

Broadsheet

The Magazine for Broadland Tree Wardens

Issue 207 - July 2022



Hello Again ... For Now

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The Monthly Magazine for
Broadland Tree Wardens



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This Month's Cover Picture

A magnificent ancient oak in Stowe in Buckinghamshire.

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Hello Again ... For Now

ALTHOUGH a few months ago I swore blind that Broadsheet had passed into history, never to be published again, several of you have since complained that the number of e-mails I send out has greatly increased and you would prefer to return to having Broadsheet give you everything in one place.

I'm sure that very few of you fully appreciate just how long it takes to write and publish this beast and what a commitment it had become. I had to shed something if I was to continue in my role as your Network Co-ordinator and I chose to shed Broadsheet.

However, the number of comments I have received have made me reconsider. There is no way that I can return Broadsheet to its past size and standard but, as some of you said, it doesn't have to be that large. "Shrink it and do what you can" was the most common suggestion.

Another suggestion was that I don't have to publish Broadsheet every month. Just when I have something important to tell you.

So here is a trial edition. I have allowed just six hours to do it ... start to finish. Please let me know what you think.

NO tree loving person can have failed to have read the protests over the felling of the 600-year-old Bretton oak tree in Peterborough.

The City Council decided the Oak needed to be chopped down because the ancient tree's roots were damaging two nearby homes in Ringwood, Bretton, and it was concerned that more homes would be next.

Councillor Nigel Simons, city council cabinet member for the environment, said it was as a very difficult decision but the tree ultimately had to go.

"What was certain to us was that if we didn't act quickly and swiftly, the council would be liable for the damage to one home - an underpinning bill of around £150,000. This would mean we wouldn't have any money to look after thousands of other trees in the city," he said.

Other options, including root barriers and extensive pruning, were considered but they "were not accepted by the insurance company as a feasible solution".

The council is planning to plant 100 more oaks in a bid to mitigate the environmental impact but campaigners argued that the tree was healthy, pre-dated the housing estate by centuries and was essential for wildlife.

It appears on the Woodland Trust Ancient Tree Register as one of the last standing oaks from the original Grimeshaw Woods.

How sad that local authorities fail to appreciate just how valuable our ancient trees are. Certainly more than the 100 that Peterborough City Council plans to plant.

Even more disappointing is the fact that insurance companies appear too eager to seek the felling of trees as a solution to such problems rather than looking for ways to keep the trees.

Of course, if we didn't grant planning

permission for houses so close to ancient trees. Let's face it. The tree was there first!

JUNE saw the Network hold the first of the Tree Council's new training sessions but the attendance wasn't that encouraging I'm afraid. Just ten of you joined me via Microsoft Teams for the new induction module "Championing Your Trees". Just 28%.

Hopefully more of you will join us on Wednesday 20 July for the first proper module "Trees and the Law". Invitations have been sent out so you all have the link via which you can connect. Please make every effort to attend. We shall start at 19:00.

AS you all know by now, the start of this month saw the Network at the Broadland District Council stand at the Royal Norfolk Show.

Richard Farley (Brundall) joined me for two very tiring days and I am sure that you will all join me in thanking him for his sterling efforts.

Apart from the problem of getting out of the car park in the evening all went very well indeed and we thoroughly enjoyed the experience.

YOU will all have received my email informing you that Sarah Burston, Project Co-ordinator North West Woodlands at Broadland District Council has invited us all to join her for an exciting evening safari at Broadland Country Park and watch the park come alive after most people have gone home and dusk falls.

Sarah hopes to be able to show you glow worms, bats, nightjars and hopefully hear the haunting sound of young owls calling and roe deer rutting.

Meet at 21:00 in the main car park off the B1149 on Haverling Road, Norwich, NR10 4DF and please bring warm clothes (it can get chilly) insect repellent, sturdy footwear and a torch. We should be finished by roughly 22:30.

To book a place please e-mail broadlandcountrypark@southnorfolkandbroadland.gov.uk

Please note, the walk is weather dependent. If it is very wet or stormy Sarah will cancel the event.

The event will be co-hosted with the Norfolk and Norwich Bat Group.

I look forward to seeing you there.

I hope you enjoy this slimmed down version of Broadsheet.

