



HOURGLASS

FREE

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RIGOROUS JOURNALISM FOR FRAGILE TIMES

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Maxine Peake**

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BRITAIN RETURNS TO DEEP COAL MINING

by SYLVIA KLIMAKI

Formal planning approval for the development of the Cumbrian Metallurgical Coal Project, also known as the Woodhouse Colliery, was given in March 2019 by the Development Control Committee of Cumbria County Council. The decision was ratified in October despite warnings by environmentalists that the authorities had failed to consider the greenhouse gas emissions of the mining operation. The £165 million colliery which is expected to go through the construction phase in 2020, with deep coal mining starting 24 months later, will be the UK's first new deep coal mine in 30 years.

The government's go-ahead lead to protests from environmentalists who say the mine will harm the UK's efforts to reduce CO2 emissions. Under planning legislation, county councils are responsible for determining planning applications relating to mineral extraction.

Last month a report by environmental think tank Green Alliance found that the proposed mine was 'incompatible' with the UK's aim of reaching net zero carbon emissions by 2050.

The UK has set a target to reach net zero carbon emissions by 2050 and has committed to switch to lower carbon steel production, announcing a clean steel fund back in August 2019. 'Yet this mine would extract coal until the 2070s, long after we have pledged to phase out all emissions,' says Rebecca Willis, Professor at the Lancaster Environment Centre at Lancaster University and one of the authors of Green Alliance's report.

The Woodhouse Colliery will be situated on the former Marchon industrial site near Whitehaven. According to the developer,



photo | Ben Darlington

West Cumbria Mining, it will extract coal from under the sea nearby, with access via the existing Sandwith Anhydrite mine portals. West Cumbria Mining plans to move mined coal via a buried 2.2km long conveyor to a train-loading facility, with its own dedicated siding on the Cumbria Coast railway line.

Once Woodhouse Colliery moves into the operational phase, the company plans to extract and process around 2.5 million tonnes of high-quality coal for use in the steel industry. The West Cumbria Mining company has said it aims to supply the

European steel-making market, which currently imports 45 million tonnes annually from the US, Australia, Colombia and Siberia.

Coal from the mine will be used for steelmaking and is estimated to produce 8.4 million tonnes of CO2 per year, equal to the emissions from over a million households. 'The proposed mine is clearly incompatible with the need for a clean energy future. The new government has championed its commitment to climate action. It now needs to set out its policy on fossil fuel extraction, making clear that digging more coal out of

the ground is no longer acceptable,' says Professor Willis.

The coal industry in Britain spans back to Roman times, but over the past four decades the industry has been steadily declining. The UK's consumption of coal has decreased significantly since 1970, when it amounted to 157 million metric tons per annum. By 2018, this figure had fallen to just 12.9 million metric tons, with coking coal making up just 3.2 million tonnes. 'Coal mining used to be central to the UK economy. But as we grapple with climate

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Photo | Ben Darlington

> CONTINUED FROM FRONT PAGE

change, we need to invest in zero-carbon industries. It would be far better for the government to support recycling of steel and new manufacturing processes, rather than supporting this damaging mine,' Willis points out.

Coking coal, also known as metallurgical coal, is used exclusively as an essential ingredient for steel production. 'Coking coal is one of the most carbon-intensive fuels. Most steel manufacturers are now testing new manufacturing processes to make steel, and have agreed to phase out coal in steel production,' says Professor Willis.

According to Green Alliance's report, there are four ways the steel industry should be cutting carbon: using less steel; using recycled steel; improving the efficiency of steel production

with conventional blast furnaces; and producing steel with new processes using renewable energy. 'The UK's demand for coking coal would halve if steel producers opted for cheaper, cleaner steel production using today's technologies. In addition, innovation in zero carbon steel production means this mine will likely become redundant in the near future, saddling Cumbria with an expensive stranded asset,' says Dustin Benton, Green Alliance's policy director.

In February this year, the environmental campaign group, Keep Cumbrian Coal in the Hole, which had previously objected to the project, was granted permission for a judicial review of Cumbria County Council's decision to allow the coal mine to be built. The judicial review will be heard at the High Court in Manchester on a date yet to

be set. The county council said it could not comment while the review was pending. West Cumbria Mining, the developer, also declined to comment on this story.

Maggie Mason, previously a minerals and waste planner at the county council and one of the protesters, said: 'Cumbria's politicians understandably want to see new jobs on the west coast. But we estimate that the profits from the mine would leave the local area with only 3 per cent of the turnover spent on salaries. We urgently need an active, low carbon industrial strategy for Cumbria and other local areas to generate thousands of green jobs rather than hundreds of coal jobs.'

West Cumbria Mining said the new mine - near the site of the former Haig Colliery in Whitehaven which shut in 1986 - would create 500 much needed new jobs. Deep coal mining in the UK employed more than 1 million people across several thousand pits a century ago but this ceased in December 2015 with the closure of the last deep-pit coal mine at Kellingley colliery in North Yorkshire. 'The West Coast of Cumbria really needs quality jobs - but not at any cost,' says Willis. ■

LETTER FROM THE EDITORS

Dear Readers,

Here at The Hourglass we receive some interesting letters. Recently, we received 3 emails asking why veganism was being 'excluded' from the newspaper (these were the words of one writer). Had they sent in articles on veganism that had been excluded? No. I replied that I have been vegan since 2003. This caused a sudden change of tone. The idea of us having an 'agenda' to exclude content on veganism was now clearly not true.

It's understandable that this paranoia about content exists, because of the way that the mainstream media works, and how propaganda-heavy it has become. Readers, we are working very hard to emulate a better style of news reporting than that. We are not trying to push forward our own agendas - however important veganism might be to me, I refuse to become like the media moguls we criticise so heavily by slipping my views into every other article (as many newspapers did with, for example, Brexit).

Equally, we can only use the content we get sent in, because we cannot pay all of our writers, which means that commissioning specific topics isn't possible. When we launched, we used the strapline 'Be the media; Lead the media'. If you want to see a topic covered, please send us a pitch. We also accept articles from readers with no writing experience, and will help you to shape your words into something you're happy with - although this means more work for us, we don't mind, as we want to ensure that all voices are heard.

For those of you who contact us to complain, we hope that you are also emailing mainstream newspapers for their lack of reporting of the climate and ecological crisis, for Party-political bias (which you will never find in The Hourglass), for printing outright lies, and so on.

A tribute

On 6 February James 'Iggy' Fox died unexpectedly while abroad, at the age of 25. He had given up a career in science to join the cause for climate activism.

The article Iggy wrote for issue 3 of The Hourglass, titled This is Why I Rebel, went viral a week after Iggy died, when the mainstream media made the link to his earlier years as a child actor.

We held a tribute to Iggy on 13 February in London, and a dance video Iggy had made was projected onto Westminster Abbey for all of London to see; thanks again to the small team who helped me to pull this off last minute. A beautiful video of the tribute was made (video link below).

In this small space, we simply cannot cover how much of a loss Iggy was for the world, but we do dedicate this issue to him. RIP Iggy. You are missed by many. ■

Watch the video of the tribute at:
<https://rebellion.earth/2020/02/13/remembering-iggy-london-13-february-2020/>

Read Iggy's Hourglass article at:
<https://rebellion.earth/2020/02/07/this-is-why-i-rebel/>

To support Hourglass donate to: <https://chuffed.org/pay/campaign/65754>

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The Hourglass has made every effort to report the truth. We take great care to ensure that statements of fact are correct, but mistakes do sometimes happen. If you spot anything, please email hourglass@rebellion.earth with the article title and page number.

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THE TRUTH BEHIND THE HEADLINES



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LEAKED JP MORGAN REPORT LEAVES INVESTORS IN NO DOUBT



photo | Ben Darlington

by **ANGUS BARR**

An internal report by the world's number one investor in fossil fuels, JP Morgan, titled *Risky business: the climate and macroeconomy*, details the 'potentially catastrophic outcomes' of ongoing fossil fuel extraction - and investments therein - 'which might be impossible to reverse' and 'where human life as we know it is threatened'.

The report warns that CO2 emissions are currently on an unsustainable trajectory: 'If no steps are taken to change the path of emissions, the global temperature will rise, rainfall patterns will change creating both droughts and floods, wildfires will become more frequent and more intense, sea levels will rise, heat-related morbidity and mortality will increase, oceans will become more acidic, and storms and cyclones will become more frequent and more intense. And as these changes occur, life will become more difficult for humans and other species on the planet', adding that 'around one million species are threatened with extinction, many within decades'.

While acknowledging the broad range of scientific opinion ('It is possible to argue that the impact of ongoing emissions on the climate will be modest. It is also possible to argue that it will be catastrophic'), it reveals that equilibrium climate sensitivity (ECS), one of the metrics used by the Intergovernmental Panel on Climate Change (IPCC), has most likely been seriously underestimated, not just because of fast and slow positive feedback loops, but also because ECS depends on the 'background

climate state'.

The report explains: 'ECS is very sensitive to the background climate state. Thus, during glacial periods (Friedrich et al) estimate an ECS of 1.8°C, while for interglacial periods they estimate an ECS of 4.9°C. Since we are currently in an interglacial period, this ECS estimate is considerably higher than the mid-point (3.2°C) of the IPCC range.' Consequently: 'If CO2 concentrations reach 700 ppm, which is quite likely under a BAU (business as usual) policy (...) and if the ECS is 4.5, the top end of the IPCC's range, the ultimate increase in the global temperature would be around 11°C. This would create huge challenges for the survival of the human race.'

The report also highlights the dangers of tipping points that could occur at just 2°C, 'raising the temperature further to activate other tipping elements in a domino-like cascade that could take the Earth System to even higher temperatures.'

To mitigate climate change, the authors suggest a global carbon tax (and carbon border taxes if necessary) and 'a move from CO2 intensive sources of energy (coal, oil and gas) to nuclear and renewables', adding that this is 'technically feasible, though it would be very challenging from a cost perspective'.

It bleakly concludes: 'No government seems willing to sacrifice the incomes of their current citizens either in favor of their children and grandchildren or in favor of citizens in other countries. Climate change is a global problem which demands a global response. Despite the efforts of the IPCC, this is not really happening.' ■

WET'SUWET'EN NATION PIPELINE PROTEST GOES GLOBAL

by **RHYS HANDLEY**

Protestors in the UK have thrown their weight behind the plight of Indigenous peoples in Canada who are under threat of losing their land to the development of oil pipelines.

Young Indigenous people recently occupied the office of Winnipeg-based Liberal MP Dan Vandal's office to call on the Canadian government to take action against the proposed Coastal GasLink (CGL) pipeline on the lands of the Wet'suwet'en nation in British Columbia.

The young activists, acting in

solidarity with Indigenous peoples, ended their 11-day demonstration on 17 February and, a week earlier, UK activists took part in peaceful solidarity demonstrations in London at Canada House and the offices of KKR & Co., an investment firm with 65% equity in the pipeline project.

