Broadsheet

The Magazine for Broadland Tree Wardens

Issue 220 – August 2023

It's Getting Hotter

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The Monthly Magazine for Broadland Tree Wardens

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Inside this issue

This Month's Cover Picture

A friend I made in Sheringham Park.

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It is circulated free of charge to Broadland Tree Wardens parish and town councils, parish meetings and other interested parties.

It's Getting Hotter

GEORGINA RANNARD, Erwan Rivault and Jana Tauschinski, BBC Climate Reporter and data team, reported that a series of climate records on temperature, ocean heat, and Antarctic sea ice have alarmed some scientists who say their speed and timing is "unprecedented". Dangerous heatwaves in Europe could break further records, the UN says.

It is hard to immediately link these events to climate change because weather and oceans are so complex. Studies are under way, but scientists already fear some worst-case scenarios are unfolding.

"I'm not aware of a similar period when all parts of the climate system were in record-breaking or abnormal territory," Thomas Smith, an environmental geographer at London School of Economics, says.

"The Earth is in uncharted territory" now due to global warming from burning fossil fuels, as well as heat from the first El Niño, a warming natural weather system, since 2018 says Imperial College London climate science lecturer Dr Paulo Ceppi.

Here are four climate records broken so far this summer and what they mean.

The world experienced its hottest day ever recorded in July, breaking the global average temperature record set in 2016. Average global temperature topped 17°C for the first time, reaching 17.08°C on 6 July, according to EU climate monitoring service Copernicus.

Ongoing emissions from burning fossil fuels like oil, coal, and gas are behind the planet's warming trend.

This is exactly what was forecast to happen in a world warmed by more greenhouse gases, says climate scientist Dr Friederike Otto, from Imperial College London.

"Humans are 100% behind the upward trend," she says.

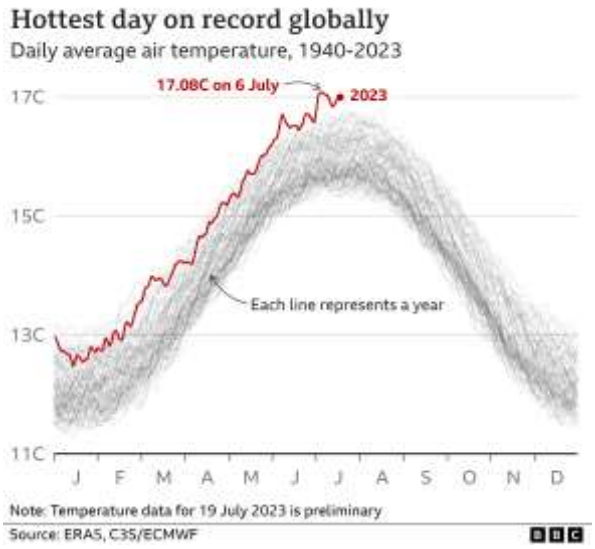
"If I'm surprised by anything, it's that we're seeing the records broken in June, so earlier in the year. El Niño normally doesn't really have a global impact until five or six months into the phase," Dr Smith says.

El Niño is the world's most powerful naturally occurring climate fluctuation. It brings warmer water to the surface in the tropical Pacific, pushing warmer air into the atmosphere. It normally increases global air temperatures.

The average global temperature in June this year was 1.47°C above the typical June in the pre-industrial period. Humans started pumping greenhouse gases into the atmosphere when the Industrial Revolution started around 1800.

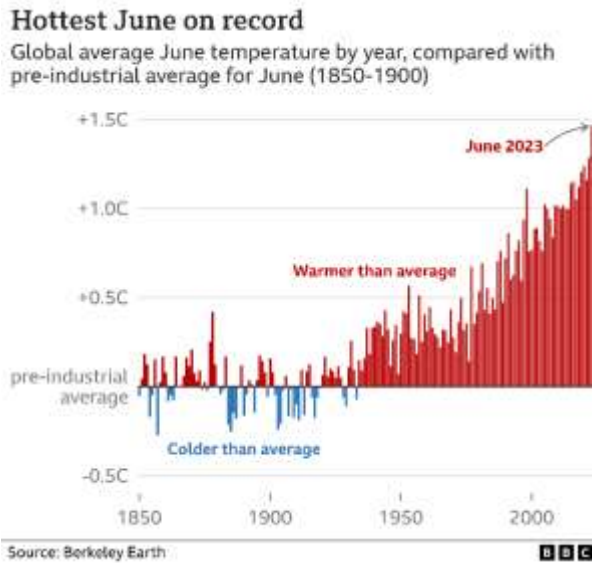
Asked if summer 2023 is what he would have forecasted a decade ago, Dr Smith says that climate models are good at predicting long-term trends but less good at forecasting the next 10 years.

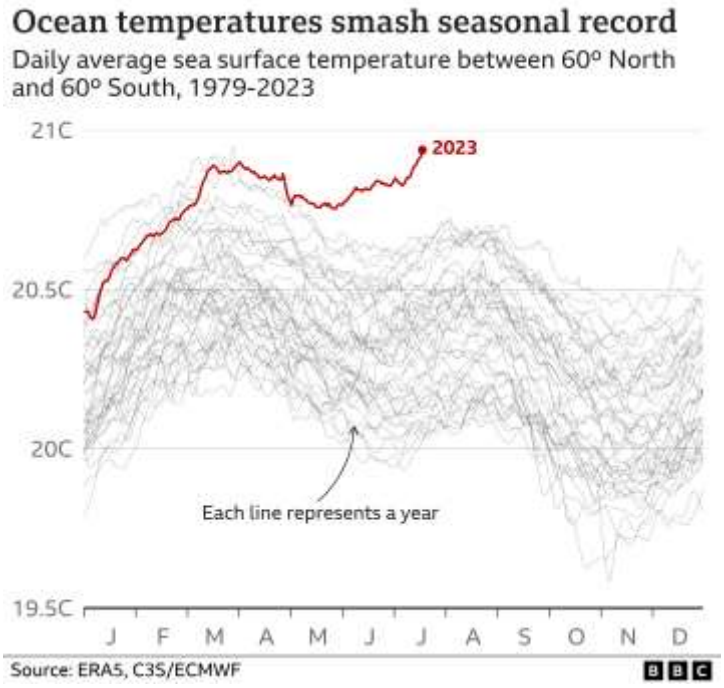
"Models from the 1990s pretty much put us where we are today. But to have an idea about what the next 10 years would look like exactly would be very difficult. Things aren't going to cool down," he says.



The average global ocean temperature has smashed records for May, June and July. It is approaching the highest sea surface temperature ever recorded, which was in 2016, but it is extreme heat in the North Atlantic ocean that is particularly alarming scientists.

"We've never ever had a marine heatwave in this part of Atlantic. I had not expected this,"





says Daniela Schmidt, Prof of Earth Sciences at the University of Bristol.

In June temperatures off the west coast of Ireland were between 4°C and 5°C above average, which the National Oceanic and Atmospheric Administration classified as a category 5 heatwave, or "beyond extreme".

Directly attributing this heatwave to climate change is complex, but that work is ongoing, Prof Schmidt says.

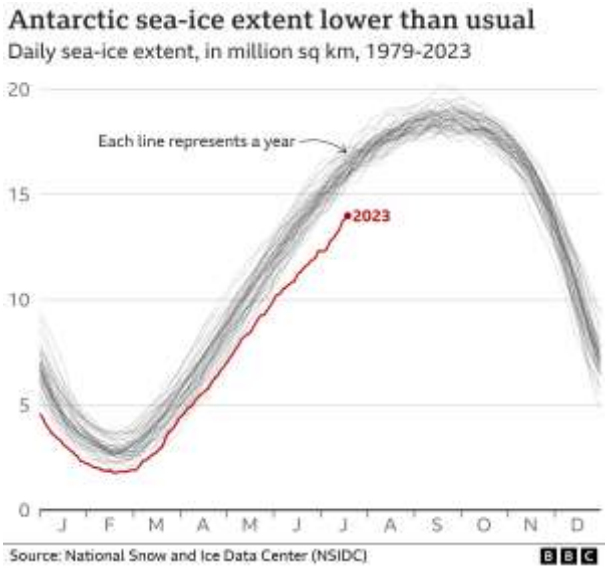
What is clear is that the world has warmed and the oceans have absorbed most of that heat from the atmosphere, she explains.

"Our models have natural variability in them, and there are still things appearing that we had not envisaged, or at least not yet," she adds.

She emphasises the impact of this heat on marine ecosystems, which produce 50% of the world's oxygen.

"People tend to think about trees and grasses dying when we talk about heatwaves. The Atlantic is 5°C warmer than it should be - that means organisms need 50% more food just to function as normal," she says.

The area covered by sea-ice in the Antarctic is at record lows for July. There is an area around 10 times the size of the UK missing, compared with the 1981-2010 average.



Alarm bells are ringing for scientists as they try to unpick the exact link to climate change.

A warming world could reduce levels of Antarctic sea-ice, but the current dramatic reduction could also be due to local weather conditions or ocean currents, explains Dr Caroline Holmes at the British Antarctic Survey.

She emphasises it is not just a record being broken - it is being smashed by a long way.

"This is nothing like anything we've seen before in July. It's 10% lower than the previous low, which is huge."

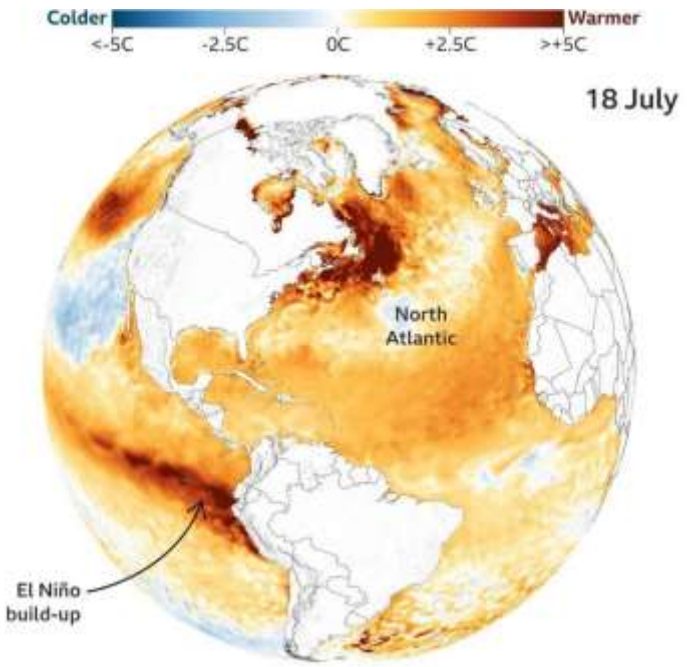
She calls it "another sign that we don't really understand the pace of change".

Scientists believed that global warming would affect Antarctic sea-ice at some point, but until 2015 it bucked the global trend for other oceans, Dr Holmes says.

She says "You can say that we've fallen off a cliff, but we don't know what's at the bottom of the cliff here. I think this has taken us by surprise in terms of the speed of which has happened. It's definitely not the best-case scenario that we were looking at - it's closer to the worst case."

We can certainly expect more and more of these records to break as the year goes on and we enter 2024, scientists say.

However, it would be wrong to call what is happening a "climate collapse" or "runaway warming", cautions Dr Otto. We are in a new era, but "we still have time to secure a liveable future for many", she explains.



IN ANOTHER article, Georgina Rannard reported that during June records were broken in 72 of the 97 areas in the UK from which temperature data is collected.

As well as the overall UK June record, England, Scotland, Wales and Northern Ireland each record-ed their warmest June since the Met Office started collecting the data in 1884.

"It's officially the hottest June on record for the UK, for mean temperature as well as average maximum and minimum temperature," said Met Office's Climate Science Manager Mark McCarthy.

"An increase of 0.9°C may not seem a huge amount, but it's really significant because it has taken the average daytime and the night time temperature for the whole of the UK," Paul Davies, Met Office chief meteorologist and climate extremes principal fellow, told BBC News.

"That's significant in a warming climate and because of the consequential impacts on society," he added.

He also said that while the UK recorded a higher one-off temperature of 40.3°C last summer, the difference last month was the sustained heat both day and night.

The west of the UK was often hotter than the east, which had increased cloud levels suppressing daytime temperatures, the Met Office said. Rain was also in short supply for much of the month, with just 68% of the average June rainfall. Wales was particularly dry, with just over half of its average monthly rainfall.

The Met Office used a supercomputer to analyse the temperatures and identify the fingerprint of climate change on the weather.

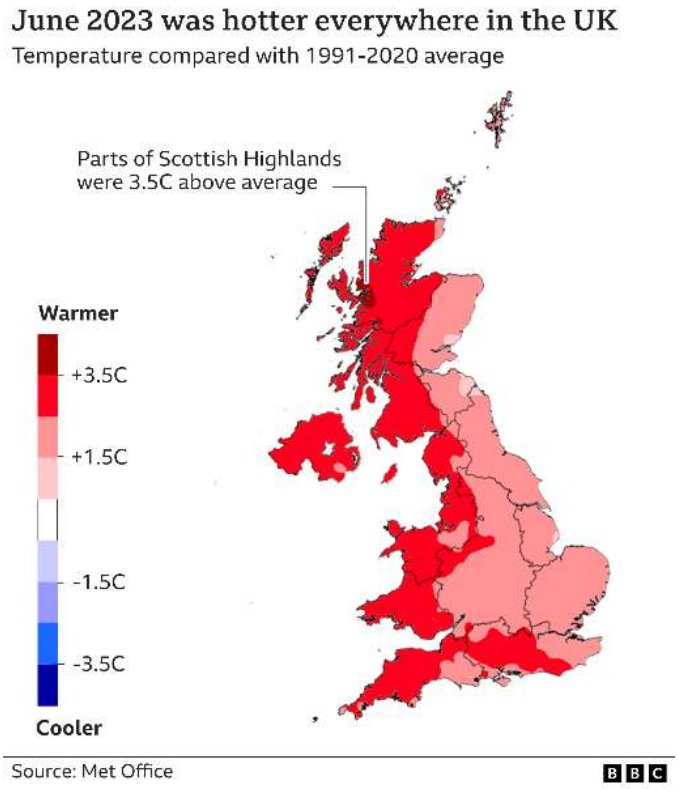
Mr Davies explained "We found that the chance of observing a June beating the previous joint 1940/1976 record of 14.9°C has at least doubled since the 1940s. Alongside natural variability, background warming of the Earth's atmosphere due to human-induced climate change has driven up the possibility of reaching record-high temperatures".

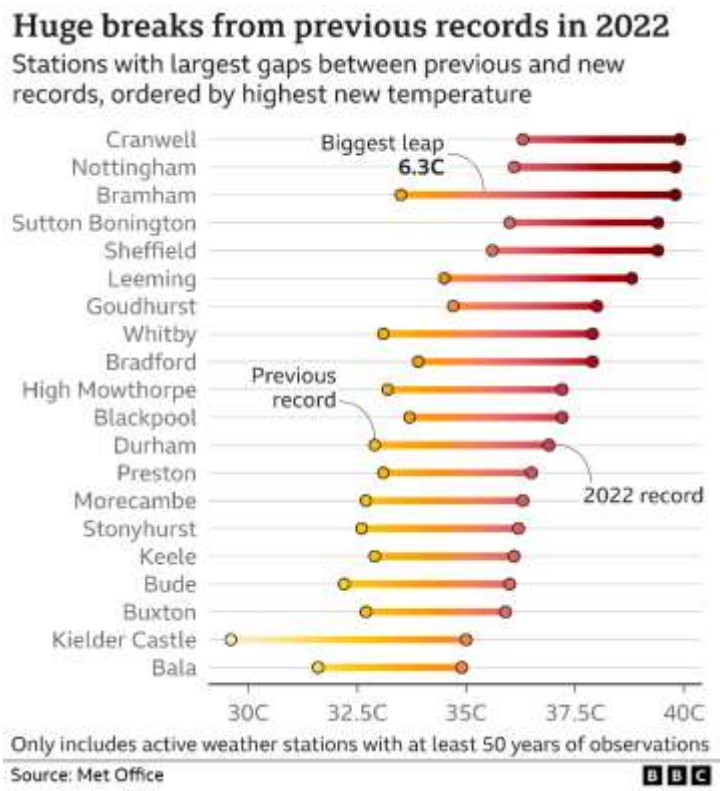
Climate change is driving extreme weather events around the world. The world has warmed by about 1.1°C since the industrial revolution about 200 years ago.

Greenhouse gases have been pumped into the atmosphere by activities such as burning fuels, which have heated up the Earth's atmosphere.

Last year the UK record-ed temperatures above 40°C for the first time. Scientists said that would have been "virtually impossible without climate change".

Dr Richard Hodgkins, senior lecturer in physical geography at University of





Loughborough says it is notable how the warm weather "fits expectations of a changing climate in the UK".

He said researchers have been predicting patterns where weather appears to get "stuck", which would mean longer heatwaves.

The hot June was "somewhat like a typical weather event for the UK, but stretched out in time much longer than normal," he added.

The dry and warm weather last month affected wildlife and nature with environment groups warning of fish deaths and flowering plants wilting.

Nature is being "pounded by extreme weather without a chance to recover", the Wildlife Trusts told BBC News.

MATT MCGRATH, BBC Environment Correspondent, reported that the Met Office says that the record-breaking UK heat experienced in 2022 will be regarded as a cool year by the end of this century.

Its report shows that last year was "extraordinary", with a heatwave pushing the UK record over 40°C for the first time.

Hot years like 2022 will be the average by 2060, if carbon emissions are as expected, the authors say. By 2100, it would be a cooler-than-average year across the UK.

Climate change is having an increasing impact on all parts of the UK, playing a key role in pushing last year's temperatures to record highs. 2022 was the warmest year in UK records dating back to 1884, and it also broke the Central England temperature series that goes back to 1659.

The UK's highest daily temperature last year was 40.3°C, recorded at Coningsby in Lincolnshire, which beat the previous high mark by a large margin. This was not an isolated incident, according to the Met Office, with persistent warmth prevalent across the year.

The Met Office's State of the UK Climate report for 2022 shows that apart from December, every month last year was warmer than the 1991-2020 average.

As well as persistent warmth, one key aspect of the study shows that extreme temperatures in the UK are changing much faster than the average.

Lead author Mike Kendon said "The actual extremes that we're seeing, the highest, the hottest days, those are really increasing markedly too. We're going to see very, very many more days, exceeding 30°, 32° or 35°C. So warmer summers will become very much more frequent, and hot days will become very much more frequent."

The authors say that the UK's record year was made much more likely by climate change.

Mr Kendon said "The heatwave that is happening now across southern Europe, the heatwave that we saw last year, all of these things are fitting into a pattern. These things emphasise that our climate is changing. And it's changing now, and it's changing fast."

Looking forward, under a medium emissions scenario, there's a 1 in 15 chance that the UK would hit 40°C in any one year.

Prof Liz Bentley, chief executive of the Royal Meteorological Society, said "That trend for (extreme temperatures) is going to increase as we go through this this century. If you look at future climate projections, we are on a path for hotter, drier summers. So 2022, for me was very much a sign of things to come in future years with our changing climate."

Earlier in July, the government's independent climate advisers warned that the UK still needed to make climate change preparations a more important priority.

The extreme 40°C heat in July last year caused extensive disruption across the country, including for transport, power supply and health care.

However, even though these temperatures will become increasingly likely with climate change, the UK still has much further to go to properly prepare for intense heat and other extreme events like flooding, according to its advisers.

One of the elements that might have led to a very hot year in 2022 and may explain the current wetter summer are changes in the jet stream, the fast moving winds that carry weather systems across the Atlantic to the UK.

In recent years the jet stream has shown a tendency to get stuck, meaning that weather patterns can persist or become "blocked" in place for weeks. There is a school of thought that a warming climate is causing this change.

"I think the jury is out, but there is definitely some science showing that we are getting these much more persistent, static kind of weather patterns, similar to what we've got at the moment with the heat waves," said Prof Bentley.

"It'll be interesting to see if there's conclusive evidence that climate change has led to that and that's going to be a pattern that we see going forward in future."

The report also underlines some other key impacts of climate across the UK last year. The ten year period from 2013 to 2022 is the warmest ten-year period on record. Near coast sea surface temperatures were the highest for the UK in a series dating back to 1870.

Last year was also one of least snowy years on record, compared to the last six decades.

I WAS most concerned to read and article by Justin Rowlatt, Climate Editor for BBC News, reporting that an internal government document seen by the BBC says that the government looks set to break its flagship £11.6bn climate and nature funding pledge for developing countries.

The document details how the government has consistently underspent and would now struggle to meet its 2026 target. Some 83% of the total overseas aid budget would need to be reallocated to climate to catch up, it adds.

The government says it will honour promises made on climate finance.

"The government remains committed to spending £11.6bn on international climate finance and we are delivering on that pledge," a government spokesperson said.

Former Prime Minister Boris Johnson pledged in 2019 to double the amount spent on the UK's international climate finance (ICF) - aid for vulnerable nations to deal with the causes of climate change - to at least £11.6bn between 2021/22 and 2025/26, but the document says "subsequent turbulence" (referring to economic shocks such as the Covid pandemic) "has turned a stretching target into a huge challenge".

Overall international aid spending has also since been cut to 0.5% of GDP, down from 0.7%. Civil servants have calculated the government is now so behind on its spending promises it would have to spend 83% of the total foreign aid budget on climate to meet the ICF target by 2026.

That would require a "reorientation" of the budget on a scale which has "not previously been achieved", they say. Doing so would also mean that there would be no cash left for other priorities such as projects "specifically targeted at helping women and girls", civil servants write.

