Broadsheet

The Magazine for Broadland Tree Wardens

Issue 193 – October 2020

Whatever Happened to Respect?

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This Month's Cover Picture

Wonderful bracket fungi on a veteran tree I saw whilst on a walk along the river, close to the A47 flyover in Postwick

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

Any views expressed are not necessarily those of the Broadland Tree Warden Network.

Whatever Happened to Respect?

I FEAR that I am alone in wondering what has happened to respect? Respect for our trees, woodlands and forests. Respect for the world's wildlife. Respect for our environment and climate change. Respect for our fellow man.

This year has seen an increase in abuse of our natural environment and that appears to have been highlighted by recent events during the COVID-19 "lockdown".

Mindless vandalism to our trees and woodlands, increased felling of forests (much of it illegal), illegal raves and a general apparent lack of respect for anything or anyone. Have we really become such a selfish society? I fear so!

I hope that the new restrictions placed on our activities at the start of September as a result of an increase in COVID-19 cases will give an indication of what such behaviour can bring … but I sadly expect that it won't.

On 3 September I sent out an e-mail to you all giving The Tree Council's COVID-19 guidance for events. I wish I could say that it was accepted by you all but I received a couple of very critical responses that were totally against any such restrictions or controls.

I took that as a lack of respect for The Tree Council, a charity that I hold very dear and without which none of you would be Tree Wardens anyway!!

I have always held The Tree Council in the highest regard but since having been given the privilege of serving as the East Anglian Representative on the national Tree Warden Advisory Group and getting even more involved than I was before I find such undeserved criticism very difficult to understand.

I have seen first-hand just how hard Sara Lom and her wonderful team work for us, our trees and woodlands. The Tree Council should be given credit for publishing such guidance. Not undeserved criticism.

I have sent the complainants the Oxford Dictionary definition of the word "Respect".

With the planting season rapidly approaching I urge you all to read and inwardly digest the Tree Council's guidance. It is possible to hold safe tree planting events. You simply have to follow the guidance, ensure that all attendees are aware of how they must conduct themselves and, of course, as leader of the event you must be strong in the application of the guidance,

I WAS appalled during the August Bank Holiday weekend at the mindless, selfish stupidity of that section of the British population who don't care about anything other than their own satisfaction.

Whatever makes people believe that they have the right to break the law and threaten the well-being of others by attending illegal raves?

South Wales Police reported that nearly two dozen people could be facing fines of £10,000 each for organising an illegal rave on the edge of the Brecon Beacons.

The police began trying to disperse the rave on the Sunday afternoon when around 3,000 people congregated at a former opencast coalmine near the village of Banwen in the Brecon Beacons.

By Monday morning, around 400 people remained, the force said, but it added it was having difficulty flushing them off the 4,000 acre site despite confiscating several sound systems. 22 people were alleged to have organised the rave.

Under newly introduced legislation from the Welsh Government to enforce social distancing, those convicted of organising an unlicensed music event of more than 30 people can be fined up to £10,000. A number of vehicles were also seized, while two people were arrested for driving while unfit through alcohol or drugs and a third for a public order offence.

South Wales Police were assisted by officers from Dyfed Powys Police and the British Transport Police, as well as a police helicopter.

Multiple raves have were shut down across the country during the bank holiday weekend. In London the Metropolitan Police said it had shut down 21 unlicensed music events.

West Yorkshire Police said eight people were fined £10,000 after several parties across Headingley and Burley on the Saturday and into the early hours of Sunday.

Thousands of pounds worth of equipment was also seized in the police crack-down in the Chapeltown area of Leeds and ahead of a planned unlicensed music event in Harlow, Essex on the Saturday.

Meanwhile, five members of the local branch of the selfish, mindless lunatic club were arrested and fined for attending an unlicensed music event in Thetford Forest. Norfolk police officers were pelted with missiles when they broke up a 500-strong rave. More than 100 officers were involved in a significant operation to disrupt the event which started in the forest on Saturday night.

Specialist teams moved on to the site, which had attracted in excess of 500 people, late Saturday afternoon and closed it down around 18:30. Officers seized audio equipment, generators, the rig and a large flat-bed lorry which was used to transport the equipment.

People were directed to leave the area and anyone who failed to do so was arrested. Five people were arrested. Three were dealt with at the scene and issued with a £100 fine while two were taken in custody and later issued with £100 fine.

Assistant Chief Constable Nick Davison, who led the operation, said: "Our investigations are ongoing to trace the organisers and these enquiries are progressing well. We understand the disruption such events cause to local communities and the concern people will have, particularly as coronavirus continues to be a real threat.

"This was a well-established and planned event and we needed additional specialist resources to shut it down safely. More than 100 officers from four forces were involved in the operation, which is a significant task but one which led to the right results being achieved. I would like to thank local residents once again for their patience and understanding while we worked to close it down."

EMILY Holden, writing on The Guardian website, reported that the Trump administration is proposing to make it easier for oil and gas companies to drill on US forest service lands.

A proposed rule would eliminate key environmental reviews and public notice requirements, according to environmental advocates.

Currently, 2.7 % of the national forest system area has been leased by energy industries. An analysis by The Wilderness Society finds that the changes would make drilling more likely on more than 9m acres of land with high, medium or moderate development potential in Colorado, Montana, New Mexico, Nevada, Utah and Wyoming. Many of the forests are near tribal lands or include the traditional territories of indigenous peoples, according to the Natural Resources Defense Council (NRDC).

Western US forests could see the biggest changes, but the rule could also affect the east coast, where there is far less forest service land.

Drilling within forests would require clearing trees for well pads and disrupting the ecosystem for roads and pipelines.

Josh Axelrod, a senior advocate for NRDC who grew up in eastern Oregon said national forests are "where you go to be in the woods – to pick berries, or hunt mushrooms, or hunt game, or bike, or hike, or run, or ATV or off-road."

Aside from being critical for recreation, national forests are home to the drinking water supplies for tens of millions of Americans, and they help slow climate change and clean the air, Axelrod said. Oil and gas development, meanwhile, causes climate change.

"We just don't need to be looking for oil and gas in these landscapes at all," Axelrod said.

PRESIDENT Trump has become well-known for some of the things he says or puts on social media before he has really thought about them.

The US president, once mocked for asserting that California's devastating wildfires may be caused by a lack of "raking" the forest floors, last month waded again into the debate over the wildfires ravaging swathes of the western US.

During a visit to California he said "with regard to the forests, when trees fall down after a short period of time, about 18 months, they become very dry. "They become really like a matchstick… They just explode."

Not surprisingly, his comments elicited widespread bewilderment and scorn on social media, with people speculating that the president may have misunderstood briefings about the effects of fire on trees, many which have died due to drought that weakens their defences against pests.

Some live trees, like Australia's eucalyptus, have been reported to have exploded at times by firefighters as the sap superheats and expands, while freezing trees have been reported to let off sounds like gunshots as the saps freezes and snaps off limbs.

Trump blamed the fires on poor forest management in states led by rival Democrats, and sparked scepticism when he said that global warming — which he has repeatedly denied — would naturally abate.

"It will start getting cooler. You just watch," he insisted to Wade Crowfoot, the head of the California Natural Resources Agency.

The official responded: "I wish science agreed with you."

Some Twitter users noted the similarity between his misplaced optimism on climate change and over the coronavirus outbreak, which has killed almost 200,000 Americans.

"It's going to disappear. One day, it's like a miracle, it will disappear," Trump said of the pandemic in February.

Well, that'll be alright then!

I HOPE that you've noted that our Annual General Meeting will be held via Microsoft Teams on Thursday 5 November 2020.

If you've never used Microsoft Teams before please don't be concerned. It is very straightforward. You don't even have to have the software loaded on your computer. You simply click on the link I will send out this month with the meeting agenda and you will be able to take part in the meeting.

I am delighted that Sam Village, The Tree Council's National Tree Warden Scheme Co-ordinator, will be joining us. Sam will have exciting news regarding the Tree Council's 30th anniversary along with the latest news from the charity.

You can listen to a report on what our Network has achieved in the last year and learn the current state of our precious finances. There will be an open forum for you to ask questions or express your views and, of course, we must elect our Executive Committee for the coming year.

I am hoping that representatives from parish and town councils and parish meetings will attend along with representatives from Broadland District Council.

Some of you have asked why that date was chosen … Guy Fawkes Night … but I can assure you that, as things stand, you won't be (legally) attending any firework displays this year.

So, I look forward to seeing you all on my laptop screen.

AS I am putting this edition of Broadsheet "to bed" on the weekend of 26/27 September, The weather has been nothing short of abysmal. Three days of continuous rain and very strong winds.

It makes me think back to last year's regional tree warden forum in Reedham when several of us had to abandon our cars and make our way home by foot … or was it swimming?

Anyway, right across the country we have lost hundreds, if not thousands of trees, though not as many as HS2 is removing!!

This means that we have to plant even more trees this season that we originally planned.

How many are you planting? Due to several of you not planting as many as you originally planned there is a few more pounds in the kitty that we expected so why not let me know how many trees you require?

SEPTEMBER saw the Tree Council's Tree Warden Scheme celebrate its 30th birthday and I cannot allow that milestone to pass without comment.

I may not be one of Broadland's longest serving Tree Wardens, having joined a year after our Network was created. I bow to the likes of Ernest Hoyos on that count. However, I have been lucky enough to have managed several exciting projects and, of course, have written 193 editions of Broadsheet plus you have allowed me to become the Co-ordinator of our independent Network and I have been privileged to represent East Anglia on the Tree Council's Tree Warden Advisory Group.

I therefore feel more than qualified to comment on The Tree Council and the success of its wonderful Tree Warden Scheme.

The Tree Council was founded nearly 50 years ago as the charity focused on trees growing outside the major forests and woodlands – the trees in your street, your local park or school playground, in orchards and hedgerows and pastures around the UK.

The Tree Council's work includes:

- support for a network of more than 5,000 volunteer Tree Wardens in communities around England, Scotland, Wales and Northern Ireland;
- science and social research in partnership with Defra, Forest Research, Fera and others;
- an important relationship with Network Rail as their 'critical friend' and adviser on vegetation management along 20,000 miles of railway corridors;
- an annual community programme, which connects people with trees and the natural world;
- partnerships with 120 Member organisations including key relations such as the Woodland Trust, Trees for Cities and Learning through Landscapes; academic partners such as Newcastle and Strathclyde Universities and generous supporters including The Weston Family, Esmee Fairbairn Foundation and others; and
- a small grants programme for planting with schools and other groups, culminating in National Tree Week every November.

With a very small number of staff (just 10) it is amazing how The Tree Council manages to achieve so much. Having said that, when one considers the qualities of those people it is quite understandable.

Tree Warden Networks vary considerably and not just between those that are local authority run and those that are "independent, such as ours.

Even within each of those categories one can find enormous differences. Just look at the difference between us and our neighbours in South Norfolk. There is no set blue print for a Network. However, each Network shares a passion for our trees and woodlands, so thank you for your wonderful leadership over thirty successful years Tree Council.

THAT'S it for this month's editorial. I hope you enjoy reading this edition of your monthly magazine.

Stay safe

John Fleetwood

The State of the World's Forests 2020: Forests, Biodiversity and People

AS the United Nations Decade on Biodiversity 2011–2020 comes to a close and countries prepare to adopt a post-2020 global biodiversity framework, the Food and Agriculture Organization of the United Nations has taken the opportunity to examine the contributions of forests and of the people who use and manage them, to the conservation and sustainable use of biodiversity.

Forests harbour most of Earth's terrestrial biodiversity. Conservation of the world's biodiversity is thus utterly dependent on the way in which we interact with and use the world's forests.

Forests provide habitats for 80% of amphibian species, 75% of bird species and 68% of mammal species. About 60% of all vascular plants are found in tropical forests. Mangroves provide breeding grounds and nurseries for numerous species of fish and shellfish and help trap sediments that might otherwise adversely affect seagrass beds and coral reefs, which are habitats for many more marine species.

Forests cover 31% of the global land area but are not equally distributed around the globe. Almost half the forest area is relatively intact and more than one-third is primary forest. More than half of the world's forests are found in only five countries (Brazil, Canada, China, Russian Federation and USA). 49% is relatively intact, while 9% is found in fragments with little or no connectivity.

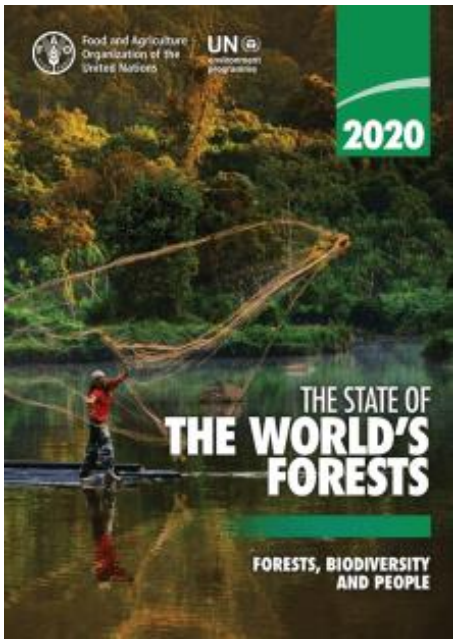
Tropical rainforests and boreal coniferous forests are the least fragmented, whereas subtropical dry forest and temperate oceanic forests are among the most fragmented. Roughly 80% of the world's forest area is found in patches larger than 1 million ha. The remaining 20% is located in more than 34 million patches across the world, the vast majority less than 1,000 ha in size.

34% of the world's forests are primary forests, defined as naturally regenerated forests of native tree species where there are no clearly visible indications of human activity and the ecological processes are not significantly disturbed.

