A climate of uncertainty

As ecologists attempt to get to grips with the Kyoto Protocol, many European climate scientists are concerned that there are insufficient resources available to understand the science behind the environment. Paul Smaglik reports.

Some ecologists worry that environmental research may have to be scaled back.

Ian Woodward (right) believes Britain is taking a balanced approach to climate-change research.

Although the Kyoto Protocol on Climate Change is raising the profile of ecologists, some are concerned that the work is emphasizing applied science at the expense of basic research. The European Commission seems to be supporting research that looks at the effects of global warming, while leaving member countries and others to investigate the mechanisms

behind the phenomenon, say climate scientists around Europe. Whether individual countries will fill that role may depend more on political and economic concerns than scientific ones.

Denmark, for one, may not be up to the task. The recently elected Conservative government has made signs that it will reduce government-funded environmental research as part of a scheme to provide some tax relief, says Tom Fenchel, director of Copenhagen University's Marine Biological Laboratory in Helsingør.

He worries that other European countries may follow suit. It is easier to be green in times of prosperity than in uncertainty, he says. Such signals may keep young scientists from entering a field that is already discouraging, as there are few positions available on university staff.

Over in England, his concerns are shared by Myles Allen of the Space Science Department at Rutherford Appleton Laboratory, Didcot. He thinks shifting too quickly to applied research could leave some of the questions on which it is based unanswered. "It's terribly damaging to assume that the

science is done just because you've signed the Kyoto Protocol."

Too much research on the impact of climate change, rather than on factors and dynamics, could discourage young mathematicians from entering ecology. The field could use those skills, because better quantitative measures could help to justify the case for taking action, and this would make any applied research that much more useful. Allen finds it ironic that the United States, which hasn't signed Kyoto, is more supportive of basic climate-change research than many of the countries that have agreed to the emission-reduction plan.

Ian Woodward, professor of the department of animal and plant sciences at Sheffield University, notes that Britain seems to be seeking a balanced approach. His lab, which examines the ecological impact of climate change on plant life and the role of plants in carbon sequestration, is one of five to share a five-year, £2.5-million (US\$7.2 million) Natural Environment Research Council (NERC) grant awarded this month to establish a Centre for Terrestrial Carbon Dynamics.

The centre will fund 10 additional postdocs at the participating institutions — a welcome addition, but hardly an overwhelming increase in the workforce. The award is guaranteed for five years — a long time in biology, but a mere blip in ecology.

One sign of commitment to applied research is the Tyndall Centre for Climate Change Research, at the University of East Anglia, Norwich. When the centre was established a year and a half ago, the Engineering and Physical Sciences Research Council, the NERC and the Economic and Social Research Council pledged an initial five-year grant of £10 million.

More long-term support for both basic and applied projects would help lend stability as well as balance, he says.

Paul Smaglik is editor of *Naturejobs*.

NERC ▸ www.nerc.ac.uk/funding/atmossci

Tyndall Centre for Climate Change Research ▸ www.tyndall.ac.uk

MARINE BIOLOGICAL LAB., UNIV. COPENHAGEN