Wet'suwet'en hereditary chiefs issued an eviction notice to CGL in 2010 which has been ignored.

As the young protesters ended their demonstration, CGL representatives batted down chiefs' alternative proposals for a pipeline route as 'unfeasible', arguing that

the final route had been chosen after 'years of study'.

Royal Canadian Mounted Police have now started arresting Wet'suwet'en people who take action to steward and protect their land from pipeline development, enforcing a court order approved in January.

UK-based protestors said in a statement: 'The rights of the environment and natural world are inextricably linked to human and Indigenous rights. Climate justice demands...that Indigenous sovereignty is respected as it deserves.' ■

In other news...

➤ Researchers have found that consuming a western-style diet can damage brain function. Healthy volunteers in their 20s spent a week eating foods that were high in fat and added sugars, such as processed foods and ready meals. Volunteers scored worse on memory tests after the week-long diet.

➤ Coronavirus, also called COVID-19, is a new illness that can affect your lungs. Symptoms are similar to cold or flu symptoms and include a cough, high temperature and shortness of breath. Anyone with these symptoms is asked to self-isolate, which means staying at home for 14 days, to stop the virus from spreading further. Experts advise washing hands regularly with soap to avoid catching and spreading the illness.

➤ Recent deadly attacks on Turkish troops by Syrian government forces in northern Syria have led to large numbers of migrants



photo | Ben Darlington

misconduct by over 100 women, with initial accusations launching the #MeToo movement.

➤ A new collaboration between the Seti Institute and the Very Large Array observatory in New Mexico may help to advance the search for alien life. Astronomers are planning to use 28 giant radio telescopes to search the sky for signs of alien civilizations.

➤ As Storm Ciara hit the UK earlier this year it unearthed an impressive discovery: a 130-million-year old dinosaur footprint in Sandown Bay on the Isle of Wight. The fossil has been identified as belonging to a large three-toed reptile such as a Neovenator, which could grow to 10 metres long. ■

crossing the border. According to Turkish President Erdogan, 18,000 migrants have crossed Turkish borders into Europe. Meanwhile Greece has blocked thousands of migrants, using tear gas to disperse crowds of people fleeing war.

➤ Disgraced film producer Harvey Weinstein has been found guilty of rape and criminal sexual assault by a New York jury. Weinstein has been publicly accused of sexual

Who said it?

Answers on Page 4

1.

'Human beings at our best are so creative and inventive, and we can create, develop and implement systems of change that are beneficial to all sentient beings and the environment'

2.

'You can't say you want to safeguard future generations and then drill for more of the stuff that has already put our planet in danger'



photo | Gareth Morris

As the world watches, Australia burns... coal

by JACK REVELL

In June last year Australia gave final approval for the Adani Carmichael coal mine. It will be the largest coal mine in the country and one of the biggest in the world, producing 2.3 billion tonnes of coal over its lifetime and 130 million tonnes of carbon dioxide every year.

The Carmichael mine is controlled by the Adani Group, an Indian corporate behemoth headed by billionaire Gautam Adani. The group has spent vast amounts promoting the benefits of coal mining to rural Queenslanders.

Adani is the most controversial energy project in Australian history. The mine is located in the Galilee Basin, an unspoiled area in Northern Queensland that is thought to contain seams of coal. Part of the Adani project is a new coal terminal on the Queensland coast, which is at the edge of the Barrier Reef.

From here coal will be transported 185 miles to the coast on a newly-built railway where it will be shipped across the Great Barrier Reef to Adani's power stations in India, a country that is already under water stress and has been struggling to transition to clean energy. The electricity generated will then be sold to Bangladesh, cementing reliance on coal in these countries - home to a quarter of the planet's population - for decades to come.

Adani is the first of 9 proposed coal mines in the region and speculators are watching it closely. If all 9 go into production, Australia's coal output could reach 320 million tonnes a year, which would produce an additional 705 million tonnes of carbon dioxide annually - 1.3

times the current output of Australia.

Politicians are determined to give Adani the go-ahead despite the fact that the mine doesn't add up financially. The price of coal has slumped dramatically in the last few years, therefore in order to keep Adani viable it will receive \$900 million in royalty deferrals, and \$4.4 billion in tax exemptions. Although coal accounts for almost fifteen per cent of Australia's exports, it contributes less than 1 percent of the government's total revenue.

Siemens, the multinational company based in Munich, Germany, is facing a backlash from climate campaigners and investors for its stake in the Adani coal project. Activists in Munich glued themselves to the headquarters of Siemens, while protestors in the UK turned Siemens' London offices into a mock crime scene.

In Australian politics, the fossil fuel industry wields power over politicians and voters; for example the Australian mining industry has poured an estimated half a billion into lobby groups over the last decade. Queensland's Labor Premier had a close victory in the last election, in the face of strong support for the right-wing coalition government.

While Indigenous land disputes, environmental challenges, and global pressure on companies to distance themselves from the project will continue to delay Adani for years, it offers a striking example of the determination of the fossil fuel industry to hang onto power.

The Australian Marine Conservation Society has called the approval of the mine 'bad news' for the Barrier Reef. ■

Who said it?
Answers

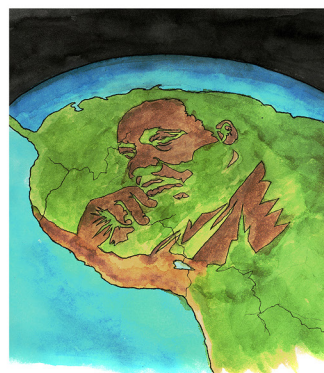
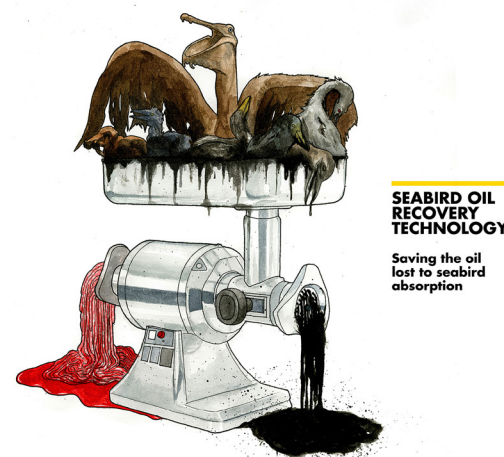
1. Joaquin Phoenix

2. Emma Thompson

WE'RE FUELING THE SWITCH TO GREEN ENERGY

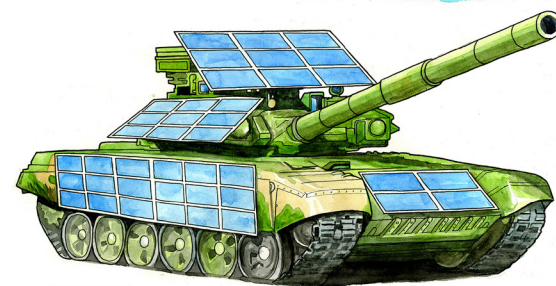
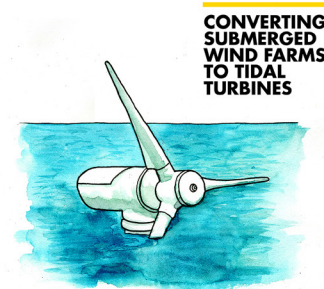


artwork | Darren Cullen



A TRIBUTE TO MARTIN LUTHER KING JR.

We're funding efforts to restrict deforestation in the Amazon to the specific areas which will form the shape of Martin Luther King Jr.'s face when seen from orbit.



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hell 

The climate, my family and me

Big people helping little people with big climate thoughts and feelings

How do we explain the climate and ecological crisis to children when we have challenging feelings of our own to manage?

In the second part of this series **SARA MAE** suggests more ways to tackle this difficult topic.

Taking the leap

Perhaps you've been reading this but haven't started having climate conversations at home yet. That's okay - and understandable. Just be aware that it's never too late to start exploring this crucial topic. Simple suggestions for taking the leap include making comments like:

'Lots of adults, young people and children are agreeing that we need to do something to protect our beautiful planet and all of the people, animals, birds, insects, marine life and trees.'

'Have you heard people talking about climate change? What are your feelings about that?'

Equip yourself with some starter facts, with enough information to answer questions. Don't worry about needing to know everything - this is just a conversation. If you get stuck for answers, write down your children's questions and answer them later.

Timing the conversation

It's best to only initiate climate conversations when your own circumstances feel calm, and when you can stop what you're doing and focus on your children. If you address the issue when you feel capable of holding the space, you will have a much better conversation than if you are stressed or have your mind on other things.

It's also a good idea to ensure that you have time later on answer any questions that arise after your discussions, as children often take time to process their thoughts and feelings and these can surface at unexpected times, for example at bedtime.

However, it's best to avoid

discussing the climate emergency around bedtime. Don't dismiss them altogether, as the stage for communication should be set by your children, but answer briefly and sufficiently with lots of reassurance for a restful sleep and a promise that the conversation will be continued at a better time. Then make a note on that time will be, aiming for the next day if possible.

Grounding the conversation

It's a good idea to end all climate conversations with a grounding exercise. Grounding techniques are useful for all of us in managing trauma and maximising our wellbeing, and they can be easily applied to children. Insert a grounding exercise into a climate conversation whenever you think it is required.

Here's how to do it. Focus on being in the present: help children to think about where they are now, what they will be doing later and what their life looks and feels like at this time. Focus on positive things.

Taking deep, slow breathing is always an excellent grounding technique, as it helps to regulate the part of the brain that responds to extreme feelings and trauma (the amygdala). Deep breathing tells the amygdala to calm down and signals to the other parts of the brain (responsible for rational thoughts) to take over.

Hugs are amazing as they are a visible sign of support, they reduce the stress of the person giving and receiving the hug (due to increasing oxytocin which in turn makes both people happier) and they have been proven to help reduce levels of fear. You can never hug your children too much during this time of climate emergency, and physical touch can help to heal



illustration | Clare Davis

mental anxieties.

Respond, don't react

Getting involved in climate activism has been proven to help children to manage their eco-anxiety - in some cases removing it altogether. This starts with a conversation! Keep the information simple and as solutions-focused as possible, to appeal to children's logic, since emotions have been discussed. For example:

- If you're talking about how a million species are at risk of extinction, focus on how we do protect animals, build shelters, etc., what we can do at home and what people around the world are already doing.
- If you're talking about the fact that the Arctic is melting and that we are heading for an ice-free Arctic in the summer, focus

on ways to reduce global warming such as alternative energy means, tree-planting initiatives, and what we can do to divest from fossil fuels.