Deforestation and forest degradation continue to take place at alarming rates, which contributes significantly to the ongoing loss of biodiversity. Since 1990, it is estimated that some 420 million ha of forest have been lost through conversion to other land uses, although the rate of deforestation has decreased over the past three decades.

Between 2015 and 2020, the rate of deforestation was estimated at 10 million ha per year, down from 16 million ha per year in the 1990s. The area of primary forest worldwide has decreased by over 80 million ha since 1990. More than 100 million has of forests are adversely affected by forest fires, pests, diseases, invasive species drought and adverse weather events.

Agricultural expansion continues to be the main driver of deforestation and forest fragmentation and the associated loss of forest biodiversity. Large-scale commercial agriculture (primarily cattle ranching and cultivation of soya



bean and oil palm) accounted for 40% of tropical deforestation between 2000 and 2010 and local subsistence agriculture for another 33%.

Ironically, the resilience of human food systems and their capacity to adapt to future change depends on that very biodiversity, including dryland-adapted shrub and tree species that help combat desertification, forest-dwelling insects, bats and bird species that pollinate crops, trees with extensive root systems in mountain ecosystems that prevent soil erosion, and mangrove species that provide resilience against flooding in coastal areas. With climate change exacerbating the risks to food systems, the role of forests in capturing and storing carbon and mitigating climate change is of ever-increasing importance for the agricultural sector.

The net loss of forest area decreased from 7.8 million ha per year in the 1990s to 4.7 million ha per year during 2010–2020. While deforestation is taking place in some areas, new forests are being established through natural expansion or deliberate efforts in others. As a result, the net loss of forest area is less than the rate of deforestation. In absolute terms, the global forest area decreased by 178 million ha between 1990 and 2020, which is an area about the size of Libya.

The biodiversity of forests varies considerably according to factors such as forest type, geography, climate and soils, in addition to human use. Most forest habitats in temperate regions support relatively few animal and tree species and species that tend to have large geographical distributions, while the montane forests of Africa, South America and South-east Asia and lowland forests of Australia, coastal Brazil, the Caribbean islands, Central America and insular South-east Asia have many species with small geographical distributions. Areas with dense human populations and intense agricultural land use, such as Europe, parts of Bangladesh, China, India and North America, are less intact in terms of their biodiversity. Northern Africa, southern Australia, coastal Brazil, Madagascar and South Africa, are also identified as areas with striking losses in biodiversity intactness.

Progress on preventing the extinction of known threatened species and improving their conservation status has been slow. More than 60,000 different tree species are known, more than 20,000 of which have been included in the International Union for Conservation of Nature (IUCN) Red List of Threatened Species, and more than 8,000 of these are assessed as globally threatened (Critically Endangered, Endangered or Vulnerable). More than 1,400 tree species are assessed as critically endangered and in urgent need of conservation action. Some 8% of assessed forest plants, 5% of forest animals and 5% of fungi found in forests are currently listed as critically endangered.

The forest-specialist index, based on 455 monitored populations of 268 forest mammals, amphibians, reptiles and birds, fell by 53% between 1970 and 2014, an annual rate of decline of 1.7%. This highlights the increased risk of these species becoming vulnerable to extinction.

On a positive note, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation has been ratified by 122 contracting Parties (an increase of 74% from 2016) and 146 Parties have ratified the International Treaty on Plant Genetic Resources for Food and Agriculture.

All people depend upon forests and their biodiversity, some more than others. Forests provide more than 86 million green jobs and support the livelihoods of many more people. An estimated 880 million people worldwide spend part of their time collecting fuelwood or producing charcoal, many of them women. Human populations tend to be low in areas of low-income countries with high forest cover and high forest biodiversity, but poverty rates in these areas tend to be high. Some 252 million people living in forests and savannahs have incomes of less than USD 1.25 per day.

Feeding humanity and conserving and sustainably using ecosystems are complementary and closely interdependent goals. Forests supply water, mitigate climate change and provide habitats for many pollinators, which are essential for sustainable food production. It is estimated that 75% of the world's leading food crops, representing 35% of global food

production, benefit from animal pollination for fruit, vegetable or seed production.

Worldwide, around 1 billion people depend to some extent on wild foods such as wild meat, edible insects, edible plant products, mushrooms and fish, which often contain high levels of key micronutrients. The value of forest foods as a nutritional resource is not limited to low- and middle-income countries; more than 100 million people in the European Union (EU) regularly consume wild food. Some 2.4 billion people – in both urban and rural settings – use wood-based energy for cooking.

Human health and well-being are closely associated with forests. More than 28,000 plant species are currently recorded as being of medicinal use and many of them are found in forest ecosystems. Visits to forest environments can have positive impacts on human physical and mental health and many people have a deep spiritual relationship to forests. Yet, forests also pose health risks. Forest-associated diseases include malaria, Chagas disease (also known as American trypanosomiasis), African trypanosomiasis (sleeping sickness), leishmaniasis, Lyme disease, HIV and Ebola.

The majority of new infectious diseases affecting humans, including the SARS-CoV2 virus that caused the current COVID-19 pandemic, are zoonotic and their emergence may be linked to habitat loss due to forest area change and the expansion of human populations into forest areas, which both increase human exposure to wildlife.

Solutions that balance conservation and sustainable use of forest biodiversity are critical – and possible. Not all human impacts on biodiversity are negative, as shown by the many concrete examples in this publication of recent successful initiatives to manage, conserve, restore and sustainably use forest biodiversity.

Actions to combat deforestation and illegal logging have gathered pace over the past decade, as have international agreements and results-based payments. So far, seven countries have reported reduced deforestation to the United Nations Framework Convention on Climate Change (UNFCCC) and countries are now accessing payments based on reducing emissions from deforestation and forest degradation from the Green Climate Fund and similar financing mechanisms.

Efforts to address illegal logging are spearheaded by trade regulations in consumer countries that require importers to demonstrate that timber has been harvested legally. Many tropical timber-producing countries are making corresponding efforts to strengthen legal compliance and verification. Fifteen of them are developing national systems to assure legality of timber operations under the EU Forest Law Enforcement, Governance and Trade mechanism. As part of this mechanism, countries are required to also implement measures to prevent illegal hunting.

Aichi Biodiversity Target 11 (to protect at least 17% of terrestrial area by 2020) has been exceeded for forest ecosystems as a whole. However, protected areas alone are not sufficient to conserve biodiversity. Globally, 18% of the world's forest area, or more than 700 million hectares, fall within legally established protected areas such as national parks, conservation areas and game reserves (IUCN categories I–IV). However, these areas are not yet fully representative of the diversity of forest ecosystems.

A special study conducted for SOFO 2020 on trends in protected forest area by global ecological zones (GEZs) between 1992 and 2015 found that more than 30% of tropical rainforests, subtropical dry forests and temperate oceanic forests were within legally protected areas (IUCN categories I–VI) in 2015. The study also found that subtropical humid forest, temperate steppe and boreal coniferous forest should be given priority in future decisions to establish new protected areas since less than 10% of these forests are currently protected. Areas with high values for both biodiversity significance and intactness, for example the northern Andes and Central America, south-eastern Brazil, parts of the Congo Basin, southern Japan, the Himalayas and various parts of South-east Asia and New Guinea, should likewise be given high priority.

Limited progress has been made to date on classifying specific forest areas as other effective area-based conservation measures, but guidance on this category is being developed and has significant potential for forests.

Aichi Biodiversity Target 7 (by 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation) has not been met for forests, but the management of the world's forests is improving. The area of forest under long-term management plans has increased significantly in the past 30 years to an estimated 2.05 billion ha in 2020, equivalent to 54% of the global forest area.

Current negative trends in biodiversity and ecosystems will undermine progress towards the Sustainable Development Goals (SDGs). The world's biodiversity underpins life on Earth, but despite some positive trends, the loss of biodiversity continues at a rapid rate. Transformational change is needed in the way we manage our forests and their biodiversity, produce and consume our food and interact with nature. It is imperative that we decouple environmental degradation and unsustainable resource use from economic growth and associated production and consumption patterns and that land-use decisions take the true value of forests into account.

Ensuring positive outcomes for both biodiversity and people requires a careful balance between conservation goals and demands for resources that support livelihoods. There is an urgent need to ensure that biodiversity conservation be mainstreamed into forest management practices in all forest types. To do so, a realistic balance must be struck between conservation goals and local needs and demands for resources that support livelihoods, food security and human well-being. This requires effective governance; policy alignment between sectors and administrative levels; land-tenure security; respect for the rights and knowledge of local communities and indigenous peoples; and enhanced capacity for monitoring of biodiversity outcomes. It also requires innovative financing modalities.

We need to transform our food systems to halt deforestation and the loss of biodiversity. The biggest transformational change is needed in the way in which we produce and consume food. We must move away from the current situation where the demand for food is resulting in inappropriate agricultural practices that drive large-scale conversion of forests to agricultural production and the loss of forest-related biodiversity.

Adopting agroforestry and sustainable production practices, restoring the productivity of degraded agricultural lands, embracing healthier diets and reducing food loss and waste are all actions that urgently need to be scaled up. Agribusinesses must meet their commitments to deforestation-free commodity chains, and companies that have not made zero-deforestation commitments should do so. Commodity investors should adopt business models that are environmentally and socially responsible. These actions will, in many cases, require a revision of current policies, in particular fiscal policies, and regulatory frameworks.

Large-scale forest restoration is needed to meet the SDGs and to prevent, halt and reverse the loss of biodiversity. While 61 countries have, together, pledged to restore 170 million ha of degraded forest lands under the Bonn Challenge, progress to date is slow. Forest restoration, when implemented appropriately, helps restore habitats and ecosystems, create jobs and income and is an effective nature-based solution to climate change. The United Nations Decade on Ecosystem Restoration 2021–2030, announced in March 2019, aims to accelerate ecosystem restoration action worldwide.

Forests are increasingly recognized for their role as a nature-based solution to many sustainable development challenges, as manifest in strengthened political will and a series of commitments to reduce rates of deforestation and to restore degraded forest ecosystems. We must build on this momentum to catalyse bold actions to prevent, halt and reverse the loss of forests and their biodiversity, for the benefit of current and future generations.

Investing in Nature is an Investment in the NHS says Environment Agency Chief Executive

IN a major speech given on Tuesday 8 September, Sir James Bevan the Chief Executive of the Environment Agency said that universal access to a healthy natural environment could save the NHS billions of pounds a year in treatment costs if everyone in England had access to good quality green space.

Sir James highlighted evidence which shows the physical and mental health benefits of good environment, and make the case for "levelling up" access to the environment as part of the green recovery from coronavirus.

He also laid out the steps the Environment Agency is taking to protect and enhance our precious green and blue spaces, while adapting to the threat of a changing climate.

The speech coincided with the publication of the Environment Agency's 'The State of the Environment: health, people and the environment', which shows the green inequality in society.

The report – which brings together a wide range of evidence – finds that people living in deprived areas are not only more likely to have poorer health outcomes, they also have poorer quality environments and access to less green space. One study found that city communities with 40% or more black, Asian or ethnic minority residents have access to 11 times fewer green spaces locally than those comprising mainly white residents.

Investing in a healthy environment is about the smartest thing we can do said Sir James. It makes medical sense, because it will mean better health for all and less strain on the NHS. It makes economic sense, because it will save the NHS billions of pounds: the NHS could save an estimated £2.1 billion every year in treatment costs if everyone in England had access to good quality green space.

Furthermore, it makes socio-political sense, because those who live in poor environments are also those who have the worst health and the lowest incomes: levelling up the environment will also help level up everything else.

The Environment Agency's latest 'State of the Environment' report highlights that while significant improvements have been made in the quality of England's air, land and water there is still a long way to go, with:

- Air pollution still being the single biggest environmental threat to health in the UK, shortening tens of thousands of lives each year.
- Antimicrobial resistant microbes becoming more common in the environment due to contamination, meaning infectious illnesses may become harder to treat.
- Mental health conditions increasing – and can be caused or affected by pollution, flooding and climate change.
- Substantial and growing evidence for the physical and mental health benefits of spending time in the natural environment, but that children are engaging less with nature.

The World Health Organisation estimates that environmental factors like these contribute about 14% of the total burden of disease in the UK.

A recent study of over 19,000 people in England also found that those who spent two hours or more a week in or around open green spaces were significantly more likely to report good health or high wellbeing.

The Environment Agency plays a key role in protecting the environment for people's lives and livelihoods, responding to pollution incidents, creating better places for people and wildlife and supporting sustainable development.

The 'State of the Environment' report sets out the ways in which the Environment Agency is helping make the country healthier, for example by supporting angling in England including through improving fish habitats and re-stocking. Angling has been shown to have a multitude of health and social benefits, particularly for those with limited opportunities for other forms of physical exercise. Angling has double the number of participants with long-term illnesses compared to other sports.

The report also highlights the benefits to health of nature based-solutions to climate change, such as the Environment Agency's new Warrington flood defence scheme which protects over 2,000 homes and businesses and will create reed bed habitats, plant trees, open up riverside paths, and improve the views across the river and town. The benefits from the air quality improvement, recreation and physical activity add up to over £70 million over the lifetime of the scheme.

Emma Howard Boyd, Chair of the Environment Agency, added "The coronavirus pandemic has exposed and amplified green inequality in society. Too many towns and cities in England, especially those with a strong industrial heritage, have too little green space, too few trees, culverted rivers, poor air quality and are at risk of flooding. This holds back economic growth and the building of new homes. It's also a fundamental moral issue.