The revelations follow Tory peer Lord Zac Goldsmith's resignation from Rishi Sunak's government last week over what he described as the prime minister's "apathy" towards climate change.

Lord Goldsmith has told the BBC that in his view, the low levels of expenditure so far combined with the decision to define our spending on Afghan and Ukrainian refugees here in the UK - something he says other countries have not done - means "it is going to be virtually impossible to honour the promise."

"Whoever is in government after the next election", he said, "would have to savagely slash humanitarian, education, health and other funding in order to hit the £11.6bn target."

Lord Goldsmith said he was worried that small island states in particular "will be left feeling utterly betrayed" and said the UK's reputation as a "reliable partner" will "simply be shredded".

That is a view that is echoed by many in the overseas aid community.

"Frankly it is embarrassing", a director of one UK aid agency told the BBC. "The cuts make it supremely difficult to credibly state the UK remains a climate change thought leader. There used to a be a huge amount of goodwill across Africa for the UK". We were seen as the best in the sector, engaged and effective. This is no longer the case. The UK is now seen as an unreliable partner."

Mr Sunak insisted Lord Goldsmith had quit after being asked to apologise for comments he made about the Privileges Committee inquiry over the conduct of Boris Johnson and whether he had intentionally misled the House of Commons as PM.

However, Lord Goldsmith denied this, instead saying his decision to step down had been a "long time coming".

The ICF refers to UK aid given to support vulnerable countries to deal with the causes of climate change, including preventing deforestation and reducing carbon emissions, as well as preparing for its effects. It forms a part of the global commitment to spend $100bn a year on climate finance for developing countries.

CAROLINE WHEELER, Sunday Times Political Editor, and Matt Dathan reported that Ed Miliband gave an animated Powerpoint presentation to the shadow cabinet on his revolutionary energy policies, speaking excitedly of the hope and change he believed they would bring.

His reception from Sir Keir Starmer, however, was decidedly lukewarm.

“[Starmer] thanked him for his presentation, but said he wasn’t interested in hope and change, he was more interested in creating sustainable new jobs to replace jobs in old sectors that were being lost,” said a source. “He then said he was not interested in tree-huggers, before adding to everyone’s surprise, ‘In fact, I hate tree-huggers’.”

The comments surprised some in the meeting, which took place the day after Starmer gave a speech on energy strategy in Aberdeen last month, but they are symptomatic of the divide that exists between him and Miliband.

Those close to the leader believe it is the economic challenge, not climate change, the party needs to focus on. They see Miliband as an eco-warrior who is more interested in the green agenda than the party’s central priorities of jobs, bills and energy security.

A shadow cabinet minister said: “Keir is always trying to anchor the party. Ed will always try to toe the line by saying that the party’s priorities are jobs, bills, energy security and climate change in that order. He can’t help himself. He is a hopey-changey kind of person.”

Morgan McSweeney, Labour’s election chief, is frustrated by those in the party pushing the green policies. A source close to him said: “He sees everything through the prism of electoral success. He sees everything else as a distraction. He wants to throw the excess baggage off the boat and just concentrate on the economy.

“He thinks the focus, for example, on the party’s pledge to end all North Sea gas and oil licences has been an unhelpful distraction, and something the Tories can easily weaponise.

“In contrast, he wants to see more focus on the party’s Bidenomics-led policies, which amounts to an ambitious plan for creating the industries and jobs of the future.”

Rachel Reeves, the shadow chancellor, and Pat McFadden, the shadow chief secretary to the Treasury, are among the “sceptics” who think the focus on a green agenda is complicating Labour’s key messages. A source familiar with their thinking said: “They want to talk about economic change not climate change.”

Another member of the shadow cabinet said the party risked shooting itself in the foot by becoming obsessed with the climate-change agenda, where there are “very few votes”.

The row has been rumbling on since last year’s annual party conference in Liverpool, when Starmer’s most senior advisers, including Deborah Mattinson, his director of strategy, and Peter Hyman, a former aide, wanted to change the colour of the party’s red rose emblem to green. They argued that commitment to the environment and “green stuff” should be one of the Labour leader’s overarching messages.

They were overruled by others, including the unions, who thought the idea was “mad”, given the inflation crisis.

A senior party source said: “Much of the tensions that exist now are a throwback to conference. There have been those who have been pushing the green agenda, but recent events have shown that tactic could easily backfire, and there is an overriding sense among most in the shadow cabinet that we need to strip everything back and talk about our core messages.”

In recent weeks, Labour has faced scrutiny of policies seen to have been the brainchild of Miliband, including the plan for £28 billion a year in capital spending on green growth and a commitment to ban new oil and gas developments in the North Sea.

Starmer is also under pressure from the Conservative Party for taking £1.5 million from Dale Vince, a vegan ex-hippy and green energy industrialist who also donates money to the direct-action group Just Stop Oil. The leader’s office insists that Vince, who was ushered in as a donor under Miliband’s leadership, has “absolutely no influence on policy”. In an interview with Times Radio on 5 July, the Labour leader condemned the “arrogance” of the group’s tactics, and said: “I can’t wait for them to stop their antics.”

However, by far the biggest headache comes from Sadiq Khan’s plans to expand the ultra-low emission zone (Ulez) for vehicles to outer London.

Last week, Starmer exposed internal divisions when he backed the party’s candidate in the Uxbridge by-election who said the expansion should be delayed.

Danny Beales said it was “not the right time to extend the Ulez scheme to outer London”, in a direct challenge to Khan, the Labour mayor. Starmer was asked if he agreed with Beales, and he said the party’s candidate was “right” to “stick up” for his would-be constituents.

The split within Labour mirrors one in the Conservative Party. Lord Goldsmith resigned as a minister last month, accusing Rishi Sunak of being “uninterested” in the environment. He told Channel 4 in an interview last week: “[Sunak’s] not in the net-zero sceptic camp . . . he’s just not motivated by these issues, he’s not interested, they don’t move him.”

Lord Frost, the former Brexit secretary, is among the most vocal sceptics. He used a speech in May to argue that Britain’s path to delivering net zero is “inevitably wasteful and damaging”.

Starmer is now waking up to the disconnect between his own party’s political and economic objectives. It is understood that he will visit Aberdeen this summer to talk to industry and union figures, after criticism of the party’s proposals to freeze North Sea oil and gas licences. Critics believe Labour has fallen into the same trap as the SNP, which has embraced the green agenda and has Green Party MSPs in the Holyrood cabinet and risks losing votes.

A senior Labour figure said: “It will just take one North Sea oil worker to stand up and say that despite being a lifetime Labour voter, they are going to vote Tory because of this policy and it could be game over. We need to be the party that can sow the green shoots of recovery rather than the party of tree-huggers.”

Rachel Reeves, the shadow chancellor further watered down Labour’s plans to invest in green technologies of the future.

The party had promised to spend £28 billion a year on green investment from the first year of entering power, but last month scaled back its plans, saying it would only meet the commitment by the middle of its first parliament in power.

Reeves failed to guarantee that the party would meet its £28 billion green spending pledge even by the end of the first parliament, insisting it was dependent on whether it had balanced the books.

The shadow chancellor’s refusal to commit to the policy, which was the centrepiece of her first speech to Labour’s party conference as shadow chancellor in September 2021, is a further sign of the party’s determination to prove its fiscal credibility.

Asked whether Labour is committed to spending £28 billion on green investment by the end of its first parliament in power, Reeves told the BBC’s Sunday with Laura Kuenssberg: “We’re confident that we can get there.”

Pressed again on whether she can guarantee the spending commitment, she said: “We’re committed to it but it’s subject to our fiscal rules.”

Reeves, who would become the first female chancellor in history if Labour wins the next election, added: “I’ve always been clear that all our policies, including investing in the industries of the future and boosting our energy security, are subject to our fiscal rules, which means paying for day to day spending through tax receipts and getting debt down as a share of the economy.”

PALLAB GHOSH, BBC Science Correspondent, reported that having big UK meat-eaters cut some of it out of their diet would be like taking 8 million cars off the road.

That's just one of the findings of new research that scientists say gives the most reliable calculation yet of how what we eat impacts our planet.

The Oxford University study is the first to pinpoint the difference high- and low-meat diets have on greenhouse gas emissions, researchers say.

The meat industry said the analysis overstated the impact of eating meat.

Prof Peter Scarborough, of Oxford University, who led the new research, told BBC News: "Our results show that if everyone in the UK who is a big meat-eater reduced the amount of meat they ate, it would make a really big difference. You don't need to completely eradicate meat from your diet."

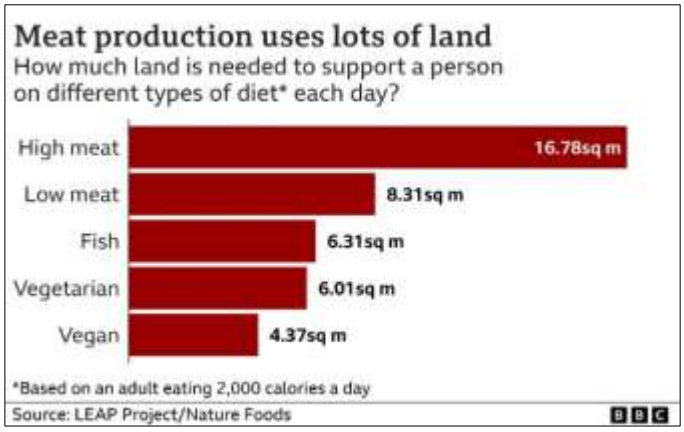
Prof Scarborough, who is part of the Livestock Environment And People (LEAP) project surveyed 55,000 people who were divided into big meat-eaters, who ate more than 100g of meat a day, which equates to a big burger, low meat-eaters, whose daily intake was 50g or less, approximately a couple of chipolata sausages, fish-eaters, vegetarians and vegans.

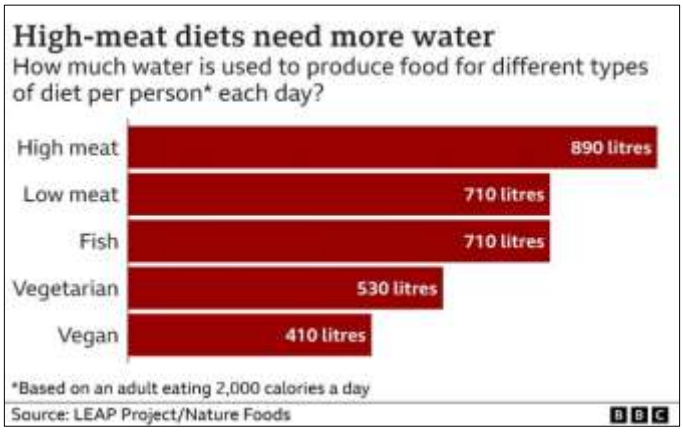
While it is well established that producing meat has a bigger environmental footprint than plant-based food, it has never been calculated in such detail, according to Prof Susan Jebb, who is head of the Food Standards Agency and a world leading nutrition scientist at Oxford University. She was not involved in the research.

"What makes this assessment different is that it takes real people's diets and is based on the various production methods we have at the moment," she said. "The researchers have assessed at a much more granular level than has been done before the environmental footprint of what they are eating."

The research shows that a big meat-eater's diet produces an average of 10.24 kg of planet-warming greenhouse gasses each day. A low meat-eater produces almost half that at 5.37 kg per day. And for vegan diets - it's halved again to 2.47 kg a day.

The analysis is the first to look at the detailed impact of diets on other environmental measures all together. These are land use, water use, water pollution and loss of species, usually caused by loss of habitat because of expansion of farming. In all cases high meat-eaters had a significantly higher adverse impact than other groups.





Britain has some of the most sustainable methods of meat production and the sector employs nearly 100,000 people making £9.5bn a year for the UK.

Nick Allen, CEO of the British Meat Processors Association says that such assessments were incomplete.

"One of the frustrations with a report like this is that it looks just at the emissions from livestock production. It doesn't take into account that carbon gets absorbed into the grassland, trees and hedgerows [on farms]. If they took those sums into account you would probably have a different picture," he said.

In response Prof Scarborough said that a number of studies, including this one, had concluded that the taking up of CO_2 by grasslands only have a "modest impact".

A separate study also published in Nature Food in 2021 concluded that food production was responsible for a third of all global greenhouse gas emissions. And an independent review for the Department for the Environment Food and Rural Affairs (Defra) called for a 30% reduction in meat consumption by 2032 in order to meet the UK's net zero target.

However, according to Prof Jebb, little has been done to achieve this aim.

"In the UK it is still not accepted that we are eating an amount of meat which is inconsistent with our environmental goals. At the moment, the conversation is not how we are going to do this, but whether it is necessary," she said.

"In the case of obesity people know they shouldn't be eating confectionary cakes and biscuits. They may not want to hear it, but they know it to be true. With meat they are not wholly convinced."

She adds that as well as encouraging people to change their diets, the government also needs to support farmers through the transition, by protecting their livelihoods.

"Our farmers are trying pretty hard to be sustainable, more so than in many other countries, and yet we in the UK are putting... more pressure on our farmers to change, and that is pretty tough if you are a farmer," she said.

In response a Defra spokesperson said "people should make their own decisions around the food they eat".

"Achieving the net zero target is a priority for this government, and whilst food choices can have an impact on greenhouse gas emissions, well-managed livestock also provide environmental benefits such as supporting biodiversity, protecting the character of the countryside and generating important income for rural communities."

The study has been published in Nature Food.

Yes, your editor is a vegan, but maybe … just maybe … there is something in this? Go on. Give it a try. You know it makes sense!

DAMIAN CARRINGTON, Environment Editor for The Guardian, wrote a very good article about how El Niño is affecting global heating in 2023.

The planet is being hit with a double whammy of global heating in 2023. On top of the inexorable rise in global temperature caused by greenhouse gas emissions is an emerging El Niño. This sporadic event is the biggest natural influence on year-to-year weather and adds a further spurt of warmth to an already overheating world. The result is supercharged extreme weather, hitting lives and livelihoods.

The last major El Niño from 2014 to 2016 led to each of those years successively breaking the global temperature record and 2016 remains the hottest year ever record-ed. However, El Niño has now begun and may already be driving new temperature records, with record heatwaves on land from Puerto Rico to China and record heatwaves in the seas around the UK.

What is the El Niño-La Niña cycle? Variations in wind strength and ocean temperatures in the vast Pacific Ocean led to two distinct climate patterns, El Niño and La Niña. The switch between them happens irregularly, every three to seven years, usually with neutral years in between. El Niños tend to last about a year but the La Niña phase can be longer, and 2023 has brought the end of an unusual run of three successive La Niña years.

What drives the cycle? Easterly winds normally push warm surface waters in the equatorial Pacific towards Australia and Indonesia and away from South America. As a result, warm water piles up in the west Pacific and cool water is drawn up from depth in the east Pacific. This is the neutral state.

However, at the onset of El Niño, the easterly winds weaken and the warm water

spreads back across the whole Pacific. In contrast, at the onset of La Niña, the easterly winds are even stronger than normal, leading to further cooling of the east Pacific waters.

The erratic timing of the switches between neutral, El Niño and La Niña conditions are the result of complex interactions between different climate system phenomena, from ocean current dynamics to thunderstorm cloud formation.

How does El Niño increase global temperatures? The ocean absorbs more than 90% of the heat trapped by greenhouse gases released by fossil fuel burning and other human activities. The ocean is particularly effective at absorbing the heat during a La Niña event, when east Pacific temperatures are especially cold.

However, during an El Niño, some of this heat is released to the atmosphere because warm water is spread right across the Pacific, smothering cooler waters. El Niño can add up to 0.2°C to annual global surface temperatures.

How does El Niño affect extreme weather? The El Niño-La Niña cycle switches the position of warm ocean waters and the damp, rain-laden air above it, meaning the cycle brings increased heatwaves, droughts, wildfires and floods to different regions.

Places closest to the Pacific are most strongly affected. In Peru and Ecuador, El Niño brings heavy rains and flooding. The event's full name, El Niño de Navidad, or the Christ Child, comes from the region and was coined because the biggest impacts occur at Christmas time.

In the Amazon, the weather gets hotter and drier during an El Niño, meaning less growth and greater risk of fires in a forest already approaching a tipping point. Heat and drought also increase in Colombia and Central America.

On the other side of the Pacific, Australia can be hit hard by the higher temperatures brought by El Niño. It raises the risk of heatwaves, drought, and bushfires in the east of the country and also increases the chances of mass coral bleaching of the Great Barrier Reef. The "black summer" of 2019-20 occurred during a small El Niño. Drought risk also increases in Indonesia and the last big El Niño from 2014-2016 fuelled huge forest fires, which sent a smoke plume halfway around the world.

Countries further from the equator are still significantly affected by El Niño, which shifts the position of the high-altitude jet stream wind. As a result, the southern US gets wetter weather and increased flood risks, while the northern US and Canada get warmer and drier. The situation is similar In China, wetter in the south and hotter and drier in the north.

El Niño also affects places farther from the Pacific. Its impacts reverberate throughout the global climate system. Perhaps the biggest impact is a tendency for reduced rainfall in the Indian monsoon, which provides 70% of the country's water and is vital for growing food in the world's most populous nation. However, El Niño could bring increased rain to the drought-stricken Horn of Africa, where dry conditions brought by the three consecutive La Niñas exacerbated a long-term drought in parts of Ethiopia, Kenya and Somalia.

El Niño also affects the risk of hurricanes and typhoons, usually suppressing those that affect the Caribbean and US, India and Bangladesh, and Japan and Korea. However, these storms are powered by ocean heat, and record-high sea temperatures in the Atlantic in 2023 have led the UK Met Office to forecast an above-average number of tropical storms in the North Atlantic.

Europe is less affected, but in winter El Niño can shift the jet stream and bring more rain to the south of the continent and drier, colder conditions in the north.

El Niño's impact on rainfall, temperature and plant growth also has knock-on effects, such as increased infectious disease including dengue fever in south-east Asia and Brazil. One study has even linked lower food production in El Niño years to civil wars.

What is the situation now? Weak El Niño conditions arrived in May and are expected to strengthen in the coming months, with an 84% chance of a moderate event at its peak from November to January, and a 56% chance of a strong event.

Global average temperatures in early June were nearly 1°C above levels previously recorded for the same month, leading to record heatwaves from Puerto Rico to Siberia to China. Some scientists said the heating suggested 2023 could become the hottest on record, although most of El Niño's heat will appear in 2024.

Scientists are not sure if climate change increases the likelihood of El Niño or La Niña, or both, partly because there are not very many El Niño and La Niña events in the observational record, which goes back about 150 years. That makes it hard to be sure that trends in the data, which suggest a tendency towards more La Niña events, are not simply the result of chance.

Furthermore, climate models do not agree on the question. This is because climate models have a relatively coarse resolution of 100km and cannot represent well either the ocean dynamics of the tropical Pacific or the thunderstorm clouds that drive large-scale circulation patterns. Prof Tim Palmer, at the University of Oxford, UK, hopes that a new generation of kilometre-scale global climate models, run on the latest "exascale" supercomputers, will provide more robust answers to this vitally important question.

One thing is certain. Rising global temperatures, boosted in El Niño years and bringing worse extreme weather, will not end until carbon emissions are reduced to net zero.

WRITING on the BBC News website, Matt McGrath and Malcolm Senior reported that the global shipping industry has agreed to reduce planet warming gases to net-zero "by or around 2050", but critics say the deal is fatally flawed.

Ships produce around 3% of global CO2 but countries will now have to reduce this as close as possible to zero by the middle of the century.

Small island states have welcomed the plan but green groups are furious. They believe the strategy is toothless and will do little to limit rising temperatures.

The global shipping industry is critical to world trade carrying up to 90% of commercial goods, but that trade is highly polluting, using some of the most carbon heavy fuels to power ships' engines.

These dirty smokestacks produce roughly the same amount of carbon each year as Germany, but maritime transport has proved hard to regulate as ships are often owned in one country but registered with another.

Small states like the Marshall Islands, Liberia and Panama have huge numbers of ships sailing under their national flags but they have no real responsibility for these vessels.

This complex arrangement meant that shipping was omitted from the Paris climate agreement in 2015 when the world put in place a global plan to tackle rising temperatures.

In 2018 shipping did agree to cut carbon in half by 2050, but this was seen as totally inadequate by scientists.

Now after growing pressure from a coalition of countries including the UK, the US, and Pacific island states, delegates meeting in London have agreed a new strategy that would bring emissions to net-zero "by or around" 2050.

Net-zero means that any emissions remaining then would be cancelled out by actively removing greenhouse gases from the atmosphere.

Richer countries and small island states had called for a 50% reduction by 2030 and a 96% emissions cut by 2040, but with resistance from China, Brazil, Saudi Arabia and others the new strategy that will see "indicative checkpoints" rather than hard targets and these would aim to see emissions from shipping fall by at least 20% by 2030, and at least 70% by 2040.

For both these checkpoints, the agreement says that countries should "strive" for a higher target of 30% by 2030 and 80% by 2040.

"This outcome is far from perfect, but countries across the world came together and got it done - and it gives us a shot at 1.5°C," said Ralph Regenvanu, Vanuatu's climate change minister.

Keeping global temperatures under 1.5°C is a key part of the Paris agreement and scientists agree that allowing the world to warm more than this level would be very dangerous.

Industry voices have also welcomed the new deal, but with reservations.

"It's a remarkable improvement that the revised strategy now aims to achieve net-zero emissions by or around 2050, and the introduction of indicative 2030 and 2040 checkpoints for emissions reductions sends an important signal to governments and industry," said Johannah Christensen, chief executive of the Global Maritime Forum.