- If you're talking about the fact that sea levels are rising and coastal flooding is becoming more common, focus on what we can do to build stronger defences, how your local area is managing this, etc.
- If you're talking about the fact that 120,000 square km of tropical forest was lost in 2018, focus on what we can do to protect trees: planting more, supporting charities that protect the trees we already have, and being mindful of the resources we use.
- If you're talking about the bushfires in Australia, focus on the tens of thousands of people who gathered in Sydney (and the people across the world who stood

in solidarity with them) demanding that their government take action, and all the people in the country who helped to save all the animals they could by taking them water, etc.

Feel proud

You should feel proud of yourself. This is a difficult time to live in, but by having these conversations you are giving your children a strong foundation to build on their understanding of the climate and ecological crisis. Whether you are a parent, a grandparent, an aunt or an uncle, a teacher, a club leader or an influencer with an investment in our planet and our future generations, your conversations will be the starting point for the little people who will be living in a changing world, and perhaps they will also go on to change it for the better. ■

INTERVIEW**PEAKE ACTIVISM**

Jessica Townsend meets Maxine Peake, an actress keen to talk about the climate and ecological emergency



photo | Brinkhoff-Moegenburg

by **JESSICA TOWNSEND**

When Maxine Peake enters the small back room at the National Theatre for our interview, she is tall and glamorous: so far so showbiz. But it's only when she begins to speak that I'm smitten: this woman is smart, hilarious and speaks with a distinctive Bolton accent. Proudly working class, Maxine Peake got by on pure talent.

Thankfully she has plenty to spare and as a result has been cast in many fantastic roles. In theatre, she's played Blanche DuBois in *A Streetcar Named Desire* and Winnie in Samuel Beckett's *Happy Days*. In *Hamlet* she's played... *Hamlet*. On TV, she's appeared in *Silk*, *Black Mirror* and *Shameless*. In film, as the lead in *Funny Cow*, and in Mike Leigh's *Peterloo*. To name just a few examples.

Peake's new play is by Lucy Kirkwood of *Chimerica* fame and it is a kind of *Twelve Angry Females* set in rural Suffolk during the mid-Eighteenth Century. In the play a group of women have to decide whether a young woman is pregnant; she has been sentenced to hang something and that will be mitigated if she is judged to be with child. Before urine tests made life simpler, ascertaining pregnancy was not cut and dried.

The production is a strong, well-achieved piece bursting with ideas and with a striking cast of women of all backgrounds. It's heartening that the National is staging ambitious work by young women playwrights. Maxine Peake's central performance holds the piece together, which leads me to question how her activism fits with her acting.

Peake gets straight to the point when I ask her about this: 'To be honest the real lightbulb moment was reading Naomi Klein's book, *This Changes Everything*, and thinking: Oh of course. Capitalism not only destroys us financially, but also

environmentally.'

Many in the environmental movement have come to hold anticapitalist views after realising what big industry and finance is doing to our world. Maxine Peake's journey has been mixed. Although Peake isn't a

It's hard because people will have to make sacrifices. It will mean you can't go on holiday by jumping on a plane. We will have to reshape the way we live

paid-up member any more, she is open that she used to be in the Communist Party. She wouldn't necessarily call herself that these days, but she jokes that a Communist is a Socialist who means it.

The people who most influenced Peake's views were her family members: beginning with her step-grandfather Jim, himself a Communist until his death 7 years ago.

'I remember being a youngster at school aged ten or eleven at the height of the miners strike. Everything was kicking off. I used to get taunted: "Your grandad's a Commie!!" I remember a teacher at school saying "Communism and Fascism have a hair's breadth between each other" and feeling furious, really furious.'

Peake's mother's approach to life has also been a strong influence to her: 'When I was a kid my mum wasn't political but she used to put herself out to do things like recycling. Part of our routine every week was a trip to the bottle bank. I used to love to hear them smash. She didn't discuss it. It was just the right thing to do.'

'She would stop for people at the bus stop

and give them a lift because she felt it was better to drive a full car. But she wouldn't have called herself an environmentalist. To her it was about community.'

So Peake grew up with a diversity of views: political rhetoric from her step-grandfather, and a practical ethical approach from her mother. Later, Peake drifted away from politics when she developed the drama bug that led her to London to study: 'I just got so wrapped up in studying, acting. But I didn't lose my beliefs.'

When I ask if Peake has children, she hints that the environment was part of her decision-making process. 'My step-grandfather Jim was always asking, how could people bring a child into this world? That stuck with me. Of course I had a great relationship with him so in a way, he was getting the benefit of other people's choices to have children.'

From an early age Maxine saw children as a choice rather than an inevitability. 'But then life comes along, you get into a relationship and think of settling down. And lots of my friends were getting pregnant.'

'So for a while I thought: if it happens, it happens. If it doesn't: I'm fine with that. Not having a child of my own saves the planet one person's carbon footprint. Not that I want to criticize anyone else's decision. And this young generation seem pretty inspiring. People sometimes imply that not having children means I'm not interested in the future of our planet, but you could say the opposite is true.'

'Of course I feel invested in the next generation. I'm ashamed of where we are. You can speak to the younger generation who think we did nothing. We forget that people did make huge moves.'

Although she sees that people are better off financially than when she was young, Peake wonders if they are any happier: 'I think every generation thinks there's too

much stress and pressure on young people. But I look at social media and it's abhorrent. Having that whole pressure. It's all so much about how you look, what you're doing in your life. Mental health is suffering.'

Peake keeps abreast of environmental news and is a fan of Greta Thunberg: 'It's appalling that anyone should criticise a young woman who knows her own mind and stands up for the environment. She's extraordinary and we should all be getting behind her.'

'Of course there are those who will try to make her a commodity. And there are those who will criticise. I think that's just fear. Of course, Trump is going to attack her because he's threatened. It's not a good look to be challenged by a young teenager. She's got a huge following because she's right. She knows what's needed.'

'It's so hard to engage people these days. People are educated to look out for their own interests. It's hard to engage them on a bigger level. We need to keep educating ourselves about the environment. Lots of people still can't see it. People are still finding excuses. Extinction Rebellion has changed things and now the media are heightening awareness but there are still a lot of smokescreens and pooh-poohing.'

'It's hard because people will have to make sacrifices. It will mean you can't go on holiday by jumping on a plane. We will have to reshape the way we live.'

Peake has made some of these sacrifices, but has reluctantly gone back to car ownership: 'I lived in London until I was in my early thirties. I didn't need a car, but now I live in the North, there's an issue with the transport system.'

'A friend of mine has a sister ill in hospital in the Wirral and had to take three buses. After 5 in the afternoon, it becomes impossible. And there's still a feeling that buses are transport for poor people. We have to change this. We have to make it so that people love getting on the bus.'

This is exactly the topic that so many activists, like Greta, have been clear about: that the solutions that are available to us need to be rolled out, and ultimately, it needs to be easier and more appealing for people to make more ethical lifestyle choices.

Peake's last thought is this: 'We have got to get back to our roots. Back to the Earth. If you're not connected with what you stand on of course you will make bad decisions.'

She's right of course: it will be a combination of rootedness and imagination that will help us to tackle the planetary emergency. Perhaps part of this is also the role of creativity that Peake champions: acting is part of her activism. Either way, Maxine Peake is likely to be part of our national conversation for decades to come. ■

The Welkin plays at the National Lyttelton Theatre until May 23rd



Leaving a Green Legacy: Having a Natural Burial

by **NICOLE STANFIELD**
Death Cafe Taunton organiser

I'm not a funeral director, but I've wrapped dozens of people in a funeral shroud. It was the same shroud every time; my shroud, and the people I've wrapped in it were very much alive. After a demonstration of shroud-wrapping, I ask people how it feels. 'Peaceful,' they usually tell me. 'Like being tucked into bed.'

In the UK over 75% of us choose cremation after death. This high rate may stem from the fact that it's the norm, or from a fear of burial, or the incorrect assumption that it might be the cheapest option. According to the Natural Death Centre, a single cremation uses as much energy as a 500 mile car trip and releases 400 kilos of carbon dioxide, as well as mercury vapour. Those of you who are going to die (100% reading this, in fact), should know that another option exists, just below the surface in a meadow or woodland near you.

Natural burial can simply be described as a return to the land. In a natural burial, a dead person is placed in a biodegradable container - usually a cotton or bamboo fabric shroud, or a coffin made of willow

or cardboard - and then buried in a designated natural burial ground or on private land. The person will normally be buried by hand at a single depth of 2 or 3 feet below the surface, as deeper burial inhibits the breakdown of the body by micro-organisms, creating methane which will eventually enter the atmosphere. The land will then be allowed to return to a natural state, with minimal landscaping.

Natural burials are as much a social issue as an environmental one. Our loved ones can still be involved in our deaths: wrapping a shroud, decorating a cardboard coffin, helping to dig a grave, planting local wildflowers at the grave site, or visiting you in beautiful surroundings, knowing that you are just below the surface, tucked into the earth, at peace.

Take a look at the Natural Death Centre online, or visit an independent funeral director for a chat. Plan and let your wishes be known. If you're ever in Taunton, you're always welcome to try out my shroud. I hear it's quite an experience. ■

Try a Plant-Based Vegan Diet

by **AARON CALDER**
www.aaroncaldervegan.com IG @aaroncalder



A plant-based diet isn't just good for the environment, but also for our health and animal welfare. I've been vegan for 4 years and it's one of the best life choices I've ever made. At first I found it hard to believe that I could live without meat, eggs and dairy. I needed protein - didn't I?

I did some research. Protein is found in most plant-based foods and the majority of us are consuming too much of it, and not enough fibre. A diet high in animal protein has been found to cause several diseases and has a huge negative impact on the planet. Luckily, nuts, seeds, peas, tofu, soya, tempeh, beans and pulses contain high amounts of protein. It's also in broccoli, bread, oats and thousands of other plant foods.

All protein (amino acids) comes from plants. The animals we consume eat the grass and grains, and then we eat them. Meat is recycled protein that we can get straight from plants, removing the animals from the scenario. Many professional athletes, footballers and bodybuilders are

adopting a plant-based diet to improve their performance and physique. Don't worry - you won't have to eat grass!

If you think you'll be eating rabbit food, then you'll be pleasantly surprised.

Whatever you eat now, you swap for a plant-based version. When I'm planning dinner, I'll make what I'm craving and create a vegan version. This is one of the best tips for beginners to going vegan.

By always having certain foods on hand in the kitchen you'll never feel like you are missing out. I always have pasta, rice, cheeses, vital wheat gluten (makes seitan), chickpea flour (a great egg substitute), bread, beans, frozen vegetables, nutritional yeast (adds a cheesy taste to any meal), black salt (adds an eggy flavour to a quiche or omelette) plus things like meat substitutes, burgers, pizza bases, milks, soya/oat cream, tinned tomatoes and pasta sauces.