"Areas of higher deprivation and Black, Asian and Minority Ethnic populations have less access to high quality green and blue space and this contributes to differing disease burdens and life expectancy. Creating, and connecting people with, green or blue spaces will support new local jobs and benefit health and wellbeing. This is why it is important that the recovery from coronavirus is a green recovery.

In its new five year plan, EA2025, the Environment Agency has already laid out plans for a new approach which promotes health, equity and environmental enhancement, with the Coronavirus pandemic presenting an opportunity to reshape a better future. It can help society better understand the largest public health threat of the century: climate change.

The plan also highlights a renewed focus on improving the health of air, land and water for people and nature and ensuring green growth for a sustainable future.

Professor Paul Ekins OBE, UCL Institute for Sustainable Resources, said "The United Nations' sixth Global Environment Outlook, published in 2019, was entitled 'Healthy Planet' Healthy People', and this important report from the Environment Agency shows that this is as true for the UK as it is more widely.

"I am delighted that Sir James Bevan has chosen to launch this new publication which gives lots of evidence of the positive effects of a healthy environment on human health - at UCL.

The government's 25 year environment plan sets out an ambition to help more people, from all backgrounds, to engage with and spend time in green and blue spaces in their everyday lives, and the government's forthcoming Environment Bill will put the environment at the centre of policy making to ensure that we have a cleaner, greener and more resilient country for the next generation. Building on this, the Government has also recently announced a further £4 million in a two-year pilot to bring green prescribing to four urban and rural areas that have been hit the hardest by coronavirus.

Congratulations Sam Jensen

Congratulations to our Tree Warden for Guestwick, Sam Jensen, and his wife on the birth of their second child. We all hope everything is going well with Mother and the young sapling which we're sure that Sam is watering regularly to ensure strong, healthy growth. I'll give the new addition a couple of weeks then arrange for the inaugural training as a Broadland Tree Warden and include the name on the Broadsheet mailing list.

Emerging Europe's Primeval Forests are in Danger

An article by Nikola Đorđević published on https://emerging-europe.com

SEVERAL countries in emerging Europe are home to vast swaths of primeval forests, areas brimming with trees which have attained a great age without significant disturbance from human activity. In particular, Poland and Romania both remain home to immense forests that were once part of a single woodland that covered most of the European Plain.

In recent decades however, these forests – which are hotspots for biodiversity – have come under threat from commercial logging, both of the legal and illegal kind. Environmental activists warn that this logging, should it continue unchecked, will have dire consequences for flora, fauna, and for the climate.

"Logging of these forests would destroy many valuable habitats and lead to a massive decline in many species and ecosystems and biodiversity as such," says Janinka Lutze of the Germany-based environmental NGO EuroNatur.

Yet despite this ecological importance, and despite many parts of forests being protected by such initiatives as the European Union's Natura 2000 project, governments and the private sector are hesitant to put a stop to logging in these areas. Quite simply, it's big business. According to data from Eurostat, in 2017 the total output of forestry and logging in Poland was more than five billion euros and the sector employed 52,700 people.

Environmentalists in emerging Europe have long warned about the dangers of logging in old growth or primeval forests, but a watershed moment for the movement happened in April 2018, when the European Court of Justice declared that increased logging in Poland's Białowieża Forest had violated EU law.

In 2016, the Polish ministry of environment decided to increase logging in the protected forest. Being one of the last and largest remnants of the primeval forest that stretched across the European Plain, it is protected by the EU's Habitats Directive and is a part of Natura 2000, the largest coordinated network of protected environments in the world. Białowieża is not just home to very old trees, however. European buffalo, one of just two extant species in the world, roam the forest and it is also a home to some of Europe's most endangered species such as the three-toed woodpecker.

As justification for the logging, the ministry said that the forest was infested with bark beetles. Bark beetles reproduce in the inner bark of trees, eventually killing them. However, the beetles are attracted mostly to already dying and weakened trees.

In the case of Białowieża, most scientists agree that nature should be allowed to take its own course and that there is no scientific proof that felling the affected trees would actually help.

Nevertheless, the ministry pressed on despite scientific warnings, protests from environmentalists, and even a petition signed by 120,000 Poles. In the end, ClientEarth, an international environmental law charity with offices in Warsaw, along with other organisations, lodged a complaint with the European Commission which would eventually force Poland to halt the logging, but only after the European Court of Justice threatened to impose a 100,000 euro daily fine.

This huge victory for environmentalists seemed short-lived by 2019 when Poland's state-owned logging company started talking about issuing new permits after loggers quickly used up quotas which were meant to last until 2021. Thanks to increased pressure from the public and organisations such as ClientEarth, these plans did not come to pass.

ClientEarth tells Emerging Europe that the situation in Białowieża has been "stable" over the past year.

"The return of the harvesters would violate the ruling of the European Court of Justice, which keeps serving as a protective shield for the forest and needs to be taken into account by every entity involved in the management of this precious ecosystem," says Agata Szafraniuk of ClientEarth.

Still, the battle to protect Białowieża is far from over. State Forests, the governmental organisation that manages state-owned forests, is now developing a new forest management plan that will shape the forest's future in the next decade. ClientEarth says these plans are a legal obligation and don't necessarily pose a threat, and they are actively involved in their development.

Another threat to Białowieża could potentially come from Covid-19. Like many other sectors, forestry was hit by the economic consequences of the pandemic as the volume of raw materials bought from State Forests dropped. This has led the ministry of environment to prepare an amendment to Poland's Act on Renewable Energy Sources which would allow State Forests to sell so called "low-quality wood" to the energy sector. Many NGOs and environmentalists have expressed concerns that while these trees might have low value from a logging perspective they are nevertheless extremely valuable from the standpoint of biodiversity conservation as they are home to many insects, birds, lichens, and fungi. There is however, no confirmation that this new legislation will affect Białowieża.

While the Polish primeval forest seems relatively safe, at least for now, the same cannot be said for forests in Romania. Romanian old growth forests, also protected by Natura 2000 have been threatened for years by logging — both legal and illegal.

Romania hosts two-thirds of the remaining primeval forests in Europe found in the temperate climate zone, but they are being systematically destroyed in large-scale logging operations while the Romanian authorities seem uninterested in the ecological and environmental implications.

"In Romania there is probably a complex and corrupted system behind all the illegal logging with many people involved, powerful people in the back and corruption on many little points in that system," says Ms Lutze.

"Apparently influential people benefit from illegal logging and therefore it is challenging to make a systematic change, which is required to resolve the issue."

While a systematic change may not be on the horizon anytime soon, EuroNatur, ClientEarth, and other NGOs filed a complaint with the European Commission in September 2019, mirroring the events around the logging in Białowieża. The European Commission has since begun infringement proceedings against the country.

According to the NGOs, the Romanian state forestry management company, Romsilva, has long carried out logging in protected primeval forests. In February of this year and then again in July, the European Commission issued reasoned opinions concerning the logging, giving Romania a chance to address the problem.

Legal logging is a problem itself, but Romanian forests are also endangered by illegal logging operators. In their reasoned opinion published in July, the European Commission notes that inconsistencies in national legislation don't allow the Romanian authorities to check large amounts of timber.

Additionally, there is the problem of whitewashing illegal logging through legal collection points where the illegally obtained timber is mixed in with legally obtained material.

"We expect that Romania comprehensively stops logging in Natura 2000 sites and complies with European legislation such as the Habitats and the Birds Directive and the EUTR (European Timer Regulation). In order to do so systematic change is required. If not, we expect that the European Commission will bring Romania to the European Court of Justice as was done in the case of Białowieża in Poland," Ms Lutze says.

Yet the logging continues. To stop it, one solution for the future involves paying compensation to private forest owners who don't cut down old growth wood. According to Ms Lutze, this is already happening, but only to a small extent.

"How such compensation schemes should look requires careful consideration. Eventually, the best solution is that states will purchase these valuable forests and designate them as protected areas without any intervention," she explains.

However, the impact of this possible solution might be limited when it comes to illegal logging. Despite campaigns by environmentalists and even a government investigation launched in July, illegal logging remains a major issue.

Without a clear systematic solution in sight, the European Court of Justice could very well be the next battleground for the salvation of Romania's, and Europe's, last old forests.

Shorter Lifespan of Faster-Growing Trees will add to Climate Crisis, Study Finds

An article by Fiona Harvey published on www.theguardian.com

LIVE fast, die young is a truism often applied to rock stars but could just as easily describe trees, according to new research. Trees that grow rapidly have a shorter lifespan, which could spell bad news for tackling the climate crisis. Trees grow faster in warmer conditions, and this should act as a natural brake on global heating, as they take up and store more carbon dioxide from the air as they grow, but the new study casts doubt on this beneficial cycle, finding that the faster trees grow, the sooner they die and therefore stop storing carbon.

Some fast-growing trees, including conifer species in cold regions, have long been known to show shorter lifespans, but what was not known was the impact of warmer conditions that can spur growth as global heating accelerates.

An international team of researchers, publishing their work in the peer-review journal Nature Communications, has found that the relationship between faster growth and shorter lifespan appears to hold good across tree species and latitudes.

Roel Brienen, associate professor of geography at the University of Leeds, the lead author of the paper, said: "We started a global analysis and were surprised to find that these trade-offs are incredibly common. It occurred in almost all species we looked at, including tropical trees."

Trees growing faster in warmer conditions reach their maximum size sooner, and that appears to increase their chance of dying. Trees that grow more quickly may also be more vulnerable to factors such as drought, disease and pests. When trees die, they give up their stored carbon gradually, in the form of methane, a greenhouse gas.

This means that many standard climate change models of how we can use forests as carbon sinks, to absorb the carbon dioxide we produce from fossil fuel burning, are likely to overestimate the benefits. This study suggests that although the forests of the future might grow faster as temperatures increase, they could also store less carbon as the trees die off sooner.

"Our findings indicate that there are traits within the fastest-growing trees that make them vulnerable, whereas slower-growing trees have traits that allow them to persist," said Steve Voelker of the department of environmental and forest biology at Syracuse University New York, a co-author of the study. "[The] carbon uptake rates of forests are likely to be on the wane as slow-growing and persistent trees are supplanted by fast-growing but vulnerable trees."

David Lee, professor of atmospheric science at Manchester Metropolitan University, who was not involved in the study, said: "Currently, Earth system climate models predict continuation or increases in the size of the carbon sink of mature forests and this study shows the opposite, that increased CO_2 compromises forests as a carbon sink … The idea that fossil fuel-based emissions can be offset by planting trees or avoiding deforestation really does not stand up to scientific scrutiny."

However, Keith Kirby, woodland ecologist at the University of Oxford, said the results did not negate the value of growing trees to stave off the climate crisis. "We cannot rely as much on increased growth per unit area to maintain and enhance the forest carbon sink potential, but this might be offset by slowing deforestation and increasing the expansion of the extent of forests, where this can be done in a sustainable way," he said.

For the study, the international team of scientists analysed data from more than 200,000 tree ring samples representing 110 species of tree, across all continents except for Africa and Antarctica.

They found that faster growth was linked to shorter lifespans in trees of the same species, and across different species, and was not dependent on the climate or soil.

The researchers also conducted a computer simulation, using data on the black spruce (*Picea mariana*), to see what impact faster growth would have on carbon storage. The results showed that the greater propensity for the trees to die off after growing more quickly could reduce the capacity of global forests to absorb and store carbon dioxide, as temperatures rose.

Growing trees, and preserving existing forests, is one of the most important ways of staving off the worst impacts of the climate crisis, but several studies have cast doubt on the capacity of global forests to act as carbon sinks as the climate alters. A study published in March found that tropical forests were losing their ability to store carbon, and research published in May showed that the world's forests were becoming shorter and younger.

Wild Maple Trees 'in Serious Need of Conservation'

An article by Helen Briggs published on http://www.bbc.co.uk

ONE in five maple species is threatened in the wild, according to the first full assessment of extinction risks. Known for the vivid colour of their autumn leaves, the trees are popular in parks and gardens, but in their natural habitats, they face a myriad of threats, including unsustainable logging, climate change, deforestation and forest fires.

Botanists are calling for urgent action to protect rare maple trees and they say seeds should be stored as an insurance policy against extinction.

The assessment of all 158 species of maple is part of an effort to map the conservation status of all tree species by the end of 2020. It was carried out by the group, Botanic Gardens Conservation International.

Conservation manager Dan Crowley told BBC News: "Maples are some of our most familiar trees, particularly in autumn when they give us those wonderful displays of yellow, orange, red and purple colours and whilst they are common in some of our open spaces, spaces where they are highly valued, several species are also highly threatened in the wild."

The scientists say action is needed to ensure there is active conservation in protected forests where maples grow and as a back-up, rare seeds should be collected and stored in botanic gardens.

What we see in gardens and parks is just a small selection of the vast number found in the wild and many of the specimens seen in urban spaces are grown from a small number of seeds collected by early plant hunters, with only limited genetic diversity.

Currently, 14 species of maple tree, including four that are critically endangered, are missing from arboretums and botanical gardens.

Dan Crowley added: "We're highly responsible for the threats that some of these species face including urban development, agriculture and timber harvesting and we have the capabilities to conserve the species in the wild and also in our living collections, and we should act to do".

China holds the greatest diversity of maple trees, with a total of 92 species, but threatened species also occur in other parts of Asia and the Americas. The North American sugar maple is famous for giving us maple syrup, a favourite pancake topping for many. Two little-known close relatives of the tree can be found in Mexico, where they are threatened by grazing, logging and forest fires.

Commenting on the study, Kathy Willis, professor of biodiversity at the University of Oxford, said: "These trees provide a number of important ecosystem services and their loss is not just a loss of a pretty iconic tree but also all the important benefits they provide to humans - maple syrup being but one of them."