John Fleetwood

New Map of Ancient Trees an Opportunity for Conservation

By Claire Marshall, BBC Rural Affairs Correspondent

A NEW MAP shows there could be around two million trees with exceptional environmental and cultural value previously unrecorded in England. That's ten times as many as currently on official records. This tree-map is sounding a rare note of optimism in the conservation world, but the Woodland Trust warns that these trees - known as ancient or veteran specimens - have "almost no" legal protection.

It comes after a centuries-old oak tree was felled in Peterborough on 29 June by the council, who said it was the most likely cause of "structural damage" to nearby homes.

The BBC joined the hunt for one of these ancient giants.

On the Ashton Court Estate near Bristol, we follow Steve Marsh from the Woodland Trust, fighting our way through brambles and rhododendrons, in the hunt for the legendary Domesday Oak.

Instead we discover an ancient unnamed tree - one the Trust has no record of. We take turns sitting inside - the air is cool and still.

An ancient tree is considered remarkably old for its age - they are sometimes known as "living archaeology".

They're incredibly rich in wildlife - one ancient oak has more biodiversity than a thousand 100-year-old oaks and veteran trees have the features of an ancient specimen but are younger in age.

"It's that feeling you get when you see a really old cathedral or an old church and you

think, imagine what the world was like back then," Steve says, patting the gnarled wood.

The tree is probably twice as old as St Paul's Cathedral, built in 1675 and as old as the Tower of London, he says.

Those buildings are protected, he explains, but the only reason this ancient tree has survived is because it's in a park where landowners have looked after it, he suggests.

"All of our old and most amazing trees should have heritage status at least to protect them so that we can look after them and care for them in the future," he says.

It's exactly this type of hidden ancient that Dr Victoria Nolan, from the University of Nottingham, spent four years looking for.

After poring over existing records and tramping through the English countryside, it was "incredible" to establish there could be two million, she told me.

Her team used a computer model to predict where the trees were likely to be. It looked at the layout of the landscape, habitat, but also distance from cities and human populations.

"At first we couldn't believe the results. The surprising bit for me was how they can be everywhere, in places where you wouldn't think an ancient tree might be," she said.

Many are concentrated around London in the historic hunting parks and forests, as well as in the Lake District, Hereford and Northumberland.

Before their work, tree records usually showed the places where scientists had gone to look for trees, rather than where they might be.

"Now we show where they actually are in the environment," she explains.

However, the results of her work are also "kind of scary".

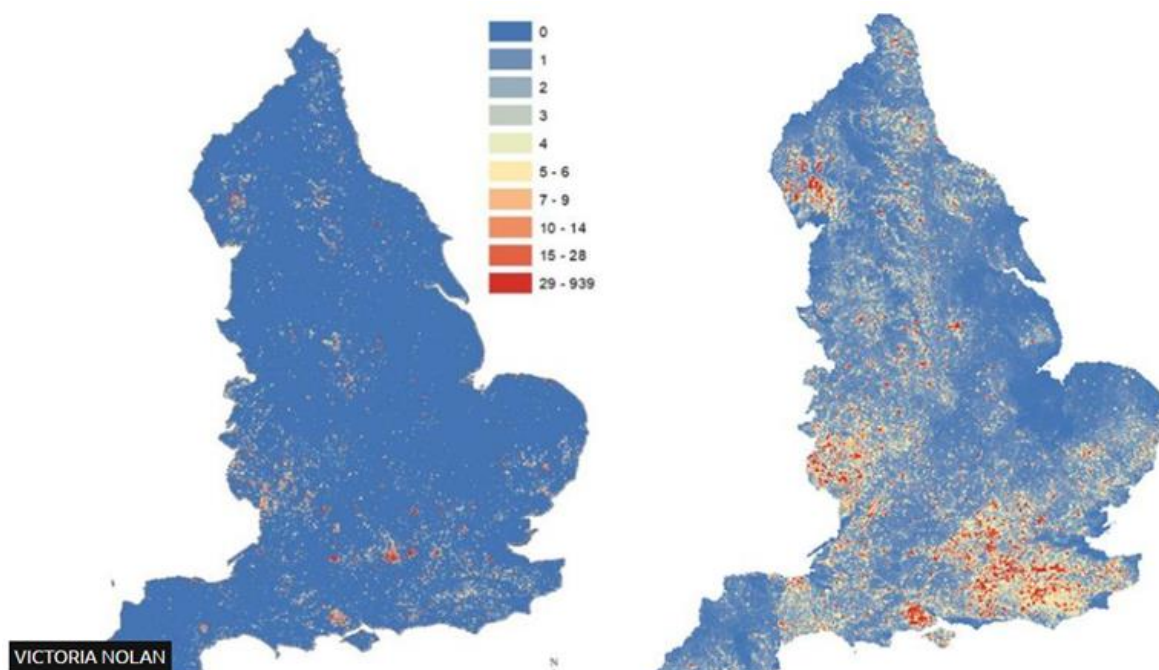
"Our limited knowledge means those trees are not protected at all currently. Depending on where these trees are, anyone could go chop them down.

