Impacts of a warming Arctic

Svalbard is the fastest warming place on the planet. Since 1971 to 2019, temperatures have risen by 4°C, five times faster than global averages. In the winter, it has gone up by 7°C. On current trends, Svalbard will hit 10°C of warming by 2100. The information below describes some of the impacts of a warming Arctic.

Sea level rise

Warming will cause more land ice (glaciers and the Greenland ice cap) to melt. This will add to sea level rise, affecting coastal communities around the world.

Starving starfish

Lots of animals that live at the bottom of the Arctic Ocean rely on food made by algae in sea ice. Warming means less sea ice, so less food for animals like starfish.

Positive feedback

Melting sea ice exposes more dark ocean, which absorbs more heat, which melts more sea ice, and so on. This is an example of a positive feedback loop, that is not great for the Arctic.

Ravenous Rudolph

Reindeer scrape through snow to find food during the winter. With warmer weather, this can mean winter rain. The rain freezes making an icy layer which cannot be scraped through.

Crowded seas

As the Arctic Ocean warms it becomes more suited to species that lived further south. Fish stocks are moving north at up to 160km per decade. This means that Arctic species can be 'crowded out'.

Danger to circulation

Global ocean currents are driven by cold salty water sinking in the Arctic. As the Arctic water freshens and warms this action decreases. Changing the pattern of ocean circulation can change the climate around the world.

Searching polar bears

Polar bears like to hunt for seals across the sea ice. With less sea ice, this traditional form of hunting and food is more difficult. Some bears are now turning to eating bird eggs. Not great for bears or birds.

More business

As the Arctic melts, this can make is easier for business activity such as shipping and oil extraction. Increased business activity can harm wildlife in this remote part of the world.