"However, the revised strategy falls short to provide the necessary clarity and strong commitments for a just and equitable Paris Agreement-aligned transition."

Many environmental groups were strongly critical of the new agreement saying that shipping's new plan would do very little to keep the world under that key temperature threshold.

"While the inclusion of 2030 and 2040 emissions reduction targets for shipping is not insignificant, this strategy will see the shipping industry exhaust its 1.5°C carbon budget by 2032," said Madeline Rose, from the Pacific Environment campaign group.

The new deal also keeps alive the idea of a carbon levy on shipping that has been strongly supported by developing countries, who believe that this measure will be key in bringing down emissions over the decades to come.

"Ultimately it's not the targets but the incentives we put in place to meet them. So we in the Pacific are going to keep up a strong fight for a levy that gets us to zero emissions by 2050," said Minister Regenvanu.

THE UK's CUCKOOS are unable to adjust migrations to keep up with climate change according to an article by James Ashworth on the Natural History Museum website.

Cuckoo populations are in steep decline in the UK, and climate change may be to blame. While other birds are shifting their breeding and

migration to adapt to rising temperatures, cuckoos are being forced into riskier migrations to get ahead of the competition.

Cuckoos are having difficulty adjusting their internal clocks to the changing pace of the world.

As the world gets warmer due to climate change, the timings of once regular events are starting to shift. Icy periods are growing shorter as temperatures rise, while the heat of summer is lasting increasingly longer.

As a result, animals and plants are struggling to keep up. While many species can shift the timing of key life events to try and adapt, others aren't so fortunate.

A new study, the findings of which were published in the journal Proceedings of the Royal Society B, reveals that cuckoos face the choice of setting off on their annual migration across the desert perilously early, or risking their hosts having already bred by the time they arrive.

Dr Chris Hewson, a Senior Research Ecologist at the British Trust for Ornithology (BTO) who co-authored the study, writes, "There is a trade-off between survival and the benefits of early arrival, perhaps due to birds migrating with less on-board fuel than they otherwise would. Such risks may become more necessary as birds try to keep up with climate change on the breeding grounds."

Cuckoos are what is known as a brood parasite, which means that they rely on other species to raise their young. While there are a number of different animals which do this, cuckoos are one of the best known.

Female cuckoos are divided up into different groups, or gens, based on the species that their eggs mimic. They lay their eggs in the nest of a host and then leave the unsuspecting birds to raise their offspring.

Over the past 50 years, however, cuckoo populations have gone into decline across Europe. While populations have dropped by about a quarter on the continent, there are up to 76% less cuckoos in the UK.

While a variety of different causes, including habitat destruction, intensive agriculture and hunting, have all been linked with the birds' decline, they're difficult to separate out. It's likely that all these issues are playing a role, with a number of cuckoo studies trying to reveal their contribution to overall population losses.

The BTO has been tracking cuckoos for around 10 years to better understand how their migration affects the bird's chances of survival. The birds spend their winters in and around the Congo rainforest, before migrating across the Sahara Desert and into Europe during spring.

Before crossing the Sahara, the birds first stop over in West Africa in a region known as the Intertropical Convergence Zone where winds from the northern and southern hemisphere converge. The arrival of rains in the spring causes caterpillars and other invertebrates to flourish, providing ample food for the birds to build up their strength for the rest of the migration.

However, as global temperatures continue to rise, the cuckoos' host birds in the UK are breeding increasingly early, meaning that cuckoos need to arrive earlier to have the best chance of breeding success. This is pushing them to leave the stopover in West Africa earlier, which means that they are unable to put on as much weight before the Sahara crossing.

Timing is everything. Using tracking data from 87 different cuckoos, the researchers found that the time of departure from the stopover site was the most important factor in determining when a bird would reach their breeding grounds in the UK.

Birds which left the stopover site earlier were more likely to arrive first in Britain, allowing them to establish in the best breeding territories and lay eggs in the nests of their hosts. However, they were also more likely to die, probably because they hadn't eaten enough to survive the journey.

This might explain some of the difference in population decline between the UK and continental Europe, as birds heading to the latter would be better able to survive on less food as they don't have as far to fly.

Cuckoos which left later, meanwhile, were more likely to make it back to the UK, but this pushed their breeding back. Previous research has suggested that some cuckoos are compensating by increasingly targeting late-breeding species such as the reed warbler in England.

This too, however, presents its own challenges. Birds that left the UK later in the autumn to head back to Africa were also more likely to die as there is less food and suitable habitat available for them prior to departure.

While the study paints a bleak picture for the cuckoos, it highlights some opportunities to better support migrating birds. Restoring the habitat of known stopover and breeding sites in Europe and Africa will help to ensure there's more food for cuckoos, giving them a better chance of survival.

The team also hope to conduct more research into why Scottish cuckoos are faring better, with populations having increased by a third in the past 20 years. As these birds take a different migration route to their English relatives, it's likely this journey is less hazardous despite being longer.

Ultimately, finding out more about migrating cuckoos in general is vital to ensure their survival. The BTO has recently attached trackers to 10 more birds to build up a better picture of their journey, including individuals from Ireland.

'It's especially exciting to see birds from Ireland tagged for the first time,' Chris says. 'We're looking forward to learning about the migrations of these cuckoos from the western extremity of the species' breeding range.'

'These birds will help us to better understand the pressures they face, the reasons for the population declines they are undergoing and how we can help them to successfully complete their arduous migrations in the rapidly changing world we share.'

WRITING on the BBC News website, Oliver Slow reported that the US says it will not "under any circumstances" pay reparations to developing countries hit by climate change-fuelled disasters.

Climate envoy John Kerry made the remarks at a Congress hearing before flying to China to discuss the issue.

Some countries want major economies, which produce the most greenhouse gases, to pay for past emissions. A fund has been established for poorer nations, but it remains unclear how much richer countries will pay.

Mr Kerry, a former secretary of state, was asked during a hearing before a House of Representatives foreign affairs committee whether the US would pay countries that have been damaged by floods, storms and other climate-driven disasters.

"No, under no circumstances," he said in response to a question from Brian Mast, the committee chair.

He was speaking days before he was due to travel to Beijing to meet with officials to discuss issues around climate change, including plans for this year's UN climate conference, COP28, which will take place in Dubai, in the United Arab Emirates, in November.

At last year's conference - COP27 in Egypt - more than 200 countries agreed to create a loss and damage fund, which will be financed mainly by developed nations before the money is distributed to "particularly vulnerable" nations.

Although the agreement was billed as one of the major successes of the summit, there are still many details that need to be ironed out, including how much richer nations will pay and how money will be distributed. A series of meetings have been taking place this year aimed at addressing these issues.

Developing nations, which are disproportionately impacted by climate-related impacts, have called for guaranteed compensation from developing countries, who they say are historically responsible for climate change through their high emissions of greenhouse gases.

Richer countries recognise the need to contribute greater funds towards the issue, but framing the payments as reparations is controversial, with some claiming it is a divisive term.

Developing countries also argue that finance targets to address the issue of climate change are too low.

BROADSHEET was sceptical when it was announced that Sultan Al Jaber, chief executive of the UAE's state oil company, was to be president of this year's COP28, but maybe … just maybe … that scepticism was unfounded.

Governments must face up to their failures to tackle climate change at the next UN climate summit, the president has told governments. The meeting in November should agree to triple renewable energy by 2030, Sultan al-Jaber told leaders in Brussels.

Green groups welcomed the speech as a "kick up the backside" to governments.

The choice of oil executive Mr Al Jaber to lead the summit in Dubai, UAE had been criticised by campaigners.

In June UN Climate Executive Secretary Simon Stiell welcomed Mr Al Jaber's "unique insights" from his experience in the oil industry.

Global leaders will meet again in November to discuss how countries make progress in tackling the causes and impacts of climate change.

Climate campaigners had criticised the United Arab Emirates, which is in the top 10 largest oil producers in the world, for choosing the head of its state oil company to be COP president.

On 13 July Mr Al Jaber met with climate ministers from countries including Brazil, China and the US in Belgium. It came as several global heat records were broken last week and a deadly heatwave swept across southern Europe.

"We must be brutally honest about the gaps that need to be filled, the root causes and how

we got to this place here today," Mr Al Jaber said.

He called on countries to update the plans and targets agreed at the landmark summit in Paris in 2015 that created the Paris Agreement.

He also stressed the need to keep global heating below 1.5°C, saying it was the summit's "North Star".

The meeting in Dubai will be the first formal assessment of progress countries have made towards goals including limiting temperature rise to 1.5°C.

Campaigners had been worried that the oil executive was not committed to radically cutting fossil fuels at the speed scientists say is necessary to tackle climate change.

On 13 July Mr Al Jabar said the "phase down" of fossil fuels was "inevitable". But he told the Guardian newspaper that ending coal, oil and gas use can only happen when the world has enough renewable energy.

Mr Al Jaber's plan for COP28 includes tripling renewable energy, doubling energy efficiency, and doubling hydrogen production by 2030.

Campaigners had also expressed concern that the UAE was dragging its feet in laying the ground for the COP28 summit, but on 13 July analysts at the climate group E3G said the new vision had the "right ingredients" and showed the UAE had a "clear grip over the stepping stones between now and COP28".

"This is a much needed kick up the backside from Sultan Al Jaber, to get counties to upgrade their climate targets by September," a spokesperson from Christian Aid said.

Earlier in July Mr Al Jaber met King Charles and US President Joe Biden in London at a meeting to discuss climate finance.

Since the start of the Industrial Revolution, when humans started burning large amounts of fossil fuels, the amount of CO2 in the atmosphere has risen by over 50%, and is still growing.

The world is now about 1.1°C warmer than it was in the late 19th century.

DO YOU WANT to do something easy that's good for the planet? Do you want to improve your health and well-being? Would you like to leave a legacy for future generations? Then this article published on www.greenerideal.com maybe of interest

If you answered yes to any of these questions, you should plant a tree today.

Trees are amazing and provide us with a wide range of benefits. They clean the air we breathe, cool our concrete-jungle cities, and help to mitigate climate change. They also provide us with food, shelter, and beauty.

This article explains the science behind trees and the fight against climate change. I will also share some fun and creative ways to plant a tree today.

Trees are nature's superheroes in the fight against climate change. Through photosynthesis, they absorb carbon dioxide and release life-giving oxygen, cleaning our air in the process. Mature trees can store carbon for the long term, preventing it from adding to greenhouse gas levels.

Forests are carbon-eating giants, absorbing a staggering 2.4 billion metric tons of CO2 each year.

However, trees don't stop there. They're savvy at storing carbon for the long haul. As they grow and thrive, they lock away carbon in their trunks, branches, and roots, effectively removing it from circulation and preventing it from adding to the greenhouse gas party in the atmosphere. This carbon storage is critical for slowing global warming and keeping our planet cool.

Beyond carbon storage, trees regulate the water cycle, influencing rainfall patterns and cooling the environment. Their roots act as straws, pulling water from the ground, while leaves release water vapor through transpiration, contributing to cloud formation and rainfall.

In addition to helping fight climate change, planting a tree has several other benefits.

- Trees improve air quality. They absorb pollutants from the air, such as nitrogen oxides, sulphur dioxide, and ozone. This can help to reduce respiratory problems, such as asthma and allergies.
- They cool our cities by providing shade and helping to slow the urban heat island effect. This can reduce energy costs and improve public health.
- Trees provide a habitat for wildlife. They offer food, shelter, and nesting sites for birds, insects, and other animals.
- They beautify our surroundings by adding a touch of nature to yards, parks, and streets.
- Trees also increase property values. Studies have shown that homes with trees sell for more money than homes without.

There are many ways to plant a tree today. You can plant a tree in your garden, a park, or a community garden. You can also adopt a tree from a local nursery or arboretum.

Choose the right tree for your climate and location and plant it in a sunny spot with well-drained soil.

Water the tree regularly, especially during the first few years. Mulch around the tree to help retain moisture and suppress weeds.

Planting a tree is a simple act that can significantly impact the planet. Trees are natural carbon sinks; they improve air quality, cool our cities, and provide wildlife habitat.

FINALLY this month, I was most disappointed to read and article by Steffan Messenger, BBC Wales Environment Correspondent, reporting that plans for a major overhaul of farm subsidy payments in Wales have been thrown into crisis after union leaders announced they would not take part in the scheme over tree planting rules.

NFU Cymru said the proposals were too complicated and "did not make business sense".

The plans were one of the Welsh government's flagship policies to fight climate change and nature loss. Environment Minister Lesley Griffiths called it "really disappointing".

The news came on the eve of the Royal Welsh Agricultural Show in Llanelwedd, Powys.

The Sustainable Farming Scheme is set to take effect in 2025, replacing EU-era payments that had been worth over £300m a year to Welsh farms.

The new model is based on the idea of public money for public goods, rewarding farmers for actions that help soak in carbon emissions, provide habitats for wildlife and enhance water quality among other things.

To qualify, farms will have to sign up to a checklist of universal actions - including ensuring 10% of their land is planted with trees, and a further 10% managed as wildlife habitat.

NFU Cymru deputy president Abi Reader told BBC News that while farms were committed to environmental protection, the tree-planting target in particular was a barrier to many.

"We fear that payment rates are not likely to reflect the reduction in land values associated with tree planting - in effect a permanent land use change," she said.

"Would Welsh government expect any other sector to undertake an activity that could devalue an asset, in our case productive agricultural land, by up to 80% of its value?"

Along with the union's president Aled Jones, she has announced that, as it stands, she would not take part in the subsidy scheme.

"We've spoken extensively with our members, even farmers who rely hugely on farm support payments are saying we just can't make this add up and that's really concerning. If farmers around Wales can't access this scheme then it's failed," she said.

NFU Cymru is Wales' largest farming union, representing thousands of businesses across the country. Its president Aled Jones said farmers were prepared to integrate more trees into farming systems - from "shelterbelts, streamside corridors to field corners".

"But we will not take our productive land out of food production for tree-planting," he said.

Ahead of the start of the Royal Welsh Show, Rural Affairs Minister Lesley Griffiths had called for farmers to visit the Welsh government's pavilion at the showground to find out more about the scheme.

She said "By working together we have a once in a lifetime opportunity to design a scheme which is right for our farmers and for Wales. "I want to keep farmers on the land, producing food sustainably, while dealing with the climate and nature emergencies."

Welsh Conservative Shadow Minister for Rural Affairs, Samuel Kurtz, said the views of farming unions had been ignored.

He said: "The Welsh government must now give serious consideration to major concessions or even scrapping this arbitrary percentage target altogether."

A third consultation on the proposals is set to be launched before the end of the year, with the final scheme unveiled in 2024.

Government advisors at the Climate Change Committee recently warned tree-planting rates in Wales were "far too low". The Welsh government has set a target for 86 million more by 2030.

Forestry organisations have also called for an increase in homegrown timber production to reduce emissions from construction and said this would bring jobs to rural Wales.

Ms Griffiths said she believed other farmers would "take the lead" of Ms Reader and Ms Jones but added she has "met several farmers who don't think 10% goes even far enough so there are mixed views, but I think it is disappointing ahead of a final consultation".

She added: "The budget is very, very different nowadays. We're in a completely new world. "We've left the European Union, we've left that security of the basic payments scheme, where that lump sum landed in the Welsh government budget and went straight out to farmers every year with no questions asked.

"We're not in that position any more."

I MAKE no apologies for devoting all of this month's editorial to the subject of climate change. I believe that is a problem we have created but are not prepared to face up to. Ignore it at your peril!!

Enjoy August's Broadsheet.

All the best,

John Fleetwood

Japanese Knotweed and Ash Dieback Cost Taxpayers £4 Billion a Year

An article by Tom Sanders published on the Metro website

INVASIVE non-native species (INNS) such as Japanese knotweed and the ash dieback fungus are now costing the UK economy around £4 billion a year. Up from £1.7 billion a year in 2010, research suggests. Scientists said rising costs are partly due to inflation and new species establishing in the country.

The impact of alien species can range from loss of crops and damaged buildings to the loss of livelihoods and ecosystems.

The study, funded by Defra, showed the ash dieback fungus *Hymenoscyphus fraxineus*, was the most economically damaging species over the past decade, costing around £883.5 million, followed by Japanese knotweed *Reynoutria japonica* (syn. *Fallopia japonica, Polygonum cuspidatum*) at £246.5 million.

Annual estimated costs in 2021 were £3 billion for England, £499 million for Scotland, £343 million for Wales and £150 million for Northern Ireland, according to the research carried out by international scientific organisation Cabi.

Other damaging species included rabbits – costing the UK economy around £170 million, rats and mice (£84 million), cockroaches (£69 million) and deer (£62 million).

The cost to forestry has increased eightfold since the previous report in 2010 and is now estimated at £123 million, while agriculture was found to be the most affected industry costing the UK economy around £1.1 billion.

The impact on construction, development and infrastructure was £270 million while tourism and recreation was £136 million, the scientists said.

Japanese knotweed (pictured upper right), for example, has been known to cause structural damage to properties which can be expensive to rectify and substantially decrease their values.

Invasive rabbits can destroy agricultural areas by overgrazing, while their burrowing also im-pacts the quality of pastures.

Meanwhile *H fraxineus (*pictured lower right), which originated in Asia and is thought to have been brought to the UK on imported ash trees, incurs huge clean-up costs near roads, railways, buildings and other publicly accessible land.

Dr Richard Shaw, co-author of the research published in the journal Biological Invasions and Cabi senior regional director, of Europe and the Americas, said: 'This assessment again shows the important costs of INNS to the UK economy.

'Few effects of INNS specific management efforts can be seen in these results. However, they highlight the need to continue prevention and early detection, followed by eradication of the highest-risk species prior to establishment."

There are currently around 2,000 invasive alien species in the UK, with up to 12 new species establishing themselves every year.

It includes established species such as killer shrimp, giant hogweed, mink, and parakeets, as well as those that have arrived recently but have a high impact such as the sea squirt *Didemnum vexillum* and *H fraxineus*.

Dr Rene Eschen, lead author and Cabi senior scientist covering ecosystems management, said: 'Repeat assessments like this one are important to maintain a focus on the impact of INNS, changes in impacts as a result of new or spreading species, as well as the identification of potential impacts of management or policies.'

He said that while the overall cost of invasive non-native species to the economy has increased, there have also been decreases in some species, such as rabbits, possibly due to effective management.

The efforts of the UK's Environment Agency also appear to have resulted in eradicating some existing infestations of water primrose, Dr Eschen added.

In February, the Government published its GB Invasive Non-native Species Strategy to provide a framework to minimise the risk of invasive species.

Defra head of GB Non-Native Secretariat, Niall Moore, said: 'Invasive non-native species pose a serious threat to our natural environment and this Government is taking action through the recently launched GB Invasive Non-Native Species strategy, to protect our native animals and plants from INNS.'

He added: 'It is vital that we work together with researchers, scientists and others, who are working to tackle INNS, to prevent their entry into and establishment in Great Britain and, when they do become established, to mitigate their negative impacts.'

Explorers Tracking Down Ancient Trees Before They Are Gone Forever

An article by Emily Cataneo published on The Guardian website

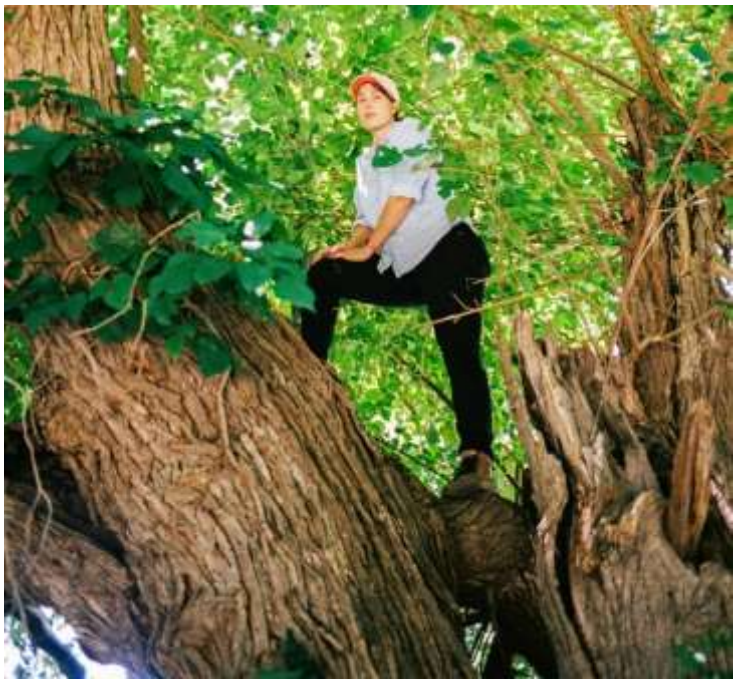
ELIZA GREENMAN plucks a wrinkly, canoe-shaped leaf from a tree and cradles it in her hands before sliding it into a plastic freezer bag. She's standing beneath a mulberry tree in a field on the banks of the Mattaponi River, a tributary that cuts through eastern Virginia to the Chesapeake Bay. Greenman had to sleuth to find this historical mulberry, which is meandering, ancient, studded with unripe, spiky white fruits, gnarled with English ivy and a distinctive wave pattern on its bark.

"It's so cool to imagine that this field was potentially all just mulberries," Greenman says, staring out at the shimmery rye across the road.