They're being damaged, especially in a lot of agricultural landscapes."

As biodiversity levels crash, these living beings are a safe haven for thousands of species and their respiration also helps to cool a heating climate. They also contain history and memory - they help us to dream and imagine.

Now, armed with this new map of old trees, scientists like Victoria and the rest of us could help to keep more of them alive.

The study is published in the scientific journal *Ecological Applications*.



| The updated, more detailed map on the right shows a much wider distribution of ancient trees

Why Felling Old Trees is an Arrogant Assault on History

By Sarah Vine For The Mail On Sunday

SOMETHING happened at the end of June that made me rather sad. The 600-year-old Bretton Oak, near Peterborough, one of the last survivors of Grimeshaw Woods, an ancient forest that once covered much of that part of the world, was felled after final desperate attempts to save it failed.

This ancient tree, which had stood since the reign of Henry VI, was ripped apart by men with hi-vis jackets and chainsaws in a matter of minutes, to the horror of many locals. Its crime? The roots were allegedly causing 'structural damage' to nearby housing. Although, as one resident pointed out, that case was debatable.

No matter. Insurance companies were refusing to underwrite the affected properties, and so the man from the council decreed that the oak had to go. Six centuries of history, a living organism that had outlasted kings, queens, plagues, war and famine, felled by petty bureaucracy.

Oh, it's just an old tree, I hear you say and yes, it is – or was. However, the thing about ancient trees is that they are not just old, gnarly bits of wood. They are a living connection to the past. Their bark bears the marks of many generations. Their roots and branches mark the passing of the decades.

They are, in many cases, astonishingly beautiful, living sculptures in our green and pleasant land and unlike humans, they ask very little from their environment. Indeed, if anything they enrich it: the soil, the air, the countless generations of animals and insects that live among their leaves.

I must confess, I've always had a thing about trees, ever since I was a child. My favourite children's book was Enid Blyton's *The Faraway Tree*, about a series of revolving worlds at the top of a magical tree in an enchanted wood. When my father read me *The Lord of The Rings*, I fell in love with Treebeard, last of the mighty Ents, described by Gandalf as 'the oldest living thing that still walks beneath the Sun upon this Middle-earth'.

In middle age, as life has presented its challenges, trees have once again become my escape. When it all gets too much, I get in my car and I go ancient tree-hunting. I seek them out – by rivers, in fields, in churchyards – and I spend time with them.

This may sound batty, and maybe it is, but they bring me great comfort and solace. They are like old souls, wise and gentle, a reminder that, good or bad, everything passes – and ultimately, nothing really matters, certainly not success or money or whether the barista makes your flat white just so.

Some reside in splendour in National Trust glory, tended to by expert horticulturists, others

grow wild in the most unlikely of places – in people's gardens, by the side of roads, in the corners of fields.

The Woodland Trust recently published research indicating that there are between 1.7 and 2.1 million trees of 'great age' across Britain, only about 115,000 of which have been recorded.

Like the poor old Bretton Oak, very few have any legal protection, although some – such as the Major Oak in Sherwood Forest (around 1,000 years old) and Big Belly in Savernake Forest (which would have been an acorn around 1066) – are famous enough to be immune from the attentions of town planners.

Everyone loves an oak, of course, but there are many others.

Some, such as birches, are defined as ancient once they get to the age of mere 150. Yews, on the other hand, are practically classified as teenagers until around the age of 800. Some in this country are thought to date back to the Bronze Age. One of my favourites is the Defynnog Yew, which lives in an unprepossessing churchyard in the Brecon Beacons. As wide as it is tall, it is so old the trunk has split, so now it looks like two trees – but it is in fact one.

