

EXPERT COMMENT

Academic insight on topical issues



<https://blogs.canterbury.ac.uk/expertcomment/>

The Canterbury Christ Church University *Expert Comment* blog invites academics from across disciplines to submit 'opinion pieces' on matters of current local or global interest.

As a regular contributor I have collated my 'expert comments' on sustainability issues to form this document. Although my entries relate to specific events in the UK, they raise issues of general interest which I hope you'll find helpful.

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An example of how to cite from these blogposts is provided below, and the URL for each blogpost is at the end of each one

EXAMPLE OF FORMAT FOR CITATION (in Harvard style)

Scoffham, S. (2019) 'Forest Fires in the Tropics: What can schools and universities do as fires rage in the tropics?', CCCU Expert Comment, 19 September. Available at: <https://blogs.canterbury.ac.uk/expertcomment/our-house-is-on-fire/> (Accessed: 27 January 2022).

1 Forest Fires in the Tropics

What can schools and universities do as fires rage in the tropics?

September 19th 2019



As forest fires rage across wide areas of the tropics from Brazil to Indonesia, we know instinctively that something is terribly wrong. The fires are destroying unique and pristine habitats, creating vast quantities of polluting smoke and threatening to destabilize the climate both locally and globally.

The extraordinary thing is that most of the fires have been started deliberately, in a self-inflicted act of environmental vandalism on a vast scale. And it is happening at precisely the same moment as people across the globe are beginning to wake up to the climate emergency that threatens us all.

Greta Thunberg, the student climate change activist, has admonished world leaders thus: 'I want you to act as if our house is on fire'. The devastation that is now being wreaked on the Amazon and other tropical forests mean that this metaphor is now becoming horribly real.

Her clarion call to protest the impact of global climate change may be met with two opposing responses. One extreme is to deny the negative impact of human activity on the global climate, while the other is to engage in apocalyptic hand-wringing as the planet faces almost certain destruction.

What can we do in the face of this emergency? As an academic institution, we should both reflect critically and be prepared to act on that reflection.

The influential educational philosopher Gert Biesta, argues that a key concern for education is not simply to support existing world views, but instead to interrupt and to challenge individuals to make an informed response. Importantly, Biesta asks that the learner consider if

‘What we desire – not only in terms of what we want to have, but also in terms of what we want to be – is actually desirable, for our own life, the life we live with others, and the life we live collectively on this planet’.

Such a response requires a shift from ego-centric to eco-centric thinking where our individual desires can be re-evaluated in relation to living sustainably with others to share the planet’s resources. We therefore support a strike to protest the negative impact of human actions on the planet.

Inspired by Greta Thunberg, students from all over the world have mobilised behind the call for school strikes. Such action marks a perfect introduction to becoming an active citizen for young people.

This Friday 20 September, we too will mark the Global Climate Change Day at Canterbury Christ Church University, supported by our Sustainability Unit.

Canterbury City Council has unanimously declared a climate change emergency and the University has joined other organisations and individuals in making a submission to the United Nations Climate Summit. Such actions on their own will not quench the forest fires but they are part of the process of changing public opinion. And when it comes down to it, doing something is better than doing nothing. And it could lead to further more dramatic action in the months ahead.

Discussion

1. Does the current environmental crisis mean that people have to act collectively rather than as individuals?
2. How can we stop feeling overwhelmed by the scale of the challenges that we face?

<https://blogs.canterbury.ac.uk/expertcomment/our-house-is-on-fire/>

2 Extinction Rebellion Protests

What lies behind the Extinction Rebellion protests?

October 21st 2019



Extinction Rebellion has been making the headlines in recent months, organising events across the country and bringing parts of London to a halt. The protests have most for the most part been good-natured but the action which brought parts of the London Underground to a halt last week provoked considerable anger.

What lies behind these protests is a deep concern about climate change. And although only relatively small numbers of people have taken direct action so far, they are focusing on something which affects us all.

This summer saw unusually high temperatures across Western Europe. In England, for example, records were broken across the UK in July and many people in Kent experienced temperatures of around 35 degrees or more. Meanwhile, not far away in Paris, the thermometer reached a sweltering 40 degrees. 2019 seems set to take its place alongside other recent years when global temperatures have reached unprecedented levels. It is a trend that seems likely to continue with potentially disastrous consequences.