People see a vegan diet as boring and restrictive, as you're cutting out animal products. Yes, I've cut out a few animal based foods, but I've simply substituted them with other foods that are better for me and the environment. Why not give it a try? I'm certain that you won't regret it! ■

Whatever you eat now, you swap for a plant-based version. When I'm planning dinner, I'll make what I'm craving and create a vegan version



WHAT ABOUT CHINA?

by **NUALA GATHERCOLE LAM**

Is it reasonable to demand that the UK government take drastic action to address the climate emergency, when China's emissions far outweigh our own? As someone who works in the media, this is a question I'm asked a lot.

It is clear that seismic shifts will have to take place globally if we are to transition to a carbon-free economy, and that includes China, as well as India, the US, the EU, the UK and all the major emitters of CO2. But that's not to say that China's role is a straightforwardly negative one, or that protesting in the UK is pointless.

About a year ago I was working as a journalist in China, reporting on the People's Republic for English speakers. There's no denying that China contributes

significantly to global CO2 emissions through domestic use of fossil fuels, as well as its development of coal infrastructure abroad. However, China has also invested significantly in renewable energy and is now the leading producer, exporter and installer of solar panels, wind turbines, and electric vehicles.

How many of the household items surrounding you as you read this are stamped with the words 'made in China'? In 2005 a third of China's emissions were associated with goods destined for export. We can assume that percentage may have decreased somewhat in the last fifteen years as domestic demand in China has grown, but it remains the case that we in the UK, and other rich nations, outsource

a huge amount of our carbon intensive manufacturing to China.

Falling emissions in the UK are a favourite among media pundits keen to discredit calls for action in the UK. However, if we take into account outsourced manufacturing, £10.5bn a year in subsidies to the fossil fuel industry as well as the fact that the City of London supports, directly or indirectly, a minimum of 15% of global carbon emissions, it looks like we're standing in the right place to demand change after all.

The human rights situation in China is another source of apathy for many. If people there don't have the right to vote, what hope is there of the government taking action? The Chinese Communist Party may not be beholden to voters, but that's not to say it isn't highly sensitive to

the views of its citizens. The Party cares primarily about prolonging its own rule

and sees social unrest and organised political activity as serious threats to that endeavour. We might think a global civil disobedience movement isn't likely to have hope of changing China, but in fact it's the Chinese Communist Party's worst nightmare. It's possible that the Party would sooner address people's concerns about the climate than have a social movement at its doorstep in Beijing. The greater problem at the moment is that for most

Chinese people simple improvements in their quality of life are a far more immediate concern than the climate and ecological emergency.

The whole world needs to reorganise on a scale we haven't really seen before and as retired detective sergeant of the Metropolitan Police, Paul Stephens, says, you can't ask another passenger to take their feet off the seats when you've still got yours up there. ■

How many of the household items surrounding you as you read this are stamped with the words 'made in China'? In 2005 a third of China's emissions were associated with goods destined for export

YOUTH VOICE

Jessie Stevens, aged 15

Palm Oil: The Good, the Bad and the Ugly

The words 'palm oil' make my heart drop. This usually occurs when I help do the weekly grocery shop. For some years I was aware of palm oil's impact on our environment, but it's only in the last eighteen months that the scale of the problem has hit home.

The Good

Derived from the fruit of the African Palm plant, palm oil naturally grows in sub-tropical regions. From biscuits to lipstick and bread to shampoo, it is one of the most versatile oils in the world. Due to its high melting point the oil provides a variable consistency making it incredibly useful.

The Bad & the Ugly

With palm oil making up thirty-eight percent of the global oil supply, huge areas of land and rainforests are being destroyed in order to grow the crop and meet the global demand. The practice of deforestation has both devastating effects on biodiversity and animal species population, with many not just losing their homes but also being burned alive. For example, the orangutan, with whom we share 96.4% of our DNA, has lost eighty percent of its habitat in the last twenty years due to land-clearing for palm oil plantations.

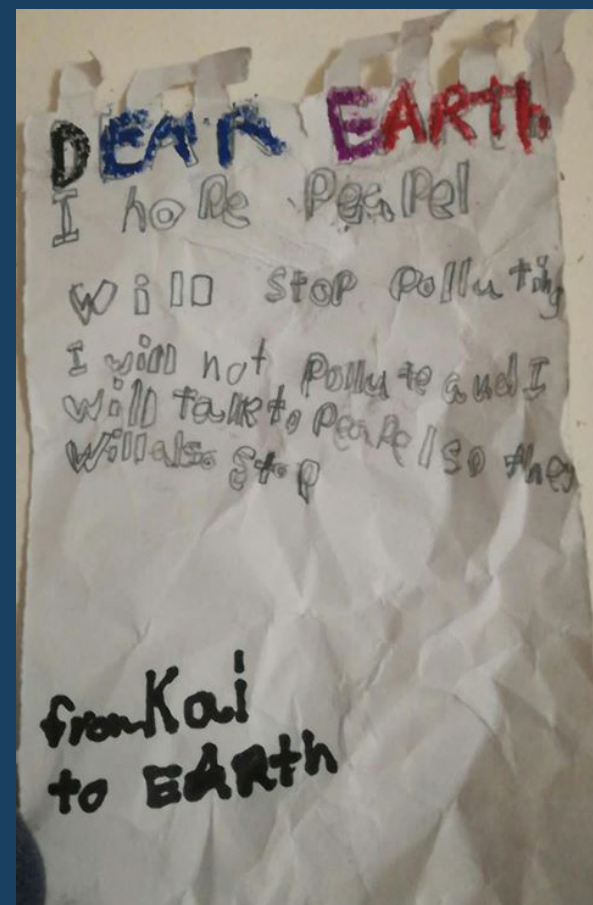
Ranking among the top four worst industries for forced and child labour, palm oil production also causes thousands of people to lose their homes and livelihoods due to the destruction of land.



So what can we do?

Check the label. If it's there, put it back on the shelf. The way to tackle big business is to 'hit them in the pocket'. With sales decreasing this will force companies to look for better alternatives - and many are already doing so. It's easy to be fooled, as palm oil can be labelled as many as twenty-five different scientific names. These include: *Elaeis guineensis*, Palmolein and 'vegetable oils' (often a mixture of different oils containing palm oil). So remember to look closely! ■

Letter to planet Earth by Kai, aged 7



The planet needs actions, not words

Aimee Docker, aged 14

The environment and the health of our planet are in the hands of you and I.

Every single thing we do affects what happens. Even when we walk to school or work, most of us are wearing shoes that have been created from leather from a cow, which, over time, will wear down and then we will be compelled to buy another pair. Leather shoes, causing cows to be even more in demand than they are already, produces methane: a greenhouse gas.

Products bought by so many people, all containing plastic of some sort. What have we done? A generation above mine is fleeing the scene and leaving behind the crime they committed. Why does

it have to be my generation that has to fix things?

Age doesn't change the way you feel about the Earth. The phrases 'our Earth is dying', 'we are destroying our planet, and 'we need change' have been used by people who have done nothing

to prevent it. Overused by people who are too lackadaisical to make a difference themselves.

Plastic has impacted us terribly. It has made our Earth riddled with waste. We all know this, yet most of us still continue to buy plastic bottles, bags and plastic packaging. How do we stop this at the source? What are we doing to change it? I shouldn't have to be saying this but I do. Because still we haven't changed things. Act now. ■

Why does it have to be my generation that has to fix things?

Keane Handley, aged 14

No, I have not been brainwashed



'What do you think of climate change?' I often ask people.

If they reply 'a hoax, and if it is true it's natural' - I think, 'seriously'? Then I run out of words!

Or they may reply, 'we've left it too late', which I can stomach but still I'm puzzled. To put this into context, I usually hear this response from older people, and it sounds like they're really thinking, 'well it won't bother me anyway so...'

They are telling the truth bar one solitary word - the word is 'too'. It's late to act, but it's not 'TOO late'. There is still time to turn the situation around.

Don't be disheartened following that last response, as there are a third group of people who reply 'It's awful, that's why I...' and they proceed to tell you about the things they do. They tell you about the vegetables they're growing to how they're only taking local holidays (no

planes!), or how they've reduced their meat consumption. These are the people you've got to admire, fully aware of the emergency and are trying to adapt their lives to take better care of their environment.

After the initial responses to my question I often go on to say 'well I'm part of Extinction Rebellion' and this causes controversy - but at least they know who we are... Or who they think we are!

'we are actually underreacting'

Here are a few of the labels I then get: hippy, middle class, over the top. Now let's just unpick these first two by saying that we are ordinary people concerned about the climate emergency and we come from all walks of life. Then to the latter I say, we are people who unite

behind science - climate science - hardcore evidence. How is that 'over the top'?

I'd say that as a global population we are actually underreacting, so if you look at the government's lack of action, our 'over the top' reaction is necessary.

One label that I have experienced, especially as a young person, is that of being 'brainwashed' because I've supposedly been 'scaremongered' by people saying the world is ending.

My response to this idea of being brainwashed is that actually, I have been presented with scientific evidence that is shocking and sad to hear. I heard it and decided to act.

Hopefully soon people will stop with the stereotypes and act if they aren't doing so already. To those who are acting - keep going. ■



photo | Ben Darlington

END THE CRAZY PAVING

by EDWARD O'BRIEN

Imagine you are trying to create inhospitable conditions for wildlife. Cut down any plants, dig out the soil, compact the ground and concrete it over. This is what millions of people in the UK choose to do when they raze their front gardens to the ground for reasons such as 'ease of maintenance' and 'convenient parking'.

Recently my home city, Bristol, became the first place in the UK to declare an ecological emergency, calling for drastic action to halt and reverse the decline of wildlife in the city. While Bristol's mayor, Marvin Rees, should be commended for this declaration, his first step in its name should surely be to ban the paving of front gardens.

I'm not the first person to call for this ban. In 2015 the London Assembly released a report named

'Crazy Paving' in which they noted that two-thirds of London's front gardens are paved over. The report recommended changes to planning laws.

While the ecological impact of paving front gardens is obvious - they cannot sustain life - paving front gardens also increases surface run-off in streets by 50%, leading to an increased risk of flooding. With all the recent floods the UK has been experiencing, it makes sense to bring in a ban on crazy paving.

Paving also creates the 'heat island effect': warming up during the day and releasing the heat at night, which consistently raises urban temperatures. In this current climate crisis, with increased flooding and hotter, drier summers on the horizon, we need less concrete and more green areas. Trees, grasses and plants that absorb water and provide shade are needed to cool our

cities and trap pollution, not the opposite.

The Royal Horticultural Society's Greening Grey Britain research found that 24% of front gardens have been completely paved over. I decided to carry out my own research as I feared that the situation near me was worse than this. I live on an ordinary suburban road in North Bristol with free on-street parking. However, out of the 91 houses on the street, my house is only one of 9 that have not been completely paved over. Over 90% of the gardens are ecological wastelands. As each front garden is 25 metres squared, that's half an acre lost to cement on just one street.

