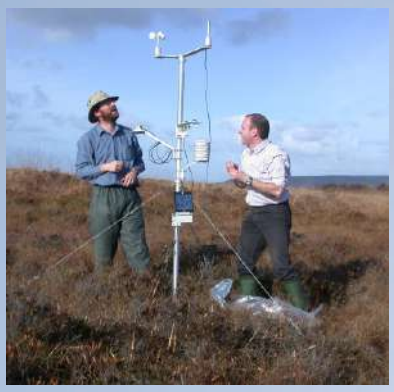
Case Study: Project Servowood

Cors Fochno, a raised peatbog near Borth, Wales is increasingly becoming a top site for climate change research in the UK. The project, which uses a MiniMet weather station was recently featured in a BBC documentary "Climate Change - Britain Under Threat" presented by Sir David Attenborough, Matt Allwright and Kate Humble.



The National Nature Reserve, managed by the Countryside Council for Wales, is one of the most studied bogs in Europe. A new weather station has recently been set up at the reserve, as part of a Wales-wide network, which will help monitor climate change at the site. It measures rainfall, temperature, humidity, soil temperature, wind speed and direction, incoming solar radiation and outgoing radiation.

The MiniMet weather station data will support two important pieces of research being conducted at the Reserve. Both are led by Andy Baird, a peat land hydrologist and Professor of Physical Geography at Queen Mary, University of London. Andy said: "My research is based around global warming. The first, a cooperative study between the Countryside Council for Wales and Environment Agency, studies the effects of rising sea levels on Cors Fochno and its future management.

The second investigates methane production in bogs and the possible effect this has on climate change. The focus of this research is bogs in the northern hemisphere, of which Cors Fochno is an important example. Northern hemisphere peatland bogs are large stores of carbon and we need to understand how they will change as sources and sinks of carbon dioxide and methane over the next 100 years to help understand the global climate system."

Mike Bailey, Cors Fochno's Senior Reserve Manager from the Countryside Council for Wales, said: "Research is key to measuring and understanding the effects of climate change, such as rising sea levels or droughts, on different environments and their ecology. Research done at the site will also help form a picture of how we will need to adapt the management of Cors Fochno and other similar sites, to cope with these changes."

Through photosynthesis, peatland plants absorb carbon dioxide (Co_2). Thus waterlogged and actively growing bogs are an extremely important store of carbon, containing about a third of the carbon stored worldwide in soils. Rising temperatures, due to global warming, can speed up the decay of the peat. This means more carbon will be released into the atmosphere than will be absorbed and stored. This is why the conservation and restoration of peatland bogs is essential.

National Nature Reserves provide key locations for scientists to research natural processes and the life they sustain. Grant aid is also provided by CCW, to help with research costs.

EQUIPMENT USED

This study is using a Skye MiniMet weather station, comprising of an 8 channel DataHog2 datalogger with various sensors. Contact us for more information.

Cyngor Cefn Gwlad Cymru
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Acknowledgements and Contacts

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