Greenman is a fruit explorer: a horticultural enthusiast who roams the United States searching for the last cultivars of old, rare or important plants. Throughout the centuries, the residents of North America, from Indigenous Americans to white botanists in the early 1900s, cultivated various fruit and nut trees. These trees' last descendants now grow on remote farms, in forests, on state lands, tucked along roads. Fruit explorers' mission is to track down those trees, test their quality and then graft them before their genetics are lost forever.

Buzz Ferver, a nursery owner and fruit explorer in northern Vermont, estimates that thousands of such explorers operate in the US, with about 20 in a "core group" who will drop anything to go anywhere and search for a fabled plant.

For some, it's about history: learning about a majestic tree in the historical record and trekking off to the woods to find it. For others, it's about taste. David Shields, an heirloom foods expert at the University of South Carolina, explained that our food system homogenized after the second world war and that many fruit explorers want to preserve old regional flavours before it's too late. "People realize that they once had great things that reflected the taste of their place and that were marginalized by market forces," Shields said. One example: "The limbertwig apples of the south, which have a wild winey flavour that once you've tasted it will haunt you."



Then, there are the environmental reasons. Many fruit explorers reject the US's current reliance on monocultural, seasonal agriculture, which means planting massive amounts of animal feed like soy and alfalfa in vast, deforested fields. These explorers want to replace that system with one of permaculture, which involves planting perennial fruit and nut trees instead.

"If we come to our senses and realize that planting 200 million acres of corn with tillage is not a good idea from an ecology perspective, we will need the best germplasm (genetic resources maintained for plant breeding) in existence," said Ferver, who described himself as a "rabid" fruit explorer. "We're going to need to keep that stuff alive so it's there if we need it."

Greenman shares this ecological mission. She's currently a germplasm specialist at the Savanna Institute, an agroforestry nonprofit in the mid-west, but she's been fruit exploring since 2009. She started by apprenticing with an apple fruit explorer in Maine and has searched for a panoply of trees, from persimmons to tannin-free oaks, which produce tastier acorns. Right now, she's in her mulberry phase. She hopes that if she can find and propagate hardy, ancient mulberry trees, then this high-protein plant can replace alfalfa as animal feed.

Finding these trees tucked into the landscape requires detective work. Greenman's hunt for the mulberry along the Mattaponi began in 2019, when she read a book about the history of silk cultivation in the US. She learned that an early Jamestown governor bought a swath of land off the Mattaponi River for mulberry growing, before selling it to the Walker family in the 1660s. Greenman immediately began researching Walkers in the area. Her research led her to a town called Walkerton and a Walker family who had lived on this land for 12 generations. Last winter, she called them and they invited her to visit. She drove down and found a single remaining mulberry.

America has a native mulberry plant, the red mulberry, but Greenman is hunting for white mulberries which were imported from Spain during the years when the British hoped to make the south-east a hub for silk production. White mulberry leaves are 26% protein, which could be a boon for the animal feed industry and this tree on the Walkers' property is important because of its longevity.

"These are genetics that are clearly winning in terms of the resilience game," Greenman said.

Greenman will take these leaves for testing to learn their protein content. If it's high in protein, she'll come back, cut a branch so she can graft the tree, and then talk with the Walkers about what they want to name their new cultivar. If the mulberries she's hunted and grafted take off as a replacement crop for alfalfa, she plans to give a percentage of sales as reparations to the Indigenous populations that were displaced by these trees centuries ago.

Although Greenman is currently on the hunt for trees older than the US itself, many fruit explorers focus on the early 20th century, another golden age of fruit exploring. During this period, said Ferver, white botanists like the nut tree nursery owner John Hershey and the agroforestry enthusiast J Russell Smith travelled America preserving the best crops cultivated by Indigenous Americans before contact. Soon after, the Tennessee Valley Authority ran contests for the best versions of various trees, then shipped out the winners to nurseries and individuals around the country. As the century mark since those last halcyon days of fruit exploring approaches, many are fixated on preserving the cultivars from that time before it's too late.

"It's crunch time to try to find these trees that are hiding on the landscape," said Greenman, who has also searched for trees from that period. The trees are naturally ageing out and also run the risk of being felled by a well-meaning but clueless owner. Greenman once went on a fruit-exploring expedition only to find that the owner had chopped down the sought-after tree the previous day.

However, there have been victories, too: through sleuthing and word of mouth, Buzz

Ferver found the legendary fruit explorer John Hershey's nursery off a rural highway in Pennsylvania and preserved Hershey's cultivars. Greenman found one of the last remaining lint white oaks, a tree that won a Tennessee Valley Authority contest a century ago because of its edible, sweet acorns. And Shields, with the help of a legendary mulberry hunter, found a famed Hicks everbearing mulberry near Mount Olive, North Carolina, a tree renowned for producing a quart of mulberries every day for two months during the growing season.

After she finishes at the Mattaponi site, Greenman hops in her car (vanity plate: MULBRYS) and drives 50 miles to Jamestown, the original British colony on the shores of the York River, now a collection of wooden forts, plaques and tranquil old trees by the water. At Jamestown, the mulberries are ripening from pale red to deep purple on the branch. Greenman strolls the park, stopping at each tree to sample the fruit, which tastes like an ethereal, less aggressive blackberry, and to pick leaves for testing.

Most of these mulberries line the walking paths, but there's one that most visitors to Jamestown will never see. It's in a maintenance area of the park, hidden by a fence, tucked next to a shed, blocked off by a tractor and a tarp-covered pile. Greenman has nicknamed this tree "massive mulb" and she estimates that colonists planted it here sometime between 1609 and 1650, making it the oldest white mulberry in the US.

"I think this is an original tree," she says, examining its bulbous trunk. "And look where it is. It's treated like trash. It has no dignity back here."

Greenman found the tree when she visited Jamestown and spotted the mulberry leaves over the fence line – then insisted on investigating.

That's the key to fruit exploring: searching for things that other people have overlooked. And once you start, it's hard to stop.

"All of us in fruit and nut exploring are constantly trying to balance our life with putting on our tree eyes," Ferver said. "I put on my tree eyes and I can't even talk to people. I get on the road and I can identify all the trees by the colour of their leaves and how they shake in the wind."

330,000 Trees Planted Through HS2 Woodland Fund Projects

A £5 MILLION HS2 Woodland Fund, administered by the Forestry Commission, is supporting new woodland creation and Plantations on Ancient Woodland Sites (PAWS) restoration projects around the Phase One route between London and the West Midlands. To date, a total of £1.75 million has been allocated across 35 schemes.

This has resulted in the restoration of over 66 hectares of ancient woodland, including the planting of over 110,000 trees; and over 130 hectares of new native woodland, with around 220,000 trees planted.

The fund provides support for landowners in the area 25 miles around the Phase One route. This goes beyond HS2's existing environmental programme to plant 7 million trees and create over 33 square kilometres of wildlife habitat.

James Hicks, Biodiversity Policy Specialist at HS2 Ltd said "We're designing HS2 to be a railway that respects the natural environment by conserving, replacing and enhancing wildlife habitats with a new 'green corridor' along the route. This will create a network of bigger, better-connected, climate resilient habitats and new green spaces for people and wildlife to enjoy in the future.

"Over and above our required mitigation, our HS2 Woodland Fund provides important additional financial support for areas near the route to help compensate for unavoidable impacts to ancient woodlands."

Sir William Worsley, Forestry Commission Chair, said "We must ensure that woodlands and habitats impacted by HS2 are effectively restored and protected. The HS2 Fund will continue to facilitate the creation of new woodland and bring new life to ancient woodlands around the Phase One route between London and the West Midlands."

The HS2 Woodland Fund on Phase One provides funding to restore and maintain PAWS sites, including restocking with native trees and shrubs, and associated items including fencing, gates and natural flood management items. It also provides funding for creating, protecting and maintaining new native woodland through the England Woodland Creation Offer – part of a suite of Forestry Commission initiatives to support woodland creation and tree planting across England.

West Wycombe Estate in Buckinghamshire is one of the projects which has received funding to restore one of their ancient woodland sites and is now seeing the benefits. Over 15,000 native trees were planted on a site that is very well used by the public, which was previously planted with non-native Japanese Larch that had suffered from damage by squirrels.

David Hunt, Forest Manager at West Wycombe Estate said "With the funding available from HS2, it made it an obvious choice for us to opt for going back to restore native ancient woodland on the estate. The benefits of planting woodland on ancient sites are really wildlife conservation, biodiversity and landscape as opposed to commercial woodlands. The funding from HS2 has been really important for us, and anyone interested in this woodland can see the benefits of going back to native tree planting."

HS2 Ltd are working to extend the Woodland Fund for Phase 2a with an additional £2million of funding available. A £1million HS2 Woodland Fund was also announced on Phase 2b in January 2023 which will be launched following Royal Assent.

More information on the HS2 Woodland Fund, including the locations of schemes delivered to date, can be found on the HS2 website: https://www.hs2.org.uk/building-hs2/environmental-sustainability/ancient-woodland/

Editor's comment: Of course, if they hadn't cut down so many trees and destroyed so much ancient woodland then they would not need to plant this many trees … would they???

Furthermore, while they are keen to tell us how many trees they have planted, why can't I find how many they have cut down?
Sorry HS2. Some crimes are unforgiveable and your tops my list!!

A Standing Amazon Rainforest Could Create an $8 Billion Bioeconomy

An article by Sarah Brown published on Mongabay

PURSUING economic growth at the expense of the environment has long been a shortsighted development strategy in the Amazon Rainforest, pushing the biome to the brink of irreversible degradation. But there is an alternative. Slashing deforestation to zero and decarbonizing the economy not only could keep the forest standing but could also transform the region into a billion-dollar bioeconomy by 2050, a recent study has found.

The study, conducted by the World Resources Institute (WRI) and the New Climate Economy and published in June, found that preserving the forest, transitioning to low-carbon agriculture practices and bolstering the bioeconomy would pump an additional $8.3 billion GDP per year into the Legal Amazon region, an administrative region that spans the nine Brazilian states located within the Amazon Basin. The transformation would also generate 312,000 additional jobs that would particularly benefit Black and Indigenous communities.

The "business-as-usual" scenario based on the deforestation and emission trends of the past 10 years would lead to irreparable environmental damage, economic collapse and a failure to meet emission reduction targets, leaving the fate of the country hanging in the balance: "There is no future for Brazil without the Amazon," the study authors warned.

"A new approach to the Amazon could save it from destruction while driving robust, equitable growth for Brazil's economy," tweeted Ani Dasgupta, the president of WRI.

This new approach would also bring environmental benefits. Brazil would have 81 million hectares (200 million acres) more standing forest from a combination of restoration efforts and deforestation cutbacks, and the Amazon would emit 94% fewer greenhouse gas emissions, putting Brazil well on track to meet international climate change goals.

"It shows that ending deforestation and maintaining the standing forest will not curb development in the Brazilian Amazon. Quite the opposite: It is an opportunity," according to a WRI statement.

"Business as usual cannot continue," warned experts from WRI. Almost a quarter of the Legal Amazon region in Brazil has already been cleared for economic activities, heavily contributing to greenhouse gas emissions. In 2021, emissions from land use and agriculture in the Amazon made up more than two-thirds of the country's total emissions in those sectors.

In the past 30 years, Brazil emitted 67 gigatons of carbon dioxide (GtCO2), 36 gigatons of which were from the Legal Amazon region. To meet the targets in the Paris Agreement, Brazil's emissions cannot surpass 7.7 GtCO2 from 2020 to 2050, according to the study, which concluded that if current deforestation and emission trends of the last decade continue, the Legal Amazon will lose another 59 million hectares (145.8 million acres), an area almost twice the size of Italy, by 2050 and will produce five times above the country's greenhouse gas limit.

It would push the Amazon to its tipping point, where the rainforest switches from being a carbon sink to a source of carbon emissions. Precipitation would dry up, having a devastating effect on the country's rainfall-dependent agriculture: "97% of all agricultural land and 100% of pastures depend on rain because we don't have an alternative irrigation," Rafael Feltran-Barbieri, a senior economist at WRI Brazil and one of the study authors, told Mongabay by phone.

Despite so much deforestation, many forest-dependent communities don't reap any economic benefits from resource exploitation. More than 83% of the deforestation in the Amazon is linked to external demands from the rest of Brazil and abroad, mostly for beef, soy and mining.

Scaling up the existing bioeconomy, a sustainable economic model that uses renewable biological resources to produce food, industrial goods and energy, could change the Amazon's socio-economic profile by leveraging existing knowledge within the region. One of the key ways to do this is to allow Indigenous communities to lead the production and commercialization of regional products.

"Nobody could be more qualified than the traditional and Indigenous people," Feltran-Barbieri said. "Indigenous knowledge includes hundreds of products and substances that could be exploited in the new bioeconomy."

Amazonian Indigenous peoples use around 270 plant-based items in daily cooking and eat about 30 insect species — "the food of the future," according to WRI.

The study analysed just 13 of these primary products, such as açaí, cacao and honey, and concluded that even this small share of potential goods could grow the bioeconomy's GDP by at least $8 billion per year.

"The bioeconomy remains undersized when comparing its current impact and future potential," the study found. "[It] should be much bigger."

The bioeconomy across the Amazon is currently unequal, said Feltran-Barbieri. "Some states are moving towards a new economy, especially those that already have the restoration and bioeconomy program," he said. "Others are moving in the opposite direction."

Pará is trailblazing in the Amazon's bioeconomy development, according to Feltran-Barbieri, having created a strategy to make the state carbon-neutral for land use and forests within 15 years by investing in the bioeconomic supply chain, credit lines and education in environmental services.

"Pará will transform from being the state with the highest carbon emissions in Brazil - due, largely, to land use changes and deforestation - to being at the vanguard of a new bioeconomy, where forests and biodiversity are a source of income, social inclusion and climate change mitigation," according to a state government statement.

Pará is already seeing results from its

strategy, including a 49% drop in greenhouse gas emissions in the first half of this year compared with the same period the year before.

The states of Amazonas and Rondônia are moving in the other direction, Feltran-Barbieri said, both of which have soaring levels of deforestation, striking social inequality and no clear plan for developing a bioeconomy. "Rondônia state is the worst; it is getting poorer every year with no sanitation," he added.

It will cost Brazil more than $541 billion from now to 2050 to implement a new economic model in the Amazon, on top of the $707 billion to continue as normal. This additional investment would be "less than half of the costs of not promoting the transition," warned the study authors.

Despite the challenges, moving toward a new development model in the Amazon is highly achievable, experts say. "I think the world is ready to rally to the cause of a new bioeconomy for the Amazon. I believe that investment and social funding will flow to Brazil," Jeffrey Sachs, U.S. economist, told Brazilian news outlet Valor International - Globo.

Some experts say this could be as soon as half a decade from now. "It'll take 5-10 years for this new economy to reach a sustainable stage," Carlos Nobre, a climate change expert and forest researcher, told Mongabay by phone. "I'm very optimistic that these investments will really motivate millions of people in the Amazon to move towards this new economy of a standing forest."

AstraZeneca Pledges to Plant and Maintain 200m Trees Globally by 2030

An article by Julia Kollewe published on The Guardian website

THE BOSS of Britain's biggest drugmaker, Pascal Soriot, has warned that the twin crises of climate change and biodiversity loss are damaging the planet and human health, as it announced a £310m plan to plant 200m trees by 2030. The offsetting scheme is one of the biggest tree-planting programmes globally. In 2020, AstraZeneca pledged to plant and maintain more than 50m trees by the end of 2025, with 10.5m trees of 300 different species planted so far across Australia (in collaboration with Aboriginal people), Indonesia, Ghana, the UK, the US and France.

On 28 June, the company expanded that programme with a £310m investment in reforestation and a commitment to plant more than 200m trees by 2030 and ensure their long-term survival.

The trees will be planted in Brazil, Vietnam, Ghana, Rwanda and India. Countries with tropical forests such as Brazil and Indonesia absorb the most carbon dioxide, and are critical in the battle against global heating.

Deforestation worsened last year when an area the size of Switzerland was cleared from the most pristine rainforests, despite a political pledge made by world leaders at the CopP26 summit in 2021 to halt their destruction. The tropics lost 10% more forests than in 2021, according to figures from the World Resources Institute and the University of Maryland. The forest loss produced 2.7 gigatonnes of carbon dioxide emissions, equivalent to India's annual fossil fuel emissions.

AstraZeneca says its tree-planting programme will remove an estimated 30m tonnes of carbon dioxide from the atmosphere. It will offset some of the carbon emissions of the contractors it uses in its supply chain, as the drugmaker aims to become net zero by 2045. The carbon credits are shared with the governments of the countries where the trees are planted "to avoid double counting", Soriot said.

Carbon-offsetting schemes are increasingly under scrutiny as many projects appear to have no positive impact on the climate, with scientists calling for the unregulated system to be reformed urgently. Regulators are increasingly banning firms from making offsetting-based environmental claims unless they can show that they work.

"The twin crises of climate change and biodiversity loss are damaging the planet and harming human health," Soriot said.

Speaking to the Guardian ahead of an event chaired by former Bank of England governor Mark Carney during London Climate Week, he said AstraZeneca's projects would create jobs for local people and support up to 80,000 livelihoods. It is partnering with NGOs and the projects will be audited and assessed by independent experts, including the European Forest Institute, the firm said.

As experts stress that the right species of trees need to be planted in the right locations and monitored over years to come, Soriot said AstraZeneca's programme was not about planting "the same trees … in big lines".

"We also want to restore biodiversity," he said. "So that's why we have 300 species of trees and plants. We want to make sure that we restore the forest the way it was before. That is different by country. In fact, in Australia, for instance, it even varies by region."

The drugmaker plans to use drones to assess tree growth and health, and hi-res satellite imagery to monitor the condition of trees and the projects' impact on water and soil and carbon stocks.

While tree-planting projects can be successful at removing carbon from the atmosphere, many schemes do not monitor whether or not trees survive. In 2021, a global review of tree-planting initiatives in the tropics and subtropics since 1961 found that while dozens of organisations reported planting a total of 1.4bn trees, just 18% mentioned monitoring and only 5% measured survival rates.

Many experts argue that natural regeneration is nearly always better, where trees grow from seeds that fall and germinate in situ, although it is slower. The Woodland Trust, a charity in England and Wales, says naturally regenerated trees often survive better than planted trees.

Natural restoration of forests that involves no tree planting can absorb as much as 40 times the amount of carbon than plantations, according to research, although businesses are unlikely to be able to claim these schemes as offsets.

Soriot said: "Whilst some of our projects will make use of natural regeneration in places, the areas we are working in are often so degraded that it would take decades for trees to naturally recolonise, if they ever manage to."

CPRE London Charity Bids to Encircle London in 'M25 For Nature'

An article by Clea Skopeliti published on the Guardian website

AN ENVIRONMENTAL CHARITY is bidding to create an "M25 for nature" that would encircle London in woodland, hedgerows and street trees to boost biodiversity, carbon capture and wellbeing. The countryside charity CPRE London hopes to weave together existing areas of green belt in the city's 18 outer boroughs to create an uninterrupted ring of trees around the capital.

The director of CPRE London, Anna Taylor, said the charity was applying for funding from the Department for Environment, Food and Rural Affairs, and called on Londoners to assist in identifying potential sites that could be used to connect woodland areas to create a "corridor for wildlife".

Britain has lost almost half its biodiversity since the Industrial Revolution, and Taylor underlined the potential role of a "tree ring" in protecting ecosystems. "It's absolutely key that we're focusing on strengthening the habitats around London. Woodland is one of the most diverse habitats once it becomes established – a mature oak tree on its own can host 2,300 species."

Some places may be less suited to planting traditional native woodland, Taylor said, explaining that alternatives such as hedgerows, orchards, and street trees could also be used to maintain an unbroken ring of plant life, allowing wildlife to move between wooded areas.

While the precise route would be determined by the mapping, the first phase of the project in north London is expected to focus on the areas in, around and between Epping and Hainault forests, while planting in the south of the city would initially concentrate on restoring areas previously covered by the Great North Wood, she said.

Mapping is under way with Greenspace Information for Greater London CIC (GiGL). "Our role is going to be advocating to local authorities and private landowners about the benefits of planting and the urgency of taking action," Taylor said. "It may be thicker in some boroughs than others – it depends on the underlying habitats.

"We'd be particularly keen to hear about opportunities for buffer planting to grow existing wooded areas, planting on the edges of playing fields where a wooded area could provide a shady respite on hot days … or planting near streams and rivers that could contribute to natural flood management."

The project would include residents from the outset in a way that is adaptive to local land use. "The idea of a community forest is all about multi-purpose planting that really serves communities, rather than blanket planting of trees."

The tree ring has strong potential to bolster access to green space for Londoners, Bridget Fox, the Woodland Trust's south-east regional external affairs officer, said. "We've known for decades how important woodland is for climate and for biodiversity, but something that was heightened during lockdown and since is how important having access to green space is for people's wellbeing.

"Whether that's the cleaner, moister, cooler air, or the just the tranquility of being in touch with nature … There's even been research on the savings to the public purse of better wellbeing from being out and about in nature.

"People now recognise the green belt needs to earn its keep as land use, whether that's in terms of sequestering carbon or helping deliver nature recovery. But [having] countryside on London's doorstep, giving everyone better access to nature, is really important too."

Royal Cygnet Numbers Drop by 40% in a Year

NO DOUBT, you have heard that the historic royal census, known as "swan upping", has revealed a 40% drop in the number of cygnets on the River Thames, compared with last year. The decline has been blamed on avian flu but also a growing problem of violence, including shootings, catapult attacks and dogs killing swans.

Only 94 cygnets were found during the five-day search of the Thames. The King's swan marker, David Barber, said the result was "disappointing" but, because of avian flu, expected.