Australian Tree Stings with 'Scorpion-Like Venom' that Causes Excruciating Pain

AUSTRALIA is notorious for its venomous spiders, snakes and sea creatures, but researchers have now identified "scorpion-like" toxins secreted by a tree that can cause excruciating pain for weeks. Split-second contact with the dendrocnide tree, a rainforest nettle known by its indigenous name gympie-gympie, delivers a sting far more potent than similar plants found in the United States or Europe.

The tree, which has broad oval- or heart-shaped leaves, is primarily found in the rainforest areas of north-east Queensland, where it is notorious among hikers.

A team of Australian scientists said they now better understand why the gympie-gympie's sting haunts those unlucky enough to brush up against its leaves.

Victims report an initial sting that "feels like fire at first, then subsides over hours to a pain reminiscent of having the affected body part caught in a slammed car door," the University of Queensland researchers said last month. In the final, drawn-out stages, simply taking a shower can reignite the pain.

Though the gympie-gympie is covered in fine needle-like hairs similar to other nettles, previous testing for common irritants such as histamines came up empty.

Irina Vetter, an associate professor at the University of Queensland's Institute for Molecular Bioscience, said the research team discovered a new class of neurotoxin mini-proteins, which they christened "gympietides."

"Although they come from a plant, the gympietides are similar to spider and cone snail toxins in the way they fold into their 3D molecular structures and target the same pain receptors. This arguably makes the gympie-gympie tree a truly 'venomous' plant," she said.

Australia is already infamous for its venomous fauna including snakes, box jellyfish, blue-ringed octopus and funnel-web spiders, although deaths in humans from bites or stings are rare.

Vetter said the long-lasting pain inflicted by the tree may be explained by the gympietides permanently altering the chemical makeup of the affected sensory neurons – not due to the fine hairs getting stuck in the skin.

The scientists hope their research, published in peer-reviewed journal Sciences Advances, will eventually help lead to better pain relief treatment for people who have been stung.

Citizen Science Taps into Public's Love of Trees

An article by Mark Kinver published on www.bbc.co.uk

CITIZEN science projects are most effective when it comes to raising awareness of some of the threats the nation's trees are facing. However, these schemes are less productive for delivering meaningful data for scientific scrutiny. These findings come from a study, published in the Insects journal, which has assessed the ability of the UK public to become involved in a tree health survey, co-ordinated by Opal.

The study's publication coincides with the conclusion of the government's public consultation on its tree strategy for England. The strategy will form the basis of the government's commitment to plant 30,000 hectares of trees each year by 2025.

Open Air Laboratories (Opal) was launched in 2007 and has involved more than 650,000 people in a range of environmental surveys that utilised the collective power of "citizen scientists", ordinary people who went out to look a little more closely at the natural world around them.

"The OPAL Tree Health survey was in effect an experiment to test if the public could contribute towards 'official' surveillance," explained Opal director David Slawson.

"As it was pioneering, there was a responsibility on us to make the government and citizen science communities aware of the results."

It was set up as a result of a number of factors coming together.

In the paper Dr Slawson wrote with co-author Prof Andy Moffat from Forest Research, the pair observed "In the early 2010s government staff resources to monitor, identify and eradicate the pathogens were limited, so we tested the efficacy of 'citizen scientists' to support these needs."

With the Conservative government at the time attempting to reduce public spending, this had a knock-on effect in terms of the funding available to government agencies, such as those responsible for the nation's biosecurity. Yet, also at that time, Prime Minister David Cameron was promoting his "Big Society" concept that encouraged people to become more involved in the community around them.

It was against this backdrop, the Department for the Environment and the Forestry Commission launched an action plan that included engaging and involving the public.

As resources were limited, it was deemed worthwhile to consider the role of citizen science in helping support and maintain monitoring and surveillance frameworks.

Opal, co-ordinated by Imperial College, formed a partnership with Forest Research (the research arm of the Forestry Commission) and the Food and Environment Research Agency (Fera) to launch a tree health survey in May 2013.

Over the course of six years, an estimated 39,000 people took part. More than 80% of the participants said that they had no previous

experience of working with trees.

Nearly 60% of the trees surveyed were in streets, schools, parks or gardens, suggesting that most people decided to do their research close to their home or school.

"The OPAL Tree Heath survey project sought to determine the effectiveness of a citizen science approach in contributing to government tree health, public engagement and surveillance needs," the scientists wrote.

"Whereas the approach was considered largely to be a success in terms of public engagement, it was deemed to be only of limited success in generating useful data on specific tree pests and diseases."

Dr Slawson said the Tree Health survey was successful in reaching out to a new generation of environmentalists, giving them their first experience of the subject, but not only did it increase their knowledge and understanding of the science surrounding tree health, he observed, but it also had a positive influence on their attitude and behaviour towards the environment.

It was also deemed to be a success in terms of the geographical range of results submitted.

While the survey delivered a volume and breadth of results that were most likely beyond the scope of the professional officials and scientists, a number of "challenges" were encountered, including errors in the data entered, and the lack of verification.

This did mean that the data was not deemed robust enough to be exposed to the scientific methodology used in laboratories. However, Dr Slawson told BBC News that other OPAL surveys, as well as other citizen science projects, had not experienced such "challenges".

He added that the experiences gained from the project did provide a blueprint for future endeavours.

They wrote: "Firstly, OPAL's mixed success at achieving both public engagement and surveillance objectives demonstrates that scientists or policymakers considering a citizen science approach should be absolutely clear about the overall aim of the proposed activity.

"Is the aim public information, public engagement or surveillance and science? Knowing the aim will then inform the decision on which approach to take and the depth of the citizen involvement in the activity."

The study concluded by suggesting that if future citizen science projects wanted to gather meaningful data then it was better to target the time and the skills of people who had experience or expertise in the areas being considered.

This would help limit the errors and the need for a greater level of verification in future citizen science projects.

"We recommend that a lay person can play a pivotal role especially in times of crisis, when they can be trained for a specific pest or disease, involved only for a time-limited period and required to submit photographs for expert verification," Dr Slawson told BBC News.

He added: "We suggest that developing… a network of citizen observers could help the UK government meet its ambitious target to train at least two per cent of the UK population (1.3 million) as biosecurity volunteers."

Sheep Farmers Could Profit More from Returning Their Land to Native Trees and Selling Carbon 'Credits'

My thanks to Peter Harrold, Horsford Tree Warden, for drawing to my attention this article by Sophie McCandlish published on www.yorkshirepost.co.uk

SHEEP Farmers could profit by growing native trees on their land and selling the resulting carbon 'credits', according to a new study. The research, carried out by the University of Sheffield, suggests most sheep farming in the UK is not profitable without subsidies if farmers are paid for their labour.

However, it said, farmers could make money by allowing native trees to return to their land and selling 'credits' for the amount of carbon dioxide the trees absorb as part of efforts to tackle climate change.

The study comes as the Government shifts the post-Brexit farming payments scheme away from subsidies for the amount of land farmed to paying for 'public goods' such as storing carbon and stopping flooding.

The university's Grantham Centre for Sustainable Futures said livestock farming was both "heavily dependent" on subsidies and generated greenhouse gas emissions, with sheep farming accounting for around one per cent of the UK's total climate pollution but, the study said, the UK, with tree cover of 8%, making it one of the least densely forested countries in Europe, has a large potential for restoring and creating woodlands to help soak up carbon emissions.

It found that farmers with at least 25 hectares of land (60 acres) could turn a profit if they allowed it to naturally regenerate into woodland and were paid as little as £3 a tonne

for the carbon the woods store and went on to suggest the credits could be bought by businesses or individuals who want to offset their emissions, for example from flights.

If they were sold for £15 a tonne – the current market price for carbon credits – they could make forests of any size profitable, the study published in the journal Environmental Research Letters said.

Natural regeneration would work in areas close to existing woodland which would provide seeds for the land. If farmers had to plant trees, they would need a price of around £42 per tonne of carbon stored – although government grants in England can cover 80% of costs, which makes planting profitable from £9 a tonne, the study said.

As well as cutting carbon emissions, switching from sheep farming to native forests could boost wildlife and curb flooding, the research said. It adds that it "would make sense economically and environmentally" to use the post-Brexit Environment Land Management Scheme (ELMS) to pay farmers to return their land to forests.

The researchers also questioned whether it is right to pay farmers to preserve non-natural pastoral landscapes in the UK, preventing reforestation, while putting pressure on developing countries to curb tropical deforestation.

Professor Colin Osborne, from the University of Sheffield and lead author of the study, said: "Sheep farming in the UK is not profitable without subsidies, but forests that sell carbon credits can be economically viable – so it makes sense for the Government to help farmers transition.

"Ultimately, these come down to political questions of how we want our countryside to be used, how we value livestock production over the global costs of climate breakdown, and how the Government supports farmers and rural communities."

Natural Regeneration is Key to Saving Britain's Forests

An article by Pippa Neill published on https://environmentjournal.online

NATURAL regeneration is the key to saving Britain's forests and allowing trees to naturally establish over huge areas could massively expand Britain's woodlands at a fraction of the cost of tree planting, according to new research conducted by Rewilding Britain.

Rewilding Britain has criticised the government's draft England Tree Strategy, stating that it is 'woefully inadequate.'

The current government targets for reforestation fail to set a tree target, and will at best raise England's woodland cover from 10% today to just 12% by 2050. Rewilding Britain is instead calling on the government to support a doubling of the country's woodland cover over the next decade, from 13% to 26%.

According to their research, this could help to absorb 10% of current UK greenhouse gas emissions annually.

To achieve this, Rewilding Britain has said that the government should raise its annual investment from £50m now to at least £500m. They have stated that by doing this, there will be many long-term economic benefits, from jobs in forestry, tourism, carbon storage and flood mitigation.

Rebecca Wrigley, chief executive of Rewilding Britain said: 'We urgently need an expansion of nature's recovery across Britain that matches the scale of the threats from accelerating climate heating and species extinction – with clear and bold targets from the Government.

We can't replace our lost woodlands by planting alone. Protecting ancient woodland fragments, and allowing and assisting trees to naturally regenerate on a big scale, is the most effective way of reversing the sorry fortunes of our crippled forests and woodlands, and so benefiting people, nature and the climate.'

'Our ancient woodlands are only absent because we've destroyed them and continue to work hard to prevent their return through over-cutting, over-mowing and over-grazing. If we let them, millions of trees would plant themselves across most of Britain.'

Wildlife in 'Catastrophic Decline' due to Human Destruction, Scientists Warn

An article by Helen Briggs published on www.bbc.co.uk

WILDLIFE populations have fallen by more than two-thirds in less than 50 years, according to a major report by the conservation group WWF. The report says this "catastrophic decline" shows no sign of slowing and it warns that nature is being destroyed by humans at a rate never seen before.

Wildlife is "in freefall" as we burn forests, over-fish our seas and destroy wild areas, says Tanya Steele, chief executive at WWF.

"We are wrecking our world - the one place we call home - risking our health, security and survival here on Earth. Now nature is sending us a desperate SOS and time is running out."

The report looked at thousands of different wildlife species monitored by conservation scientists in habitats across the world.

They recorded an average 68% fall in more than 20,000 populations of mammals, birds, amphibians, reptiles and fish since 1970.

The decline was clear evidence of the damage human activity is doing to the natural world, said Dr Andrew Terry, director of conservation at the Zoological Society of London (ZSL), which provides the data.

"If nothing changes, populations will undoubtedly continue to fall, driving wildlife to extinction and threatening the integrity of the ecosystems on which we depend," he added.

The report says the Covid-19 pandemic is a stark reminder of how nature and humans are intertwined.

Factors believed to lead to the emergence of pandemics - including habitat loss and the use and trade of wildlife - are also some of the drivers behind the decline in wildlife.

New modelling evidence suggests we can halt and even reverse habitat loss and deforestation if we take urgent conservation action and change the way we produce and consume food.

The British TV presenter and naturalist Sir David Attenborough said the Anthropocene, the geological age during which human activity has come to the fore, could be the moment we achieve a balance with the natural world and become stewards of our planet.

"Doing so will require systemic shifts in how we produce food, create energy, manage our oceans and use materials," he said.

"But above all it will require a change in perspective. A change from viewing nature as something that's optional or 'nice to have' to the single greatest ally we have in restoring balance to our world."

Sir David presents a new documentary on extinction to be aired on BBC One in the UK on Sunday 13 September at 20:00 BST.

Measuring the variety of all life on Earth is complex, with a number of different measures.

Taken together, they provide evidence that biodiversity is being destroyed at a rate unprecedented in human history.

This particular report uses an index of whether populations of wildlife are going up or down. It does not tell us the number of species lost, or extinctions.

The largest declines are in tropical areas. The drop of 94% for Latin America and the Caribbean is the largest anywhere in the world, driven by a cocktail of threats to reptiles, amphibians and birds.

"This report is looking at the global picture and the need to act soon in order to start reversing these trends," said Louise McRae of ZSL.

The data has been used for modelling work to look at what might be needed to reverse the decline.

Research published in the journal Naturesuggests that to turn the tide we must transform the way we produce and consume food, including reducing food waste and eating food with a lower environmental impact.