There is a lot of discussion about trying to keep global warming within limits and the 2015 Paris Climate Change Agreement was a laudable attempt to reach an international

consensus. If temperatures really can be stabilised at just 1.5 degrees above pre-industrial levels that would be a great achievement. But this isn't as simple as it sounds. Here is just one example of the problems that lie ahead.

Consider the Greenland ice sheet. This is a relic of the last Ice Age with ice up to 3,000 metres (10 000 feet) thick in some places. At this height, temperatures can be expected to be around 20 to 30 degrees lower than at sea level. If the ice thins and the glaciers reduce in height, the surface temperature is bound to rise, irrespective of climate change. So, melting ice sets off a self-perpetuating process which once started, is extremely difficult to halt.

There are many other feedback loops in the world climate system, some positive, some negative. The crucial question is how much stress the system can absorb before it reaches a tipping point. Scientists are simply unable to predict when this will happen but they know that there are plenty of danger signs. And the stakes couldn't be higher. Runaway climate change will render life on Earth untenable for most forms of life and wipe out vast numbers of people.

Extinction Rebellion and Climate Change Action Groups are trying to draw attention to this emergency. They may not adopt tactics which everyone approves of and they are certainly causing inconvenience to the general public. But they argue that time is running out and they simply have no other option.

Discussion

1. Protests which cause disruption get publicity. In what circumstances is this justified?
2. What do you think would prompt you to take direct action yourself?

<https://blogs.canterbury.ac.uk/expertcomment/turning-up-the-heat/>

3 National Election Campaign 2019

What role will climate change and environmental issues play in the forthcoming election?

November 11th 2019



A recent survey, typical of many others, found that the majority of people in Britain recognises that the world is facing a ‘climate emergency’ and say that politicians are failing to take appropriate action (*The Guardian*, 18 Sept 2019). Even in the United States, which has a significant number of climate change deniers, the great majority of citizens now accept the scientific evidence that global warming is a reality. Yet, as in previous years, concerns about the state of the environment do not seem to be translating into political policies. In the current election campaign, Brexit, the economy and social issues dominate the debate; the environment is reduced to a mere footnote.

The silence surrounding the state of the environment is even more surprising given recent reports, all which have sounded the highest levels of concern. For example, the World Wildlife Foundation (WWF) has established that since 1970 there has been a 60% decline in vertebrate species populations around the world. And, with respect to climate change, the Intergovernmental Panel on Climate Change (IPCC) has concluded that we only have 12 years to limit global warming to 1.5 degrees, beyond which runaway effects are increasingly likely to affect hundreds of millions of people.

A few days ago, in early November, more than 11,000 scientists, motivated by their moral duty to warn of impending catastrophe, put their names to an article reaffirming that planet Earth is ‘clearly and unequivocally’ facing a climate emergency (Ripple et al. 2019). We know what is happening.

There are no simple solutions but it is increasingly clear that carrying on as normal – the business-as-usual approach – is not going to be viable very much longer. And it will be interesting to see if the election campaign prompts a discussion about how we can adjust our lives to take account of environmental imperatives.

The shocking truth is that current levels of consumption mean that we are using more resources and creating more pollution than Earth can sustain. Endless economic growth is a recipe for disaster but it takes a brave politician to say so.

We desperately need a mature debate about the emergency that confronts us. And there is still scope for meaningful action. But unless people are really prepared to take notice of the warnings from scientists, politicians will not feel empowered to respond. This election promises to be more volatile and more unpredictable than ever. It is a chance to foreground environmental concerns and to see they become a priority for every political party. There are compelling reasons why this needs to happen – not least for the citizens of South Yorkshire who have just suffered a ‘Biblical flood’ in line with scientists’ predictions of extreme weather events.

Discussion

1. Despite their overwhelming importance, climate change and sustainability have always been little more than marginal issues in UK and other election campaigns. What would it take to turn them into vote winners?

<https://blogs.canterbury.ac.uk/expertcomment/election-priorities-climate-change-and-environmental-issues/>

4 Heathrow Airport Ruling

Could the recent ruling on a third runway at Heathrow be a tipping point for other environmental campaigns?

March 9th 2020



It is a little more than 100 years since aeroplanes first took to the skies. Now there are over four billion scheduled passenger flights worldwide each year and air traffic accounts for around a third of international trade in terms of value.

In the UK alone just one airport, Heathrow, handles well over 65 million passengers a year, making it the third busiest in the world. Is it now time to build a third runway?

