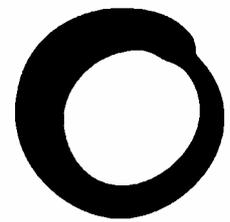


July 2005

# Briefing Note



**Friends of  
the Earth  
Cymru**

**Cyfeillion  
y Ddaear  
Cymru**

## Losing our habitats to climate change

Snowdon's majestic profile swathed in winter snow is a Welsh icon. Serenely beautiful and unchanging, it attracts thousands of tourists every year to the heart of Wales. The stars of the climbing world have all been to pay their respects - Tenzing Norgay, Sir Edmund Hillary, Sir Chris Bonington, Chris Brasher, and Sir Roger Bannister. But in a few years' time, the snow and ice that made Snowdon a training ground for the Himalayas may be lost.

The latest research from Bangor University is showing a steady retreat in Snowdon's snowline. The Snowdon lily and other alpine plants that depend upon the cold to survive could also be lost as the weather patterns alter due to climate change.

### What is climate change?

Top scientists agree that climate change is real, and it's happening. The world is getting warmer and the weather is getting more extreme. More droughts, storms and floods are on the way. It's a direct result of burning more and more fossil fuels for increasing energy use. The carbon dioxide (CO<sub>2</sub>) released traps the heat from the Sun in the atmosphere causing a greenhouse effect. CO<sub>2</sub> levels are now about a third higher than they were before the industrial revolution.

### What's happening to the weather?

In Britain, for instance, the number of winter storms has doubled over the past 50 years. Insurance companies report that the global economic cost of weather related disasters increased ten fold between the 1950s and the 1990s. The World Health Organisation estimates that around 150,000 people already die annually as a result of these climatic changes.

On present trends, this pattern of unstable weather is set to develop at an ever-increasing rate. In Wales, by 2080, we are expected to experience wetter/warmer winters and hotter/drier summers; more frequent and violent storms with more intense rainfall, and a rise in sea level of up to 80cm.

This could have a significant impact on some coastal and low-lying areas and on important economic activities like tourism, agriculture and forestry.

A warmer world threatens people and habitats. A recent study in Nature suggested that a quarter of land animals and plants, altogether 1 million species, could be made extinct by the middle of the century.

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**Friends of the Earth Cymru:**

- is dedicated to protecting the environment and promoting a sustainable future for Wales**
- is part of the UK's most influential environmental campaigning organisation**
- is part of the most extensive environmental network in the world, with over 60 national organisations across five continents**
- supports a unique network of campaigning local groups, working in communities across Wales**
- is dependent upon individuals for over 90 per cent of its income.**

**To join or make a donation call us on 0800 581 051**

**Friends of the Earth Cymru, 33 Castle Arcade Balcony, Cardiff CF10 1BY**

**Tel 029 2022 9577 Fax 029 2022 8775 Email [cymru@foe.co.uk](mailto:cymru@foe.co.uk) Website [www.foecymru.co.uk](http://www.foecymru.co.uk)**

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## Losing our habitats

Rising sea levels, caused by melting ice and expanded, warmer water, will lead to the flooding of low lying areas. Estuaries and marshes near the sea could disappear. Birds such as redshanks may lose breeding habitat: both inland wet grassland and coastal salt marshes. Places such as the Dee and Severn estuaries could lose areas to rising sea levels which waders and other shore birds need in order to feed.

By the middle of the century heather moorland and woodland could be adversely affected. Natural forests in Wales will suffer if droughts become more frequent. Trees such as oak and ash will find it difficult to survive, while conifers may find it easier. Lowland raised bogs, rare wetland homes to even rarer moths, will dry out in hot summers. Upland areas will also suffer. Water quality in lakes and rivers will be affected by longer, warmer summers, allowing algal blooms to flourish at the expense of fish and bird life.

## What will happen to the Polar bear?

Many plant and animal species are unlikely to survive climate change. For some of these species there will no longer be anywhere suitable to live. Others will be unable to reach places where the climate is suitable. Polar bears in the Arctic are already finding it difficult because the lack of sea ice in winter means that the time they have to hunt and eat seals is much shorter.

Plant flowering, the arrival of migrating birds, the breeding season for birds and the emergence of insects are already seen to be occurring earlier here in the UK. A survey involving 65,000 wildlife sightings suggests that frogs and bumblebees are among the hardest hit by unpredictable seasons. Swallows are now migrating to the UK a week earlier, on average, than they did in 1970. Snowdrops and daffodils are blooming earlier, oaks are leafing earlier and butterflies such as holly blues are appearing earlier, as spring creeps forward and autumn recedes.

## Farming is under threat

Milder winters will allow pests and other bacteria to survive, affecting crops and wildlife. Thin soils will dry out and erode in summer. Flash floods will cause more soil to be washed downriver. Rapidly changing weather patterns will also disrupt growing patterns. Across the world, crop failure and famine will be a very real danger in areas where rainfall is already scarce, as in parts of Africa and China.

## What can be done about it?

There is much that can be done to halt and reverse the increase in the emission of the gases that are changing the climate. Far more emphasis has to be given to energy saving measures, renewable energy systems (such as wind, solar and tidal power) and good public transport systems. The planning system has a role to play in ensuring that climate change is addressed by, for example, ensuring that people can work, shop and enjoy recreation facilities near to their homes – reducing the need for excessive travel.

## Join the Big Ask

Friends of the Earth's new Big Ask campaign helps people who are concerned about climate change to press their MPs to pass a law that obliges the UK Government to make annual 3 per cent CO<sub>2</sub> emission cuts year on year.

- The UK government needs to act now to reduce carbon dioxide emissions – from electricity generation, from transport, and from industry. *Join the Big Ask Climate change campaign to ask the government to start acting on climate change [www.thebigask.com](http://www.thebigask.com).*
- You can also take action in your own home or office by saving energy and backing renewable energy initiatives, avoiding unnecessary flights and car trips and buying locally. *For further information visit our website on [www.foecymru.co.uk](http://www.foecymru.co.uk).*
- The UK Phenology network runs a Nature's Calendar, with over 12,000 people in the UK involved in helping to record changes in nature. *More information on getting involved from*

[www.phenology.org.uk](http://www.phenology.org.uk)