When I moved into my house last spring, I dug up the small lawn in my front garden and planted it with long flowering perennials. It flowered until October, an oasis for bees and butterflies in a concrete desert. The only maintenance was weeding once a fortnight and cutting back the old vegetation in winter. Although a few hours of maintenance might be too much for some peoples' busy lives, a policy change towards front gardens that can harbour life and reduce environmental destruction must be a priority. ■

Whistle-stop walks

by GARETH HUW DAVIES



Hastings to Rye

I feel the tug of the sea as I exit Hastings railway station. No need for a map. Just follow the wheeling seagulls downhill to the beach.

What does the town forever linked, with geographical imprecision, to England's biggest home-defeat do to erase 1,000 years of hurt? It turns instant recognition to its advantage, rebranding itself and its pretty Sussex hinterland as '1066 Country'.

There is an attractive alternative whistlestop walk on the 1066 Country Walk 6 miles to the actual site of the showdown, on Senlac Hill, at Battle, but today I head east along part of the Saxon Shore Way (12 miles, 19km) to Rye, hilltop town of distinction.

I begin on the Hastings seafront, lined with handsome Georgian houses. At the eastern end is the historic fishing quarter, the Stade. This mazy skyscape of steep-roofed fishermen's huts huddles under the

cliff face, around Jerwood Gallery.

On this hectic, built-up Sussex coast there is a glorious undeveloped gap in the smother of concrete to the east of Hastings, where my path steps up onto clay heights above pebbly coves and plunging valleys. In the spring a carpet of wildflowers rolls away north and a smudge of bright yellow gorse lights the cliff edge at Fire Hills. To the east is the lonely spread of the Pett Levels.

Beyond it is a coast ill at ease with the sea. My route follows a section of the C19th Royal Military Canal to Winchelsea, one of the now inland towns whose flourishing harbours were choked by ancient storms. In St Thomas's Church I found the grave of Spike Milligan.

It's a short step on to the charming town of Rye, every medieval street a film set. I look down on the long golden expanse of Camber Sands. To the south, on a clear, slack day of low sun, the coast of France beckons dimly. ■

Tring to Cheddington, Ashridge in the Chilterns

The West Coast Main Line, on its last push into the built-up South East, rises through a tantalising swathe of rolling, yearning countryside.

The trains breast the scarp in minutes. Then this narrow ribbon of the Chilterns is gone. How many travellers, since Robert Stephenson built the line in the 1830s, must have thought: 'If only I had time,' or 'One day I shall...'

On behalf of those unrequited millions, I take the stopping train to Tring and charted a walk to the preceding station Cheddington (8 miles, 12km).

Tring Station has a rare distinction. The Ridgeway National Trail actually passes through it, on a footbridge over the tracks. I will join this quicker route, to its end, later on.

I take the longer way through the heart of the National Trust's Ashridge Estate, a rich mix of old woodland and chalk downland astride the Hertfordshire and Buckinghamshire border.

Ashridge is one of the first wide

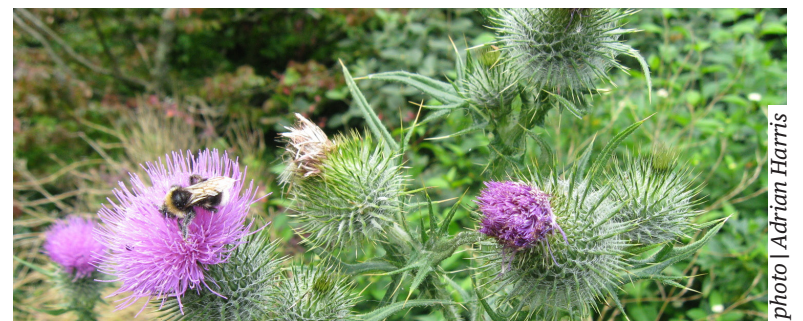


photo | Adrian Harris

tracts of open, freely accessible countryside north of London. But there's an environmental penalty to pay. The estate attracts torrents of cars to its free parking spaces. All the more reason to promote the walking option. (Is it time, incidentally, to revive an advertising tradition as old as the railways, to entice Londoners into the countryside by train?)

A happier trend is the phalanxes of cyclists who spin through the Chilterns and stop here. They have their own cafe, Musette, just a mile from the station.

Another mile on, up a steep slope, is the visitor centre in the heart of Ashridge. It's worth joining the long queue outside the excellent cafe. Towering above it is the Bridgewater Monument. This granite column honours the third Duke of Bridgewater, who founded the most serene form of inland transport yet devised,

the canal system of the Industrial Revolution.

I follow the Ashridge Boundary Trail north to a startling landscape transition. The path suddenly bursts out of dense beech trees onto the wide open Chilterns scarp, with views deep into the north. This is original chalk downland, dancing with marbled white butterflies over nodding harebells in the summer.

There is a sumptuous passage of downland to Ivinghoe Beacon. Various paths lead down to the village of Ivinghoe. I recommend the Rose and Crown, a stout independent country pub. Pitstone Windmill, one of the oldest post mills in Britain, is worth a detour.

As an appropriate conclusion I walk a short stretch of the Grand Union Canal, then take a footpath to Cheddington station to head home. ■

OPINION

THE IMPACT OF LAND USE FOR DIET

by **GUNNAR EIGENER**

Studies estimate that food production accounts for 19-29% of greenhouse gas emissions, 80-86% of which are agricultural. Agriculture is itself a threat to biodiversity and increases the risk of soil degradation. Modern society and the rise of capitalism has seen the middle classes expand within developing countries and this leads to increasing demands for foods with high environmental impact.

The national recommended diets (NRDs) of many countries provide a guide to healthy eating. In high-income countries, NRDs are moving towards increased vegetable use. Yet NRDs in such countries, like the UK, go no further than being a qualitative suggestion. Climate change and environmental sustainability have little effect

on dietary policy; such policies call for consideration in food choices and the possible reduction of meat consumption, but little else. Meanwhile, lower-income countries are focusing on providing sufficient caloric and protein

intake, leading to an increase in environmental impacts.

The World Health Organisation estimates that 3 billion people are malnourished globally. One of the main accepted reasons is the declining per capita availability of land, water and energy resources. This means that the use of land for dietary purposes is becoming more

and more vital.

Vegetarianism and veganism are potentially better alternatives to reducing environmental impacts, reducing individual carbon

footprints by up to 73%. Cutting meat and dairy products could reduce global farmland by up to 75%. In order to keep up with population growth estimates of 9.7 billion people by 2050, the world will have to increase food calories by 70% to be able to feed everyone. Therefore the best use of land potentially becomes a question of which are the best crops to grow and which animals, if

Reducing the consumption of meat and other animal-based foods in the developed world could free up between 766 million and 1.6 billion acres



photo | Adrian Harris

any, to rear.

Animal-based foods are, in general, more resource-intensive than plant-based foods. Reducing the consumption of meat and other animal-based foods in the developed world could free up between 766 million and 1.6 billion acres, depending on the type of approach used.

The two main scenarios advocated are animal protein reduction and vegetarian diets. The first scenario involves halving the consumption of meat, dairy, fish and eggs while vegetarianism requires the elimination of meat and fish from the diet, but an uptake in dairy consumption.

While many of the advantages

of dispensing with meat in a diet remain clear, vegetarianism and veganism are not without their own issues. A recent investigation by Unearthed found that the Environment Agency has little control over the fertilisers used on farmland and discovered that sewage waste, containing pollutants and toxins, is routinely used. Approximately 78% of the UK's sewage, around 3.6 tonnes, is spread over farmland every year.

Diets need to change and NRDs need to include the impact of the production food systems on the environment when considering how to guide a nation towards healthy and environmentally-friendly eating. ■



illustration | Federico De Cicco

The relentless pursuit of profit

by **CATHY MEADOWS**

The other day I noticed some Lego kits in a shop window showing Arctic landscapes that included a mini Lego figure drilling into the ice, industrial vehicles and ice cutters. I was shocked. What do we want to tell our children about the Arctic? Perhaps about biodiversity, wildlife, Indigenous people, and maybe that the ice caps are melting because of human activity? So why would Lego create a theme that appears to focus on the industrial extraction of the Arctic?

I vaguely recalled a campaign against an oil company partnering with Lego and looked it up. In 2014 the environmental campaign group Greenpeace campaigned for Lego to break a deal (valued at \$116 million) with the oil

company Shell because Shell had announced plans to drill in the Arctic. At first the Lego executive said that the matter was between Shell and Greenpeace, but in October that year Lego announced that they would not renew their current contract with Shell. Then in October 2015 Shell announced that it was giving up drilling for oil in the Alaskan Arctic, with The Guardian newspaper reporting, 'Privately, senior executives concede that the protests had a bigger impact than expected, and damaged the company's reputation.'

In February 2017 the American Petroleum Institute (API), of which Shell is a member, wrote to the U.S. Department of the Interior calling for the reversal of an executive order by Barack Obama in 2014 banning oil drilling in large

areas of the Atlantic and Arctic. This was less than 18 months after Shell's announcement to drop their plans. Even if Shell kept their word, another oil company could be attempting to exploit the Arctic, and even if Lego kept their word, another oil company could be attempting to make another deal with another children's toy, book, film franchise, museum, etc.

Under the capitalist system, companies have to make profit and this relentless pursuit of profit leads to them continuously push back legal, social and sustainability boundaries to steal a chase on each other. Decisions that impact humankind and the planet are being made by a tiny minority. In such conditions, true democracy cannot work. Environmental campaigns can expose and challenge the profit system with a view to ultimately getting rid of it, for example by making big bold demands that go beyond the written and unwritten rules of capitalism, such as: demanding that companies make information about their contracts public, demanding that they break deals, and calling on industry unions to develop and campaign for programs that move away from unsustainable extraction and production, without the loss of jobs. ■

In praise of pauses

by **SATYA ROBYN**

I have noticed something about people who do amazing work on behalf of our planet - they are not always good at taking breaks. I am terrible at building gaps in my life, and when I don't, it leads to trouble.

I understand why it's hard for me to take breaks. Some of the reasons are internal. Part of me relies on regular affirmation in order to feel accepted. Part of me uses work as a distraction from difficult emotions. Part of me feels that I'm only worthy if I keep producing and achieving. There is also intense pressure from outside - we are in the midst of a planetary emergency, and when I connect with my grief and my fear I am driven to work longer and harder.

However, when I neglect to take breaks, I become clogged with adrenaline and fatigue. I want to 'get it done quick', rather than finding creativity in contemplative space. I burn out. Our dear Earth knows about the necessity periods of rest. Daffodils, dormice, bears and trees all have a good long sleep once a year.

