

SKILLS THE NATION NEEDS

Sue Benham is an expert in applied environmental science. Tackling climate change – and reducing CO₂ emissions – is one of the biggest challenges we face. The UK's climate scientists play a vital role in monitoring change and seeking solutions



Latest revision of this document: <https://library.prospect.org.uk/id/2011/00297>
This revision: <https://library.prospect.org.uk/id/2011/00297/2011-03-03>

I'm not a number...

I'm a
climate scientist

a job worth doing, not a cash saving

www.prospect.org.uk

Saving our forests from climate change

TREES TAKE a long time to grow – so monitoring their progress also takes time. Prospect member Sue Benham, a research scientist at the Forestry Commission in Hampshire, contributes to ensuring the survival of our forests in a world where global warming has become a reality. Her expert research areas are climate change, biodiversity, air pollution and ecology.

Based at the Centre for Forestry and Climate Change at Alice Holt Forest, she leads two long-term projects:

- managing Alice Holt's environmental change monitoring unit – the Commission's contribution to a national programme which monitors the long-term effects of climate change on a range of different environments, including moorland, agricultural land and forests
- overseeing the Commission's participation in an EU-wide long-term forest monitoring system. This means co-ordinating research across 12 sites in



the UK into monitoring the health of forests.

"These are long-term projects, lasting 25 years or more," says Sue. "Some trees take 100 years to grow. You can't see what's happening just by taking a snapshot."

The data gathered is used by colleagues who run models to make predictions for the future. It also contributes to the work of those developing best management practices in forests, such as when and which trees to plant, and when felling should occur.

Sue measures tree growth and records key data on water and soil chemistry, vegetation and wildlife.

"The timing of events – such as when trees first start to leaf up – is all affected by climate change. If we don't act now it is not only our forests that will be in danger," warns Sue. "If the predictions are right, and we end up with a climate like Bordeaux, some UK species may not survive at all."

■ **Sue Benham, Forestry Commission research scientist**



“Some trees take 100 years to grow. You can't see what's happening just by taking a snapshot”



Environment faces the harshest government cuts

A GOVERNMENT which claimed to be the 'greenest ever' has reserved some of its harshest spending cuts for the environment.

The Department for Environment, Food and Rural Affairs has had its total budget cut by 29 per cent over the next four years in the comprehensive spending review, meaning 5,000-8,000 job losses.

Prospect has

environmental scientists working in Defra organisations and other bodies, including the Forestry Commission and the Natural Environment Research Council. They are all under attack.

Thanks to widespread public protest the government was forced into a U-turn in February on its policy of selling off 85 per cent of England's





► public forest estate. Specialist staff at the Forestry Commission played a key part in the mass campaign against the sale of woodlands, securing the government's admission that it had "got this one wrong."

But major threats to the UK's environmental work still hang over the Commission. These include the potential sale of 15% of Commission land (currently on hold) and 25% funding cuts because of the CSR. There

are 150 job losses planned at the Commission's UK headquarters in Edinburgh, and another 350 jobs in England, in the enterprise and services divisions. Its third arm – Forest Research – also faces 25% cuts. These scientists do vital work countering the effects of climate change and combating tree diseases.

They collaborate with programmes like the Environmental Change Network, which is co-ordinated by the Centre for Ecology and Hydrology,

and brings together many of the UK's leading environmental bodies.

Yet CEH itself faces cutbacks because of a 45% cut in the capital budget of its sponsoring body, the Natural Environment Research Council.

Among the cuts facing Defra and its agencies are:

- **Natural England** – down 21%
- **Environment Agency** – environment protection and water, down 17%; flood management, down 23%

- **Marine Management Organisation**

– down 21%

- **Royal Botanical Gardens Kew** –

down 30%

- **Joint Nature Conservation Committee**

– down 20%.



New Prospect House
8 Leake Street
London SE1 7NN

T 020 7902 6600 F 020 7902 6667
E enquiries@prospect.org.uk

www.prospect.org.uk

February 2011 Published by Prospect
Main pics: Stefano Cagnoni

Printed by College Hill Press