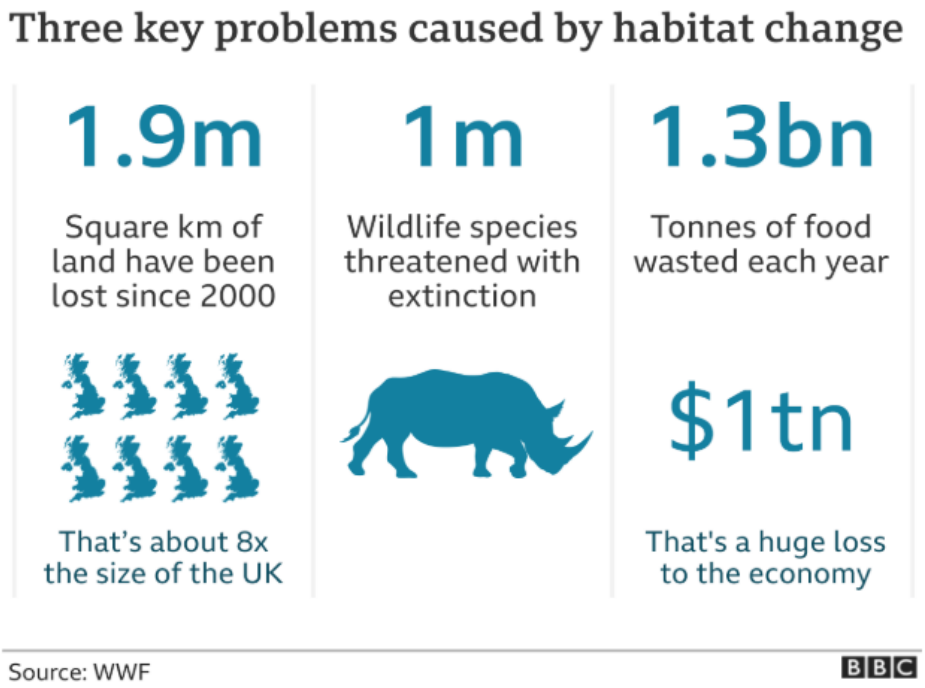
Prof Dame Georgina Mace of UCL said conservation actions alone wouldn't be sufficient to "bend the curve on biodiversity loss".

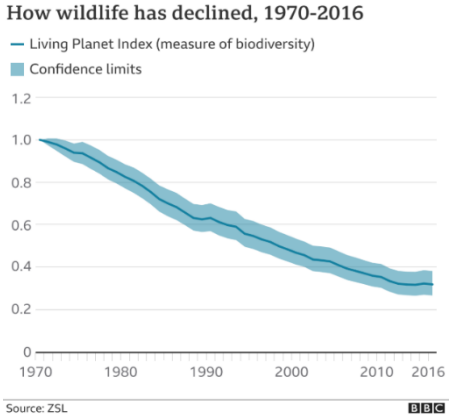
"It will require actions from other sectors, and here we show that the food system will be particularly important, both from the agricultural sector on the supply side, and consumers on the demand side," she said.

Extinction data is compiled by the International Union for Conservation of Nature (IUCN), which has evaluated more than 100,000 species of plants and animals, with more than 32,000 species threatened with extinction.

In 2019, an intergovernmental panel of scientists concluded that one million species (500,000 animals and plants, and 500,000 insects) are threatened with extinction, some within decades.

The WWF report is one of many assessments of the state of nature being published in the coming weeks and months in the build-up to a major summit next year.





Norfolk Wildlife Trust to Object to Western Link amid Fears for Bats, Rivers and Trees

An article by Dan Grimmer published on www.edp24.co.uk

NORFOLK Wildlife Trust (NWT) has announced that it intends to "strongly object" to plans for the Western Link and has written to the government to raise concerns over "unacceptable" impacts on wildlife. Norfolk County Council wants to build the controversial £153m road to connect the Norwich Northern Distributor Road from the A1067 to the A47 near Easton.

However, NWT fears the chosen route, which would travel between Weston Longville and Ringland and include a 720-metre-long viaduct over the River Wensum, would be likely to result in the complete loss of a Special Area of Conservation calibre breeding colony of barbastelle bats.

Those bats, listed as endangered by the International Union for Conservation of Nature, are protected by law from disturbance and destruction under the Wildlife & Countryside Act and the Habitats Regulations, the trust says.

Furthermore, they say further likely losses are areas of woodland likely to qualify as ancient woodland and permanent damage to two chalk rivers.

Mike Jones, conservation officer at the trust, said: "Based on the evidence available, we consider that the proposal would result in the loss of significant and irreplaceable ecological features of national importance for which mitigation and compensation are not feasible.

"We cannot envisage how it would be possible to proceed with the road and comply with wildlife laws and planning policies, nor provide a net gain for biodiversity as stated by Norfolk County Council. As a result, NWT intends to strongly object to the planning application."

The trust's chief executive Pamela Abbott said: "We have written to the Department for Transport to urge the Western Link is removed from further consideration. Our recommendation is that the road proposal is stopped at this point. Alternative options for meeting future transport needs that do not contravene multiple wildlife laws must be examined further."

Martin Wilby, Norfolk County Council's cabinet member for highways and infrastructure said: "The Norwich Western Link is an important project for Norfolk and Norwich and will provide essential infrastructure for our county's future.

"We have seen the concerns raised by the trust and we will continue to work with them and other environmental groups throughout this project. We hope that the trust will review their current position when we submit our planning application in 2021.

"This will demonstrate that we are delivering a solution in the most environmentally considerate way possible, while taking into account the impact that existing traffic has on local communities and the surrounding environment. The traffic relief will also improve the viability of alternative transport methods in those areas, either through walking and cycling or public transport.

"It is still very early in the development of the project and there is a significant amount of work still to do in finalising the details of the scheme and the mitigation measures. Further details will be developed in advance of a more detailed consultation on the project during 2021."

The trust says there is a "very real risk" that the road would lead to the local extinction of multiple bat colonies, which would be a clear breach of the Habitats Regulations and the Wildlife & Countryside Act. That includes the endangered barbastelle colony at Weston, which is likely to be of international significance due to its current size. The barbastelle bat is listed as near threatened on the red list.

The trust says: "We would not consider any assessment of the impacts on a narrow 75 metre corridor around the road, as indicated in the interim survey reports, to provide sufficient information to inform the full scale of the impact on the colony and its core sustenance zone."

Several of the woodlands in the surrounding landscape are included in the Ancient Woodland Inventory and the trust says there is therefore a risk that there are further areas of ancient woodland directly on the route or its zone of influence.

They said: "Ancient woodland is a rare and irreplaceable habitat and the full extent of ancient woodland habitat on the route and its zone of influence should be identified through detailed Phase 2 botanical surveys in order to properly assess the risk to this irreplaceable priority habitat."

The UK holds a significant proportion of the world's chalk rivers, and so holds a key responsibility for their conservation.

The trust says the Western Link would require crossing the River Wensum Special Area of Conservation (SAC), and would also result in the loss of County Wildlife Site floodplain habitats which are linked to the health of the SAC.

The trust says: "Whilst the focus appears to be on ensuring that adverse effects on the SAC are avoided, it is not clear from the information provided if the habitat loss, hydrological and pollution impacts on the supporting floodplain habitats adjacent to the SAC have been considered in assessing the long term impacts on the SAC.

"We also consider the River Tud on the southern edge of the proposal to be of equal ecological value to the River Wensum. Whilst it is not designated as an SAC, and only partially designated as a County Wildlife Site, we believe it is of equal ecological value, and potentially of Site of Special Scientific Interest quality.

"It is also likely to suffer from in-combination effects from the A47 upgrades necessary to join to the Western Link, with cumulative impacts on habitat quality and its hydrology. In addition, the Western Link would need to cross a tributary of the Tud below Foxburrow Plantation, with likely additional hydrological impacts on the flow and water quality of the Tud."

40,000 Trees Face Felling by National Trust Following Surge in Ash Dieback

An article by Steven Morris published on www.theguardian.com

WOODS that inspired Beatrix Potter and John Constable could be lost because of a surge in a disease affecting ash, the National Trust has warned. The conservation charity said it faced its worst year on record for felling trees owing to ash dieback, in part due to one of the warmest and driest springs on record. Increased prolonged hot and dry conditions driven by the climate crisis were putting trees under stress and making them more susceptible to disease, dramatically speeding up the impact of ash dieback.

It said the Covid-19 lockdown meant rangers who ordinarily carry out felling and maintenance work to ensure tree safety had not been able to do so, leaving them having to play catch-up.

While the National Trust has felled about 4,000-5,000 trees a year in recent years, largely because of ash dieback, this year it faces having to cut down around 40,000 trees, with a bill of £2m. Landscapes under threat include the Cotswolds, where more than 7,000 trees will have to be felled in the coming year. In all, the trust expects to fell more than 15,000 trees in south-west England.

Woodlands around the home of the painter John Constable, in Flatford, Suffolk, are also under threat, as are sites in the Lake District that inspired Beatrix Potter, including Troutbeck Park farm, which she managed, and High Oxen fell.

The National Trust said other woodlands, including the ravine woods of the White Peak in Derbyshire, where ash trees cling to the limestone of the steep dale sides, will change beyond recognition.

Luke Barley, a tree and woodland adviser, said: “Ash dieback is a catastrophe for nature. Our landscapes and woodlands are irrevocably changing before our eyes, and this year’s combination of a dry spring and late frost may have dramatically sped up the spread and severity of ash dieback. It is nothing new, but the speed at which it is spreading seems to have been exacerbated due to the weather, and the time and expense necessary to tackle it contributes to the perfect storm we are witnessing.”

The charity, which needs to save £100m because of the pandemic, is appealing to the public to replace lost woodland by donating to the Everyone Needs Nature campaign via its website.

High Court Considering Campaigners’ Concerns over Felling of Historic Woodland

An article by Katy Sandalls published on www.eadt.co.uk

A HIGH COURT hearing has taken place to consider the future of an area of historic Suffolk woodland. The future of Coronation Wood near Sizewell is under discussion after East Suffolk Council gave permission for the wood to be chopped down as part of the preparations to build a new twin reactor nuclear power station.

A legal challenge against the council’s decision has been brought by Together Against Sizewell C (TASC) campaigner Joan Girling.

If given the go-ahead buildings currently used to run the existing Sizewell B nuclear site could be moved to the wood ahead of the construction of Sizewell C. The buildings in question include the Sizewell B visitor centre, as well as training centres and their associated car parks.

Protestors have argued in the past that the felling of the trees will cause untold damage to an historic area of woodland, where some trees are around 100 years old. They say that East Suffolk Council should not have given permission for the felling of the woodland ahead of permission being granted for the construction of Sizewell C.

A decision on whether the construction of Sizewell C itself is given the go-ahead is currently being discussed with a decision not expected until next year.

A virtual hearing was held in June to consider a bid for a judicial review on the Sizewell B buildings, which was successful.

Ms Girling’s case was granted the review after differences in opinion were highlighted over whether the ecological advice for environmental plans on the site was still up to date.

EDF has always maintained that it will be planting more trees elsewhere and has previously raised concerns about the quality of the existing trees which reside within the Coronation Wood site.

The case was heard in the High Court on Tuesday 8 September 2020 but it will take some time for an outcome to be reached. No date for the verdict has yet been announced.

A spokesman for TASC said: “We hope that the court will agree with our point of view.”

A spokesman for East Suffolk Council said: “East Suffolk Council defended the decision made by its Planning Committee at the High Court and will await the outcome in due course.”

EDF declined to comment further on the case at this time.

When do Hedgehogs and other Animals Hibernate?

By Charlie Mellor, Content Manager at The Woodland Trust

AS summer turns to autumn, temperatures start to fall and woodland wildlife turns its attentions to surviving the coming winter. Food and shelter become more important than ever, but where do hedgehogs and other species go during our harshest weather? Often we imagine hibernation as animals curling up in a dark, quiet, cosy spot and sleeping peacefully for a few months until spring returns. Though they seem to disappear, that's not really the case.

Hibernating animals enter a state of inactivity by slowing their heart rate and breathing and lowering their body temperature and metabolism.

All this means they can survive long periods without eating, but they do need to get up occasionally to look for food and go to the toilet. Their clever bodies can also wake them up if temperatures drop so far that they're in danger of freezing.

To prepare for their hibernation, hedgehogs eat as much as they can during autumn. To build up good fat reserves for winter, they munch all the beetles, caterpillars and earthworms they can find. They then seek out a quiet spot to rest for the coming months, making use of whatever materials and hiding places they can find. They might build their own winter shelter – known as a hibernaculum - from dead leaves, twigs and feathers. In urban areas, they can take up residence in stacks of logs, compost heaps or under garden sheds.

The time they retire to their chosen spot will depend on how mild the weather is. Hibernation can take place any time from October to April, but in a warmer winter you may still see hedgehogs out and about in December.

Hedgehogs can be found in woodland edges, hedges, farmland, parks and gardens, but numbers have dropped dramatically. Our rural hedgehog population has halved since 2000. They are less common in gardens too as lots of perimeter fencing and tidier outdoor spaces prevent them from moving around so easily.

You can help local hedgehogs through hibernation by putting food in an accessible place and providing a safe shelter for them.

If you spot a hedgehog that looks too small to survive hibernation, contact the British Hedgehog Preservation Society for advice.

Icy temperatures make winter survival tough for some wildlife. Maintaining body temperature and looking for food can burn more energy than they're able to consume.

As well as a lack of food and shelter, small mammals have to deal with losing heat more quickly due to their larger surface area to volume ratio and short, thin fur. Rabbits, shrews, mice and more seemingly disappear. But rather than truly hibernating, some of our woodland residents enter 'torpor'. Like hibernation, this is also a state of inactivity but for a shorter period.

The only mammals that truly hibernate in the UK are hedgehogs, dormice and bats.

The hibernation period for dormice begins around October to November. They stay in their nests until April or May. These tiny creatures slow their heartbeat and breathing and lower their body temperature to just a few degrees above freezing. They can lose half their body weight over winter, so they eat so much at the end of summer that they grow to twice their normal size!