Last month saw the colourful spectacle of counting swans, but the outcome has been a much more sombre result.

The impact of avian flu had been "horrendous, terrible to see," said Mr Barber, who was in charge of the count, which covered the Thames from London to Abingdon in Oxfordshire.

Down from 155 in 2022, it was the lowest number of cygnets for seven years, but those found had been "in good condition", Mr Barber said.

Another factor in the decline was high flood-water washing away nests. However, there were also concerns about "vandalism", including shooting swans with air rifles and other guns or catapults; eggs and nests being destroyed; and swans being harmed by dogs off leads.

This was the first "swan upping" carried out under the insignia of King Charles, in an annual event dating back to the 12th Century. Teams row up the river, dressed in scarlet outfits, stopping to count, weigh and measure any young swans they find.

"Swan upping" began as the Crown protecting its ownership of swans, but it is now about wildlife conservation. Swans were once a delicacy in medieval banquets but are now a protected species.

How Trees Benefit Nature, People and Climate

An article by Orla Dwyer published on the CarbonBrief website

MANY countries rely on tree planting to help reduce greenhouse gas emissions and meet future climate targets. Nature and trees have been hailed as a "saviour" with a "mind-blowing" potential to tackle the climate crisis, but there have also been warnings that trees should not be solely seen as a permanent solution for "carbon removal". Alongside removing carbon dioxide (CO_2) from the air, forests provide a huge range of benefits for biodiversity and people around the world.

All these issues were discussed at the end of June at the "Trees for Climate Change, Biodiversity and People" conference organised by the British Ecological Society.

Held at the University of Kent, experts delved into tree diseases, woodland recovery and the future of forest landscapes.

Prof Yadvinder Malhi, professor of ecosystem science at the University of Oxford, said the conference highlighted the "awe-inspiring" ways in which trees provide for nature, people and the environment.

Trees are important for both climate mitigation and adaptation. They absorb and store CO_2 from the atmosphere and help defend against the intensity of some extreme weather events, such as heatwaves.

Prof Malhi tells Carbon Brief that trees are key for adapting to the effects of climate change, "particularly the restoration of trees and trees in peri-urban and urban landscapes, where they can play an essential role in minimising the effects of peak temperatures or increased flood risk".

Trees and woodlands can improve air quality, protect soils and host a range of biodiversity, but trees can also be challenged by climate change. A 2019 study found that climate change could cause trees to "live fast and die young", reducing the ability of forests to act as a carbon sink over long timescales.

Dr Cat Scott from the University of Leeds told the conference that the UK's land management practices are largely focused on what humans can get from the land in the form of products such as food and timber.

She said there is an "increasing realisation" that this has not led to ecologically diverse landscapes.

Scott is the director of the Leeds Ecosystem, Atmosphere and Forest centre which helps manage four forest projects in northern England.

At these sites, researchers can monitor temperature changes in woodlands compared to open fields. During the record-topping UK 2022 heatwave, Scott said temperatures were 15C lower in one project at Hardknott Forest compared to open grassland nearby.

Trees comprise a prominent part of the UK's plan to reach net-zero emissions by 2050. There are a number of government tree-planting schemes and grants, including funding for farmers to plant trees on their land.

However, progress on tree planting has been "too slow", according to the recent Climate Change Committee (CCC) report on the UK government's progress in reducing emissions. Tree-planting rates will need to double by 2025 to reach the government's target of 30,000 hectares of woodland creation per year, the CCC said.

The conference heard about the importance of having many different types of trees in a forest to ensure many different types of species can live there. For example, ash trees support 955 different species and oak supports 2,300.

Ross Barnett from the University of Stirling researches how different landscape factors impact the complexity of sounds in a restored woodland. His findings showed that woodland planted with just one type of tree support significantly fewer invertebrates, pollinators and predators than woods with many tree varieties.

Dr Eleanor Tew from Forestry England, England's largest forest manager, said six tree species currently make up almost 70% of forest area managed by the organisation. Tew said the government agency is trying to increase the species diversity in its forests.

Alongside climate change and other threats facing trees in the UK and across the world, pests and diseases can have a major impact. These diseases include ash dieback which is expected to kill up to 80% of the UK's ash trees, according to the Woodland Trust.

Warmer temperatures and changing rainfall patterns have also led to increased tree mortality, according to the Intergovernmental Panel on Climate Change.

Dr Cecilia Dahlsjo from the University of Oxford explained that ash dieback is a fungal disease native to Asia. It has been present in the UK for more than a decade. Dahlsjo described how ash dieback weakens a tree's canopy, branches and trunk. It has a 70% mortality rate over a period of 10-15 years, she added.

Rebecca Gosling, conservation evidence officer for tree health at the Woodland Trust, told the conference that a new introduced pest or pathogen has been identified every 1.4 years in the UK. She said it is "quite a serious situation".

Ash trees face another threat from emerald ash borer, a beetle that has been "hitchhiking" into Europe from Russia and the US, Gosling said. This insect can cause significant damage to ash trees.

Prof Lucio Montecchio from the University of Padova said that trade is the main way in which known and unknown plant parasites move between countries.

He told the conference "Usually parasites [do] not move through wind from one country to another…fungi, bacteria, viruses – they must be moved."

Quick response times are important, he said, alongside increasing local nurseries for trees and reducing imports from abroad.

Gosling told Carbon Brief that pests and diseases are "high up as one of the biggest threats our woods and trees have" in the UK. She said that experts fear climate change will "add another layer of threat" to trees:

"With climate change, the predictions are that our trees will become more stressed themselves. So, if they are suffering with more frequent droughts, as we've been seeing, the trees will be more stressed and, therefore, less able to defend themselves against a pest or pathogen.

"The second arm to that is that actually the pests themselves might find they're more able to survive in the UK."

Warming temperatures caused by climate change increase the risk that "more pests from

warmer climates will be able to survive" in the UK, Gosling said.

In terms of current and future threats to UK forest landscapes.

Malhi tells Carbon Brief "Pathogens are probably a bigger effect than climate change, and certainly bigger than deforestation and land use in terms of what's going to shape these ecosystems over the coming decades."

A number of experts at the conference discussed research on the impact that trees can have on people.

Prof Zoe Davis from the University of Kent researches the "wellbeing benefits" people can get from being in nature. She co-authored a study published in Nature Sustainability which looked at the human wellbeing response to certain species traits, such as colour and sound.

The findings showed that many aspects of nature, such as bird song, can bring joy or other positive emotional responses.

Trees can also have cultural or local significance around the world. Dr Aliyu Salisu Barau from Bayero University described how many neighbourhoods in Kano city, Nigeria are named after trees. They are important for local history, he told the conference, so tree loss can be a "disaster".

People, especially Indigenous peoples and local communities, can often help to protect trees and forests. A study found that Indigenous peoples played a "vital role" in the least-deforested areas of the Brazilian Amazon. More than 1.6bn people also rely on forests for timber, food, fuel, jobs and shelter.

Malhi said there should be greater research emphasis to show that "trees are more than just carbon" storage.

He told Carbon Brief that social science about nature highlights the "whole spectrum of values of trees" – ranging from ecological, cultural, spiritual and psychosocial.

He added "There's a whole frontier of research there about how people benefit from trees… I think much of the world, as the population gets more and more urban, is going through a nature deprivation catastrophe. I think that's going to have lots of profound consequences for people's wellbeing and welfare."

House Builders Should Stop Complaining and be Part of the Solution

By Daniel Capurro, Environment Correspondent for inews

HOUSE builders should stop complaining about water pollution rules, see the "bigger picture" of nature's catastrophic decline and "be part of the solution", the chair of Natural England has said. Speaking to i, Tony Juniper said that while it was normal for groups to feel "disproportionately" affected by environmental regulations, house builders needed to understand the impact they have.

It comes after the industry hit out at nutrient neutrality rules that they claim have severely restricted new builds in 74 local authorities.

The Home Builders Federation has claimed that 120,000 homes have been delayed by the rules, which require any new pollution to be offset elsewhere in the local river catchment via schemes such as reed-beds and new woodland.

New homes add nutrient pollution in rivers because often even treated wastewater contains phosphorus and nitrates. In excess, these trigger algal growth which smothers rivers and starves them of oxygen.

The rules stemmed from a European court ruling against the UK Government and protect highly polluted river systems such as the River Wye. House builders, however, complain that they are being unfairly targeted when the main polluters are farmers and water companies.

Mr Juniper did not accept that criticism, telling I "There usually is some group that feels as though the environmental improvements that the country is seeking to achieve disproportionately affect them, but I would encourage them all, to see the bigger picture.

"And to recognise that more housing will lead to more pressures on the natural environment and those pressures need to be managed, including in protecting our most valuable wildlife sites, from excessive water pollution."

He insisted that it was possible to hit environmental and house-building goals at the same time and, rather than seeing environmentalism as a burden, they should embrace it as an economic opportunity.

"We know that beautiful environments

where homes are built can attract higher prices than homes that are less beautiful in terms of their surroundings. So there are very often economic upsides that come with environmental improvements," he said.

The Home Builders Federation said it backed environmental protection but that it should not be the focus of efforts.

"The industry absolutely supports moves to protect and enhance the environment," a spokesperson told i, "But new homes are a negligible contributor to this issue, which is a result of agricultural practices and the failings of the water companies. After four years the lack of leadership by Government only risks exacerbating another national crisis – the shortage of decent housing."

Mr Juniper was speaking following the launch of two new Defra funding schemes aimed at shifting environmental efforts away from solely conservation to increasing the amount of wildlife and biodiversity in the country.

The £25 Species Survival Fund will target key declining animals through habitat protection and restoration, while local authorities are set to start receiving funding for the Local Nature Recovery Strategies, which require them to identify land that can be used for environmental improvement.

Both are intended to help Britain reach targets it signed up to as part of the Kunming-Montreal biodiversity agreement at last year's COP15 summit, including halting species decline by 2030.

However, Mr Juniper said that reaching those ambitious goals would require much more than just regulatory intervention.

"As we move into nature recovery, which is different to environmental protection and conservation, which used to be the themes of the past, we need more creative processes that involve more actors, certainly way beyond official bodies that run regulatory regimes," he said, "This needs to be a common endeavour. Farmers, house builders, water companies, local communities, NGOs, fishing communities working together."

He warned that over centuries, England had stripped the resilience out of its landscape, through habitat loss and fragmentation, the intensification of farming and pesticide use, invasive species and the reengineering of river systems and loss of wetlands.

"On top of all these things, no we're being hit by these fundamental climate impacts," he said. "For me, it's not only a question of reducing the pressures, in terms of habitat loss, it's also about rebuilding resilience in the natural world, if we're going to take these climate impacts and have any chance of wildlife actually recovering… not just to hanging on to the remnants that are left."

The Home Builders Federation was approached for comment.

Retro-fit Trees into Housing Estates to Bring Nature Back, Charity Tells Councils

An article published on Specification Online

THE WOODLAND TRUST has challenged councils to bring back nature to the places we live as councillors and officers converged on the Local Government Association (LGA) Conference in Bournemouth. The charity presented its new report, "Trees and Woods at the Heart of Nature Recovery in England" to delegates which sets out a raft of solutions, including adding more trees into housing estates with less than 16% tree cover, 30% canopy cover for new developments, and access to greenspace within 10 minutes of everyone's doorsteps.

To coincide with the launch, the Trust is urging people to back its campaign calling on councillors to take urgent action for nature.

The report, designed to help councils and communities write their Local Nature Recovery Strategies, follows the Government's announcement on 30 June that is has made £14m available to the 48 local authorities tasked with leading on drafting the plans.

Ecologist Louise Wilkinson, Nature Recovery Lead at the Woodland Trust who co-authored the report, said: "We recognise the enormous strain on local authority budgets and wrote this report to offer a helping hand on how to surmount the challenge of rapid declines in nature. This year the Government handed local authorities the task of involving communities in writing Local Nature Recovery Strategies. This is a golden chance for communities to map out what they want to see, where to bring nature back, and crucially, to embed this in local policy. It's a tough task so we have published the top steps that should be incorporated."

Since 1970, 35% of species have declined in abundance. This means today's children now have a 70% less chance of seeing a hedgehog than their parents did, while dormice populations have fallen 48% since today's primary school pupils were born. The proportion of urban green space is also declining.

Responsibility to turn the tide rests with local authorities as well as national government. As part of the 2021 Environment Act, the Government is tasking designated local authorities to develop Local Nature Recovery Strategies bespoke to their areas – an action required by law. These plans are designed to be easy to grasp and are geared to reflect the views of local people on where they want to see areas of nature-rich space for public use.

Darren Moorcroft, chief executive of the Woodland Trust, explained why trees are vital: "Trees and woods are critical in creating better, healthier places for people to live and all communities should have access to these benefits. As well as driving nature's return, tree numbers correlate to improving people's health and well-being, something that's being increaseingly recognised by leaders across the globe. This is why our report calls for councils to ensure more trees on new and existing housing estates as well as improved access to woodland, so that trees and woods can benefit their residents and nature alike."

To help ensure these plans are placed high on agendas, the Woodland Trust is asking people to contact their local authorities via its campaign website. The e-action will demand that local authorities declare a nature crisis. It is estimated that while 80% of councils have declared a climate emergency, fewer than 15% that have declared a nature crisis.

Dr Moorcroft, continues: "We have launched our campaign that takes two clicks to let your local authority know you want it to declare a nature emergency. We know many people feel unheard but we're asking them not to under-estimate the power of lending their weight to campaigns that challenge elected politicians to listen. Our report is focussed on solutions, not panic. There are answers to the crisis we face. We just need action … and it can be done."

To contact your council and back the e-action, visit the campaign page.

Read the Nature Recovery Report in full.

WRITING on the Norwich Evening News website, Francis Redwood reported that The Woodland Trust report arrives amid a housing boom in the Norwich area.

The Greater Norwich Local Plan set out targets for where 50,000 homes would be built by 2038 in the Norwich, Broadland and South Norfolk council areas.

"Norfolk County Council, said Norwich's tree canopy coverage was assessed at 18.6% by Forest Research. That is above the national average level of cover of 16% and compares relatively well alongside other historic cities.

"We recognise the importance of trees in our towns and cities and have been working with Norwich City Council to plant more trees within the city. Last year we planted 63 new street trees and this year we've developed a programme to plant 382 across the city over the next two years."

Unfortunately, a report by the EDP's Dan Grimmer a few days later revealed that Norfolk County Council says it tries to replace diseased trees which are chopped down, but does not have a tree replacement fund.

Perhaps our County Council needs to change its priorities … FAST!!

Dangerous Plants Lurking in Plain Sight

MOST of us are aware of just how dangerous some plants can be. Nevertheless, I thought it worth publishing this article by Laurence Cawley of BBC News, Suffolk, that I found on the BBC News website. On 10 July, it emerged children's lives were "at stake" in a Suffolk village after hemlock, a plant that can be fatal if ingested, was found along their normal walk to school. Hemlock, however, is far from our only green neighbour that poses a risk.

HEMLOCK

The alkaloids in Hemlock cause violent vomiting and paralysis of the nervous system, with death usually due to respiratory failure.

The Bucklesham hemlock's days are numbered. First reported to Suffolk County

Council in June by parish council chairman David Brinkley, the authority has pledged to close the road and remove the offending plant.

In his call to action, Mr Brinkley says delays to the plant's removal "put children's lives at stake".

Head teacher Rachael Rudge has similar concerns. "To walk on the roads because the path isn't safe because of all the hemlock and vegetation overgrowing, they're being put in this really difficult and unsafe position," she says.

However, according to Prof Iain Barr, of the University of East Anglia, the removal of the hemlock leaves a further 28,000 still dotted around the UK. Prof Barr, a professor of field ecology, tells the BBC about a number of other dangerous plants sitting in plain sight and why some pose such a threat.

GIANT HOGWEED

The toxic sap of giant hogweed *Heracleum*

mantegazzianum is not to be messed with, says Prof Barr. It grows near canals and rivers and can cause burns, blisters and scarring to those who come into contact

It is one of more than 100 toxic plants found in the UK and listed as potentially harmful by the Royal Horticultural Society.

"If you touch it and your body reacts to it, it can cause a reaction and makes you very susceptible to sunburn," Prof Barr says. "You don't want to come into contact with any part of it."

The plant, a close relative of cow parsley, has white flowers, thick bristly stems and can grow more than 16ft (5m) tall. Native to Central Asia, it was introduced into Britain in 1893 as an ornamental plant, but "escaped from domestication".

Toxic components in the leaves, stems, roots, flowers and seeds can be transferred to skin by touch.

It is often confused with its native relative, the common hogweed which is also toxic, but less so.

FOXGLOVE

A staple favourite for a shadier spot in the garden, the much-loved foxglove's floral beauty comes with a dark side. Foxglove - *digitalis* - is a source of digitoxin, a glycoside in the drug digitalis, which has been used as a heart stimulant since 1785.

It is also well-known for its toxicity in all parts of the plant. Consuming the leaves can cause oral and abdominal pain, nausea, vomiting and diarrhoea. In severe cases, symptoms can include visual disturbances, plus heart and kidney problems.

"People should just stand back and admire it," says Prof Barr.

DEADLY NIGHTSHADE

Belladonna, or deadly nightshade, is one of the UK's most poisonous plants and just a couple of berries, which contain tropane alkaloids, would be enough to kill a person. "It is part of the tomato family," says Prof Barr. "It can be found in woodlands, though it is not quite as common as it used to be."

The Solanaceae family is a vast one with more than 2,500 members including tomatoes, potatoes, chillies, aubergines, peppers, tobacco, deadly nightshade and henbane.

Despite its deadly potential, the nerve-gas antidote atropine sulphate can be extracted from it.

HEMLOCK WATER DROPWORT

"The hemlock water dropwort is very, very common around the Norfolk and Suffolk Broads," says Prof Barr. "It is also very toxic."

It is also known as the "poison parsnip", hemlock water dropwort *Oenanthe crocata* is one of the most poisonous plants native to the UK.

Both hemlock and hemlock water dropwort are part of the carrot family, but live in different habitats and have different toxins. The tubers, stems and leaves all contain a poisonous and powerful convulsant called oenanthotoxin, which targets the central nervous system.

Hemlock on the other hand contains five alkaloids. Coniine, conhydrine, pseudo-conhydrine, methyl-coniine and ethyl-piperidine can cause violent vomiting and paralysis of the nervous system.

CHEMISTRY AND EVOLUTION

Toxic plant related deaths are very rare in the UK, but they do happen. The Office for National Statistics found six people died from the "toxic effect of ingested plants" in 2016, but how do plants become so toxic that they can kill people?

"It is all to do with chemistry and evolution," says Dr Barr. "Plants have developed toxins to avoid being eaten. "So a plant that is slightly more toxic to a grazing animal than the ones next to it has a slight advantage.

"Over time, this process leads to a point where certain plants can become very toxic to certain species."

The majority of the UK's native toxic plants evolved their toxins to deter huge creatures like woolly mammoths or 2m (6ft 6in) tall aurochs, rather than us humans, he said.

"If an auroch or mammoth overgrazed, then the plant alkaloids would make it not feel very well," he says.

"It was not designed to kill them, just to make them unwell and to stop eating."

Plant toxins certainly did not develop, he says, to prevent children from walking to school.

War on Our Trees and Woodlands

TWO RECENT ARTICLES should be of interest to us all. The first I found on www.localgovernmentlawyer.co.uk where Mark Smulian reported that the Court of Appeal has rejected an attempt to use tree preservation policies to halt the redevelopment of an estate, even though Lord Justice Stuart-Smith noted the London Borough of Lambeth's policy was "not drafted as well or as clearly as it could have been".

Andrew Plant, a resident of the Cressingham Gardens estate which Lambeth proposes to demolish and redevelop, challenged its grant of planning permission on the ground that the council misinterpreted its local plan.

This was because it included the proposed felling of trees and so was contrary to the relevant policy on its proper interpretation. He had already argued the point unsuccessfully in the High Court.

The policy, known as Q10, provides development will not be permitted that would result in the loss of trees of significant amenity, historic or ecological/habitat conservation value or give rise to a threat to the continued wellbeing of such trees.

It also says where trees are located within a development site, they must either be retained or where it is imperative to remove them, adequate replacement planting will be secured.

In Plant, R (On the Application Of) v London Borough Of Lambeth [2023] EWCA Civ 809 Stuart-Smith LJ said: "The issue in this appeal is whether, on the proper interpretation of Q10, the felling of the trees is contrary to [it] even if it is 'imperative' to remove them and suitable replacement planting…is secured."

Mr Plant argued the policy meant an absolute requirement to preserve trees and Lambeth countered that the point about 'imperative' removal gave it an exception.

The High Court had identified that the consequence of Mr Plant's submissions would be that the policy always required retention of significant trees, whatever justification there might be for their removal or whatever benefits removal might bring.

Stuart-Smith LJ said: "Mr Plant's case is that the planning authority cannot within policy strike a balance between the importance of the scheme and the value of the tree proposed for removal in deciding whether removal is 'imperative' under Q10."

He said: "Whichever is the correct interpretation, it must be acknowledged at the outset that Q10 is not drafted as well or as clearly as it could have been."

The judge explained though that Lambeth's interpretation "does less violence to the wording of Q10" and provided a more natural interpretation.

A further consequence of Mr Plant's proposed interpretation would be that the obligation to secure replacement planting arose only if it was 'imperative' to remove the trees but not otherwise.

"There seems no obvious logic that would require replanting to be secured if it had been imperative to remove a tree but not if the tree was removed even though it was not imperative to do so," Stuart-Smith LJ said.