The argument hinges around the economic need for the UK to maintain its place in the world economy. Without a hub airport it is feared that Britain will be left behind as other countries continue to grow. Set against this, the environmental damage which the new runway will create is a source of serious concern. It is anticipated that there will be around a quarter of million extra flights a year which will generate significant greenhouse gas emissions.

Perhaps this is a good moment to step back from the details of the pros and cons and look instead at the big picture. At a global level, we know from the work of the Stockholm Resilience Centre that we have already breached a number of crucial

environmental limits and that humanity collectively is living beyond its means, particularly in the industrialised West. Should we now be re-interpreting what we mean by prosperity to focus on well-being and planetary living rather than ever increasing material wealth?

In their ground-breaking book, *The Spirit Level*, Wilkinson and Pickett argue that we have come to the end of what higher material standards can bring and that reducing inequality is now the best way of improving our quality of life. Interestingly, this idea has come to the fore in the debate about expanding Heathrow. An alternative approach would be to develop regional airports which would help to reduce the disparity between the North and South of the UK and contribute to the current government's 'levelling up' agenda.

The landmark ruling at the end of February by Court of Appeal on the third Heathrow runway could be a tipping point in more ways than one. The judges ruled that the government hadn't taken account of its commitment to stabilise greenhouse gas emissions in the Paris climate agreement which made the plans illegal. This decision may well set a precedent which will inspire similar challenges to polluting developments around world. Rather than making the economy work ever faster at the expense of the environment, the debate about Heathrow suggests a fundamental shift of emphasis. From now on, we need to strive to make the economy work better for everyone. Ultimately this means a more rounded appraisal of human needs which takes account of the natural environment on which we all depend.

Discussion

1. What factors make the biggest contribution to your quality of life?
2. What role do you see for both national and international law in promoting more sustainable ways of living?

<https://blogs.canterbury.ac.uk/expertcomment/shifting-ground-at-heathrow-airport/>

5 Learning from Covid-19

Is the destruction of natural habitats undermining the buffer between humans and disease?

June 9th 2020



In recent months a vast amount of media time and effort has been devoted to exploring how best to combat Covid-19 but much less attention has been given to the lessons we can learn from it. Saving lives and preventing the spread of infection is of course the number one priority at the moment but, as we move into a new phase of the pandemic, perhaps it is time to start reflecting on what we can learn from it.

One immediate response has been to search for someone or something to blame. With the virus first identified in China and associated with wet markets, there have been dark suggestions that the pandemic was China's fault and conspiracy theorists have even claimed it may have been started deliberately. President Trump has inflamed international tension in his characteristic manner by labelling COVID-19 the 'Wuhan Disease'. Lurking behind this rhetoric is the hint that in due course the Chinese will be called to account for the damage they have inflicted on the rest of the world and there is a danger that the pandemic will be harnessed in support of an emerging American-Chinese cold war.

With respect to Covid-19, as with other recent pandemics, it is the erosion of the natural environment rather than an individual nation or the behaviour of a group of people which seems to be the underlying cause.

There is disturbing evidence that the catastrophic collapse of wildlife (60% of all wildlife has been lost in the last 50 years according to the WWF) is destabilizing natural systems and triggering domino effects. At the same time, deforestation and habitat destruction is concentrating diseases in smaller and smaller areas. Covid-19 shows how altering nature too much, or in the wrong way, can have devastating human consequences.

The links between human activity and Covid-19 shifts attention away from microbiology towards modern life styles and patterns of behaviour. Writing for the *World Economic Forum* website (April 14, 2020) Marie Quinney points out that pandemics are often the hidden side of economic development. In Amazonia and other equatorial regions, for example, deforested land creates an ideal habitat for infected mosquitoes. Similarly, recent research suggests that Ebola took hold in Africa as deforestation brought humans into contact with previously untouched animals. Although the exact cause of Covid-19 has yet to be established, if it is rooted in the way people relate to nature then, she argues, this should also be the focus for any recovery.

Coming to terms with Covid-19 will require a dispassionate analysis of what went wrong, strong leadership and action from both business and civic society to forge new, nature-positive policies. However, the way that the global community has responded to Covid-19 so far does not inspire confidence. Rather than working together, many nations have ended up going it alone. International co-operation will be at a premium if we are to find a better balance between people and nature in the years ahead. And education and universities will have an important part to play in this process as we strive both individually and collectively to steer our way through complex and often contradictory situations.

Discussion

1. What do you think we have learnt both individually and collectively from the COVID-19 pandemic?

<https://blogs.canterbury.ac.uk/expertcomment/learning-from-covid-19/>

6 The State of Nature Report

If nature is in free-fall, how can we best respond?