Climb inside the belly of this gentle giant, as I have done, and you will feel a stillness and a peace like no other. If I could choose anywhere to draw my last breath, it would be in the soft caress of its mossy woodiness. There is a reason so many churches are built where these extraordinary trees grow: there is something deeply spiritual about them.

Why do we protect our ancient buildings and not our trees? Why are we so arrogant as to think bricks and mortar matter more than a creature that was alive when we were still grubbing in the dust?

Our ancient trees are part of our culture and history. We should honour them for the giants they are.



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The World's Cities Have Always Been Radically Hostile Environments for Trees but One Variety Proved to Be Remarkably Resilient.

By Zaria Gorvett, Senior Journalist for BBC Future

IN an unremarkable corner of London's Cheapside district, tucked away behind black wrought-iron fencing, is one of the city's oldest residents. With a towering frame and slightly stooped posture, capped with a broad thatch of leathery, star-shaped leaves, this venerable giant is thought to have presided over the city since at least the 18th Century.

Over its lifetime, the Cheapside tree has lived through countless dramas and innovations – slowly inching its way upwards while stonemasons toiled away erecting early coffee houses and banks, then gradually broadening its shoulders as the first electric hackney carriages rolled along the streets below, and later, shading the cars that replaced them. It has been a stoic witness to the infamous cholera outbreak of 1854 which led to the introduction of modern sanitation. The 1918 flu pandemic and the horrors of the Blitz.

However, life for this Londoner has not been easy. Hemmed in on one side by buildings and the other by a road, it inhabits one of the most polluted parts of the city and like most urban trees, when it rains it's either inundated with runoff or left thirsty. Its roots are squashed into heavily compacted, alkaline soil with little space to stretch out their tendrils without bumping into concrete. The City of London may be an urban jungle, but it's hardly an idyllic environment for a tree.

In fact, there is emerging evidence that urban trees share many of the burdens of other city residents, often living in cramped conditions, riddled with infectious diseases, and suffering from chronic stress. In this unnatural setting, they tend to live fast and die young. Research has found that they have mortality rates nearly twice as high as those in rural areas, with fewer surviving trees every year.

"Street trees are typically not getting older than 30 to 40 years," says Cecil Konijnendijk, professor of urban forestry at the University of British Columbia in Canada. As we speak, he is surveying the health of the trees he can see from his hotel room during a visit to Brussels. "I can see already in a line of six trees one or two that don't look healthy," he says.

Though it can be easy to think of them as little more than city furniture, urban trees are very much alive and their struggle to survive is only becoming more extreme. Without a radical rethink of the living conditions of this long-overlooked community, some experts are concerned that our cities could soon lose much of their greenery altogether.

How have some trees survived in these dystopian environments for so long? Furthermore, what can be done to save the others?



The Cheapside London plane has barely changed for hundreds of years (Credit: Alamy)

It all started in the 17th Century. As global trade took off between Western countries and their colonies, among the endless crates of imported spices, silks, ancient artefacts and tea were millions of tiny guests – seeds. Explorers and merchants sent these tiny souvenirs back from wherever they travelled so as the map expanded, so did the plants available in Britain. Soon English gardens were transformed into showrooms for the flora in the furthest reaches of the planet. It was around that time that the London plane tree came into being. To this day, its origins remain a mystery, but somehow, amid the chaotic meeting of the so-called New World and the Old, two plants from continents thousands of miles apart, an American sycamore and an Oriental plane, met and reproduced.

One possibility is that the two strangers may have co-existed on the grounds of the Oxford Botanical Garden, where one botanical thing led to another. An alternative theory is that they hooked up in Spain, where their offspring was first described. Either way, the result was a large, strikingly beautiful tree with a fast growth rate and an unusually robust constitution, able to survive in one of the harshest environments on Earth ... human cities. It didn't take long for the London plane to be a hit.

Within a century these noble plants could be found scattered across London. The exact age of the Cheapside tree is hotly disputed. Some say it belongs to this first generation, making it up to 300 years old, while the City of London

asserts that it was planted in 1820 at a cost of sixpence.

For regular trees, these early additions are still just youngsters, but for city trees they are positively ancient.