Bats hunt for hollow trees, roofs, caves and bat boxes to spend their winter months. They usually hibernate from November to April. To help get them through this period, bats can slow their breathing to as few as five breaths a minute. Some species can last almost an hour without breathing at all!

Badgers are also less active in winter and go through cycles of torpor which last for around 29 hours. They will stay in their home – an underground sett - for days without food when winter conditions are too harsh to venture outside.

It's a common misconception that squirrels go to sleep for winter too. It's true you're less likely to see them, but they are still awake. Red squirrels prepare for winter by storing surplus food near their home so they can keep time outside their drey to a minimum and save energy. When the weather is especially bad, they can stay in their dreys for several days at a time.

Frogs, toads and newts also go into a state of torpor when it's cold, dropping their body temperature, breathing and heart rate. They can withstand winter better than others, but will creep under rocks or logs or lay buried at the bottom of ponds when the temperature really drops. They emerge again from January.

The hum and buzz of spring and summer turns almost silent in winter as bees and butterflies find overwinter homes. Queen bees will gorge on pollen and nectar to store fat before burrowing deep into the soil in early autumn. They can stay there for up to nine months.

Most butterfly species spend winter in the larval stage, but some hibernate as adults, including the brimstone, peacock and comma. They settle down in outdoor structures like sheds and farm buildings and enter a dormant state as the weather turns cold. They wake again around April or May.

Giant 10-Million-Year-Old Fossil Tree in Peru Reveals Surprises about Ancient Past

An article by David Nield published on www.sciencealert.com

RESEARCHERS working on the Central Andean Plateau (or Altiplano) in Peru have discovered a giant tree fossil buried in the plains and the 10 million years of history that it reveals don't quite match up with what we thought we knew about the ancient climate. Back when this tree died, a little more than half way through the Neogene period, the South American climate was much more humid than had previously been thought, based on what this tree fossil reveals.

The researchers say it shows the importance of using plant fossils to work out how our planet's climate has taken sharp turns in the past and from that, how it might change again in the future.

"This tree and the hundreds of fossil wood, leaf and pollen samples we collected on the expedition, reveal that when these plants were alive the ecosystem was more humid – even more humid than climate models of the past predicted," says palaeobotanist Camila Martinez from the Smithsonian Tropical Research Institute (STRI) in Panama.

"There is probably no comparable modern ecosystem, because temperatures were higher when these fossils were deposited 10 million years ago."

A lot has changed over those 10 million years to turn the area from a humid and diverse ecosystem into the more arid and sparse state that it's in today. Not least a shift in elevation from around 2,000 to 4,000 metres.

Recovered plant fossils that are a mere 5 million years old suggest the majority of the shift had already taken place by then. They show evidence of grasses, ferns, herbs and shrubs, suggesting a puna-like ecosystem similar to today's rather than one that could have supported the growth of huge trees.

In the scale of Earth's history, that's a quick shift in a short space of time, caused by movements in the Earth's lithosphere under South America over many millions of years.

"The fossil record in the region tells us two things: both the altitude and the vegetation changed dramatically over a relatively short period of time, supporting a hypothesis that suggests the tectonic uplift of this region occurred in rapid pulses," says STRI palaeobotanist Carlos Jaramillo.

It's not entirely clear how ongoing climate change is going to affect the Central Andean Plateau and the neighbouring Amazon Basin in the coming years, because of complicated feedback loops that might be triggered, but the new findings suggest that in the ancient past, at least, climate and altitude change occurred alongside one another.

The idea that the tectonic uplift helped to cause less rain and a drying out of the region is almost the opposite of the conclusions that several other studies have come to.

In some ways, though, a lack of agreement between studies can be as useful as perfect harmony. The gaps show where experts might be getting their calculations wrong and there are a lot of calculations to make to peer back through 10 million years of history.

"By the end of this century, changes in temperature and atmospheric carbon dioxide concentrations will again approximate the conditions 10 million years ago," says Martinez.

"Understanding the discrepancies between climate models and data based on the fossil record help us to elucidate the driving forces controlling the current climate of the Altiplano and ultimately the climate across the South American continent."

The research has been published in Science Advances.

Dr Jo's Corner

The column by Jo Parmenter, Reedham's Parish Tree Warden

Chaffweed

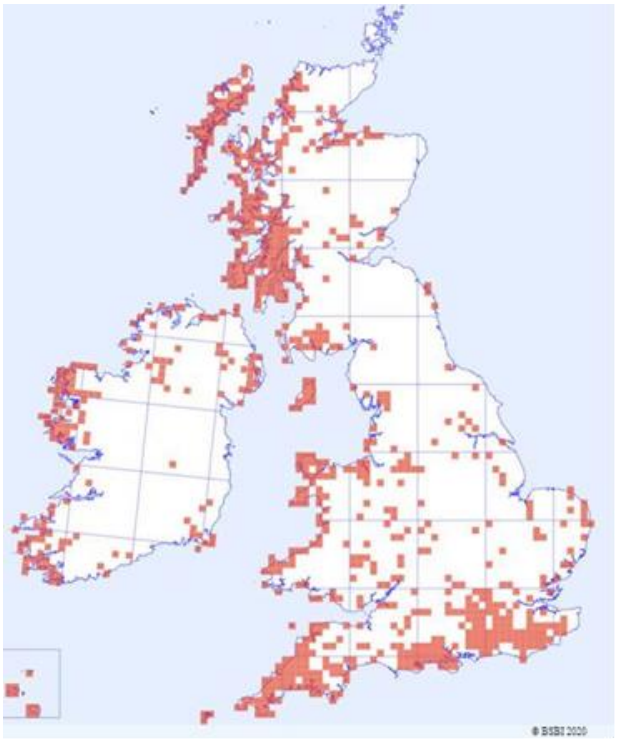
A very small flower for you this time, but beautiful all the same. Chaffweed, also known as *Anagallis minima*, *Centunculus minimus* and, most recently, *Lysimachia minima* (lots of name changes there) is in the same family of plants as yellow loosestrife and scarlet pimpernel, but is a little less showy. It can actually reach the dizzy heights of 5-8cm; I am not sure I have ever seen it much larger than 1cm tall and this one was very, very small indeed.

The plant has alternate leaves and tiny pink or white flowers which are borne in the leaf-axils

In my experience the best place to look for it is bare, wet, gravelly or sandy, slightly shaded, acid ground. This particular one was on a path in the New Forest, but I have also found it at Winterton on the north-east Norfolk coast and at Racecourse Plantation and as you can see from the map, it isn't so very uncommon in the south and west of the country; but perhaps often goes unnoticed.

The online atlas of the British and Irish Flora notes that it was lost from many sites, especially inland ones, before 1930. In England these losses have continued or accelerated, possibly through changes in heathland management, but the distribution is stable elsewhere.

Here in East Anglia, the best places to search for it are the heathy sites, such as the Bedfordshire Greensands, Mousehold through to Cawston in mid Norfolk, The Brecks, and the Sandlings, especially on seasonally wet ground with a little forest cover for shade.



Tree Preservation Orders and Conservation Area News

Broadland Tree Preservation Orders Served, Confirmed and Revoked

TPO Number	Address	Served	Trees Protected	Status
2020 No 1 (1303)	Robin Hill, 16 South Walsham Road, **Acle**	17/02/2020	All trees on site	Provisional
2020 No 3 (1305)	Land at Wood Green, **Salhouse**	09/03/2020	1 x Leyland cypress	Provisional
2020 No 4 (1306)	Land rear of 48 Spixworth Road, **Old Catton**	29/04/2020	T1 oak, T2 deodar cedar T3 copper beech T4 yew	Provisional
2020 No 5 (1307)	66 Charles Close, **Wroxham**	26/05/2020	1 x Atlas cedar	Provisional
2020 No 6 (1308)	19 Millgate, **Aylsham**	17/08/2020	2 x Scots pine	Provisional
2020 No 7 (1309)	Lime Tree House, 16b Harvey Lane, **Thorpe St Andrew.**	28/09/2020	All trees of whatever species.	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
20191487	Thatched House, 10 The Street, **Coltishall**	211	Coppicing of 6 sallow and 3 silver birch. Currently 8m in Height.	19/09/2019
20191569	68 St Williams Way, **Thorpe St Andrew**	TPO	T1 oak - end weight reduction. Reduce width from 13.5m 8m.	28/11/2019
20191764	The Loft, Aylsham Water Mill, Mill Row, **Aylsham**	211	Lime – fell.	08/11/2019
20191768	Belt Farm, Mill Row, **Aylsham**	211	T1- fell. T2 yew - crown lift to 4m & reduce laterals to rear of property by 2-2.5m. T3 sycamore - remove to coppice. T4 - remove all sycamore stems and holly 5m of garden wall.	13/11/2019
20191982	Bircham Centre, Market Place, **Reepham**	211	T1 and T2 holly – fell.	31/12/2019
20200431	19 Breck Farm Lane, **Taverham**	TPO	T1 cedar – fell.	Approved
20201112	St Margarets House, 1 Staitheway Road, **Wroxham**	211	T1 fir 0=- fell – heavy decline.	02/06/2020
20201119	Meadow View, 102 Lower Street, **Salhouse**		T1 cedar - crown reduction in height from 5m to 4.5m and in radial spread from 2m to 1.5 m.	05/06/2020
20201175	Land at Haveringland Hall Park, **Haveringland**	TPO	No 4 lodges- 2 x ash – fell. 1A lodge- skinny Scots pine growing through canopy of neighbouring sycamore - fell. 10 Lakeside- Silver birch - remove large limb over caravan to balance the tree canopy. 35 Lakeview - leaning oak - fell. 16 Lakeside - 3 x leylandii – fell. 17 Lakeside - small conifer - fell. 1 Arboretum – oak - raise and crown clean.	Split decision
20201239	5 Sego Vale, **Taverham**	TPO	T1 oak and T3, t5 & T6 sycamore – fell. T2 beech & sycamore - tip back from property by 2-3m reducing. T4 sycamore - reduce from 20m to 17m.	18/06/2020
20201252	Newlands, 9 School Lane, **Thorpe St Andrew**	TPO	T1 oak - reduce height from approx 20m to approx 14m.Tree is dangerously close to property and there is history of tree failure on this steep bank. Customer wants to preserve the trees as they are holding the bank together. T2 oak - reduce from approx 20m to approx 14m as above tree is close to property and on a steep bank. T3 oak reduce from approx 6m to 14m as above. Happy to take advice and a site meeting a must.	Split decision

20201302	The Laurels, 20 Norwich Road, **Horstead**	211	T2 lime – fell.	Approved
20201326	6B Westbourne Road, **Coltishall**	TPO	G1 lime - fell	Split decision
20201364	25 Thorpe Avenue, **Thorpe St Andrew**	TPO	T1 oak – fell.	Approved
20201371	Aylsham High School, Sir Williams Lane, **Aylsham**	211	Oak – reduce by 30%	Approved
20201373	67 Low Road, **Hellesdon**	TPO	T1 plum, T2 pine, T3 yew, T4 bullace, T5 & T9 cypress, T6 birch, T7 spruce, T8 holly, T12 Norway maple and T13 oak – fell. T10 crimson maple - no work required. T11 cypress - raise by clear stemming up to 2.5 to 3m.	Split decision
20201380	89C Yarmouth Road, **Thorpe St Andrew**	211	T1, T2 & T3 sycamores - reduce western portion of crowns by 2.5m in order to alleviate bias. T4 *Acer* - crown lift to provide 4m and reduce eastern aspect of crown by 2m.	Approved
20201404	7 Colkett Drive, **Old Catton**	TPO	G3 Scots pine - crown lift by 1.8m. Lateral and height reduction of approx 1.8m to top right corner. Left hand branch currently at approx 7m above ground level and approx 6m in length, selective reduction of approx 1.5m to fit with existing canopy outline. Crown thin by approx 10%.	Approved
20201410	6 Library Close, **Blofield**	TPO	*Acer* - reduce northern spread from 8 to 6.5m and western spread from 9 to 7.5m to alleviate bias caused by neighbouring pine. Crown lift to 5.5m to alleviate impact on recently planted pleached trees. Pine - remove deadwood and inspect crown for further defects. Sycamore – fell.	23/07/2020
20201412	The Pines, 8 Parkside Drive, **Old Catton**	211	T1 holly - reduce height from 8m to 4m. T2 holly - reduce crown from 5m to 3.5m.	Approved
20201420	69 Garrick Green, **Old Catton**	TPO	T1 sycamore - crown lift to 6m and clean out crown removing deadwood and smaller crossing branches. T2 sycamore - crown lift to 6m, reduce branches approaching on yew by up to 2m and clean out crown removing deadwood and smaller crossing branches. T3 yew - reduce lower branches up to approximately 5m by up to 2m over neighbours' garden.	Approved
20201435	62 Charles Close, **Wroxham**	TPO	T1 lime - lift crown to 3m to maintain clear access on public footpath. Crown reduction to approx 8m (h) x 4m (w), maintaining sympathetic overall shape, to arrest spread of branches into other trees nearby. Crown thin by 25-30% to reduce overcrowding. T2 larch - fell. Tree has never flourished as it is being suffocated by proximity of the lime. Neither tree can benefit from being close. Do not wish to re-plant as it is so close to other trees. T3 goat willow - fell. This tree is being smothered by adjacent birch. Do not wish to re-plant as it is so close to other trees. T4 copper beech – crown lift to 3m. Reduce crown to 8m (h) x 5m (w), maintaining a sympathetic overall shape. Carry out some crown thinning - approx 20%. T5 laburnum and T6 lilac (these are so close/entwined that they almost appear as one shrub!) - Fell. These are very much past their best as they appear to ha ?????	Approved
20201457	Hillside Farm, 98 Lower Street, **Salhouse**	TPO	20 x conifer (exact species unknown) – fell as follows. T1 dead or dying, insecure. T2 growing through adjacent red maple, multiple stems, layered into ground, ivy-bound. T3 part dead, distorted shape. T4 & T5 green only at extremities, competing for light. T6, T9, T10 & T20 green only at extremities, competing for light, ivy-bound, poor. T7 green only at extremities, competing for light, broken bough due to storm damage. T8 dead or dying, poor condition, ivy-bound. T11 dead, insecure, ivy-bound. T12 & T14 dead or dying, insecure, ivy-bound. T13 dead or dying, insecure, heavy ivy infestation spreading to adjacent Scots pine. T15 dead, broken, only supported by T14. T16 green only at extremities, very heavy ivy, insecure, poor. T17 no sign of life, very heavy ivy, poor. T18 dead, fallen, only supported by T7. T19 green only at extremities, competing for light, ivy-bound, poor.	Approved
20201459	Between 30 and 32 Plumstead Road, **Great Little Plumstead**	211	Oak – fell.	27/07/2020

