

# African Elephant

African elephants are sensitive to the heat. Rising temperatures due to global warming reduce the animal's ability to reproduce.

Habitat fragmentation due to deforestation,

towns or deserts make it harder for the elephants to adapt to a warmer climate as travelling for food and water becomes more challenging.



Perhaps the most important factor in the African elephants' survival is their need for a lot of freshwater, which directly affects their reproduction and migration. With increases in droughts, it is becoming harder for the elephants to find enough water to survive.

# Poison Dart Frog

Living mainly in the rainforests of Central America and South America, this critically endangered species of frog, like all frogs, relies on water to sustain itself in tadpole



form. As temperatures continue to shoot up due to global warming, sources of water start to disappear in some rainforest areas, which threatens tadpoles' survival.



Humans cutting down areas of the Rainforest also present a huge threat to these frogs. Their habitat becomes broken up and it also affects the microclimate within the rainforest, reducing rainfall and increasing temperatures.

The poison dart frog has only one natural predator, a snake that is immune to the frog's toxicity.

# Ringed Seal



The ringed seal is the smallest of all living seal species and is named after the ring-shaped markings on its coat.

They may be small but they are not delicate – ringed seals have a thick layer of fat called blubber, which helps to keep them warm and buoyant and serves as a nutrient source during lean times. Ringed seals feed on a wide variety of fish and crustaceans.

Climate change is the most important threat to ringed seals, as it jeopardizes the sea ice habitat they rely on for survival. Ringed Seals are highly dependent on Arctic sea ice and almost never come onto land. Warming spring temperatures and early sea ice breakup are causing nursing pups to be prematurely separated from their mothers. Additionally, warmer ocean temperatures are likely to boost seal parasite populations and the forced migration of seals to more stable ice habitats will facilitate the spread of disease



# Grey Headed Albatros



Grey-headed albatrosses are solitary creatures. They can cover distances of up to 13,000km in search of food and spend the majority of their lives at sea. Living on average to 35 years of age, there are an estimated 250,000 grey-headed albatross left in the world today.

Not only a majestic bird, the grey-headed albatross is a literal a world record holder! In 2003, The Guinness Book of Records gave them the title of world's fastest horizontal flier. With a colossal wingspan of 2.2m, they can fly at speeds of up to 127km per hour and can circumnavigate the globe in just a little over a month.

A major threat to this bird is climate change. Rising sea-surface temperatures have resulted in food shortages. Climate change has also led to more extreme storm conditions in the area where they build their nests. Many chicks are blown from their nests in these unseasonal storms and do not survive.



# Marine Iguana



The **marine iguana**, also known as the **sea iguana**, is a species of iguana found only on the Galápagos Islands (Ecuador) that has the ability,

unique among modern lizards, to forage in the sea, making it a marine reptile. This iguana feeds almost exclusively on algae found in the sea, and large males dive to find this food.

Warming oceans cause an array of problems for aquatic and marine animals like the marine iguana. The rising ocean temperatures, caused by climate change, have been killing the algae on which the iguana feed, causing many of these lizards to starve.

Elevating sea and air temperatures also contribute to these coastal iguanas' vulnerable status. Warmer weather can interfere with their ability to regulate body temperature, and it can impact their beach-nesting and egg development.



# White Beaked Dolphin

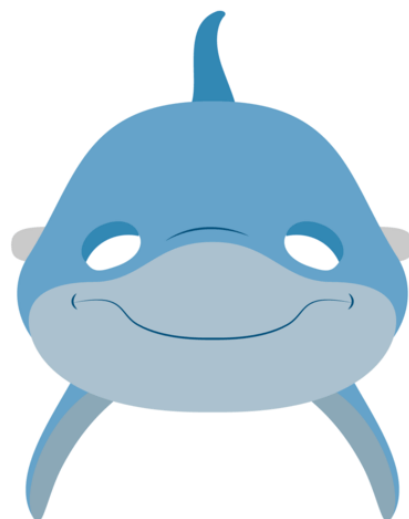


White-beaked dolphins are found in cold, temperate waters of the North Atlantic and an estimated 80% of the European population are found in the UK and Scotland alone.