In the 19th Century, London plane trees were used to transform the city's layout, turning previously naked streets into familiar leafy boulevards, inspired by the same trend in Paris. (One particularly broad specimen in London's Mayfair, dating back to the Victorian era, was valued at £750,000 by tree officers from the local authority in 2008.)

Even as the harsh living conditions of the Industrial Revolution began to take hold, London plane trees continued to cling on where others got sick. In addition to being unusually hardy, the hybrid giants had some quirky features that helped them adjust to city life, such as the ability to slough off the outer layers of their smog-coated trunks to reveal a fresh patchwork of green and white bark beneath.

By the 1920s, the London plane represented 60% of their city namesake's trees, and their almost-cartoonishly straight trunks and fluffy crowns had become a regular fixture in many other urban centres around the globe, from Sydney to New York City. They were soon joined a handful of other species, such as the common lime (also known as the linden tree), which currently makes up 45% of the canopy in the Finnish capital Helsinki.

Today the London plane is not as dominant as it once was or quite as robust. Research in



the Czech Republic has found that the trees' health has been steadily deteriorating and in any given year the proportion of sickly individuals can be up to 97.5%. It is widely accepted that when trees are stressed out by their local environment – such as warming cities or life in a concrete street box – they become particularly susceptible to a range of diseases. Furthermore, this variety has been catching a new kind of fungal infection that causes characteristic sores, or "cankers" on the trunk.

Even for the long-suffering London plane, the conditions in modern cities are a step too far.

"One of the greatest challenges [for trees in city environments] is just space," says Andy Hiron, a senior lecturer in Arboriculture at Myerscough College in Lancashire, pointing out that large trees in the wild have vast root structures, often sprawling out nearly as far as their branches do. But in cities, the spaces we carve out for them are "often woefully inadequate for the size of the tree and the ambition those planting the tree have for it", he says.

These confined conditions then lead to other issues, such as localised droughts – a common problem, as a tree's roots can quickly mop up the water in its little pocket of land. "A tree with a smaller working environment will cause it to dry out much quicker, so they'll experience drought cycles," says Hiron. "And, you know, if a tree is always living on the edge of that sort of stress, they become more vulnerable to pathogens, pests, etc, just like us."

Not only are city trees imprisoned in small slivers of soil, the soil itself is the equivalent of junk food – without the acidic organic matter that would usually cover the forest floor, the root environment tends to be alkaline, hindering their ability to absorb nutrients.

Even the soil's structure is all wrong: where there should be pockets of air, the soil is compacted into dense clumps. "This means that it's physically much more difficult for the roots to grow through and expand," says Hiron. Eventually this limits their distribution and scale, further limiting their underground world.

Then there's the pollution. This is ubiquitous. In the soil there are heavy metals, as well as salt from the de-icing of roads and chemical contaminants from building materials. In the air, particulates block up microscopic pores in city trees' leaves and smother delicate structures on the surface of the trunk – which plays a surprisingly important role in gas exchange and photosynthesis – while nitrogen

oxides are absorbed by the leaves, leading to potentially toxic accumulations.

Finally, there are the trees' human neighbours.

"There are big problems with the ways we interact with trees," says Hiron. He lists off some common crimes humans commit against their woody bystanders. Resting bikes on them, using their protective enclosures as litter bins, encouraging pets to urinate all over their trunks, which alters the ground chemistry. Perhaps most bizarrely, some people even train their dogs to bite living branches. "[It's] just crazy. Once that bark is lost, it's devastating for the tree – it's like losing your skin," he says.

Crucially, many of the oldest urban trees will have spent the majority of their lives in conditions that were significantly less desperate. While in human terms the invention of tarmac in 1902 may seem like the distant past, for a three-century-old tree the era of these impermeable surfaces, which allow precious water to flow off into drainage channels rather than percolating down into the ground where it can be accessed, is relatively new.

"Effectively what you're doing [with hard street coverings like tarmac and paving] is decoupling the climate, in terms of precipitation, from the experience of the tree," says Hiron. Today city trees in some of the wettest parts of the planet are effectively inhabiting miniature deserts. They're also suffocating.

"Impermeable surfaces really reduce the gas exchange between the root system and the atmosphere as well," says Hiron. Just like humans, trees need to breathe – they must be able to absorb oxygen through their roots in order to release the energy from their food.