How can we get better at adding pauses to our days? First we

identify the parts of ourselves that are holding us back from resting, and befriend them. The part that is afraid of stopping - what does it think might happen if you do? The part that feels unworthy - where did this belief come from? Offering these parts some understanding and loving attention creates a little space, which makes the second step possible.

This is where we plan the pauses, and then honour them as we would any other important appointment. I begin each day with ten minutes of spiritual practice. Monday is my 'Sabbath', with no time online and a strict ban on appointments.

Our Earth needs us over the coming years, and so we have a duty to take care of ourselves. Even twenty seconds can make a big difference. Maybe take a slow breath right now, close your eyes, and allow your shoulder muscles to relax. ■

Satya Robyn is a Buddhist priest, psychotherapist and author who runs a Buddhist temple in Malvern with her husband www.dearearth.co.uk

NATURE CONNECTEDNESS

The Missing Link for a Good Life

by **PROFESSOR MILES RICHARDSON**

The 2019 report by The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) on the critical decline in wildlife states that to save nature we need to re-evaluate what we mean by a 'good life'.

In Western culture, a good life tends to focus on having more money and more things. However, a recent research study has shown that nature connectedness, i.e. having a close relationship with nature, is nearly four times more important for a good life than buying things.

The benefits of spending time in nature are increasingly accepted, but many of these studies haven't considered a person's relationship with nature. This recent work aimed, for the first time, to establish the contribution of both getting out into nature

Nature connectedness needs to be significantly higher for the majority of the population to bring about the behaviours required for a sustainable future

and nature connectedness to wellbeing and doing good for nature.

The work surveyed a representative sample of 4,960 adults across England. To ensure meaningful results, the survey took care to account for various types of nature contact and many other factors such as socio-economic status, neighbourhood deprivation, urbanicity, gender, ethnicity, employment and marital status.

The results showed that those with higher nature connectedness felt that their lives were more worthwhile, to a level 4 times larger than the increase associated with higher socio-economic status. The results also showed that a closer relationship with nature was linked to greater pro-environmental behaviours - behaviours

like walking or cycling, recycling, buying locally-sourced food and eco-friendly products. Finally, those with a close connection to nature reported more pro-nature conservation, such as supporting nature conservation groups and volunteering for them.

So, a close relationship with nature is linked to both a worthwhile life and a pro-nature life - a good life. Notably, this close relationship with the rest of nature was found to be important over and above getting out into nature.

Interestingly, living in a greener neighbourhood was unrelated to general



photo | Ben Darlington

health, wellbeing or sustainability outcomes in this research. This may seem a little odd, but it shows that being in and developing a meaningful relationship with nature is more important than the simple presence of green space. Creating a good and sustainable life means creating places where people can engage every day with nature on their doorstep. This means moving beyond encouraging visits to green spaces, to fostering engagement with nature in green places.

Encouragingly, we know that nature connectedness can be increased through simply noticing the good things - looking, listening, finding joy, beauty and meaning

in everyday nature. However, the warming climate and loss of wildlife show that the human relationship with the rest of nature is broken. Nature connectedness needs to be significantly higher for the majority of the population to bring about the behaviours required for a sustainable future. A new, closer and sustainable relationship with nature will require meaningful changes across society, including bringing nature into every aspect of our lives, from education to the workplace. ■

Miles Richardson is Professor of Human Factors and Nature Connectedness
www.findingnature.org.uk @findingnature

TIME IN NATURE BENEFITS CREATIVITY AND MEMORY

by **DR ADRIAN HARRIS** @dradrianharris

Taking time out to connect with nature can help to get your creative juices flowing. Research from the U.S. found that a four-day nature hike improved creative problem-solving by as much as fifty percent. Sadly most of us don't have the option of taking a long hike in the wilderness, but a twenty-five minute walk in a local park can also boost your creativity. Some studies suggest that even just having a house plant in the room can help you to be more creative!

A Danish study found that nature helped creative professionals in their work, making them 'more open towards new, different and wild ideas'. Watching the trees gently swaying in the wind, sitting by a stream bubbling over rocks, or listening to birdsong offers what researchers call 'soft fascination'. Because nature engages our senses in this gentle way, it calms and restores the mind. This creates the ideal environment for our imaginations to let loose.

Researchers have found that feelings of awe slow down our perception of time, bringing about a greater sense of presence. Professor Melanie Rudd sums up an experience you've probably had yourself

in awestruck moments: 'Time feels more expansive, more full and rich.' Nature often inspires feelings of awe: have you ever taken time to look closely at the intricacy of a leaf, or watch a spider weave a web? Awe not only opens up our imaginations, but also gives us a sense of 'time abundance' that allows us to be more creative.

Nature offers a huge range of sensory input. Natural variety stimulates our curiosity, provokes new ideas and encourages flexible thinking. Walking in nature is especially helpful as it helps us to gain new perspectives and imagine different possibilities. In fact, spending time in nature can improve your memory.

Research found that a walk in an arboretum, compared to one in a city, improved memory by 20%. A good memory gives you access to the myriad of ideas you've picked up over time, so it's vital for reaching your full creative potential.

Sometimes it can be hard to connect with the natural world even when you're surrounded by it. We're bombarded with artificial noise and visual pollution every day, which can dull our senses. The American

naturalist Henry Thoreau spent months living alone in a small hut in the woods. Living in nature sharpened his senses so much that he was able to smell the first appearance of muskrats in the spring. You don't have to become a woodland hermit, but try not to take your busy life into nature. Put your mobile phone on silent and leave it at home. Then deliberately slow down your pace and allow your senses to explore the world around

you.

If you need some help to slow down, try the '4, 3, 2, 1' exercise. As you're walking, name 4 things that catch your eye and then 3 natural sounds you can hear. Slow down more and find two textures that you can feel. Finally, sniff out one smell. With your mind slowed down and your senses more awake, you'll find it's easy to find creative inspiration in nature. ■



artwork | Tori Dee

Another green Read

In his second column for The Hourglass **PROFESSOR RUPERT READ** gives his account of the JP Morgan report he helped to leak - and what he thinks they should do next.

Find Rupert on Twitter @greenrupertread



THE REPORT THEY DIDN'T WANT YOU TO READ

'It is clear that the earth is on an unsustainable trajectory. Something will have to change at some point if the human race is going to survive.'

Who do you think wrote those two terrifying sentences? Who is responsible for this latest exercise in radical truth-telling?: Extinction Rebellion? Caroline Lucas? The University of East Anglia?

The correct answer is: the world's largest funder of fossil fuels, JP Morgan. In a detailed report written by two of their leading economists - a report that, when I Tweeted about it recently and the BBC contacted them about it, they then tried to pooh-pooh.

Luckily, the story couldn't be held back, and it's now made worldwide news. Those pesky eco-extremists at JP Morgan & Chase have blown the lid right off the debate, and made starkly clear just how close to the precipice we are. Perhaps the people who don't like listening to you or me or Greta Thunberg or even Sir David Attenborough will be woken up by the deeply worrying words of a vast profit-hungry investment bank. For this is most definitely a bank that does not want to let such truths slip.

When I look back over my involvement in this tale of a private JP Morgan report warning of potential societal collapse if there isn't deep and rapid change, one thing strikes me most strongly: JP Morgan's oh-so-telling response to their report surfacing. This response, which consists basically of their denying that the paper is really a proper JP Morgan report, is the opposite of what they

should be doing. Which would be to own this excellent report.

The reason they aren't keen to come clean isn't hard to figure out. JP Morgan are a huge and largely unrepentant funder of fossil fuels. If they were to accept what their own report is saying, it would require them to revolutionise their business model. It would require them to tell the truth - and to act accordingly.

They want to hold out against doing this a little longer, but the genie is out of the bottle. How long will institutions like JP Morgan be able to continue to commit climate crimes now that their own economists are clear as day about the consequences of doing so?

It is quite obviously in the public interest that reports like this be made public. In fact, any information about our growing collective vulnerability to the biodiversity and climate crises ought to be disclosed. So I want to say to anyone reading this who is privy to such information: please bring it out into the public. If you are not sure how to, then contact The Hourglass, or me. If you need help or protection to blow the whistle, there is a platform available that supplies exactly that at www.truthteller.life

We need the full truth to be told. We need to know what army generals and military intelligence officers are scoping out in terms of contingency plans for the coming disasters and crises. We need to know about the vulnerabilities of our ludicrously-fragile food system. We need to know what the insurance companies know about the rising risks that they (read: we) are facing.

Let's seek to dig out more reports and files and truths that they don't want us to read. That's how awakening proceeds: one revelation at a time. ■

The reason they aren't keen to come clean isn't hard to figure out. JP Morgan are a huge and largely unrepentant funder of fossil fuels. If they were to accept what their own report is saying, it would require them to revolutionise their business



artwork | Celeste Sterling

Planting trees must not distract from reducing emissions

by **DR CHARLIE GARDNER** @CharlieJGardner

It is difficult to get away from talk of tree planting these days. Everyone is proposing it, which is important progress, because even if we manage to reach zero emissions within years as the science demands, we will still need to suck some of the carbon dioxide we've already emitted out of the air.

Planting new forests, or preferably letting them regenerate naturally, is one of the quickest and cheapest ways to address the climate and ecological crisis. However, ecosystems alone cannot absorb all our carbon emissions, as there simply isn't enough land. So tree planting must be done in addition to eliminating our emissions, and must not be used as an excuse to avoid it.

Beyond absorbing carbon, trees also reduce flooding, prevent soil erosion, and provide habitat for wildlife such as insect pollinators and birds. But mature trees generally do this much better than saplings, and creating a forest from scratch isn't easy. Forests take many decades to mature and reach the same level of diversity and carbon storage as ancient woodland. With this in mind, preventing the destruction of ancient woodlands for development of housing and

infrastructure, such as HS2, is a much greater priority than new planting.

Tree planting is still important, but we must do it right, and that means having the right trees in the right places. In the past, forestry policy has focused on industrial monocultures of non-native conifers, but these plantations are virtual deserts for wildlife, and have little of the conservation or amenity value of native broadleaf woodlands.

Instead we should be planting diverse forests of native broadleaved trees if we want to maximise the value of our forests. We also need to consider where to put them, because trees don't naturally occur everywhere. Our islands have many rich and diverse habitats, such as heaths, grasslands and peat bogs, which are naturally treeless. Afforesting them would be counterproductive, not only destroying valuable wildlife habitat but also potentially releasing carbon already stored in the soil.

Critically, we must make sure that tree planting doesn't distract effort or resources away from eliminating emissions, or protecting the irreplaceable forests we have, not just in Britain, but around the world. ■

TRUTHTELLER.LIFE

FIGHTING FOR CHANGE FOR HEDGEHOGS

by **HUGH WARWICK** @hedgehoghugh

When Change.org asked if I would like to launch a petition on their website I was a little sceptical, but then they pointed out that I could make a call for something that would help return hedgehogs back to their former glory.

