Climate change – a rational debate

Climate models have not predicted recent years' static temperature trends but the Intergovernmental Panel on Climate Change reports with 95% confidence that humans are the main cause of current global warming. Meanwhile across blogs and the media debate rages on the evidence for climate change and the implications of related policies and expenditure. Is action in response to climate change a severe environmental impact in itself, creating direct harm to nature and human wellbeing in the name of the precautionary principle, or is mitigation and adaptation to climate change an essential and urgent priority, to aid people and wildlife amidst an all pervading global threat? ECOS sought two contrasting views amongst conservation practitioners in response to the IPCC 5th assessment report (www.ipcc.ch/report/ar5)...

British conservation and climate change: the habitats matter CLIVE HAMBLER

As relentlessly as the climate keeps changing, so do predictions of how it will change. First an ice age was the threat. Then we were told the world might warm 6°C by 2100 (delaying the ice age), but now it's unlikely to warm much more than 2°C. Read the IPCC's 5th report, with its disturbing internal contradictions, and you may come out less confident of predictions. It's important to be critical, and consider this: scientists are often wrong, no matter how many of them in one branch of it are saying something. Although paradigm shifts can be painful, we should always open our minds to alternative experts and the latest research.^{1,2,3,4} The IPCC did some great work - but that does not mean all its work is great. A precautionary approach and a rash of modelling were rational whilst extreme climate changes were quite plausible, but as evidence and understanding has improved, it's time to damp down those alarms - and focus on habitat restoration.

Despite the IPCC obscuring inconvenient facts, there is very high confidence their favourite global climate models are inadequate.^{1,5} A great deal of energy was anticipated to enter the Earth system, but this has not warmed the surface since 1998; it may somehow have been lost in space or lost in the ocean (never to trouble anyone but the modellers). The climate probably has low sensitivity to CO₂¹ and high sensitivity to the Sun. Meanwhile, the Met Office's prediction for UK climate impacts appear biased against low amounts of warming.⁶ Will revised projections be made for British wildlife, which include the possibilities of cooling in the next decades or centuries?

As a small area with oceanic influence, Britain's climate prediction was volatile from the start. Maybe warmer, colder, wetter, drier, more 'extreme'; maybe all of these,

in different places and seasons. For what they are worth, the new IPCC regional assessments maps show that some changes may well be undetectable beyond current natural variation.

I suggest that most of 'our' wildlife can take substantial climate changes: Britain's wildlife has been filtered through some 20 ice ages and 20 short, warm interglacials. Which species will gain and lose from climate change? If Britain warms substantively, some of our (few) specialised northern and montane species will be doomed, whilst we gain many continental thermophiles. Many natives will have more space, here and globally. Conversely, cooling threatens some of the globally numerous opportunists that long ago invaded Britain as it was degraded by clearing, coppicing, grazing, burning, draining and building. Increased sea level, and rain, present an opportunity for some species, a challenge to others.

Perhaps the only thing to be confident of in the attempted 'climate-proofing' of wildlife is that it should be made even easier for species to cope with climate change. Species may need big populations (with more genes), and habitat connectivity to move north, south, east, west, up or down. We should be pursuing those goals anyway. In the face of inevitable and natural climate changes, conservation should be business as usual.

Wildlife organisations wallow in controversial models of species' responses to climate⁷, driven by risky models of the regional climate, driven by out-of-date, floundering, global models. The natural changes this century might have been harder for wildlife. If your favourite species depended on it, would you worry more about guaranteed loss of food and shelter through habitat loss, or about speculative changes over a hundred years from now - which might actually make its life easier?

Habitat loss is the dominant driver of the high British extinction rate⁸ with about one species lost per month. Habitat loss is the most fundamental problem: without it, even the greatest estimates of climate change are probably not threatening for most species. So, we should rewild - to restore connectivity and the habitat diversity of mature forest and wetland that will further buffer against any changes.⁷

Instead, some NGOs claim that climate change is the biggest threat to wildlife. They (and, amazingly, the IPCC WGII AR5 impacts report!) quote profoundly erroneous and alarmist estimates of the numbers of animals that will be killed by fossil fuels; they think 'committed to extinction by 2050' means 'extinct by 2050' ^{7,9} and very selectively ignore the inevitable benefits to numerous species.

Climate paranoia has been exploited by developers to make people who care about wildlife destroy it. In Britain we are fragmenting streams with hydro-plants. Wind energy brings industrial scale infrastructure to undeveloped landscapes, including peatlands; wind turbines attract and kill bats, and possibly lethally lure swifts, eagles and harriers.¹⁰ We have habitat-burning stoves and power stations, using the most primitive and biologically destructive energy source: woodfuel. We have the depravity of using food for fuel. We have calls for massive pumped storage of

energy. Some NGOs would even watch with satisfaction as a barrage on the river Severn destroyed one the very best habitats in Britain!

Everyone should be concerned that some of the crazy climate 'solutions' have, predictably, increased CO_2 emissions. Why do NGOs not favour what engineers and biologists tell them are more effective responses? As no-regrets actions (more particularly against ocean acidification) we should cut wasteful combustion, save fossil carbon for plastics and restore forests.

Some NGOs have lost perspective, and now obsess with preventing climate changes nobody understands. They appear to have emotional and financial conflicts of interest - investments in some actions that might have to be reversed. But if people attempt to 'protect' wildlife from possible harm, using 'climate mitigation' technologies which cause definite harm, here's my prediction: a rise in extinctions. Not the legacy anyone wants - whatever the climate.

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