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Irish Sea Creatures

Sharks

Elasmobranches

Irish species

Some people would be surprised or maybe nervous to hear we have sharks in Irish waters. In fact there are 10 species of sharks that use Irish waters. Certain species are migratory and come to Ireland to feed in our rich waters. These include the Basking shark, Blue shark, Short-finned Mako, Six Gilled Shark and the Porbeagle shark. Our resident sharks are the Spur Dogfish, Greater Spotted Dogfish, Lesser Spotted Dogfish, Siki Dogfish and Smooth Hound.

The rays are a relative of the shark family. There are many rays in Irish waters, including the Thornback Ray, Blonde Ray, Sting Ray, Cuckoo Ray, Undulate Ray, Homelyn Ray, Painted Ray, Electric Ray, Common Skate and White Skate.

Basking shark

The basking sharks are the second biggest sharks in the world and are found throughout Irish seas during the summer months. They can measure up to 11m in length. They are usually seen alone cruising slowly at the surface,



Basking shark

with dorsal fin above the water and their mouth opened as it filters the coastal waters for food. They feed on tiny animals that float in the water called plankton. The basking shark can filter the same amount of water found in a regular size swimming pool in one hour (about 2000 tons of water). They can also be seen in larger groups from 4 to 100. It is thought that basking sharks gather in large numbers during courtship. At this time they are known to leap right out of the water, perhaps to attract a mate.

Basking sharks come to Ireland from late April to late July to feed. During these months there are high levels of plankton in Irish waters and the sharks are found in certain areas where this food is plentiful. They

disappear from the coastal surface waters during the winter months. It is thought that they move to deeper waters near the edge of the continental shelf. Still little is known about these sharks' migratory patterns.

Good places to spot basking sharks; 1) Achill Island, Co. Mayo, 2) Brandon, Co. Kerry, 3) Galley head, Co. Cork, 4) Kinsale, Co. Cork, 5) Dungarvan, Co. Waterford and 6) Hook Head, Co. Wexford

Blue Shark

Blue Shark measure around 2-3m. They are blue with a white under belly, called counter shading which helps to camouflage themselves from their prey. They have long pectoral fins that allow them to glide along ocean currents. Blue Shark never stop swimming; if they did they would sink. They are top predators feeding on squid, mackerel and herring. They are found in coastal and offshore Irish waters from Malin Head in Donegal, around the west and south coasts as far as Hook Head in Wexford. They occur mainly during the months of June to October. Irish Blue Sharks migrate from Ireland to West Africa across the Atlantic Ocean then up along the American coast to Canada and then back to



Ireland. They are to be found in most seas around the world.

Dogfish

The dogfish is our most common shark. They are found in coastal areas, and are often seen resting on the seabed in the day. They hunt at night, feeding mainly on crustaceans (crabs and shrimps), molluscs (especially whelks), and small fish. Dogfish use their sense of smell to catch prey and can also detect faint electrical fields produced by the muscles of hidden prey. During the autumn, males fertilise the female eggs internally. Then the female lays her egg capsule. She anchors it by swimming repeatedly around an object like seaweed. Each capsule contains a single embryo and a miniature dogfish will emerge approximately 9 months later. These egg cases can then be found washed up on the beach and are known as mermaids' purses.

Shark skin

In olden days people used shark's skin to make shoe soles and sand paper. Today, swimwear designers are mimicking the shark's skin to create the most hydrodynamic swimwear. One of the biggest problems with swimming is that a body creates drag in the water. Sharks and rays have evolved skin that minimises this problem. Instead of having scales like other fish,

sharks and rays have tooth-like structures called denticles. Each denticle is designed to minimise drag and become the ultimate hydrodynamic adaptation. That's why shark's skin is rough to touch in one direction but smooth to touch the other.

Threats

The largest threat to sharks and rays comes from the fishing industry including incidental capture in fishing nets. Over six million blue sharks have been taken annually from the world's oceans over the past few years. There is also a very destructive shark fishery in some of the world's oceans that targets these amazing animals just for their dorsal fin!

Seals

Pinnipedia (Flap footed)

Irish species

There are two native species of true seals in Irish waters, the grey seal and the common (harbour) seal.

The grey seal is more abundant than common seal, and is found throughout the Irish coastline. They breed and haul out mainly in isolated areas.

The Common (Harbour) seals are found in more sheltered areas Carnsore Point (Co. Wexford), Clew Bay (Co. Mayo) and Tralee



Female Grey Seal

Bay (Co. Kerry) and use sand and mud banks to breed and haul out. Common seals can usually be seen individually or in groups when hauled out. There are noticeable differences between grey and common seals;

1) **Size:** the grey seal is bigger: grey males can reach up to 2m while common males can reach up to 1.7m.

2) **Face shape:** the Grey seal has an elongated muzzle while the common seal has a rounded faced and tend to look more attractive.

3) **Colouration:** The colouring can be similar but the grey seal is generally darker brown and grey while the common seal has a finer pattern of spots and their coat is generally lighter in colour. The coat of each seal is unique. This allows photo ID to be carried out to determine breeding population size, residency or site fidelity.

4) **Pups:** Differences can also be seen in their pups. Grey seals are born during September and October and have a white coat. The pups tend to stay with the mother on the beach for the first three weeks. The mother feeds them with her rich milk (seal milk is about 70% fat) and once she leaves they have to search for food on their own.