These dolphins need cooler waters to survive. But warming seas mean that they are being pushed out of their normal territory.

Scottish water temperatures are at the edge of the dolphin's range and if it continues to warm then they could become locally extinct – which would be devastating to the overall population.

There are currently an estimated 100,000 individuals.



# Kittiwakes



Kittiwake are seabirds that breed on the UK coastline. They rely on our steep cliffs and cold waters for success in their breeding attempts. However,

seabirds are amongst the species worst affected by climate change, and kittiwakes are in decline.

Rising sea temperatures are to blame, it has a lasting effect on the whole food chain, which will ultimately impact the seabird populations. Zooplankton struggle to survive in warmer waters, so sand eels have less to eat and their population declines as well. This means that Kittiwakes will have less prey to feed on and their population will also eventually fall.



# Bee



Believe it or not, there are over 250 species of bees in the UK and only one of these is

the honey bee. There are 25 species of bumblebee and the rest are solitary bees.

All bees are vital for our food system and are considered to be the primary pollinators for crops in the UK, and without them, our food security is at risk. Climate change disrupts the seasons ; warmer, wetter winters and seasons that start at different times, as the climate warms. More erratic weather and unreliable seasons mean that bees find it harder to nest and feed. On top of this, bees are suffering from a loss of habitat due to intensive farming and land-use change (including how we manage our gardens). We've lost 97% of our wildflower meadows in the UK, on which bees rely heavily.





# Atlantic Salmon



Spending most of their lives feeding in the Atlantic, this species of salmon returns to breed in the freshwaters of Scotland. As a keystone species,

they are integral to the freshwater environment.

The expected warming of oceanic waters due to climate change will be lethal for Atlantic Salmon. In Scotland, the warmer freshwater will mean reproduction is less successful. Over time, this will negatively impact the overall salmon population.



# Snowshoe Hare



Snowshoe hares live in parts of North America. In the summer they have brown fur, then as winter approaches they switch to having a

thicker white fur. This helps keep them warm when the snow comes. Also, importantly, the white fur is great camouflage against the snow, helping them to avoid predators.

However as Climate Change is changing weather patterns, the snow is arriving later in the year. The warmer conditions in the spring means it melts sooner than it used to. The problem arises as the snowshoe hare is still changing to it's white fur, even when there is not any snow. As a result it stands out and is an easy meal for predators.

Unless the snowshoe hare starts to adapt, it's numbers will decline, all because of climate change.



# Reindeer



Reindeer are the only deer where both males and females have antlers.

Reindeer numbers across the Arctic have fallen by more than half in the past twenty years. They survive by migrating to find food, using their hooves to dig through the snow to eat the nutritious lichen buried underneath. But climate change means herds must swim across previously frozen rivers and many young calves drown – and rising temperatures mean more rain, covering plants with ice instead of snow, making grazing harder.



# Narwhals



The rarest of whales, Narwhals are the *unicorns of the sea*. Most males and even some females

have a beautiful spiraling tusk, which can be up to 3m long. The tooth is sensitive to temperatures and chemicals in the water and scientists think it enables males to find food as well as females ready to mate. Narwhals dive deeper than any whales—as deep as 1500metres—and stay under for 25 minutes before surfacing for air.

Narwhals are totally adapted to living amongst thick sea ice. They evolved without a dorsal fin, allowing them to travel closely under ice to take refuge from faster predators. But with sea ice melting earlier, predators like orcas can potentially access new areas that they previously couldn't because of their large dorsal fin. And they hunt narwhal.

The Narwhal lives mainly in the Atlantic Arctic. Because of specialized habitat, narrow range and limited diet (Arctic cod and halibut), it is one of the Arctic species most vulnerable to climate change.

The Narwhal breeds in bays and fjords, moving offshore during winter to areas of heavy ice pack, breathing through the few cracks. Sudden or extreme temperature change can cause these cracks to freeze shut, trapping the whales. Other threats are illegal hunting, industrial activities, and risks from oil development, exploration and shipping in the Arctic.

