrasse are territorial and will even follow divers around to keep an eye on exactly where they are going!

#### **Local Hotspots:**

The Maidens, Red Bay, Rathlin Island.



### HORSE MUSSELS

(Modiolus modiolus)

Horse mussels are related to the blue mussels that we normally eat but they are larger and not edible.

Horse mussels are extremely important creatures that create homes for other animals, including scallops and sponges, to live on by forming clumps or extensive reefs on the sea bed. They provide small crevices which are used by young animals as places to hide from predators.

Young mussels provide an easy meal for starfish and crabs; however when adult horse mussels join up together in clumps they are more difficult to break apart.

#### **Local Hotspots:**

Strangford Lough, Outer Ards Peninsula.



### **SPONGES**

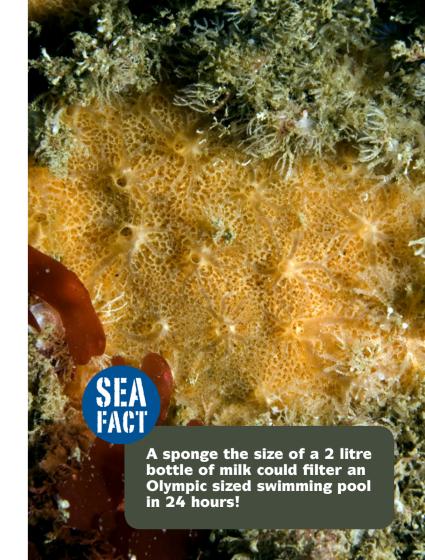
Sponges are animals that live on our sea beds, often forming colourful gardens and homes for many other creatures including baby scallops.

They rely on keeping a constant flow of water moving through their bodies which helps them catch food particles and oxygen, and remove waste.

Northern Ireland is a global hotspot for sponges. In 2007, 29 species of sponge new to science were found in the waters around Rathlin Island. Rathlin is home to 50% of the UK's known sponge species.

The sponge pictured here is *Phorbas punctata*; it is one of the new species discovered off Rathlin Island in 2007.

Local Hotspots: Skerries, Rathlin Island, the Maidens, Strangford Lough.



### **KELP FORESTS**

Around the coast of Northern Ireland you will see the tops of kelp forests appearing from low water when the tide is out, but they are in their true glory when under the waves serving as the forests of our oceans.

Kelp forests are mostly large brown seaweeds with many other seaweeds and creatures living on and underneath them. Kelp need sunlight in order to grow, therefore they are rarely found much deeper than 15 metres.

#### **Local Hotspots:**

Can be found all around our coastal waters off rocky shores.



### **MAERL**

Maerl is a collective term for several species of red seaweed with hard, chalky skeletons. Unlike other seaweeds, it grows unattached on the seabed.

Maerl beds are important for many different types of marine life which live amongst, are attached to the surface, or burrow into the coarse gravel of the dead maerl beneath the top living layer. Like all seaweeds, maerl needs sunlight to grow and it only occurs to a depth of about 20 metres.

#### **Local Hotspots:**

Garron Point, Ballygalley Head, Strangford Lough, Rathlin Island, Red Bay, Carlingford Lough.



# JOIN US ON OUR JOURNEY TOWARDS LIVING SEAS

We believe it is possible to achieve Living Seas within 20 years – a single generation – but only if opportunities are seized right now. We would like you to join us on the journey, to be part of this crucial time for our local seas. Your support could make all the difference!

#### Ulster Wildlife is working to -

Inspire people about our local sea life and to value the sea for the many ways in which it supports our quality of life, through education and public events.

Secure a network of marine protected areas as part of a long-term solution to the management of healthy seas.

Ensure developments and activities in our seas are sustainable by influencing the marine planning process.

Ensure our seas and sea life are properly protected through fit-for-purpose marine and fisheries legislation and practices.





"Stand on the coastline and gaze out to the horizon - you cannot fail to be moved by the sight of the vast ocean stretching as far as the eye can see.

And even more extraordinary is the realisation that below this expanse is a whole other world, teeming with life - rocky reefs, kelp meadows, gleaming shoals of herring, anemones like bursts of light in the deep.

Just like on land, these habitats need protecting. That's why it's so important to support The Wildlife Trusts' vision for Living Seas"

Simon King OBE
President of the Wildlife Trusts

## LOVE OUR LIVING SEAS

#### **Get Involved**

Support our campaigns and make your voice heard on important issues that affect our local seas

Take part in programmes that help survey our local sea life.

Volunteer with our Living Seas team or come along to one of Ulster Wildlife's events

Support the work of Ulster Wildlife by becoming a member, making a donation, or providing corporate sponsorship.



Get in touch with our Living Seas team livingseas@ulsterwildlife.org





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