Common pups are born in June and July. The pups can swim within a few hours of being born. Early swimming enables them to escape from human interference. They come on to shore to suckle and rest. The bond between the Common seal and her pup is very intense. She can be seen giving piggyback rides to early young. The common seal will stay with their pup for up to 5-6 weeks.



Sea Turtle

Interesting facts about seals

Seals are believed to have evolved from river bears 30 million years ago. Increased competition on land drove them back towards sea hunting. Seals are warm-blooded mammals, and have a thick layer of blubber (fat) that helps maintain their body temperature. On land seals look clumsy and awkward but in the water they are agile and capable of moving very fast. They are a top predator feeding on mackerel, pollock and shellfish, etc. They dive to hunt, normally for 5 -15 minutes at depths of 30 - 70 metres but can dive up to 45 minutes. Seals exhale on diving and keep their nostrils closed during the dive. On deeper dives they have many ways to help them stay down for longer. They can reserve their blood supply allowing oxygenated blood only to their heart, brain and lungs. They can also reduce their heart rate from 120 beats a minute to only 5 beats a minute. Seals have a relatively large blood volume (up to twice that of terrestrial mammals).

Sea Turtles

There are seven species of sea turtle in the world. They live mainly in warmer tropical seas. However, five kinds of sea turtle have been recorded around the coasts of Ireland. These are migratory species that breed in tropical waters and they turn up here mainly because they have lost their way. However, one species of turtle belongs in Irish waters, the Leatherback turtle.

The Leatherback Turtle is the largest and most wide-ranging of all sea turtles. The biggest leatherback turtle ever recorded weighed 916 kg (approx 1 ton) found off the coast of Wales. The leatherback is appropriately named as it has a soft leather shell unlike the other sea turtles whose shell is hard and plate-like. The leatherbacks are different to other living reptiles because they are warm-blooded like birds and mammals. This enables them to feed in colder waters like Ireland and Britain and also to dive deep to depths of 1200m. Leatherback turtles come to Ireland during the summer and autumn months to feed on the abundant jellyfish.

Leatherbacks, like all sea turtles, are endangered. Firstly, in the

tropics they are threatened at their nesting sites. Locals eat their eggs or kill the mother turtles for meat and coastal development interferes with the young hatchlings. Grown turtles are frequently caught in fishing nets or on longline hooks, boats hit others and some may choke from mistaking plastic bags for jellyfish.

Dolphins & Whales

Cetaceans

Whales and dolphins are known collectively as cetaceans. There are 24 species of cetaceans in Irish waters. Ireland is an important habitat for cetaceans and in 1991, was designated as a sanctuary for whales and dolphins.

Dolphins

Dolphins are found throughout the Irish coast. The most familiar species of dolphin is the bottlenose dolphin. Shannon estuary has the largest resident (present all year round) Bottlenose population in Ireland. There are over 115 Bottlenose dolphins using the Shannon estuary at different times of the year. Other species of dolphin that are found in Ireland are the Common dolphin, Striped dolphin, Risso dolphin, Atlantic White-sided dolphin and White-beaked dolphin. Dolphins feed mainly on fish (herring, pollock and mackerel) and squid.

Porpoises

The small cousin of the dolphin is the harbour porpoise. They are found in all coastal areas throughout Ireland. They feed on crabs, shellfish and fish. Porpoises have flat teeth (spade teeth) to help them crush shells and crab exoskeletons. They are a shy mammal and can be injured



Pilot Whale

or killed by motorboats and jet skis and by fishing nets.

Whales

Ireland is one of the best countries in Europe to whale watch. Some of the largest whales come to Ireland to feed. Large whales such as the Fin Whale measuring up to 26m in length can be spotted off the coast of Cork (Galley Head), Kerry (Slea Head) and Wexford (Hook Head). Blue, Fin, Humpback, Sei, Minke are all baleen whales. Baleen whales don't have teeth instead have baleen plates (comb like structure). They use these plates to sieve water for food. These huge mammals feed on small animal plankton (krill) and small fish (herring). Sperm whale, Pygmy Sperm whale, Killer whale, False Killer whale, Sowerby's beaked whale, Northern bottlenose whale and Long-finned Pilot whale are all toothed whales. Dolphins can also be known as toothed whales. They both have a strong set of teeth to hunt their prey. Toothed whales form groups (pods). Unlike the baleen whales, which are usually found alone or in small groups.

Sharing knowledge

By sharing your knowledge with others of these majestic animals we will increase their public profile. This will help us protect these animals and ensure their protection in Irish waters.

Reference list and websites

www.sharktrust.org
www.iwdg.ie
www.shannondolphins.ie
www.turtle.ie/
www.iol.ie/~seaworld.htm

Carwardine, M. (1995) Whales dolphins and porpoises. Dorling Kindersley

Text by Kate Bradbury

Photography Rohan Holt & Kate Bradbury



Issued by:
ENFO – The Environmental Information Service,
17 St Andrew Street,
Dublin 2, Ireland.

Tel: (01) 8883910
Locall: 1890 200191
Fax: (01) 888 3946
e-mail: info@enfo.ie
www.enfo.ie

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