Lord Justice Moylan and Sir Keith Lindblom agreed with the main judgment.

THE second article, by, Ewan Murrie and Eve Watson writing on the BBC News website, reported that the High Court has rejected Plymouth City Council's application to have a judicial review thrown out after more than 100 trees were felled in the city centre.

It comes after former Conservative leader Richard Bingley signed an order for 129 trees to be cut down in Armada Way on 14 March as part of a regeneration project.

An injunction stopped the felling and a High Court Judge in London kept the court order in place, which prevents the council from cutting down about 20 trees still remaining.

Labour council leader Tudor Evans has since scrapped the tree felling order and wanted to end the legal action, but a judge disagreed and said the local authority's application to have the case thrown out was "misconceived".

Mrs Justice Lang DBE said: "In my view the application is misconceived. Permission has already been granted for a substantive judicial review hearing."

The hearing will go ahead unless an agreement is settled outside court and will determine whether the former council leader's decision to approve the felling was unlawful.

Mr Evans said "Whilst we are disappointed with the court's decision and will now consider our next steps regarding the legal action, we are going to continue looking forward on the future of Armada Way and not dwell on the past," he said.

Efforts to remove the felled trees from Armada Way were put on hold in April because of concerns about nesting birds. Mr Evans then scrapped the controversial scheme when Labour took over the council in May. The leftover trees have caused some frustration with local traders, who said the trees were putting people off from shopping in the area.

Plymouth City Council confirmed the stumps of the felled trees between the sections on Mayflower Street, Cornwall Street and New George Street would be removed by 30 June.

Mr Evans said: "We have already created the cut through in the fencing, enabling people to access the shops more easily and I was always clear that the removal of the stumps should take place well before the summer holidays.

"By removing the stumps, we will be able to further pull back the fencing, enabling even more space and access to shops".

Mr Evans added the work would happen during the day whilst being supervised by an ecologist.

JACK TOLSON reported on the Barnsley Chronicle that plans to fell more than 150 trees to make way for a huge housing development in Wombwell have angered residents, who have received the backing of a local councillor.

Plans have already been approved by the council's planning board to build a total of 235 homes on Lundhill Road and work is already underway. However, a recently submitted amendment to the plans state the firm behind the development, Miller Homes, want to destroy another 160 trees.

Local resident Kathryn Wing, who has lived on nearby Gypsy Lane for six years, said the area used to be a haven for wildlife, but the submitted plans will mean this will no longer be the case. She told the Chronicle: "They've already felled more than 100 trees before this amended application was submitted. "They now want to take another 160 trees out.

"There's only a handful of people who have been notified of this. We just haven't been consulted enough. Gypsy Lane used to be a street full of trees but this is no longer the case. We just need some support. I can't sit around and do nothing."

A planning report states that the removal of the trees will be compensated on a one-to-one basis.

"In total, the proposal seeks to remove a total of 160 trees from the site. The loss off these trees will however be compensated one a one-to-one basis, with 160 replacement trees to be replanted. In total, 128 trees will be planted within the developable area in the form of street and garden trees, and 37 trees will be replanted within the woodland."

Cllr James Higginbottom, cabinet spokes-person for environment and highways, represents the Wombwell ward and aired his concerns to the planning department.

He believes that one-to-one compensation is not sufficient as many of the trees due to be felled are mature, and will be replaced by 'much younger' ones. Furthermore, the previous conduct of the developers and the loss of 'visual amenity' to properties on Gypsy Lane and Poplar Road are also of concern.

He added: "I have been contacted by a number of residents from the surrounding area, who are very concerned about the proposed felling of an additional 160 trees to facilitate the construction on the former Wombwell High School site. I do not believe that these proposals are necessary to ensure the viability of housing delivery on site.

"Plans that were initially granted for the construction of 235 dwellings did so on the basis of existing arboricultural assessments, and this was clearly known to the developer at the time they took over the site and associated planning permissions. In my view, these proposals would result in an unacceptable loss of visual amenity to surrounding properties and a considering and unjustifiable loss of biodiversity at this time."

REPORTING on The Warrington Guardian, Tom Bedworth wrote that a row between neighbours in Appleton regarding a fence has caused the Woodland Trust to wade in.

The fence was erected by one resident on land that does not belong to them and has allegedly refused to remove it.

According to one neighbour, the resident has also explained that they will be using CCTV cameras to monitor the area, even though it is not their property.

The unauthorised fence was erected in an area that a resident claims has blocked a public right of way, which spurred the disgruntled individual into action.

After contacting their local MP, the resident also reached out to the local council who told him that the area is not a public right of way, therefore he should get in touch with the Woodland Trust.

Speaking to the Warrington Guardian, the resident said: "The chap states he is recording via CCTV. The use of anti-vandal paint is also alarming as it will damage clothing. He has no right to do this."

The complaint refers to a property on Larkstoke Close in Appleton, which was also reported to Warrington Borough Council. However, the area of land is maintained by the Woodland Trust.

Neil Oxley, Woodland Trust site manager, told the Warrington Guardian: “We are aware of this issue and are working with our legal team and neighbour to get the fence removed.”

Editor’s comment. After more than 30 years as a Tree Warden I really shouldn’t be surprised by things like this, but the arrogance of some people still amazes me.

ALAN SMITH, writing on Kent OnLine, reported that The Woodland Trust has launched a campaign to stop a major extension of a ragstone quarry which it says could destroy a swathe of ancient woodland.

By 3 July, the campaign generated more than 7,000 letters of objection to Kent County Council’s draft Minerals and Waste Plan, which, if it was agreed, would allow the ragstone quarry run by Gallagher Aggregates Ltd in Hermitage Lane, Barming, to more than double in size.

The trust said: “The proposed quarry extension could ravage more than 50 hectares of Oaken Wood, an ancient woodland. It’s a shocking and short-sighted proposal that completely disregards the national commitments to tackle the nature and climate crises.

“The loss of ancient woodland from this scheme could be greater than the losses from HS2 and the Lower Thames Crossing combined. “It is the biggest single development threat to ancient woodland in England for decades.”

The trust said that in 2013, an extension to the quarry was approved by government and as a result the quarry now occupies 32 hectares of what was once precious ancient woodland, but it points out that since then, protection for ancient woodland has been strengthened in planning policy.

The trust’s statement continued. “The proposals aren’t clear on exactly how much ancient woodland will be taken. “Our analysis suggests at least 50 hectares is likely to face the chop, with much more exposed to serious long-term damage and deterioration. That’s equivalent to more than 70 football pitches. “We’re appalled that such an outrageous amount of destruction is even being considered.”

The proposal forms part of KCC’s new Mineral and Waste Local Plan, which is out to public consultation here. People have until July 25 to give their views.

The trust is urging people to oppose the plan and has made it easy to do so by drafting a letter for them to use which they can find online here and send to KCC by an attached link.

KCC proposes to allow Hermitage Quarry to expand by 96 hectares, to allow Gallagher to

extract a further 20 million tonnes of ragstone.

Officers said there is an expected shortfall of 17.4 million tonnes in the provision of hard rock extraction over the plan period up to 2039.

KCC had previously carried out a “call for sites” inviting landowners across the county to put forward suitable plots for ragstone extraction, but only Gallagher’s came forward.

The company proposed an extension to the south and west of its existing quarry. It says the extension would ensure the future of 190 jobs at the quarry and points out that ragstone is an essential material for the repair of many heritage buildings.

It says that it has a proven record of restoring land to an enriched biodiversity standard once the quarrying is finished.

It said: “We are exploring options for the ongoing preservation of the ancient woodland soils, to ensure a biodiversity net gain which preserves the soil quality and local biodiversity for future generations."

Gallagher says the extension to the quarry could supply ragstone at a rate of around 900,000 tonnes a year. At the end of its life, the quarry would be restored to its original levels with inert materials and be returned to mixed native woodland and meadow.

Vehicle access would continue to be from Hermitage Lane.

The site is within the parishes of East Malling and Larkfield, Ditton and Barming, and straddles the boroughs of both Tonbridge and Malling and Maidstone.

Cllr Tony Harwood (Lib Dem) said: “I campaigned alongside many local people to ensure that the National Planning Policy Framework contained effective protection for ancient woodland and other irreplaceable habitats. Little did I know that the first big test of this policy would be in Maidstone.

“The scale of ancient woodland destruction proposed is immense and if allowed would be the largest area of ancient woodland lost in the British Isles for many decades. The promoters of the quarry extension are making much of the fact that most of the wood was replanted with sweet chestnut to produce poles for the hop industry in the 18th and 19th centuries.

“That said, many native trees and shrubs still flourish across Oaken Wood, including pedunculate and sessile oak, hornbeam, hazel, silver birch, common hawthorn, dogwood, rowan, dog rose and holly. However, an ancient woodland is the sum of its parts and it is the undisturbed soils and their biome that contain the real wonder of ancient woodland.

“Significantly, it is probably the presence of the broadleaved and deciduous sweet chestnut, that has protected the wood to date by giving it a commercial value that has prevented it from being cleared and ploughed-up for agriculture.

“The presence of sweet chestnut has also contributed towards the remarkable biodiversity of the wood, historically, the best site in Kent for breeding nightjars. This is because active rotational coppice management has meant that all important structural diversity has been maintained over the centuries.

“A further key concern is the impact on Net Zero objectives should 50 hectares of ancient woodland be destroyed for a quarry extension. The quantity of carbon sequestered by the undisturbed woodland soils and within the many thousands of trees is immense.

“Such an unprecedented loss of ancient woodland would be of national policy significance in terms of the precedent it could set and its impact upon wildlife and climate.”

Cllr Harwood called for the Secretary of State to step in to “ensure an appropriate level of national policy scrutiny and scientific oversight”.

He said: “Too much is at stake for all of us if we get this wrong.”

The quarry extension is also being opposed by the Green Party. Campaigner Rachel Rodwell has already collected a petition of 400 signatures against the plan which she has handed in to KCC.

She said: “There is an ecological emergency unfolding around us yet KCC and Gallagher seem to think it is quite reasonable to destroy a huge swathe of ancient woodland for profit and pretty stones for houses and aggregate for more roads.

“Ancient woodland cannot be replaced. It takes over 400 years for the soil biome to mature. It is protected as it has a level of diversity not seen in new woodland. “With the loss of 70% of species during the past 50 years, this plan does the opposite of what the world needs. If we are to ensure a future for our children we must start planting forests, not destroying them.”

Lance Taylor, chief executive at the Gallagher Group, said: “It is important to clarify that only part of the area that has been identified at this early mineral plan review stage is designated as Plantation on Ancient Woodland Site (PAWS).

“Gallagher Aggregates has established a proven and well-respected restoration and biodiversity enhancement plan at Hermitage Quarry. If the identified site is allocated in the new plan, we are committed to replacing the low-value introduced species that are currently present with a more diverse mix of higher value native species in line with our current approved practices.

“This approach ensures not only greater long-term carbon sequestration but also a significant biodiversity net gain, which will contribute to the preservation and enhancement of the local eco system.

“The continuation of Hermitage Quarry is crucial in supporting Kent's Mineral Plan. As the sole provider of crushed rock in the South East of England, Gallagher Aggregates contribution is of utmost significance.

“Failing to increase the supply of Kentish ragstone would lead to the increased importation of rock from other sources, resulting in diluted heritage, increased carbon footprint and detrimental impacts on local jobs and supply chains.

“At the core of this debate lies the challenge of striking a balance between conservation and development. Gallagher Aggregates has demonstrated its commitment to environmental stewardship along with responsible resource extraction providing a locally sourced, sustainable mineral to Kents built environment.”

Jack Taylor, the Woodland Trust’s lead campaigner, said: “Ripping up more wooded habitat that provides such vast benefit to climate, nature and people is senseless. Combined with the scarce amount of ancient woodland remaining, it’s glaringly obvious that Oaken Wood must be spared the axe.

“We are asking people to join us in telling Kent County Council just how outrageous this plan is.”

CHRIS MATTHEWS reported on MailOnline that a tycoon who founded a bakery worth tens of millions of pounds was accused of chopping down scores of protected trees to build a luxury mansion.

Sukh Chamdal, 61, founded egg-free bakery Cake Box, which is worth £35million and has more than 200 franchises nationwide. Mr Chamdal and four other defendants pleaded not guilty at Chelmsford magistrates' court on June 22 to illegally felling at least 132 trees in a woodland at Debden Hall, Essex.

The entrepreneur is reportedly set to appear at Chelmsford crown court to face accusations of breaching a tree preservation order to clear space for a proposed luxury residence, according to a report in the Telegraph.

Epping Forest District Council is to bring the prosecution against Chamdal, who could receive an unlimited fine and be forced to replace all the trees if he is found guilty, it was reported. The trees were cut down over two weeks in March 2021 so a 9,000 sq ft mansion could be built in the woodland.

Chamdal launched egg-free Cake Box 13 years ago with a £20,000 grant after his daughter said she didn't want 'dead chickens' in her birthday cake.

He co-founded the firm, which now has 205 shops across Britain, with his cousin Pradip Dass during the height of the global financial crisis in 2008, after being inspired by his daughter.

All of the group's products remain free of eggs, alcohol and meat, making it very popular with vegetarians and those who follow a strict diet for religious or ethical reasons.

PIERS MEYLER, Local Democracy Reporter for EssexLive, reported that A wooded plantation near Stansted Airport will be demolished to make way for 30 homes.

The 3.4 hectares site, located on the south-eastern side of High Lane and situated to the north-eastern edge of Stansted Mountfitchet village was planted in 1996 under a forestry commission Woodland Grant Scheme for commercial timber production

The agreement became part of a Farm Woodland Premium Scheme over a 25-year scheme after the end of which the land could revert back to its former use. Centrally within the site there are large oak trees which are covered by Tree Preservation Orders and cannot be removed.

Officers says the development will have “limited impact” on the landscape while bringing economic befits and contribute the council’s housing need, its housing land supply currently standing at 4.89 years below the five years required of councils.

The site is about 500 metres from where 350 homes are being planned on agricultural land north of Walpole Meadows, by Pegasus Group on behalf of developers Bloor Homes. There has been opposition to the development of the plantation over the destruction of natural habitat.

Councillor Allen Dean (Lib Dem, Stansted North) told Uttlesford planning committee on July 5: "It should be renamed woodland east of High Lane. In my parish little woodland remains. This woodland is the core of Stansted Mountfitchet and therefore in my opinion it should remain.”

He added: “The wood is a home for wildlife. We saw badger setts. It is a place where true nature resides alongside people and our fellow citizens. There is plenty of land elsewhere that could be built on. This council does have a problem created by its out of date local plan and there are other ways of resolving that besides destroying Stansted Mountfitchet’s limited supply of urban woodland.”

Developer agent Andrew Martin on behalf of Pembridge Land Group Limited said: “This woodland is a commercial plantation. It is not natural woodland. It is clear the scheme was planned so that trees could be felled for commercial purposes. A large proportion of the trees were conifers planted as nurse trees and many other were ash which are now suffering from dieback.”

CASEY COOPER-FISKE, reporting for Norwich Evening News, wrote that “troublesome” trees which loom over Newmarket Road in Norwich could be cut over fears they could fall and hit vehicles and pedestrians.

The low-hanging branches which emanate from Montpellier House, in Judges Walk, have been known to strike tall vehicles as they pass underneath. but now the owners of the four-bedroom home, which has been listed for sale for £1.3m, have applied to have them cut back over worries they will fall.

In a planning application submitted to Norwich City Council by the home's owner, former Norwich City goalkeeper Scott Howie, it is said that a similar tree at another home had fallen recently in heavy rain.

He said: "The branch is in danger of falling in adverse weather or in collision with a tall vehicle. A similarly positioned branch fell after heavy rain. The proposed branch is long and grows horizontally and downwards. There are some dead limbs on the branch."

Mr Howie said that following the incident, the county council's highways department had recommended that he removed the branches overhanging the road. It is hoped a decision on the trees will be made by August 15.

BROADSHEET congratulates Okehampton Town Council for opposing a planning application for a crown reduction of an oak tree on Quarry Fields on the grounds of loss of habitat.

The Okehampton Times reported that The council opposed the application at a recent meeting following a comment by Cllr Michael Ireland during which he raised concerns that the proposed 3m reduction would have a significantly negative impact on the wildlife that call the area home.

Cllr Ireland described the area as a ‘wildlife haven’ and pointed out that cutting down trees during spring and summer months was likely to disrupt nesting birds which the RSPB says are already suffering from severe habitat loss in urban environments.

He said: ‘It’s a woodland corridor. It’s part of an ecosystem and I know on our planning objections ecology and landscape can be noted here so I think I am much more considerate to maybe trimming would be useful not cutting as is shown in the plan. Personally I object to that being done to the tree - it’s landscape value and ecological value are really important to us.’

Cllr Richard Colman echoed Cllr Ireland’s view, saying that although the trees had grown substantially in the last ten years and swayed in high winds, the proposed cutting was too extreme.

The application also proposes to reduce the crown of a silver birch tree which proved to be less controversial since, in the words of Cllr Ireland, silver birch could be ‘quite prolific.’

It was also noted that the applicant had provided no arborist report to explain why such action is needed.

AN ALDEBURGH homeowner has been fined £5,500 and told to replace a protected tree unlawfully removed from his garden.

Russell Abrahams, 62, was sentenced by magistrates after pleading guilty to breaching a 34-year-old preservation order by felling an oak tree in the garden of his Thorpe Road home last summer.

The prosecution was brought under the Town and Country Planning Act 1990 by East Suffolk Council, successor to Suffolk Coastal District Council, which approved the original TPO in June 1989. The Act prevents anyone from cutting down a protected tree without getting permission from the local authority.

On Monday 22 August 2022, acting on a report of unauthorised tree felling, East Suffolk Council’s Principal Landscape and Arboricultural Officer visited the address, located within the Aldeburgh Conservation Area, where residents are required to also give six weeks’ notice of intent to carry out any tree works.

Although a tree works application had been submitted to East Suffolk Council in December 2020, it only covered work to a number of grey poplars in the front garden area and the removal of a rotting sycamore to the side of the property, but made no reference to a healthy, maturing Turkey oak felled nine days before the officer’s visit.

Mr Abrahams appeared before magistrates on 19 June to admit breaching the preservation order. He was fined £5,500 and ordered to pay £1,302 in prosecution costs and a £2,000 statutory court surcharge. A tree replacement notice will also be issued by East Suffolk Council, requiring the planting of a replacement Turkey oak in a position adjacent to the location of the felled tree.

Cllr Kay Yule, East Suffolk's cabinet member for Planning and Coastal Management said “TPOs exist for the benefit of the public and are put in place to protect trees judged to be of such value that their removal would have a significant negative impact on the local environment. “I hope this prosecution and the resulting sentence serve as a strong reminder that anyone considering work on protected trees must follow the correct processes.”

Cllr Rachel Smith-Lyte, East Suffolk's cabinet member for the Environment, said “While this wasn’t a case of deliberate negligence, or of a large developer felling dozens of trees at once, it was nonetheless reckless and resulted in the destruction of a healthy, maturing, protected oak tree.

“Our investigation found that the tree showed no signs of any decay that might present an imminent danger to property and justify emergency work permitted within the legislation. In any case, we need to change our attitudes towards decaying wood as it is essential to wildlife, in particular species of beetle and their larvae that depend on decaying wood. No insects means no food for many species of bird.”

SIMON JOHNSON, Scottish Political Editor for The Guardian, reported that almost 16 million trees have been chopped down on publicly owned land in Scotland to make way for wind farms, an SNP minister had admitted amid a major drive to erect more turbines.

Mairi Gougeon, the Rural Affairs Secretary, estimated that 15.7 million trees had been felled since 2000 in land that is currently managed by agency Forestry and Land Scotland (FLS) - the equivalent of more than 1,700 per day.

She insisted there was a planning presumption in favour of protecting woodland and wind farm developers would be expected to undertake "compensatory planting elsewhere".

However, Liam Kerr, a Scottish Tory MSP, said the public would be "astonished" at the total and cited concerns about the developments that had been raised with him "by communities all over the country."

Scotland already has turbines theoretically capable of generating 8.4GW of power, well over half the UK's total, but SNP ministers want to add a further 8-12GW.

Their latest planning framework relaxes controls on building more turbines, with protections for unspoiled wild land watered down.

The John Muir Trust, a conservation charity, has warned the new threshold for allowing wind farm companies to build turbines on wild land is so low that it appears impossible for them not to meet it.

The SNP wind power target also includes replacing existing turbines that may be coming to the end of their working life with even taller and larger versions, a process called "repowering". It emerged earlier this year that some developers want to erect turbines up to 850 feet tall, the equivalent of more than 60 double decker buses.

In a letter to Mr Kerr, dated July 13, Ms Gougeon said the equivalent of around 7,858 hectares of trees had been chopped down to make way for wind farms since 2000. With an average of 2,000 trees per hectare, she said: "This gives an estimated total of 15.7 million trees which have been felled in order to facilitate windfarm development."

The minister added: "Removal should only be permitted where it would achieve significant and clearly defined additional public benefits. Where woodland is removed in association with development, developers will generally be expected to provide compensatory planting in order to avoid a net loss of woodland."

She said many of the felled trees will have been "replanted on site" or replaced elsewhere, and the vast majority were part of a commercial crop that would have been chopped down anyway "at the end of their rotation".

However, Mr Kerr, a North East MSP, said: "Most people will be astonished to see the number of trees cut down to make way for wind farms. I've been contacted many times by rural communities all over the country questioning the location of these developments, sharing legitimate concerns not just about the visual impact but also damage to wildlife and business. Now we learn there's significant damage when it comes to trees."

