



EFFECTS ON BIODIVERSITY

1. Earth's polar regions feel the effects of climate change more keenly than elsewhere, and the same goes for the animals that live there. For bowhead whales, warmer temperatures are great news. For polar bears and other land-based predators, they present severe problems.

Can you match the climate change impact to the animal affected by it?

YOUR HUNTING AREA IS SHRINKING

YOUR FOOD SUPPLY IS GROWING

YOU CANNOT TREAD WATER FOREVER –
BUT YOU CAN FIND LESS AND LESS ICE TO REST ON

YOU STRUGGLE TO FIND PLACE TO MAKE A DEN
AND RAISE YOUR OFFSPRING

YOUR SUMMER HUNTING SEASON LASTS A FEW
WEEKS LONGER NOW THAN IT USED TO
(FOR EXAMPLE, BACK IN 1980)

YOU STRUGGLE TO FIND A MATE

THE SEA ICE IS THINNER, MEANING THERE IS MORE
PHYTOPLANKTON TO FEED ON

YOU ARE DISCOVERING SOME LONG-LOST RELATIVES,
SEPARATED FROM YOU BY ARCTIC SEA ICE FOR CENTURIES

YOUR WATERS ARE WARMING

BOWHEAD WHALE

POLAR BEAR

2. True or false? Consider the following sentences:

Corals are actually small animals that glue their skeletons to rocks. **TRUE / FALSE**

Coral reefs are sensitive to temperature, but not to light. **TRUE / FALSE**

Coral reefs do not like polluted waters. **TRUE / FALSE**

Coral reefs get their colourful appearance from the algae that live on the corals. **TRUE / FALSE**

When corals are under too much stress, coral bleaching occurs. **TRUE / FALSE**

Coral bleaching turns the corals yellow. **TRUE / FALSE**

Coral bleaching usually causes the corals to die of stress. **TRUE / FALSE**

Coral bleaching can be linked to climate change as a result of warmer oceans. **TRUE / FALSE**

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3. You are a local politician trying to raise awareness about the impacts of climate change in your constituency. You decide to hold an event at the community centre where people can learn about how climate change is negatively affecting people, animals and the local environment.

Design a poster to inform your constituents about how local biodiversity is suffering as a result of changes to the climate. The poster should include:

- What weather- and climate-related changes your area is experiencing
- Have these changes been sudden, or gradual? Or a mix of both?
- How these changes are affecting animals in the area – decline in productivity, species loss etc.
- Which species are affected
- How these negative effects can have further knock-on impacts on humans, either here or elsewhere
- Why this is important

Things to remember:

- The aim is to inform local people of the problem and convince them of the need to act
- The poster should be visually appealing – you want people to read it!
- Do your research and be prepared to speak about it when asked

4. Brainstorm some possible actions you can undertake to help local biodiversity. How about planting a tree, building a pollinator plot or nurturing a wildflower habitat in or near your school?

Agree on a goal, think about how to achieve it and then invite your school principal to come and listen to your proposal.