My idea was simple: 'This petition calls on the dismantling of industrial capitalism and the replacing of it with something kinder,' but they said no.

We worked on it for a while until we came to a compromise. It was almost embarrassingly small - I launched a petition calling on all new housing developments to come with a hedgehog highway as standard. The new fences that come with the pocket handkerchief gardens need to have a small hole, just 13cm across, in the base. This allows hedgehogs to move freely from garden to garden.

Hedgehog numbers are down by 30% in urban areas and 50% in rural areas since the year 2000. There has probably been a population decline of 90 to 95% since the 1950s. A large part of this is the loss of food and shelter



photo | Zoe Broughton

that comes with industrialised agriculture.

One of the biggest threats hedgehogs face is habitat fragmentation - the splitting of our landscape into small pieces. Our research has shown that hedgehogs can travel 2km a night

The new fences that come with the pocket handkerchief gardens need to have a small hole, just 13cm across, in the base. This allows hedgehogs to move freely from garden to garden

in search of food, shelter and mates.

By the time the petition reached half a million signatures I was invited to a meeting with the housing Minister, and in July 2019 the National Planning Policy Framework was altered to include guidance calling for hedgehog highways to be included

in new developments. Then in January this year Bovis (the fourth largest developer in the country) committed to creating hedgehog highways whenever feasible in all new developments, and to start a campaign to retrofit. This is not a full victory though - the teeth required to enforce the guidance have been removed.

When I sit in my shed and feel adrift in my campaign to change the way we treat nature I get a kick of joy from realising that I am not alone. So I persist, and I would love you to join me by signing and sharing the petition. We can make changes that may seem small to us - but these small changes mean the world to a hedgehog. ■

Hugh Warwick is an author, ecologist and spokesperson for the British Hedgehog Preservation Society.

Hugh's petition can be found at: change.org/SaveOurHedgehogs

March against racism

'We must all work harder to repair the fissures and polarization that are so prevalent in our societies today. We must nurture mutual understanding and invest in making diversity a success. And we must counter and reject political figures who exploit differences for electoral gain.'

UN Secretary-General António Guterres

by **JOHN SINHA**

The 21st of March is the United Nations' International Day for the Elimination of Racial Discrimination. It is an important date on the calendar for those of us who understand that increased racism will be one outcome of climate breakdown. Everywhere, the climate and ecological crisis will disproportionately affect communities of colour.

According to a recent study by Cornell University, 1.4 billion people could be forced to leave their homes by 2060 and this number could rise to two billion by 2100.

Extreme weather events are already devastating communities. In 2016, 'weather-related sudden-onset hazards', such as cyclones and floods displaced around 23.5 million people. In the first half of the year 2019, 7 million people were internally displaced by such weather events, according to the Internal Displacement Monitoring Centre. This is a record number, and it's twice as big as the number of people displaced by violence and conflicts.

In central America, desperate Campesinos are migrating north due to the collapse of agriculture, especially coffee production. They are reaching the wall Trump is building on the border with Mexico. This is a wall of climate apartheid, designed to keep out the victims of climate breakdown.

When Hurricane Dorian struck



the Bahamas last year, it was left to a cruise ship to pick up the survivors. When Trump falsely claimed that Dorian would make landfall in Alabama, this became the big media controversy, rather than the fact that he had prevented a cruise ship carrying survivors from disembarking in US ports.

We know that the hardest impacted victims will be in the Global South. Climate change is one of the factors driving migration from Africa and forcing people to make the perilous crossing across the Mediterranean. According to a recent NGO, there were over 34,000 documented refugee deaths in the Mediterranean as a result of Europe's border regime.

The climate crisis doesn't care about skin colour or borders. We invite you to join us between 12-4pm on the 21st of March in central London. ■

Find your local event page at <https://www.facebook.com/events/518483265364312/>

Investing with your morals

by **KEITH LEWIS**

There is now evidence in favour of sustainable investment as a sound financial strategy. While many traditional investment funds have traditionally been heavily invested in fossil fuels, this is now changing. Large institutional pension investors as far-ranging as New York City and the National Trust have committed to divest from fossil fuels. Last year, 300 UK MPs also backed a campaign to divest their pension fund from fossil fuels.

Any continued success of oil (read: a rising price) will only serve to accelerate its own decline.

Even at its lowest ebb, oil is becoming increasingly uncompetitive as the price of cleaner energy plummets. These are among the reasons that Mark Carney, Governor of the Bank of England, has warned that the transition away from carbon intensive investments could be the next big financial bubble.

The financial media outlet, Dow Jones, runs a sustainability index that assesses the sustainability

Any continued success of oil (read: a rising price) will only serve to accelerate its own decline. Even at its lowest ebb, oil is becoming increasingly uncompetitive

of global companies against one another. It has found that the share prices of those companies at the higher end of the index tend to perform better than the more carbon-intensive firms at the bottom. However, few firms seem willing to align their own investments with climate goals such as the Paris targets. Axa, for example, still has significant assets tied up in oil companies through its investment funds.

As investors we can help to speed up the shift towards a greener economy and assert more pressure on financial firms. Find out about your existing pension funds, and speak to your provider or a financial advisor about switching to more sustainable alternatives; most of the big investment firms now run them. There are also many customer-friendly digital wealth managers (firms like Nutmeg or Wealthify) whose low-cost digital services put sustainable investment options at the forefront. ■



photo | Hector Durham

STAR LETTER

On HS2

They talk about HS2 serving the North, but it seems apparent that the North stops at Manchester or, stretching it, to Leeds. What happened to Newcastle, Sunderland, Middlesbrough and of course our Scottish friends? We have been missed out of the equation.

Why would we want to sacrifice all that land to get to London from the North East about 15 minutes earlier? We are not in that big a hurry. Why don't they use their clever technology to produce first class trains and first class services on our existing tracks? Just think of the times when trains have to run slow because of leaves or debris on the line, how will that impact our new 250mph trains? It's bad enough hitting a few tree branches on the line at over 100mph.

As a nation we are falling behind other nations. Have they considered the extra maintenance these new trains will need? It is bad enough keeping the present rolling stock to maintain the speed they do in a safe and efficient way. All this additional work will cost the people of this country dearly, only to appease a few fat cats who want to get to work a few minutes earlier. If it's that important to them, they can simply live closer to their work and not have to travel in the first place.

JACK JORDAN, The North

Re. Help Earthworms Thrive (issue 2, page 5)

The final paragraph of Rhys Handley's article mentions 'natural capital'. The term has real meaning. 'Natural Capital'* refers to the process whereby profit is made from trying to right the problems of previous exploitation in the natural world. Significantly, in the case of worms, land is used for massive factories by agribusinesses, which means that they cannot thrive in their natural environment.

We need the worms and all the other bugs that are there to create a liveable diverse world. Not a world where more profit is

squeezed from the land contributing to the worms destruction by 'Natural Capital'.

ALAN WATTS, Haringey

*See: 'System Change Not Climate Change.' Natural Capital: A Neoliberal Response. Ian Rappel Ch. 5

Who said it?

In the long run my observations have convinced me that some men, reasoning preposterously, first establish some conclusion in their minds which, either because of its being their own or because of their having

received it from some person who has their entire confidence, impresses them so deeply that one finds it impossible ever to get it out of their heads. Such arguments in support of their fixed idea as they hit upon themselves or hear set forth by others, no matter how simple and stupid these may be, gain their instant acceptance and applause. On the other hand whatever is brought forward against it, however ingenious and conclusive, they receive with disdain or with hot rage -- if indeed it does not make them ill. Beside themselves with passion, some of them would not be backward even about scheming to suppress and silence their adversaries. I have had some experience of this myself.

Answer: Galileo

Extra factoid: Galileo's Heliocentrism was finally accepted by the Vatican in 1992, the same year the IPCC was formed.

ALEX ZEFFERTT

Big business needs reigning in

I recently read your great free paper The Hourglass. It's very thought provoking. I have been doing the best I can over the years to help the environment. I have been involved at one point with Friends of the Earth, and when I was in my 20s, I went on a couple of whale marches with Greenpeace. I recycle as much as I can at home, our council in Cheshire being very good with recycling. I read (with disgust) that Donald Trump is going to take away the laws preventing big business in the US polluting the environment.

I have learned over time that it is pointless trying to get sympathy for the ecosystem and the dire straits that the whole planet faces from big business moguls. The only way to get the message across to them is in the only language that they understand. They need to be told that unless they change policies (that should have been changed decades ago), the big bucks that they are so greedy to make, will be of no use to them. It's not only other ordinary people the world over that will bear the brunt of their deplorable, selfish actions, they will too!

Everyone the world over, from the person in the street to global organisations and businesses, need to work together to tackle this emergency while there is still time. However, it's very encouraging, on a brighter note, that a lot of ordinary people the world over are coming together to demand change. Carry on with your excellent work.

JILL PEARS, North West

Re. Industries Adapt to Address the Crisis

Thank you for highlighting the problem with fast fashion clothing and accessories.

From working in the slow-fashion industry, I can tell you that there are quite a few clothing brands who design and produce slow fashion, also called eco-fashion,

responsibly. If Hourglass readers need to buy new clothes, I recommend doing a bit research first and don't be shy asking questions before you buy:

- Look for organic cotton. Ask or look out for certification
- Check the material. Natural fibres last much longer and are healthier to our skin and are biodegradable. Due to the better and sustainable quality they will be more expensive. It will pay off though, because the garments will last you for many years.
- Check the dyes. Make sure that any dyes used are environmentally-friendly
- Assess the packaging. Many eco-fashion brands use plastic-free packaging

IRENA, Launceston

Re. Paul Scholes's letter (issue 5)

On the letters page of issue 5 Paul Scholes says that we must work alongside people of all political persuasions to save our planet, which I agree with. However in reality only a progressive positive left wing society can solve our problems. Before the capitalist system replaced former organisation there were no such problems. The greed which is the basis of a capitalist society has caused this situation to develop. Only a well organised left wing society is capable of solving it.

KENNETH LOUIS SHEPHERD, Essex

We need a green alliance

I am reminded of events in the early noughties following the Iraq war. There was at that time an attempt to bring together the divided left - it was called the socialist alliance (SA). I lived in London then, had left the Labour Party and was extremely excited when I joined SA. The alliance grew well for a couple of years and we really did believe it was going to be a new force in politics.

