



## Habitats & MPA's transcript

Today we will understand the term habitat, identify and name habitats found in the North Sea, understand what a Marine Protected Area is, discuss the pros and cons of a Marine Protected Area and understand that we have Marine Protected Areas in the North Sea.

So what is a habitat? It is a place where an animal or plant lives.

Are there habitats in the North Sea? Why not try and name a few?

Kelp is a type of seaweed that grows in the sea and forms forests underwater, just like trees do on land. They are extremely important habitats for a variety of wildlife. They provides homes to animals like fish and crabs, and these then attract more animals like seals that feed on them.

Sandy seabed's can be found covering the depths of the ocean to the top of shore; in fact, together they cover up to 90% of our seabed's. They are popular with burrowing creatures, like lugworms which are food to other animals. This is an especially important habitat for a type of fish called sand eels, which burrow down into the sea floor. These fish are a vital part of the diet of many animals, including larger fish and seabirds. Flatfish like plaice camouflage against the sea floor to avoid being eaten by predators.

You might be used to seeing coral reefs on TV or when travelling, but did you know we also get them right here in the North Sea? Coral reefs provide a natural habitat and protection for different species of fish. They are not plants; they are actually living organisms that provide a safe place for fishes to breed.

We also get a special type of habitat in the North Sea in the form of chalk reefs. The variety of shapes found on these reefs, from boulder to cracks and canyons, make them fascinating habitats that are rich in life. Beneath the waves, chalk reefs offer a hard surface for marine life to attach to. As chalk is very soft, boring species will drill their own holes into the rock and make a home there.

What is a Marine Protected area? They are areas of sea protected for the wildlife and habitats that are present. Have you ever been to a nature reserve on land before? Well these are nature reserves at sea!

We currently have a number of Marine Protected Areas in the North Sea but are always trying to get more. The map on the left shows a few examples. However Marine Protected Areas can only work if they are big enough, if they are close enough to each other so

animals can pass from one to another safely, there are enough of them and they must be actively protected. If no one listens, what's the point?

What is good about a Marine Protected Area?

Marine Protected Areas provide a safe space and shelter for a lot of animals. They provide areas where animals like fish and lobsters can reproduce and grow to their adult size. They protect important habitats from damage by harmful human activities, giving them time to recover. They can help these areas to become resilient to things like climate change. They help to maintain people's livelihoods that are linked to the sea.

What is bad about a Marine Protected Area?

A lot of the time Marine Protected Areas are only protected on paper and lack any plan or enforcement to ensure these areas that are actually being protected.

Here is some information on a Marine Protected Area in the North Sea called Markham's Triangle. It lies 137km off the Yorkshire coast. The seafloor consists of sand, with patches of rock and gravel. This is an important habitat for many creatures that burrow within or camouflage against the sand like worms, starfish and sea urchins. Small fish called sand eels live there which are a key food source for seals and porpoises. This site is close to another protected area which creates a safe passage between the two for a variety of wildlife.

This diagram shows how everything is connected, so we must protect everything to allow wildlife to thrive.

Sand eels, which are a type of fish, feed on microscopic organisms called zooplankton, whose numbers could change and decrease due to climate change and habitat disturbance. The sandy seabed provides a home for the sand eels. In the winter they will bury themselves deep into the sand to hibernate. Seabirds like puffins rely on the sand eels for food. Larger animals like porpoise also depend on sand eels for food. Commercial fishing catches sand eels to use as bait. But certain fishing techniques can disturb their habitat. So therefore, if the sandeels food or home is destroyed, this also impacts other animals like puffins and porpoises which rely on them for food.