20201460	55 Bishops Close, **Thorpe St Andrew**	211	8 x leylandii – fell.	Approved
20201461	10 Macmillan Way, **Great Little Plumstead**	TPO	T1 & T5 unknown spp, T2 & T4 silver birch & T3 hawthorn – fell. T6 unknown species – reduce current height 7.5m to 4.5-6m.	Approved
20201463	19 Millgate, **Aylsham**	211	T1 & T2 Scots pine – fell.	Approved
20201465	Park House, Petersons Lane, **Aylsham**	211	Conifer - reduce to the same height as the hedge.	Approved
20201466	Orford Cottage, The Moor, **Reepham**	211	T1 birch – fell.	Approved
20201474	39 Charles Close, **Wroxham**	211	Leylandii – remove.	Approved
20201477	14 The Street, **Coltishall**	211	Copper beech - current height 7m, crown reduce by 1.5-2m, removing infected and dead wood. Maple - current height 7m, crown reduce by 2m, remove deadwood and branches that are dying back.	Approved
20201485	9 Breck Farm Lane, **Taverham**	TPO	Oak - current height 11.6m and spread 17.4m. Crown reduction of 2m to height to 9.6m and reduce to 14m in width (at widest point). Reduce two lowest branches in driveway by 20% to 4m.	17/08/2020
20201488	Point House, 5 High Street, **Coltishall**	211	T1 & T2 lime - crown lift to 5.2m over driveway.	Approved
20201491	199 Norwich Road, **Wroxham**	211	L1, L2, L3, L4 & L5 leylandii – fell. H1 hawthorn - crown reduction from 6 to 3.5m high and 3.5 to 2.4m wide.	Approved
20201495	51 Charles Close, **Wroxham**	211	T1 cherry - reduce by approx 3m to a height of 12m and width of 5m, reshape and rebalance the crown. T5 & T11 oak and T9 sycamore - fell. T8 silver birch - dead – fell.	31/07/2020
20201500	2 Millers Way, **Horsford**	TPO	Oak on property of 2 Millers Way, driveway bordering Millers Way, front east side of property. Sketch plan tree marked as TPO Works required, (trim back branches overhanging property and road side). Crown lift or raise. Crown reduction. Crown thin.	05/08/2020
20201510	157 Norwich Road, **Wroxham**	TPO	2 x oak - remove all dead wood/branches and cut/trim back the branches with excessive growth at the end and little or no growth along branch. If there is sufficient growth part way along the branch, it will be taken back to the growth, as long as the branch is then able to hold the weight of any new additional growth.	Approved
20201511	Manor Farm, The Moor, **Reepham**	211	Ash – fell.	Approved
20201513	Swallow House, Buckenham Road **Lingwood and Burlingham**	TPO	T1 ash – fell. T2 copper beech - spread 20m & height 15m - reduce lower 50% of crown by 2m and upper 50% by 1.5m and crown thin by 10%. T3 & T4 lime - spread 12m & height 12m - reduce crown by 2m. T5 sycamore - spread 10m and height 12m - pollard to 7m. T6 lime - reduce by 1.5m. Current spread 10m and height 12m.	07/08/2020
20201519	8 Western Avenue, **Thorpe St Andrew**	211	T1 purple plum - remove overhanging branches. T2 birch – fell. T3 Norway maple - remove branch to the north west originating at 7m.	Approved
20201522	Norbrey, 58 Bishops Close**, Thorpe St Andrew**	211	Tree species unknown - crown reduction from 2 to 1m from top of the trunk, remove side shoots from main trunk.	Approved
20201525	Bayfield Cottage, 20 High Street, **Foulsham**	211	T1 & T2 small willow, T3 & T4 small copper beech and T5 & T6 ash – fell.	Approved
20201532	4 Manor Close, **Buxton With Lamas**	TPO	T1 silver birch - current height 20m reduce to 15m, current width 12m reduce to 8m.	20/08/2020
20201534	40A Harvey Lane, **Thorpe St Andrew**	TPO	T1 oak - approx 21m in height. To raise approx 5-6m on eastern aspect overhanging garden retaining lateral length of canopy. T2 oak - approx 19m in height. To raise approx 5-6m on eastern aspect overhanging garden retaining lateral length of canopy. Both trees will be deadwooded within area of work. Raising will be done by removing branches back to primary and secondary growth points but not to stem. There will be no reduction in crown area.	Approved
20201539	Land to rear of 22 Astley Road**, Little Plumstead**	TPO	T1 oak - no reduction in height of 22m but reduce east side of crown back from 8m to 3m by removing 5m.	26/08/2020
20201546	84 Norwich Road, **Wroxham**	211	T1 sycamore – remove. T2 cherry - prune southern crown back by 40 cm from 2m to 1.6m to clear path	Approved

20201551	22 & 30 Catton Court, **Old Catton**	TPO	T32 magnolia adjacent 22 Catton Court - reduce and shape crown to clear house structure to allow more light into property. Reduce height from 9.5m to 7.5m and crown spread from 4.5m to 3m and raise crown from 1m ground clearance to 2m. T39 yew adjacent 30 Catton Court - raise and reduce crown to allow more light into adjacent properties. Reduce height from 10m to 9.5m, raise low branches from 2.5m ground clearance to 3.5m and reduce crown radial spread from 3m to 2.5m to the north, 2.5m to 2m to the west, 3m to 2.5m to the south and 4.5m to 3.5m to the east	Approved
20201558	Charles House, Beech Avenue, **Taverham**	TPO	T16 purple leaved *Acer* - a street lamp is in the middle of the tree canopy and the branches have previously broken the lamp. I would like to cut away the small branches around the lamp just enough to prevent this happening again. The parish council have warned me of this problem in the past. T14 oak - reduce width of canopy by 1.2m as the required clearance from the house	14/08/2020
20201560	123 Lower Street, **Salhouse**	211	T1 Norway maple - reduce spread and height from 9 m to 6m. Pole thin by up to 20%	Approved
20201564	Thatched Cottages, 4 Top Road, **Belaugh**	TPO	T1 conifer & G4 5 x conifer – fell. T2 sycamore & T3 beech - clear phone lines. T5 sycamore - clear phone and power lines, reduce by 2.5m-3m and raise to 3m-3.5m	Approved
20201565	27 Greenacres, Church Lane, **Burgh Next Aylsham**	211	T1 yew - crown lift to 2m, approx height 1.5m. Crown reduction by 1.5m to 2m, approx 11m. T2 weeping pear & T3 black mulberry - crown reduction back to previous points. T5 *Prunus* - height 4m - reduce by 1m and shape. T6 sweet gum - height 5.2m - reduce by 1.5m and shape. T7 *Parotia persila* - height 4.2m - reduce by 1m and shape. T8 birch – reduce 4.5m height by 1.5m and shape. T9 beech - reduce 4.5m height - by 1m and shape. T10 maple (height 5.7m) reduce lower branches by 2m & shape. T11, 12 & 13 - reduce lower branch over lawn. T19 white mulberry - crown reduction back to previous points.	Approved
20201566	2 Sylvan Way, **Taverham**	TPO	T1 sycamore - crown lift to 4.5m over 3a Orchard Bank. Reduce lower long laterals growing towards 3a Orchard Bank to create 3m clearance.	07/09/2020
20201567	Wherry Court, 149 Yarmouth Road, **Thorpe St Andrew**	TPO	T1 cedar – fell and replace.	12/08/2020
20201569	1 St Clements Way, **Brundall**	TPO	T1 oak - prune back branches overhanging roof from 6 to 3m.	19/08/2020
20201580	Holly Cottage, 22 Church Lane, **Wroxham**	211	G1 & G4 conifers, T2 golden conifer, G3 hollies (G3) – fell.	Approved
20201581	3 Bulwer Close, **Buxton With Lamas**	TPO	Yew - crown raise to 2.5 - 3m and reduce by 3 - 3.5m.	21/08/2020
20201582	Goosepie Farm, Booton Road, **Cawston**	211	T1 sycamore – fell. T2 - willow - approx height 12m reduction away from northern buildings approx 1.5 reduction.	Approved
20201583	62 Howell Road, **Drayton**	TPO	T1 Scots pine and T2 oak - dead, fell	21/08/2020
20201586	19 Barnby Road, **Badersfield**	TPO	Removal of dead hawthorn.	Approved
20201591	5 Western Avenue, **Thorpe St Andrew**	211	Row of Lawson cypress - reduce height from 8m to 6m. Silver birch reduce height from 16m to 12m. Silver birch reduce height from 13m to 9m. Tip back neighbours beech trees by 1-2m. Silver birch group reduce height by 2-3m	Approved
20201593	Lime Tree House, 16B Harvey Lane, **Thorpe St Andrew**	TPO	T1 – T8 sycamores - fell and replant with silver birch, small-leaved lime, hornbeam and occasional wild service tree.	TPO required
20201596	19 Silvergate Lane, **Blickling**	TPO	Holly - fell	Approved
20201602	20 Barnby Road, **Badersfield**	TPO	T24 oak - reduce overhang towards house by up to 4m, back to suitable growth points.	26/08/2020
20201603	182 Thunder Lane, **Thorpe St Andrew**	TPO	T1 beech – remove. T2 copper beech - reduce crown radius from 8.5 to 6.5m and height from 19 to 17m to prevent failure of over-extended limbs.	20/08/2020
20201604	Parmeters,12 Cromer Road, **Aylsham**	211	Yews nos 1- 5 - crown raise by 5m. Yew no 6 - remove low branch,	Approved
20201605	The Old Smithy, 39 Wood Lane, **Burgh next Aylsham**	211	T1 larch – fell.	26/08/2020

20201613	8 Oxcroft, **Acle**	TPO	W1 whitebeam - thin by up to 15%. A1 ash - crown lift over car park by approx 2.5m. A2 ash - crown lift over car park by approx 2.5m and deadwood. C1 cherry - reduce up to 1.8m remove branches. C2 cherry - reduce laterals toward garden by up to 1.2m.	27/08/2020
20201614	74 Sandy Lane, **Taverham**	TPO	S1 sycamore - thin by up to 15% abd reduce laterals toward house by up to 3.3m giving a finished radius of approx 5.6m.	27/08/2020
20201632	6B Westbourne Road, **Coltishall.**	TPO	Silver birch - remove low hanging branches to facilitate light to lawn and shrubs below.	Approved
20201633	5 Saint Edmunds Road, **Taverham**	?	Oak encroaching into garden and requires some cutting back of branches (including some dead wood). In addition, branches from the oak in the neighbours' are overhanging into my garden and I am concerned that should the branches break it could cause some damage to my summer house and patio.	21/08/2020
20201637	64 Wilks Farm Drive, **Sprowston**		Pear- reduce and reshape by 2% and crown lift to 3m, removing all arisings from site.	24/08/2020
20201641	St Brides, 5 Burgh Road, **Aylsham**	211	T1 Turkish hazel - remove including stump.	Approved
20201646	St Anthony, 58 Norwich Road, **Horstead With Stanninghall**	211	T1 sycamore - bifurcated stems approx 30cm diameter each. Removal of south-west leaning stem as it leans toward road and interferes with 'phone wire. Pollard remaining stem to 6m height.	27/08/2020
20201651	Oakdene, 21 Station Road, **Salhouse**	TPO	T1 lime - reduce extremity on western portion of the crown by 2m and remove major deadwood. Current height 20m. T2 beech - crown lift to 5m and reduce crown by 1.5m. Current height 20m. T3 lime crown lift to 4m. T4 oak - remove major deadwood and crown lift over road to 5.5m. T5 oak reduce eastern portion over road by 2m, T6 sycamore – fell. Causing conflict with oak. G6 horse chestnut and beech - crown lift to 5m.	01/09/2020
20201654	Avenue Edge, 143 Norwich Road, **Wroxham**	211	Silver birch- reduce height of main stem to height of secondary canopy to reduce risk of breakout. (See picture added).	01/09/2020
20201656	14 Birchwood, **Thorpe St Andrew**	?	T1 beech - reduce lateral branches up to a height of 12m by a maximum of 2m. Current spread 20m.	01/09/2020
20201657	1 The Waterside, **Hellesdon**	TPO	T351 walnut - raise crown over lawn allowing 2m clearance. T383 beech - raise crown over road allowing 5.2m clearance.	01/09/2020
20201659	Heydon Hall, The Street, **Heydon**	211	T1 holm oak – fell due to wind damage.	02/09/2020
20201661	9 Manor Close**, Buxton With Lamas**	?	T1 oak - full reduction by 4.5m in height and reduce any lower branches to maintain shape. Tree is tall and is excessively shading garden at 9 Manor close. T2 beech - reduction of lateral limbs by 3m and reduce very top branches by 4m to match crown. Lateral limbs stretch across the garden and over a greenhouse in adjacent property. Tree has very one-sided growth due to competition for light. This reduction should help balance the tree	03/09/2020
20201663	118 Taverham Road, **Taverham**	TPO	Tree works as listed in specification of works.	21/08/2020
20201667	The Laurels, 222 Fakenham Road, **Taverham**	TPO	T1 - 3.6m lateral reduction (hanging over Fakenham Road), 5.5m crown lift over road and crown lift over neighbours' drive. T2 - reduce branch off phone line. T3 - reduce lateral over garage by up to 2.4m.	04/09/2020
20201668	300 St Faiths Road, **Old Catton**	TPO	T1 leylandii - crown lift over training building roof by 2m. T2 beech - reduce by 3m max on east and west tapering-in to the top of the tree. T3 & T4 ash - remove. T5 ash - remove canopy to leave trunk. Group of 3 sycamores – remove.	04/09/2020
20201670	121 Norwich Road, Wroxham	211	Pear – remove.	Approved
20201678	5 Seton Road, **Taverham**	TPO	T1 oak - crown lift over grass to 5m and remove major dead wood. T2 oak - crown lift in 3 no gardens at rear by removal of droppers being pruned back to laterals and removal of major dead wood of 40mm and above.	27/08/2020