September 30th 2020



There have been three major reports in past few weeks on the state of natural the world. They all tell the same story, albeit in a different way.

Nature is in free fall and the rate of decline, rather than slowing down, is actually increasing. First came the [State of Nature report](#) from the World Wide Fund for Nature which revealed that on average global wildlife populations have plummeted by 68% between 1970 and 2016.

Then came an analysis from the RSPB which established that the UK had failed to meet 17 out of 20 of its biodiversity targets ([the Aichi Targets](#)) over the last decade and had actually gone backwards on six of them. Finally, the UN *Biodiversity Outlook 5* report warned of dire consequences unless people rethink their relationship with nature.

To amplify this message, anyone who watched David Attenborough's recent documentary, *Extinction: The Facts* (available on BBC iplayer), can be left in no doubt as to the seriousness of the current situation and the potentially disastrous implications. The question is, what should we do about it both individually and collectively.

Fortunately, there is no shortage of ideas. There are plenty of suggestions for small scale interventions which can make our gardens more environmentally friendly. Around the country, conservation groups have done a remarkable job in conserving habitats and reintroducing endangered species. While some groups strive to expose problems, others

are working to restore habitats – the Woodland Trust, for example, is creating new forests by planting literally millions of trees. Green corridors, nature solutions and rewilding schemes have enormous potential and are being adopted increasingly widely. But the evidence suggests they are simply not sufficient on their own to reverse current trends.

Thinking about the kind of world our children are likely to inherit offers a different approach which could have the potential to stimulate more fundamental change.

In an initiative which deserves to be much better known, the devolved government in Wales has pioneered legislation over the last decade which puts sustainability at the heart of government. This has now culminated in the [Well-being of Future Generations \(Wales\) Act 2015](#) which requires government bodies to factor the effect on future generations into all decision making. The Act introduces statutory goals and ways of working and is supported by monitoring and accountability mechanisms. By redefining prosperity in terms of a low carbon economy operating within environmental limits, it offers a vision of a better world – a world in which both people and nature can live in harmony.

Whether or not this ‘golden thread’ of intergenerational equity can reframe our lives, it is a hopeful indication of the way that government can take positive and meaningful action. The Future Generations Act was informed by extensive consultation and had support from many different sections of society. It addresses a problem that faces us all, takes the long view, and it avoids being party political because it provides an organising principle rather than specific regulations. The governments in New Zealand and Denmark have both said they want to know more.

As the scale and extent of the environmental catastrophe unfolds, there are indications that the public wants to go further and faster than many politicians are prepared to. Last month, for example, the first UK Climate Assembly published its recommendations. These include a frequent flyer tax, a cut in car use of up to 5% a decade and a change in diet to reduce meat and dairy consumption by 20-40%.

The Assembly reflected the diversity of the population and achieved a consensus despite different opinions. Similar inclusive and co-operative decision-making which bring out the best rather than the worst in human nature will be needed at all levels of society in the months and years ahead. And legislation which takes the long view will be crucial in instigating a planned reduction in our carbon footprint and the conservation of wildlife.

Discussion

1. How do you think a ‘golden thread’ of intergenerational equity would reshape your life?

<https://blogs.canterbury.ac.uk/expertcomment/if-nature-is-in-free-fall-how-can-we-best-respond/>

7 Animal culling

Do we need a new approach to animal farming to avoid cross contamination disasters?

13th November 2020



Sometimes what seems like a relatively minor news item masks a much bigger issue. The recent decision by the Danish government to cull its entire mink population (up to seventeen million animals) is just such an event. The reason for this drastic action is the emergence of a new strain of coronavirus among farmed mink which could pose a threat to human health. The irony is that farm workers appear to have infected the mink, thus creating the problem in the first place.

Denmark is the world's top producer of mink fur and mink outnumber Danes by around three to one. The animals are often kept confined in small unhealthy cages where they can only take a few paces backwards and forwards at a time. Many people were completely unaware of this industry and the new health scare has caused alarm. Meanwhile, [in Denmark](#), there has been a political outcry as mass graves filled with slaughtered animals have started to appear in the countryside.

There have been many other instances in last few decades when large numbers of animals have been culled in an attempt to halt the spread of disease. In Britain, for example, the army was mobilised to kill over a million farm animals in the 2001 foot and mouth outbreak. More recently marksmen have been employed to shoot badgers in many parts of England because they are suspected of infecting cattle with TB. Although the science is disputed, over 150,000 badgers have been killed since 2013 and the cull continues unabated.