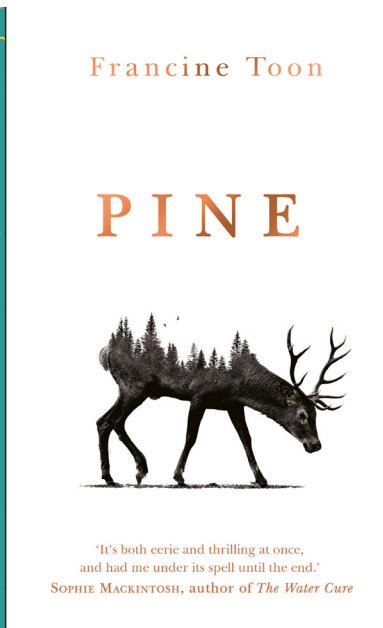
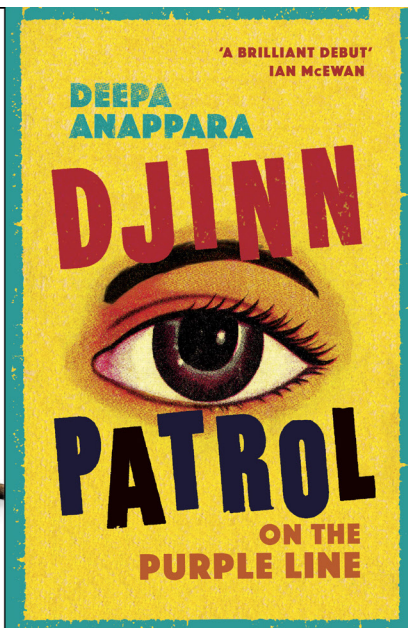
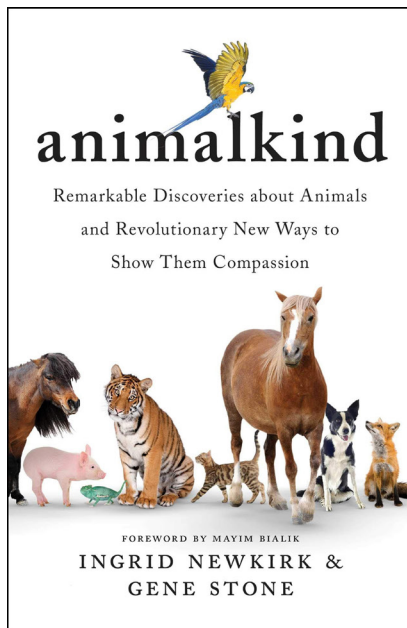
Then George Galloway arrived on the scene ready and eager to become our new leader - renaming SA 'Respect'. The result was that SA was split and it all withered away quite quickly, albeit providing Galloway with some brief success.

It was estimated that on 20th March 2003 over one million people took to the streets of London to demonstrate against the Iraq war. This was possible because many groups talked to each other and organised. A green alliance could do the same for climate breakdown and biodiversity - perhaps even with greater numbers. With no disruption (apart from sheer bodies) this time we could take many more people with us as we did then.

JOHN WALSH, North Norfolk

Book Reviews

Available in
bookstores now



by **HENRY ROWLEY**

Animalkind by Ingrid Newkirk and Gene Stone

Published by Simon and Schuster

Animals have never had it so good. In *Animalkind*, Ingrid Newkirk (founder of PETA) and Gene Stone (*How Not to Die*) are keen to emphasise this. The 20th century saw rapid escalation of the animal rights movement and the changes in recent decades have been vast, partly due to the research constantly revealing the unique complexity and intelligence of different species. In *Animalkind* the authors present these findings to us, depicting highly sophisticated, organised societies, full of distinct, characterful individuals, many with loves and fears much like our own.

Despite shocking accounts of the cruelty billions of animals face daily, the tone of *Animalkind* remains largely optimistic, and the second half of the book acts as a practical guide to the innovative new ways we can avoid harming animals. Despite a few overoptimistic (VR safaris), overenthusiastic (vegan eggs) suggestions, it's hard not to be swept up and inspired by the kinder, exploitation-free world that the authors lay before us. *Animalkind* asks us to honour both the similarities and the differences between humans and other animals. Learning of the high 'divorce rate' amongst swans,

and pigs that enjoy computer games, helps us to feel closer to our co-inhabitants, but equally important is that we respect our very different evolutionary paths.

Djinn Patrol on the Purple Line

by Deepa Anappara

Published by Chatto and Windus

In Deepa Anappara's exhilarating, vivid, and moving debut novel, danger and uncertainty reign. Life is precarious for our young narrator, Jai, and his schoolmates Pari and Faiz, as they navigate life in a poor community on the outskirts of an unnamed Indian city.

Colour is everywhere in these scenes, but it's seen through a thick smog that enshrouds the city and all its goings-on. At times the atmosphere is otherworldly, and the strong presence of myth - ancient and urban - means the occasional, sudden, scares are sometimes supernatural in feel. As the novel progresses, the comfort and hope of the initial mystery give way to the reality of the struggles the children and their families face. Anappara, who worked as a journalist documenting the lives of India's poor children, has done a remarkable job of telling their stories, while delivering a bold, skilful mystery novel.

Pine

by Francine Toon

Published by Doubleday

Pine revolves around Lauren, a ten-year-old girl living in the Scottish Highlands with her father, Niall. Small town rumour, school bullying and her disorderly, drunk father cast shadows over her life, as does the absence of her mother, who mysteriously disappeared when Lauren was just a baby. Toon creates atmosphere brilliantly, one that is true to its highland setting, and thick with supernatural menace. She also does a fine job of depicting life in a small, isolated community, and this is often captivating.

Losing Eden by Lucy Jones

Published by Allen Lane

As we face ecological crisis, humans have arguably never been more disconnected from the natural world. In *Losing Eden*, Lucy Jones makes an impassioned and articulate case for why we desperately need to reconnect, for our personal wellbeing and for that of the planet. Drawing from a growing body of scientific evidence, *Losing Eden* is a fascinating guide to the deep bonds that exist between our psychological health and the natural world.

Those with tree-view rooms in hospitals recover more quickly than those without. Antidepressant prescriptions are lower in areas with lots of trees

and greenery. By destroying nature we are destroying ourselves, and by removing it from our children's lives (three quarters of children in the UK spend less time outdoors than prison inmates) we are discouraging the next generation from protecting it. Jones makes this case with journalistic eloquence. *Losing Eden* is sad and scary, but not without hope.

Bad Island by Stanley Donwood

Published by Hamish Hamilton

Stanley Donwood has been working with Radiohead since the beginnings of the band, his artwork providing them with the strong visual aesthetic that has always felt integral to their music. In his new graphic novel, *Bad Island*, Donwood tells the story of

an Earth-like environment, from primeval times to the present day.

Turning the first pages, moving through towering waves and dark clouds, we approach the island. It's rich with nature and occupied by large, peculiar beasts. As natural disasters cause devastation, and life rebuilds itself, these mysterious animals begin to take hold of the story. They exploit the land and the other animals to create their civilization, and soon we find ourselves in an environment that feels very familiar, full of chaos and destruction. Told without words in stark, beautiful, monochrome, *Bad Island* is a chilling and immersive history of mankind. It's a bleak vision, and all we can hope is that the next chapter of this story is very different. ■



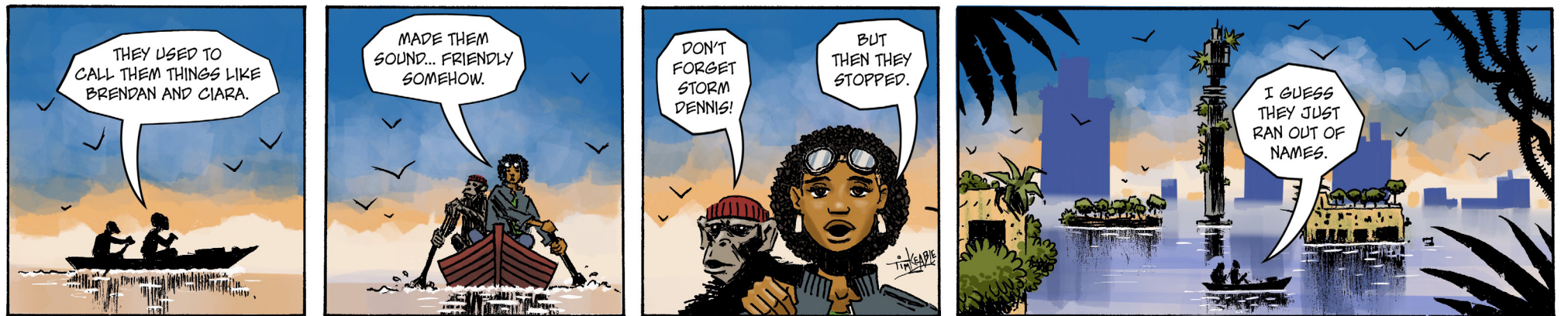
FUNNY PAGE

ACT NOW by Mair Perkins

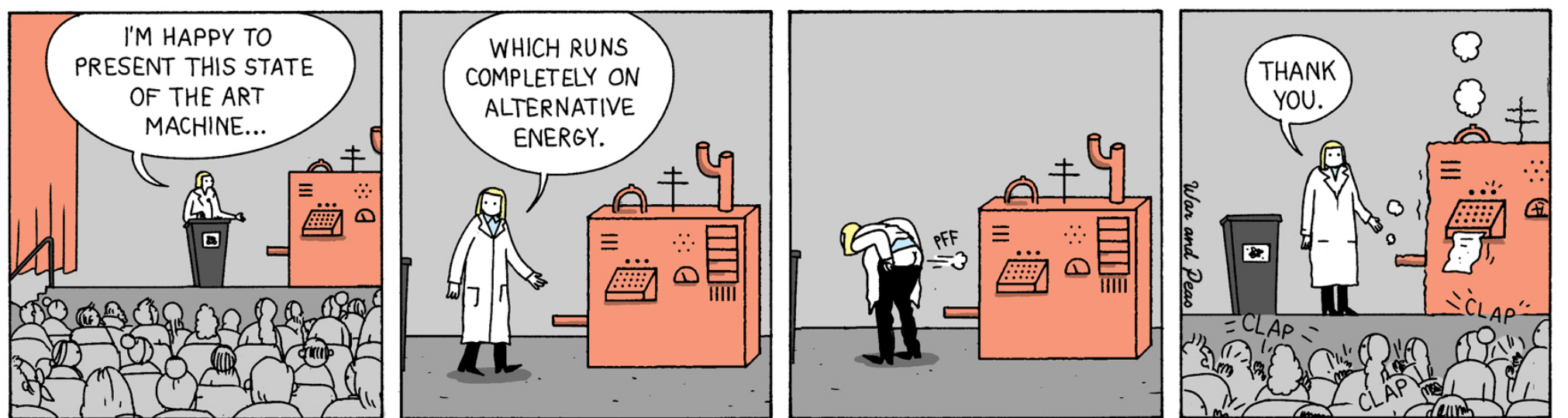
DRAWING THE LINE by polyp.org.uk



THE ADVENTURES OF TUPPENNY & ALBRECHT by Tim Keable and lettered by Andrew Cheverton



THE FUTURE by War and Peas @warandpeas



CAPTAIN REBEL by Philip Kingslan John



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