He said ministers "must be alive" to the "significant costs" that could be incurred with the siting of wind farms.

FLS said it had planted more than 500 million trees since 2000 and the quantity felled for wind farms equated roughly to its annual harvesting programme.

A spokesman said: "Renewable energy generated from wind farms is a key element in Scotland's response to the climate emergency and the shift towards net zero and the infrastructure on land that we manage generates enough power for 600,000 homes."

Morag Watson, director of policy at trade body Scottish Renewables said: "The volatile price of imported gas has left energy consumers suffering some of the highest prices in living memory, alongside a climate emergency which means cutting the amount of carbon we emit as quickly as possible.

"Building new wind farms - the cheapest form of power generation - tackles both problems at once."

WRITING on the Environment America website, Ellen Montgomery and Mark Morgenstein reported that More than 500,000 people have submitted public comments to the US Forest Service calling for the agency to adopt a rule that protects mature and old-growth trees and forests on federal land as a cornerstone of US climate policy.

On 20 July, Environment America Research & Policy Center and Sierra Club delivered some of those public comments to the US Forest Service office in Washington, DC. Activists holding signs that said "Save America's Oldest Trees" joined the environmental advocacy groups for the delivery at the Forest Service's national headquarters.

The submissions come at the end of a public comment period about a proposed rulemaking on forest management and climate resilience. The Forest Service specifically asked for feedback on managing mature and old-growth trees and forests on federal lands.

"I'm not surprised that so many people took the time to get involved in this comment period. We love our trees and forests so of course people spoke up, said Ellen Montgomery, public lands campaign director for Environment America Research & Policy Center. "Our forests clean our water, are home for wildlife and are an incredible ally in our work to stop climate change. Our mature and old-growth forests and trees are worth more standing than as lumber."

Currently, the federal government allows logging of mature and old-growth trees across the country. The Forest Service's 2001 Roadless Area Conservation Rule partially protects some U.S. forests from logging but not up to 50 million acres of mature and old-growth trees and forests on federal land. If the government lets timber companies chop them down, it will eliminate one of the most effective tools for removing the atmospheric carbon that exacerbates climate change. In addition, it would eliminate essential habitats for countless species and degrade the land.

"Old growth trees and forests are some of the most effective tools we have to take on the climate crisis. Protecting these forests on federal public lands would absorb and store critical amounts of carbon as well as safeguard vital habitat, ecosystems, and watersheds," said Anna Medema, Associate Director, Legislative and Administrative Advocacy, Forests and Public Lands for Sierra Club.

"Hundreds of thousands of people have made it clear – taking climate action means preserving the old growth we have and letting younger trees mature. We look forward to working with the Forest Service to create the strongest possible rule to protect these treasured forests."

In November, the Climate Forest Campaign released a report, "America's Vanishing Climate Forests." This report spotlighted 12 federally run logging projects that include cutting down mature and old-growth forests, reducing these forests' ability to absorb carbon and releasing into the atmosphere vast amounts of carbon that trees had safely stored.

Together with an earlier report, Worth More Standing, the coalition has highlighted 22 projects that would endanger nearly 370,000 acres of mature and old-growth forests and trees.

I WAS SHOCKED to learn that a number of oak trees in the Long Eaton area of Derbyshire have been confirmed to be infested with the tree pest Oak Processionary Moth (OPM).

It appears that the pest has now suddenly moved north by a considerable distance (much further north than previously recorded) and makes one wonder if it has suddenly become bionic or human activity has provided a means of transport

Broadsheet will keep you informed about ant further migration but in the meantime, you MUST report any suspected sightings to The Forestry Commission.

WRITING on The Argus website, Ellie Crabbe reported that mountain biking has been banned at a Brighton woodland with new council signage warning that those who disobey may be prosecuted.

The sign, in Wild Park, Brighton, says "no mountain biking" in an area where hobbyists can often be seen performing tricks.

Lisa Watson Boswood, who lives nearby, posted one of the signs on Facebook. She told The Argus: "My boyfriend rides there and noticed the poster. It's crazy that the council would do this. I don't see what harm people are doing."

She said the posters are by the council's city parks team.

The signs read: "No mountain biking. Mountain biking in this area poses a health and safety risk and can cause environmental damage. Anyone riding a mountain bike in this area is trespassing and may be prosecuted."

Responding to Ms Watson Boswood's post on Facebook, James Trotman said: "Absolute nonsense. That notice has no legal basis whatsoever."

Joy Flowers, who lives in Brighton, added: "I still have no idea how they will police this in remote woodland."

The Argus understands that the council has put up the signage because damage caused by cyclists can lead to costs to the taxpayer.

MATTHEW TAYLOR, writing on The Guardian website, reported that charity Trees for Streets says dry weather has put pressure on saplings, which need about 50 litres a week

As young street trees struggle and wilt in the summer heat, people are being urged to step into action with their watering cans to help.

Hundreds of people are already looking after their local trees as part of the Watering Wednesday campaign launched by Trees for Streets and some residents have set up rotas and allocated particular saplings to specific families.

Weeks of dry weather have put huge pressure on neighbourhood saplings, which need up to 50 litres of water a week to survive.

Trees for Streets is calling for more people to care for their local trees every Wednesday.

"For the first few years, young trees need about 50 litres a week – five standard watering cans – in the hotter months," said Simeon Linstead, of the charity. "[So] if it's especially hot or dry, feel free to give a street tree a drink."

There is a growing body of evidence showing the myriad benefits of street trees, from improved air quality to increasing biodiversity. Studies show trees dramatically reduce the risk of flooding during downpours, while in heatwaves they cool the air and break up urban heat islands. Research also shows they can improve mental health, strengthen community relations – and can even reduce crime.

Councils have stepped up their planting programmes in recent years as the multiple benefit of street trees are better understood. Many local authorities have watering programmes for younger trees to help them survive. However, tree cover in England is still among the lowest in Europe and Linstead said it was crucial for residents to support trees in their neighbourhoods.

"You won't harm [them] by doing this and they'll repay you in kind with shade in the future," he said.

HOW many of you comment on notices that Broadland District Council has served a new Tree Preservation Order or comment on applications for permission to carry out works on trees subject to a TPO or Section 211 Notices for works on Conservation Areas?

Furthermore, how many of you comment on them to your Town or Parish Councils or Parish Meetings?

The answer, I fear, is not many and I find that most disappointing as it is a fundamental part of the Broadland Tree Warden role to do so.

I won't even ask how many of you have recommended a tree or trees for TPO protection or reported illegal works that have been carried out.

It doesn't take much effort to give your views to Mark Symonds or Hugh Coggles and being "the boots on the ground" or the "eyes and ears" such views can be invaluable.

So please, please, please take a look at the tables I produce and the end of each month's Broadsheet, have a look at the tree(s) and send an e-mail to Mark or Hugh as appropriate,

Go on, You know it makes sense!

I WAS delighted to read an article published on 5 July on North Norfolk District Council's website titled "Help us protect our trees, hedgerows and woodlands"

The council says that trees, hedgerows and woodlands across the district are incredibly valuable, contributing significantly to the health and well-being of local communities, the local environment and the wider global environment by providing a range of ecosystem services.

The Council this year completed the highly successful 110,000 tree planting scheme, one for every resident in North Norfolk. Trees, hedgerows and woodlands are incredibly important and valued by our residents. The Council has also planted six Miyawaki Forests in Sheringham, Fakenham, North Walsham, Hindringham, Cromer and Beeston Regis.

One way of protecting the district's green heritage is through Tree Preservation Orders (TPO) and designated conservation areas, where a single tree, group, woodland or even forest can be protected.

The article details methods of tree protection. TPOs are in place around the district. If a tree is protected or growing in a conservation area then permission must be applied for before any tree work is carried out.

The application process is free and can usually be filled in by an arborist. Tree work can be incredibly dangerous and the Council always suggests that a professional arborist is employed to undertake tree work.

Anyone who breaches a TPO by damaging or carrying out work on a protected tree without permission from the local planning authority may be guilty of an offence and if convicted could receive a fine of up to £20,000. In serious cases a person can be committed for trial in the Crown Court and, if convicted, may be liable for an unlimited fine.

Cllr Adam Varley, portfolio holder for Climate Change and Net Zero, said ""Trees are so important. They give us oxygen and store carbon; they stabilise the soil and increase wildlife habitat, and more. TPOs will ensure that these trees and woodlands are protected and continue to thrive."

Links are provided to relevant further information.

Congratulations to North Norfolk District Council for an excellent article. Short and to the point.

HELENA HORTON, Environment Reporter for The Guardian, reported that Defra this year published what it called "ambitious" nature targets, a requirement under the Environment Act, including the goal of planting 30,000 hectares of woodland by March 2025.

A report by the environmental audit committee (EAC) of cross-party MPs has found that this target was unlikely to be met, putting net zero ambitions at risk.

While the public sector is responsible for only a quarter of UK woodland, the report found there was not enough direction from the government for the private sector, which faces "unclear strategies and overly bureaucratic schemes".

Tree planting is crucial for meeting carbon and biodiversity targets, as well as for sustainability in the building industry. The EAC report says UK-sourced timber will help meet the growing demand for low-carbon construction materials.

It adds that a significant expansion of woodland cover is required to compensate for predicted shortfalls in the supply of domestically produced softwood timber and to deliver the UK's climate and environment goals. At present, the rate of planting is less than half of the government's target.

The report recommends that the government focus on tree planting for its upcoming and delayed land use framework, which is supposed to be a blueprint for how land is allocated in the UK. The Defra minister Mark Spencer recently hinted that it would be watered down, saying it would not be a "communist" document telling landowners what to do with their estates.

The wrong species being planted could also be a disaster for nature, the report says, recommending that native broadleaves offer ideal habitats for nature, while conifers supply softwood for timber use. The committee found this balance was unlikely to be struck, as the UK Forestry Standard is not routinely monitored and Forestry England lacks the resource to do this.

The committee said it was "disappointed to observe that Forestry England is not currently on track to contribute fully to national tree-planting targets: to date it has only planted 303 hectares against its own target of 2,000 hectares between 2021-2026. Ministers should also commission work to identify opportunities for woodland creation on the wider government estate."

The EAC chair, Philip Dunne, said: "The government's target to plant 30,000 hectares of woodland in the UK by March 2025 is welcome, and by and large ministers appreciate the conflicting challenges and demands on woodland. But the committee is concerned that England is currently way off meeting its contribution to that UK-wide goal, and that the rate of planting must increase."

The Conservative MP added: "At the moment there are simply too many overlapping

strategies that aim to cover tree-planting policies in the UK and in England, and there is little evidence of an overall vision for the timber sector. The numerous strategies are disjointed: what is required is an overarching, holistic strategy that sets a long-term vision for how different types of woodland will be used to deliver government's goals."

A Defra spokesperson said: "Since the start of this parliament, we have planted or supported the planting of over 10.8m trees. Increasing tree cover is at the heart of our pledge to meet net zero ambitions, which is why we are investing £650m during this parliament in transforming England's treescapes. We are also continuing to work on delivering our legal target to have 16.5% of England's total land area covered by trees by 2050.

"Tree-planting rates are now at record levels, but we know there is much more to do and will continue to work with partners in both the private and public sector at pace to increase the nation's tree cover and boost the forestry sector – supporting domestic timber production, creating new jobs and improving biodiversity across the country."

It appears to Broadsheet that the government is very good at publishing ambitious (over ambitious???) targets but absolutely useless at achieving them.

Could it be that they don't have a clue about what they are talking about or simply that publishing such targets helps to get them out of the hole they were in at the time?

Or was it that the hole they were in was so deep that they had to promise anything?

Broadsheet wishes that it could believe that a change of government would be any better … but it won't!

Talking Tree Strategies Nationwide

By The Tree Council and Jess Allan

IT IS SAID that failing to plan is planning to fail and this is true for how we manage and establish trees, woodlands and hedgerows. At the local level, it's no mean feat to navigate fast-paced national policy, challenging targets, a changing climate and pests and diseases. So how can local authorities keep on top of their core duties, while making the most of current opportunities for tree planting and woodland creation?

One key action they can take is to create a local Trees and Woodland Strategy (TAWS) in collaboration with key stakeholders. Done well, this can act as a roadmap to a thriving local treescape that benefits people and nature.

In January this year, we published the Trees and Woodland Strategies (TAWS) Toolkit, a step by step guide to developing and delivering a strategy. Funded by Defra, the toolkit was co-created by The Tree Council, Fera Science, Forest Research, the Forestry Commission, alongside local authorities. However, its publication was just the start of the story! Since then, we have embarked on a series of four regional workshops across England – our 'TAWS Tour'.

We have been blown away by the turn-out at each of our workshops, which we held in Leeds, the National Forest, Surrey, and Exeter. More than 120 people joined us in total, from local authorities, key agencies, and sector organisations, like the Woodland Trust, the Forestry Commission, Natural England and the Environment Agency. We hope this spirit of collaboration continues long into the future! Just like our trees, we are stronger and more resilient when we are connected and supported by a wider community.

It was a joy to meet so many people who are passionate about their local treescapes and keen to develop new and improved strategies all across England, from county councils to boroughs and districts, towns and cities. We so appreciate the open and honest feedback about the toolkit and the challenges of developing and delivering TAWS. This will help us to shape some online sessions in the autumn, tackling key themes such as funding and stakeholder engagement.

The toolkit contains guidance for each stage of a TAWS lifecycle: getting started, developing a strategy, and delivering it. While we are yet to fully process the workshop findings, it seems

that a large proportion of local authorities are currently at the developing stage, or reviewing an existing strategy.

So, there are clear opportunities to make a positive difference. However, it was emphasised that there is a wide disparity in levels of resourcing, both in terms of financial budgets and numbers of tree officers within a local authority. This can lead to significant challenges.

For me, one of the best things about the workshops was seeing the support and knowledge-sharing between the local authorities and other organisations who came along.

Following the event in the National Forest, a city council representative said: "I felt we stimulated some really great thoughts on our table. I came back with a good list of actions and feel fired-up to push forward on our strategy review - thanks!"

We encourage anyone interested in trees and woodlands to check out the TAWS Toolkit. In particular, have a look at the ten cases studies, that showcase a diverse range of examples from local authorities across England and demonstrate that every step forward is worthwhile. We hope that this knowledge and experience will provide a source of inspiration for many more local authorities.

From all of the workshops, we have reams of notes that our research team will review carefully to guide our next steps. We hope to hold online workshops later in 2023, providing guidance and discussion about the most pressing challenges facing local authorities.

Jess Allan is The Tree Council's Science & Research Projects Manager. To find out more about The Tree Council, please visit treecouncil.org.uk

Tree Preservation Orders and Conservation Area News

Broadland Tree Preservation Orders Served, Confirmed and Revoked				
TPO No	**Address**	**Served**	**Trees Protected**	**Status**
2022 No 13	Land rear 9 St Pauls Close, **Hellesdon**	16/12/2022	**T1 magnolia**	Provisional
2023 No BD0596	Verge east of School Road, **Drayton**	30/03/2023	**A1 mixed area**.	Provisional
2023 No BD0601	5 Church Lane, **Sprowston**	28/04/2023	**T1 oak** in rear garden.	Provisional
2023 No BD0604	Land east of Manor Road, **Newton St Faith**	15/05/2023	**T1, T5, T6, T7, T8, T9, T11, T12, T13, T16, T17, T18, T19, T20, T21** & **T22 oak, T2, T14** & **T15 ash, T3 apple, T4 sycamore** and **T10 holly**	Provisional
2023 No BD0605	Front garden of Beechbank, Buckenham Road, **Lingwood**	17/05/2023	**T1 copper beech**	Provisional
2023 No BD0606	42 Park Road, **Spixworth**	25/05/2023	**T1 oak**	Provisional
2023 No BD0608	Front garden of The Rectory, Norwich Road, **Acle**	19/06/2023	**T1 stone pine**	Provisional
2023 No BD0609	Land adj cycle path south of Broadland Northway, from track leading from Reepham Road, **Taverham**	22/06/2023	**A1 mixed area.**	Provisional
2023 No BD0611	Land east of Fred Tuddenham Drive, **Cawston**	29/06/2023	**G1 oak x8.** **W1 mixed woodland**	Provisional
2023 No BD0612	Tree(s) at 76, 82, 86 & 96 Charles Avenue, **Thorpe St Andrew**	14/07/2023	**T1 oak** at number 76, **T2 oak** at number 82, **T3 oak** at number 86 and **T4 oak** at number 96.	Provisional
2023 No BD0606	Front garden of 3 Barrack Yard Cottages, Church Road, Wickhampton, **Freethorpe**	26/07/2023	**T1 ash**	Provisional

Current Works to Trees Subject to a Tree Preservation Order and Section 211 Notifications for Works to Trees Within Conservation Areas				
App No	**Address**	**Cat**	**Species / Requested Works**	**Decision**
2023/1322	Land adj to 12 Crown Meadow Way, **Newton St Faith**	TPO	**T001 oak** - crown reduce by 2 - 3m overall from 26 to 23m height and 14m to 12 - 13m. Reshape crown. **T002 oak** – crown reduce by 3m overall from 17m to 14m height and 10m to 7m radius. Reshape crown.	Approved
2023/1354	The Hollies, 43 Waterloo Road, **Hainford**	TPO	**T1 hornbeam** - Deadwood. Crown reduction to 5m above ground to alleviate further damage to property whilst awaiting appeal to fell. **T2 yew** – reduce height from 7m to 5m, crown spread from 8m to 5m. Pruning work would be concentrated on crown spread over No. 43 to balance the shape.	Approved
2023/1401	Park House, Vicarage Road, **Salhouse**	TPO	**T1 oak** - approx ht 25m, N 3m, S 10m, W 5m, E 8m. Reduce height by 4.5m, S by 3.5m, W by 1m, E by 3m. **T2 beech** - approx 28m in ht, N 8.5m, S 7.5m, W 7m, E 8m. Reduce height by 4m, N by 2.5m, S by 1.5m, W by 2m and E by 2m.	Approved
2023/1422	2 Holly Bank, **Spowston**	TPO	**T3 and T4** reduce by approx 30% due to honey fungus and risk of failure. Want trees to survive but concerned that neighbours' tree fell though their roof. Our two trees are close to our house between the dying tree and the boundary of 3 Holly Bank. They are unstable.	Approved
2023/1448	Douglas House, 2 Bure Way, **Aylsham**	211	**Lime** – pollard. Fell due to low amenity value and close proximity to house	No objection
2023/1476	12 Millgate, **Aylsham**	211	**T1 oak** in neighbouring garden. Height 11m, width 8m, stem dia 1m. Reduce lower smaller branches back to suitable growth points according to BS3998, additionally reducing the upper canopy by 1m back from the patio	No objection
2023/1490	109 Godfrey Road, **Spixworth**	TPO	**T1 oak** - canopy approx from 20m by 2-3m.	21/07/2023

2023/1495	36A Waterloo Road, **Hainford**	TPO	**T1 oak** - approx 16m tall and 14m spread. Reduce all branches of canopy hanging over fence. Each branch to be reduced by 3-4m back to a suitable growth point whilst retaining a natural shape. The spread will be reduced to no less than 10m.	Approved
2023/1515	234 Plumstead Road East, **Thorpe St Andrew**	TPO	**T1 beech** - approx radius 9m. Crown clean. Reduce only extremities of the western 50% of the crown by a maximum of 2.5m (around 5-6 branches extend well beyond the 7-8m radius of the crown).	Approved
2023/1518	Three Oaks, 70 Lower Street, **Salhouse**	211	**T1 ash** - ht 13m. Remove. **G2 birch** - ht 10-13m. Remove 3 declining trees. **T2 conifer** - ht 5m. Remove dead stem. **T3 beech** - ht 10.7m. Crown raise to 3.5m and crown thin by 15%.	No objection
2023/1522	Oakhill Wood, Oakhill, **Brundall**	TPO	**T1 common ash** – ash dieback. Ht approx 20m. Remove smaller stem completely and reduce main stem to 2.5m monolith and coronet cut. **T2 copper beech** – remove deadwood.	Approved
2023/1557	29 New Street, **Cawston**	211	**T1 oak** - stem diameter 1.2m, canopy width 15m, canopy height 15m. reduce lateral limbs No 29 side only by 1.5m. **T2 ash** - multi stemmed. Stem diameter varying from 0.5m-0.8m, canopy width 8m, canopy height 12m. Remove smaller central leader back to the main union. **T3 pine** - stem diameter 0.8m, canopy width 4m, canopy height 9m. Remove main limb overhanging No 29's property. **T4 ash** - stem diameter 0.6m, canopy width 4m, canopy height 10m. Raise canopy by 4m over driveway and reduce upper canopy by 1m.	No objection
2023/1558	2 Chimes Way, **Reepham**	211	**T1 cherry-** reduce approx 0.5m from approx height of 3m and crown lift approx 3m over track blending in crown..	No objection
2023/1573	Robinswood, 4 The Avenue, **Wroxham**	211	**T1 cypress** – fell.	No objection
2023/1578	236 Plumstead Road East, **Thorpe St Andrew**	TPO	**T1 beech** - 2-3 branches on north aspect and 2-3 branches on south aspect, reduce by around 2m (current radial spread 9m on both north and south aspect) and crown clean (removal of any small crossing branches totalling 10% max of entire crown).	Approved
2023/1579	13 Stanmore Road, **Thorpe St Andrew**	211	**T1 beech** - reduce crown over drive by 2m, bringing spread from 9m to 7m. Crown lift to 5m to give good clearance to vehicles.	No objection
2023/1587	14 Lake View Drive, **Brundall**	TPO	**T1 oak** - reduce height from 18m to 12m. **T2 oak -** reduce north-eastern canopy spread from 8m to 5m and height from 17m to 14m. **T3 holly –** remove wayward horizontal top, reducing north west canopy from 4m to 1m.	Approved
2023/1599	68 Sandy Lane, **Taverham**	TPO	**T1 holly** – re-pollard.	Approved
2023/1623	119 Norwich Road, **Wroxham**	211	**T1 oak -** reduce height from 18m to 12m and crown spread from 18m to 6m.	No objection
2023/1626	Abbey Farm Commercial Park, Southwell Road, **Horsham St Faith**	211	**G2 ash x 8** – fell.	No objection
2023/1630	Courtney House, 90 Post Office Road, **Lingwood**	TPO	**T1 copper beech** – Reduce western canopy by approx 2-3m and western crown spread from 9 to 6m approx	22/06/2023
2013/1631	39 Bure Way, **Aylsham**	211	**T1 common beech -** height 12m, 0.7m stem diameter, crown spread 8m Raise canopy by 5m. 10% crown thin.	No objection
2013/1632	Mill Farm, Moorgate, **Blickling**	211	**T1 oak** - height 13m, stem dia 1.2m, crown spread 9m. Deadwood. **T2 oak** - height 11m, stem dia 1.2m, crown spread 8m. Deadwood. Reduce south-east canopy by 2m (see survey attached).	No objection
2023/1636	The Old Stables, 2A Guist Road, **Foulsham**	211	**T3 ash, T4, T5** & **T6 apple** – fell.	No objection