Whether it is chickens, civets, bats or pangolins, animals are often blamed for spreading disease. But is culling them the answer? The veteran Indian campaigner and ecologist, Vandana Shiva, believes not. She argues that slaughtering animals

makes us think of them as enemies and is motivated by an unrealistic desire for security and safety. The problem she contends, is not the occurrence of disease and infection in animals, but practices that make them vulnerable to it.

The Covid-19 pandemic has done much to expose weaknesses in our social, economic and political systems. It also reminds us of the dangers of intensive farming. For years campaigners have been protesting about appalling conditions on battery farms and about the inhumane treatment of pigs, sheep, cows and other animals. The risks to human health have now been exposed. As health expert [Matthew Baylis points out](#), keeping large numbers of animals in close quarters creates the conditions in which viruses can multiply and easily spread to people.

What is happening in Denmark is part of a chain of events which emphasises how safe farming involves recognising the link between human and animal health. Furthermore, it suggests that, rather than declaring war on animals when disease breaks out, we should pay greater attention to maintaining their immunity and resilience. No group of living creatures will ever be completely disease free. Working with, rather than against, the forces of nature, offers the best hope for the future.

Discussion

1. What do you think governments should do when they are faced with an outbreak of a disease amongst animals which could harm humans?

<https://blogs.canterbury.ac.uk/expertcomment/declaring-war-on-animals/>

8 Climate Change Education

Will climate change education make connections across all curriculum areas?

November 23rd 2021



The recent COP 26 conference is likely to have a lasting impact on education. As well as raised public awareness and a growing recognition that climate change is a very serious problem indeed, there appears to be a significant shift in UK education policy. A [recent statement](#) by Nadhim Zahawi, Secretary of State for Education, declares that 'education is key to fighting climate change'. The draft paper released by the Ministry in early November (which will lead to a final strategy in April 2022) includes a commitment to provide training and support. With respect to Higher Education, there is a focus on continuing 'to further enhance best practice in teacher training and the teaching of sustainability within university courses.'

These proposals are broadly in line with proposals from a youth-led campaign called [Teach the Future](#). As well as arguing that students need to be taught about the climate emergency and ecological crisis, this campaign focuses on what we can do mitigate problems and how future lives and jobs are going to look as a result of them. These demands have been encapsulated in a student-written draft Emergency Education Bill for England – the first of its kind.

These are promising developments but there are a number of factors which could easily be overlooked. One of them is that climate change is only one aspect of sustainability. In the realm of physical science, for example, [experts](#) recognise that if human beings are to

continue to thrive on a finite planet, they need to respect a whole range of biophysical boundaries. Meanwhile, the [United Nations Sustainable Development Goals](#), take an even broader view and present climate change as just one of seventeen goals, alongside social justice, gender equality and partnerships between organisations, all of which require urgent action.

There is also a danger that climate change education will be limited to just a few curriculum areas. The draft paper specifically identifies science, geography and citizenship as providing the key knowledge and skills base but all subject areas are actually involved. Interestingly, one of the features of the COP 26 conference was a focus on moral issues. The [small island states](#) argued vehemently for climate justice as increasing storms and rising sea levels devastate their countries. Understanding the worldwide implications and impacts of climate change requires an ethical, just as much as a scientific, perspective.

One of the key insights which has been gleaned from ecology is that all phenomena are inter-related in complex and often unpredictable networks. Ideas such as feedback loops, emergent properties and systems thinking have revolutionised our understanding of the world and are fundamental to any meaningful understanding and implementation of sustainability.

As climate change takes centre stage there is a danger of reductionism – a danger of pursuing a single story to the exclusion of the bigger picture and deeper levels of understanding. Ultimately, climate change is not a problem that can be fixed by technology alone, nor can it be understood just through science.

It is a problem that has been created by human behaviour and it is by critically examining human behaviour at all levels of education that it can be addressed. Schools and universities around the country are discussing how they can best incorporate sustainability perspectives into their teaching in order to equip students and young people for an uncertain future. Canterbury Christ Church is one of them, and we will be launching our own initiatives in the coming months.

Discussion

1. Should teachers ever allow their pupils to take direct action in support of an environmental cause? What are the reasons in favour and what are the reasons against?

<https://blogs.canterbury.ac.uk/expertcomment/climate-change-education-needs-to-make-connections/>