20201681	Pheasant House, 1 Pheasant Walk, **South Walsham**	?	G1 group of Scots pine forming a plantation - silviculturally thin to remove dead and diseased, weak and crowded trees to benefit remaining trees and allow them to develop. Total volume of timber to be removed approx 3.2 m^3. Ash within woodland- raise crown to 3m. Beech - deadwood and cut back to give clearance to driveway so 2.5m radius on driveway side only.	08/09/2020
20201682	Catton Park, Oak Lane, **Old Catton**	211	Sycamore next to 99 Spixworth Road - cut back two lowest branches by 2m from house guttering.	Approved
20201690	179 Norwich Road, **Wroxham**	211	T1 monkey puzzle tree – remove. T2 sycamore - remove side branches overhanging and laying on neighbouring bungalow roof. T3 sycamore – remove.	09/09/2020
20201691	94 Fakenham Road, **Drayton**	?	G1 mixed spp - crown lift to 5.5m on west in order to provide clearance over planned access driveway for new development. G2 mixed spp - reduce eastern portion of trees in order to provide clearance from new properties and gardens.	09/09/2020
20201694	Avenue Edge, 143 Norwich Road, **Wroxham**	211	Eucalyptus - re-pollard back to previous pollard point.	01/09/2020
20201699	188 Thunder Lane, **Thorpe St Andrew**	TPO	Horse chestnut - trim back branches overhanging Thunder Lane (outside front of 190 Thunder Lane) by approx 3m to edge of footpath adjoining road. Current length to trunk approx. 8.5m Trim branches closest to house at 190 Thunder Lane by approx 2.5m. Trim back 2m to trunk of lower branches overhanging front raised garden at 190 Thunder Lane.	10/09/2020
20201703	Broadway, 6 Staitheway Road, **Wroxham**	211	T1 cedar - crown reduce to 3.5m and reduce by 2-2.25m. Current height 13-14m, width 9-10m approx..	03/09/2020
20201704	Wood Lodge, Park Road, **Wroxham**	211	T1, T2, T3 ash – remove.	03/09/2020
20201706	25 Orchard Bank, **Drayton**	TPO	Oak - crown raise to approx 5.5m to suitable growing points.	03/09/2020
20201707	3 Oakfield Road, **Aylsham**	211	T1 silver birch – fell. T2 & T3 silver birch - reduce height by 3m from 7-8m to 4-5m. T4 Eucalyptus - reduce height by 3-4m from 7-8m to 4m.	04/09/2020
20201708	10 The Maltings, Millgate, **Aylsham**	211	Cherry – fell.	07/09/2020
20201710	Field House, Heydon Road, **Aylsham**	211	Whitebeam – fell.	11/09/2020
20201715	6 Plumstead Road, **Thorpe End**	?	T1 cedar - reduce laterals by 1.5m and crown thin by 10%. G2 and G3 leylandii – remove.	14/09/2020
20201717	12 Bircham Road, **Reepham**	211	T1 black cherry *Prunus nigra* located in corner of front garden adjacent to pavement - proposed crown reduction, We would like to keep tree but cut it back to a safe overall size (height and width) to create a more balanced shape that is suitable to its location and still looks attractive. The branches have become tall, wide and straggly. After heavy rain the branches are low because of how saturated they are. Earlier in the year one small branch a third of the way up snapped and fell, though still attached to tree. We would therefore like to reduce the crown in order to improve safety. T2 cherry located in rear corner of back garden, adjacent to rear fence - proposed removal as close to ground as possible. We propose to replace it with a large shrub. The cherry tree has become very big for the size of the garden, overhangs the neighbours greenhouse, has roots that are getting close to our shed and big raised roots by fence and coming up through ???	14/09/2020
20201719	18 Bircham Road, **Reepham**	211	T1 yew - reduce outer peripheral crown by up to 3m to improve shape and form. T2 beech - reduce the west facing crown by 1.5m to reduce crown and conflict towards property. T3 evergreen oak - reduce over-extended laterals back by up to 3.5m including limb towards road. Reduce west crown towards garage by up to 3m.	07/09/2020

20201723	18 Seton Road, **Taverham**	?	T17 oak - trunk leaning over boundary (there are plans in place to build a road) risk that this may destroy new boundary fence and risk to road - propose to coppice. T21 chestnut - this has died and is now leaning towards boundary fence to be removed if deemed a risk. T1 oak – split in trunk is weighted with branches and tree surgeon has suggested removal of some of these limbs and deadwooding to preserve tree. T25 oak - leaning limb, recommended to coppice to enable new re-growth of the tree. T19 oak deadwooding required and recommended by tree surgeon to remove lower branches to promote growth. T23 & T27 laurel - some coppicing to promote re-growth and reduce excessive shading in some areas. General woodland to be assessed for thinning of saplings, including holly.	14/09/2020
20201726	32 Bircham Road, **Reepham**	?	T1 - reduce 3 lateral limbs by 3m and secondary leader by approx 2-3m. T3 - reduce canopy by 2-3m. T2 - reduce loading by approx 2m, to leave the limbs 6-8m.	02/09/2020
20201737	Harrier Barn,Hall Farm Close, **Halvergate**	?	Ash - approx 9-10 m high, raise over driveway by re-shaping by approx 1.5 m. 3x field maples - approx 5-6 m. raise over driveway by re-shaping by approximately 1.5 m.	17/09/2020
20201743	The Furs, The Havaker, **Reedham**	?	T1 holm oak - has had branch split out. I believe my customers contacted your office by e-mail at the time. There is potential for more limbs to break out in the future and the customer would like to brace the tree to prolong its life and stability. I don't believe the tree would benefit from a reduction and believe this is the best option, with your backing	17/09/2020
20201744	Chapter Ii, Hemblington Road, **Strumpshaw**	TPO	T1 ash – re-pollard to pervious point around 9m leaving some of smaller, lower branches to give cover and shape. T2 ash – re-pollard to previous points around 10m again leaving some lower branches to give it a shape.	17/09/2020
20201745	82 Shakespeare Way, **Taverham**	?	T3 silver birch – fell.	03/09/2020
20201746	The Granary, 45 School Road, **Reepham**	?	I wish to remove an apple tree - old and unattractive. I propose to replace this tree with a magnolia.	17/09/2020
20201749	Paddock Cottage, North Street, **Blofield**	TPO	Sycamore - lower lateral limb + crown lifting to 6m because tree is growing downwards encroaching into x`x`garden and causing a hazard to young children playing	18/09/2020
20201750	Evergreen Cottage, 7 Woodland Drive, **Great Little Plumstead**	?	Fell one spruce and two conifers to front of property. Trees have grown large and are interfering with the horse chestnuts that were planted as part of the original Thorpe End Garden Village development in the 1930's. Spruce is beginning to restrict access to driveway. No proposal to re-plant any replacement trees as they may interfere with the mature horse chestnuts to the front of the property.	18/09/2020
20201757	Hill House, 2 Skinners Lane, **Wroxham**	?	1. dead tree of unknown species covered in dense ivy - reduce to 3m height then possibly fell. It overhangs the river and public slipway and could endanger users of the public staithe next door. 2. sycamore - close to riverbank and will become much too large for this location in the garden. Fell. 3. poplar - will become much too big for this location in garden. Fell. 4. 7 x alder right on the eroding river bank. Reduce each to one main vertical trunk, removing trunks that are extending over the river. We hope to defer the day they fall into the river. Some have been so reduced before.	18/09/2020
20201760	Land West of Abbey Farm Commercial Park, Church Street, **Horsham St Faith**	?	G1 5 x ash and sycamore and G19 1 x verge tree - full details provided within the attached cover letter.	21/09/2020
20201762	The White House, Mill Lane, **Great Witchingham**	TPO	Beech TPO 2012 No 45 (1118) - please refer to the report by Richard Ravencroft who recommends the tree should be dismantled in its entirety as soon as possible due to a branch falling into the garden of my neighbour (Gothic House, The Street, Lenwade) bringing down a power line and the presence of *Meripilus giganteus* on the roots and base of the tree. The tree has also been inspected by Ian Flatters, arboricultural consultant for Target Trees who fully agrees the beech should be dismantled. Replace with one *Liquidamber* in the same area.	21/09/2020

20201763	6 Lodge Place, **Thorpe St Andrew**	?	T1 sweet chestnut - reduce north western canopy from 9m to 7m and remove dead wood to redress the weight and visual balance following recent wind damage to the northern canopy. T2 & T3 oak and T4 & T5 beech - remove dead wood.	21/09/2020
20201765	23 Bishops Close, **Thorpe St Andrew**	211	Laburnum – dead, fell.	Approved
20201766	Blickling Hall, Estate Barn, Blickling Road, **Blickling**	?	1. sycamore - fell because of excessive included bark in main stem, weight largely towards the property and overhanging garden shed. 2. sycamore - fell because of included bark and evidence of large pocket of rot in and around the main union, also heavily leaning over garden outbuilding. 3. oak - fell because of potential risk to residents caused by sudden branch drop pertaining to brown cubical rot in main stem and branches; crown dying back excessively. Replant may be possible here, although other healthier oaks surround the tree, so replacement may not be necessary. 4. sycamore - almost complete crown dieback over past 12 months, little or no leaf cover this summer; mainly crown overhangs main visitor route from the hall and park (medium usage zone). Replanting not necessary - natural regeneration in the woodland adjacent. 5. horse chestnut - fell because of major dysfunction in main stem and crown failure and overextended limbs over a permissive footpath. Replanting is not possible in t ??????	21/09/2020
20201771	3 Barber Place, **Thorpe St Andrew**	?	T1, T2, T3, T4 and T5 sycamore - reduce to a height of 6m in order to regenerate as a pollard. Conflict with overhead utilities, excessive shading and recent branch failures would all be alleviated/eliminated by the proposed work.	22/09/2020
20201775	86 Charles Close, **Wroxham**	211	Scots pine x 2 and ash - fell and re-plant.	15/09/2020
20201784	Swallow Barn, Hall Drive, **Salhouse**	?	T1 willow - pollard at 4-45m, below failed split main stem current height 6-7m. Damage from recent high winds. T2 willow - current height 7m, reduce by 1.5-2m and crown raise over neighbouring land by 3m. T3 willow - current height 7.5m reduce by 2m to avoid wind throw.	16/09/2020
20201786	Royal Norwich Golf Club, Weston Park, Weston Hall Road, **Lenwade**	211	Ash x 2, oak x 1 & elm x 1 – Remove dead trees.	Approved
20201797	Forge Cottage, The Street, **Oulton**	211	Silver birch tree in rear garden and bordering driveway of The Forge and rear garden of The Old Post Office. Reduce and re-shape tree.	25/09/2020
20201800	The Willows, Frettenham Road, **Frettenham**	?	T1 oak and T2 & T5 sycamore - crown reduce by 2-25m and crown raise to 3m. T3 ash - crown raise to 4m over play area. T4 elder, T6 ash, T7 alder and T9 sycamore - fell Sycamore (T10) - Raise crown to 3m, reduce branches away from the house by 2.5-3m. T12 ash - raise crown by 3m. T13 &T14 sycamore - raise branches over car port to 4m.	15/09/2020
20201803	Crofts, 3 Cromer Road, **Aylsham**	211	Indian bean *Catalpa bignonioides* – fell. Tree has previously lost its top (or has been topped) and there is a 50cm deep cavity at the base with possible brown cubicle heartwood rot. A survey was carried out in June 2019 by Norwich Norse Environmental Ltd and they stated the condition of the tree was poor.	28/09/2020
20201804	18 Barnby Road, **Badersfield**	?	Cornelian cherry in back garden. 25% crown reduction as creating too much shade.	28/09/2020
20201815	98 Norwich Road, **Wroxham**	211	Conifer – fell.	23/09/2020

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. In other words, it 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 date on which the application was received by Broadland District Council or the actual decision.
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 Broadland District Council "Planning Explorer" at https://secure.broadland.gov.uk/Northgate/PlanningExplorer/GeneralSearch.aspx to view the application or read the Council's decision.