



read

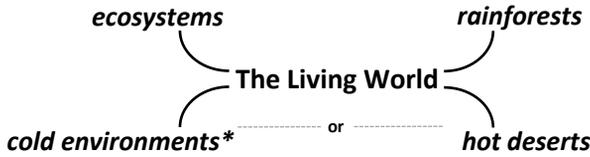
THE LIVING WORLD

Protecting Cold Environments

quiz



The Big Picture



What is a wilderness area?

 **Wilderness areas** are remote, unspoilt parts of the world including deserts, mountains and cold environments. Wilderness areas are typically unspoilt by human development and remain natural. Many of the world's cold environments are considered wilderness areas due to their remoteness and physical conditions.



Protecting wilderness areas

Cold environments need to be protected for a range of reasons, including:



Tundra and polar environments are fragile environments. Recovery from human impact can take significant time.



Indigenous culture depends on the preservation of the natural environment.



Cold environments are home to a range of species, many are unique.



There is a global moral responsibility to protect wilderness areas.



Scientists need to study global processes in unspoilt areas e.g. climate change.



Strategies to maintain cold environments



Stilts raise the insulated Trans-Alaskan oil pipeline above the ground to reduce the risk of thawing permafrost and disrupting animal migration.



Pumping stations enable the oil to flow over mountainous areas in the region.



Only allows the use of Antarctica for peaceful purposes, and military activities are forbidden.



Promotes co-operation among international scientists.



Strict controls on tourism and landing sites to reduce the impact of tourists.

Technology can provide environmentally friendly solutions to some of the challenges faced by developing cold environments.

Technology

Maintaining Cold Environments

Action by Governments

Since oil was found in Alaska in the 1960s, the US government has been involved in protecting the environment.

International Agreements

Antarctica is often described as 'the last wilderness on Earth'. It has remained undeveloped since the 1959 Antarctic Treaty.

Conservation Groups

Conservation groups (e.g. WWF), work with governments, communities and businesses to protect Arctic biodiversity.



Alaska's marine habitats and fishing have been monitored by the National Oceanographic and Atmospheric Administration (NOAA).



The Western Arctic Reserve has been set up in the north of Alaska, protecting the area from oil and gas extraction.



The WWF Arctic Programme was launched in 1992 to work with governments on issues such as climate change, polar bears, shipping and oil and gas including project such as:

- Scientific research into endangered species
- Promoting sustainable development
- Monitoring and protecting ecosystems