2023/1637	Little Plumstead C of E Primary School, Old Road, **Little Plumstead**	TPO	**T51 & T53 - silver birch** – fell. **T64 oak** - formative pruning to remove suppressed branches. **T85 purple-leaved cherry** - remove & replace. **G1 various spp** & **G2 Norway spruce** - fell dead and declining trees (marked with fluorescent paint). **T12 Atlantic cedar** & **T24 sycamore** - formative pruning to clean out suppressed and crossing branches. Slightly tip reduce crown to lessen loading on tight V-shaped union. N 5.5m, S 6.5m, W 10m & E 6.5m. Reduce tips by approx 1.5m. **T30 sycamore** - formative pruning to lean out suppressed and crossing branches – N 3.5m, S 4.5m, W 4.5m & E 4.5m. Reduce tip on extended side branches by 1.5m. **T66 sycamore** - remove canker damaged sub-dominant stem and weak branches. **T98 Himalayan birch** - remove section of fractured stem attached to upper stem. Tip reduce branches giving dominance to centre branch. **T99 Corsican pine** - remove stem nearest wall cutting just above the stem union.	Approved
2023/1653	St Gervases and St Protases Church, Hospital Road, **Little Plumstead**	TPO	**T1 silver birch** – fell.	Approved
2023/1660	21 Colkett Drive, **Old Catton**	TPO	**T1 beech -** crown lift to approx 4m.	Approved
2023/1661	Aylsham Manor Residential Home, 5-5A Norwich Road, **Aylsham**	211	**T137 western red cedar, T81 sycamore, T82 ash** – fell. **T147 Norway maple** - height 10m, 12m crown spread. Clean out suppressed and crossing branches by 15%. Tip reduce extended side limbs to lessen end loading. Tip reduce approx 1.5-2.5m from 6m to lessen loading on union with upper stem, particular attention to limb on north-east. **T4 Scots pine** - Clean out suppressed and crossing branches by 5% **T33 ash** - fell sub-dominant stem. **T37 common lime** - clean out suppressed and crossing branches by 2% max. Remove smaller of two crossing branches at 16m height. **T97 common oak** - height 26m Selectively reduce loading of remaining crown by tip reducing outer branches by 2.5-3m back to viable growth point. Estimated reduction of 4m. 97%crown reshape. **T99 Portugal laurel** - coppice to near ground level. **T104 English elm** - remove broken branches in lower crown. Tip reduce branches of sub-dominant limb by 3m. Before length 25m. **T119 cedar of Lebanon** - height 39m, limb 12-15m. Tip reduce by 1.5 to 3.5m extended side branches to lessen the end loading. Reshape crown by 10% **T124 ash** - if more than 50% crown death then fell. **T143 beech** - crown lift to 4m. Remove crossing limbs.	No objection
2023/1674	Old School House, New Street, **Cawston**	211	**T1 conifer** & **T2 cherry** – fell.	No objection
2023/1725	15 & 16 Barberry Close, **Taverham**	TPO	**T1, T2** & **T3 oak** - height 12-14m. Reduce crowns by 2-3m and thin by 12-15%.	16/06/2023
2023/1727	Pear Tree Cottage, 113 The Street, **Oulton**	211	**T1 sycamore** – fell. **T2 walnut** - reduce lower limbs by 6ft from 18ft to 12ft.	No objection
2023/1742	Ashford House, Petersons Lane, **Aylsham**	211	**T1 lime -** reduce from 16m to 14m and crown raise to 5m. **T2 horse chestnut** & **T3, T4, T5, T6, T7 T8 oak** crown raise to 6m**.** **T9 overgrown hedgerow** - cut to 1.8m and raise sycamores to 6m over road.	No objection
2023/1743	33 Norwich Road, **Horsham St Faith**	211	**T1 ash** - fell.	No objection
2023/1746	Pemberley, 7 Church Street, **Old Catton**	211	**G1 holly** - reduce limbs from 8m to 2m. Reduce house side by 1m from 3.5m to 2.5. **T1 oak**- reduce house side by 2m and reduce canopy over garage 6m to 2m. Remove dead wood over 40mm in diameter	No objection
2023/1747	125-129 Woodside Road, **Thorpe St Andrew**	TPO	**G1 3 x oak -** deadwood (exempt). Thin by 10%, Raise crowns over highway and car park by 5m and tip back extended limbs to balance crown by approx 2m maximum.	10/07/2023
2023/1749	27 Filby Road, **Badersfield**	211	**T2 cherry -** ivy covered. Fell**.** **T3 ash** - crown lift to 6m to clear BT cables. Remove deadwood over 30mm in diameter.	No objection
2023/1761	Saxon Lodge, 141 Norwich Road, **Wroxham**	211	**T1 conifer** - fell. **T2 yew** - height 5m, spread 6m. Reduce crown by 3m to shape. **T3 beech** - height 6m, spread 6m. Reduce by 2m to shape. **T4 beech** - height 12-14m, spread 10m. Reduce by 3m and raise to 3m to shape and reduce extended limbs.	No objection
2023/1773	1 Bircham Road, **Reepham**	211	**T1 plum** & **T2 cherry** – fell.	No objection

2023/1784	67 Spixworth Road, **Old Catton**	211	**T2 sycamore** – whole crown reduction and prune to height of 8ft in line with adjoining hedge. **T3** & **T4 species unknown** – fell.	No objection
2023/1785	59 Henby Way, **Thorpe St Andrew**	TPO	**T1, T2** & **T3 Corsican pine** - undertake root pruning.	06/07/2023
2023/1787	10A South Avenue, **Thorpe St Andrew**	211	**T1 birch** - fell under an exception of Conservation Area restrictions for dead trees)	Exempt works
2023/1797	St Margarets, 46 Plumstead Road, **Thorpe End**	211	**T1 pear** and **T2 apple** – dead. Fell.	No objection
2023/1812	62 Spinney Road, **Thorpe St Andrew**	TPO	**English oak** - raise crown to 5m. Remove epicormic growth to gutter height of 64 Spinney Road. Remove dead wood. Crown thin. Remove Ivy.	Approved
2023/1813	27 Filby Road, **Badersfield**	TPO	**T1 cherry** - reduce height from 16m to 14m and width from 4.5m to 3m and remove deadwood. **T2 cherry** - fell. **T3 ash** - crown lift to 6m and remove deadwood.	Approved
2023/1818	19 Town Lane, **Aylsham**	211	**2 x trees** – fell under and exception of Conservation Area restrictions for dead trees)	Exempt works
2023/1824	25 Park Road, **Wroxham**	211	**T1, T2** & **T3 cherry** - height 8-9m, width 5m. Reduce limbs back to boundary as agreed with Wroxham parish council.	No objection
2023/1834	9 Charles Close, **Wroxham**	211	**T1 cedar** – fell.	27/06/2023
2023/1856	The Old Rectory, 4 Hindolveston Road, **Foulsham**	211	**T1** raise crown to 3m over lawn and 4.5m over drive. Reduce length of over-extended split, hazard beam scaffold limb to north-east back to suitable growth points following aerial inspection by our arborist on day of works. Estimate specific limb reduction by up to 4-6 m back to structurally sound wood to reduce risk of entire limb failure. Crown height estimated 19 m. Height shall not to be reduced. Over extended limb crown spread, estimated 12m north-east.	No objection
2023/1863	62 Ollands Road, **Reepham**	TPO	**2 x silver birch** in front garden – remove.	28/06/2023
2023/1869	Treetops, 18 Woodland Drive, **Thorpe End**	211	**T1 fir** - fell under an exception of Conservation Area restrictions for dead trees.	Exempt works
2023/1872	24 Charles Close, **Wroxham**	211	**T1 ash** - fell under an exception of Conservation Area restrictions for dead trees.	Exempt works
2023/1875	Burgh House, Burgh Road, **Aylsham**	211	**T1 ash** – remove dead branch. **T2** & **T3 ash** – fell. **T4** - Remove branches along property boundary.	No objection
2023/1880	1 Marland Road, **Taverham**	TPO	**AQFT007 pedunculate oak** –cavities in trunk, large cavity 1m wide, 1.5m up and in depth- decay present. Fell.	29/06/2023
2023/1881	The Bungalow, 17A The Street, **Burgh**	211	**T1** ***Sorbus*** – fell.	06/07/2023
2023/1886	6 Park Lane, **Reepham**	211	**T1 Eucalyptus, T2 fir** & **T3 conifer** – fell.	No objection
2023/1895	22 Charles Close, **Wroxham**	211	**T1 pine** – fell.	30/06/2023
2023/1896	Oaklea, 32 Lower Street, **Salhouse**	211	**T1 plum, T2 Lawson cypress** & **T5 apple** – fell. **T3 ash** - current height 10-11m and radial spread 7m. Crown lift to 4m at roadside and remove lowest large lateral branch over garden to reduce impact on the garden. Remove deadwood and any small crossing branches. Reduce extremities of crown by 1-1.5m. **T4 cherry** - crown lift to 3m.	No objection
2023/1899	Leeward House, 20 Fairholme Road, **Newton St Faith**	TPO	**T1 oak** - crown lift to a height of 5.5m and remove all major deadwood.	Approved
2023/1906	Church Farm, 6 Booton Road, **Cawston**	211	**T1 Robinia** - approx height 16m. Prune to previous failed stems and fell remaining stem. **T2 Robinia** - approx height 16m. Fell.	No objection
2023/1907	8 Leonard Medler Way, **Hevingham**	TPO	**T1 oak** - reduce height from 18m to 13m and width to approx 2.5m.	27/06/2023
2023/1914	Koru House, 16B Harvey Lane, **Thorpe St Andrew**	TPO	**T1** & **T2** non-native sycamore – fell.	03/09/2023
2023/1917	1 Marland Road, **Taverham**	TPO	**T007 oak** – fell. **T006 beech** - crown lift approx 2.4m.	03/07/2023
2023/1920	The Old Rectory, 4 Hindolveston Road, **Foulsham**	211	**T1 silver birch** & **T2 yew** – fell. **T3 yew** - 10m high x 7m crown. Cut back lower epicormics around lower stem. Reduce south facing branches which extend over cart shed roof by approx 2m to clear building and cable spread. **T4 red oak** - 8m high x 5m crown spread. Raise lower branches to crown height approx 2.5m.	No objection

2023/1931	The Rutlands, 35 Woodland Drive, **Thorpe End**	211	**2 x conifers** large at rear of garden. Remove. **2 x unknown species** – dead. Remove. **1 x pine** in middle of garden – reduce from 20m to 10m. **1 x holly, 3 x fir trees** & **1 x unknown species** in front garden - reduce from approx 16m to 10m.	No objection
2023/1938	15 Oak Avenue, **Thorpe St Andrew**	TPO	**T1 oak** – fell.	Approved
2023/1939	9 Beverley Road, **Brundall**	TPO	**T1 ash** - reduce broken branch from 4m to 2m to suitable secondary growth point and reduce elongated extremities from 8m to 5m both on south side of crown.	29/06/2023
2023/1954	48 Springfield Road. **Taverham**	TPO	**T1, T2** & **T3 silver birch** – fell.	Withdrawn
2023/1962	Longacre, Howletts Loke, **Salhouse**	TPO	**T1 pedunculate oak** - height: 23m, N: 9m, E: 5m, S: 11m, W: 9m. Reduce over-extended laterals only by 2.5m north, 2.5m south, 2m east and 2m west to suitable growth points to reduce weight loading on bifurcation at stem.	05/07/2023
2023/1969	2 Harrold Close, **South Walsham**	TPO	**T1 pine** - fell under an exception of TPO restrictions for dead trees.	Exempt works
2023/1970	Pheasant House, 1 Pheasant Walk, **South Walsham**	TPO	**T1 pine** - fell under an exception of TPO restrictions for dead trees.	Exempt works
2023/1979	Breck Farm, Breck Farm Lane, **Taverham**	TPO	Remove trees and vegetation area shown in red on the supplied plan	06/07/2023
2023/1986	The White House, 33 Wroxham Road, **Coltishall**	211	**T1 cherry** - ht 8m - wd 5m - remove broken branches, raise crown to approx 2.5m and reduce remaining crown by up to 2.5m. **T2 beech** - raise low branches by 3m over access gate opposite Kings Head public house.	19/07/2023
2023/1987	10A South Avenue, **Thorpe St Andrew**	211	**T1 birch** - fell under an exception of Conservation Area restrictions for dead trees.	Exempt works
2023/1939	9 Beverley Road, **Brundall**	TPO	**T1 ash** - reduce broken branch from 4m to 2m to suitable secondary growth point and reduce elongated extremities from 8m to 5m both on south side of crown.	29/06/2023
2023/1967	17 Bulwer Road, **Buxton**	TPO	**T1 Oak** - works to crown and spread.	20/07/2023
2023/2027	4 Manor Close, **Buxton**	TPO	**T1 silver birch *Betula pendula*** - reduce height from 20m to 15m and reduce spread from 13m to 8m.	11/07/2023
2023/2033	Springdale Crescent, **Brundall**	TPO	**APDT034 Norway maple** - epicormic removal and remove one stem **APDT035 Norway maple -** Crown lift 3m over car park and sever Ivy	12/07/2023
2023/2049	Fire Station, Park Road, **Wroxham**	211	**T1 5 x Douglas fir, T2 sycamore** & **T3 beech** - remove deadwood (exempt works). **T4 yew** - fell, leaving 2m high stump.	13/07/2023
2023/2068	105A Fakenham Road, **Taverham**	TPO	**T1** oak - stem dia 0.9m. Ht 10m. Canopy width 7m. Reduce lateral branches of south canopy away from property by 1.5m. **T2 Macrocarpa** - fell.	14/07/2023
2023/2076	The Old Granaries, 7 White Lion Road, **Coltishall**	211	**T1 cherry** - crown reduction of 2.5m from 7m to 4.5m. T2 cherry - fell	15/07/2023
2023/2077	2 Swansgate, **Old Catton**	TPO	**Norway maple x 2** – remove.	15/07/2023
2023/2083	35 Saint Michaels Avenue, **Aylsham**	TPO	**T1 oak** – fell.	17/07/2023
2023/2086	18 Kevill Davis Drive, **Little Plumstead**	TPO	**T1 Acacia** - crown lift 3 lowest branches.	17/07/2023
2023/2090	Swallow Barn, The Street, **Halvergate**	211	**T1** – reduce height and width from approx 15m to 10m.	27/07/2023
2023/2103	Woodfold, 24 Woodland Drive, **Thorpe End**	211	**T1 *Robinia pseudoacacia*** – fell.	18/07/2023
2023/2107	The Granary, Back Street, **Reepham**	211	**T1 cherry** – dia 0.6m, ht 3m, canopy spread 2m. Reduce canopy by 0.5m back to original pollard points. **T2 Liquidambar** – dia 0.6m, ht 3m canopy spread 1.5m. Reduce canopy by 0.5m back to original pollard points. **T3 Indian bean tree** – dia 0.8m, ht4m, canopy spread 2.5m. Reduce canopy by 2m back to original pollard points due to location.	18/07/2023
2023/2110	48 Springfield Road, **Taverham**	TPO	**3 x silver birch** - fell under an exception of TPO restrictions for dead trees.	Exempt works
2023/2114	Newlands, 9 School Lane, **Thorpe St Andrew**	211	**T1 & T2 unknown species**. Reduce height from approx 14m to 10m and spread from approx 14m to 10m.	19/07/2023

2023/2116	Caenyard House, 26 Church Lane, **Wroxham**	211	**T1 conifer** and **T5 Liquidamber** - remove. **T2 maple** – ht 7.8m, w 4.2m, Crown reduce by 2.05m in height and sides by 1.5m**.** **T3 birch** – ht 8.5m, w 4.2m, Crown reduce by 2.5m. **T4 willow** – ht 9.5. Raise crown to 3m over meadow. **G6 maples** – ht 8.5m. Raise crown to 3m over meadow and 3.5m over garden. **T7 Acacia** ht 8.3m. Raise crown to 3m over meadow and 3.5m over garden. Deadwood (exempt).	19/07/2023
2023/2122	Hill Farm, Mill Hill, **Salhouse**	211	**T1 Eucalyptus** – fell.	20/07/2023
2023/2127	19 Robert Norgate Close, **Horstead with Stanninghall**	TPO	**Multi-stemmed beech** – reduce crown by 2.5m from 24 to 21.5m. Reduce extended limb over number 21 by 2.5m to 8.5m.	20/07/2023
2022/2150	Ringwood, Beech Road, **Wroxham**	211	**T1 sweet chestnut** - ht 13m. Prune back epicormic growth over garden to a height of 4m. **T2 oak** - ht 16m. Deadwood and shorten limb growing toward holm oak by 2m. Reduce and re-shape crown by 2m. **T3 cherry** - ht 8m. Reduce crown by 2m. **T4 holm oak** – ht 11m. Re-pollard.	21/07/2023
2022/2151	Oakapples, Lower Street, **Sahouse**	211	**T1 plum** – ht 10.5m. Remove limb. **T2 Portuguese laurel** – remove. **G3 yews** - ht 4.7m. Reduce by 1.5 to 2.0m from 12 and 10 Lower Street, levelling off tops to re-form lapsed hedge. **T4 oak** - owned by 12 Lower Street. Remove.	21/07/2023
2022/2152	1 St John's Close, **Coltishall**	TPO	**T1 sycamore** – reduce by 2m leaving12m height and6m width. Deadwood (exempt).	20/07/2023
2022/2153	The Beeches, 54 Holman Road, **Aylsham**	TPO	**T1 beech** – Reduce by 2m from 16m and crown lift by 4m.	20/07/2023
2022/2158	The Croft, Beech Road, Wroxham	TPO	**T1 beech** – ht 16.5m. Reduce upper crown by 4m whilst re-shaping extended limbs to form appeasing crown.	21/07/2023
2022/2169	15 Drabblegate, **Aylsham**	211	**T1 crack willow** – pollard.	22/07/2023
2023/2177	63 Bishops Close, **Thorpe St Andrew**	211	**T1 cypress** - fell under an exception of Conservation Area restrictions for dead trees.	Exempt works
2023/2184	4 Old Hall Terrace, **Halvergate**	211	**G1 mixed broadleaved trees on boundary of property** - reduce back to boundary removing up to 3m back to growth points. **G2 conifers** - reduce back to boundary of the property by up to 3m.	24/07/2023
2023/2208	Church Farm, 6 Booton Road, **Cawston**	211	**T1 Robinia** - height 20m.Reduce crown by approx 2.5m to suitable growth points.	26/07/2023
2023/2211	35 Evans Way, **Old Catton**	TPO	Reduce group of small mixed trees and shrubs at rear to form a hedge at 2m (located between 2 mature oaks).	26/07/2023
2023/2225	Aylsham High School, Sir Williams Lane, **Aylsham**	211	**Beech** – dead. Fell (Under an exception of Conservation Area restrictions for dead trees).	27/07/2023
2023/2241	9 Saint Edmunds Road, **Taverham**	TPO	**T1 silver birch** – fell. (Under an exception of the TPO restrictions for dead trees)	24/07/2023

Explanatory Notes:

1) App No is the unique Broadland District Council Planning Application number allocated to the application to carry out work and is the number by which progress of the application may be traced. Any comment, objection, support or request for information should quote this number.
2) Address is the address to which the application for work relates. That is the address where the trees for which the application is made are located.
3) Cat (ie Category) denotes the type of application. TPO = works to trees subject to a Tree Preservation Order; or
   211 = Section 211 Notifications for Works to Trees Within Conservation Areas
4) Species / Requested Works is the species of the tree(s) concerned and details of the work proposed. A reference such as T1, T2 or G1 may also appear and that is simply a reference to the tree(s) on the TPO, Conservation Order or simply on the application.
5) Decision is either the actual decision or the date on which the application was validated by Broadland District Council.
6) This list is not intended to be a definitive list of all the relevant details. The reader should always refer to the specific application on the South Norfolk and Broadland District Council Planning website at https://www.southnorfolkandbroadland.gov.uk/planning-applications/find-planning-application to view the application or read the Council's decision.