"They had much, much better rooting environments [in the past] in many ways and it's difficult to see how that's going to be pulled back," says Hiron, who explains that 200 years ago pavements were wider and trees weren't competing with fibre optic broadband cables for space.

In short, just because old trees have made it this far, there's no guarantee they'll survive another century.

Enter the next generation of city trees, which experts are struggling to recruit.

One challenge is the new awareness of the importance of biodiversity, both for its ecological benefits and as an insurance against new diseases or pests that could wipe out whole species. When Dutch elm disease swept around the globe in the 1960s and 70s, it killed off

around 25 million trees in Britain alone. By 1976, the United States had already lost around 38 million trees. Few survived.

All this means that city planners can no longer rely on an elite pool of high-performing trees, such as the London plane. Instead, they're on the lookout for a more varied supply which can thrive in the increasingly harsh conditions urban forests have to offer and it hasn't been easy.

According to one estimate, there are currently around 800,000 street trees in London, with the ones that end up on pavements carefully selected by developers and city arborists. However, even once they've identified a species that could work, getting hold of enough of these trees to populate a city is a huge challenge. There is often little incentive for plant nurseries to invest the time and money it takes to grow young trees unless they know there's going to be a market for them in 10 years' time and at the moment, most demand is for a narrow selection of small trees like silver birches.

"Frankly, just sticking in really small rowans or birches is not really going to deliver what we want in the future," says Hiron. "You take away those last statuesque plane trees and that's what you're left with."

Next there's the surprisingly high mortality rate for young trees, which are particularly vulnerable in the years it takes for them to establish in their new home. Hiron says this is currently around 13% but in some situations it's significantly higher. Nearly 50% of the new trees added to one street in Toronto, Canada were dead within three years.

However, Hiron is optimistic that cities can solve these problems.

One important change will be to make it clear to growers that there is demand for certain larger tree species, in advance of when they're needed, but even more vital is designing the spaces they will inhabit with their physiological requirements in mind – ideally, larger pockets of land where they can develop healthy root systems.

In addition, support in their early years is also crucial. "It's like with human children. If you don't have a good start, you will get the consequences later in your life," says Konijnendijk. "It means we need to help them along the way, basically." This includes things like "mulching" – adding organic matter to the root surface to seal in moisture – watering, and making sure they've got enough space, above and below ground.

If urban planners get it right, over the next few decades cities across the globe may soon break away from the monoculture aesthetic that London plane trees have lent them for centuries and pioneer something more colourful. Hiron is rooting, quite literally, for more ginkgos (ancient trees that once lived alongside dinosaurs) which are currently popular in Japan.

"I do like ginkgos," says Hiron. "I think they've got a lot of character they become sort of more and more on unwieldy and wild as they get older. They're really resilient, and they also can deliver just fantastic yellow-gold autumn colour as well." Of course, what he'd really like to see are baobabs – strange, bulbous trees that flourish in the Sahel region of Africa on the edge of the Sahara desert – "but then we really would be in the realm of serious climate change..." he says.

Is This the Oldest Tree in the World?

By Tia Ghose, Managing Director of Live Science

THE world's oldest tree may have been standing for centuries when the first boulders were erected at Stonehenge, new research suggests. The ancient giant, an alerce (*Fitzroya cupressoides*) known as the "Gran Abuelo" (or great grandfather in Spanish) that towers over a ravine in the Chilean Andes, may be roughly 5,400 years old, a new computer model suggests. If that date can be confirmed, it would make the Gran Abuelo over 300 years older than the current official record holder for world's oldest tree, a Great Basin bristlecone pine (*Pinus longaeva*) in California.

However, the alerce's exact age is still somewhat contested, because confirming that requires dendrochronology, an analysis of the tree's rings and the gold standard for determining a tree's age. However, that data is currently incomplete. The underlying data for the model has not yet been publicly released or submitted to a peer-reviewed journal.

Whatever its age, the tree is in peril and needs to be protected, said Jonathan Barichivich, a climate and global ecology scientist at the Climate and Environmental Sciences Laboratory in Paris and the researcher who created the model.

"It's really in poor condition because of tourism," and the tree has also been affected by climate change, Barichivich told Live Science.

The Gran Abuelo, a conifer that rises 196 feet (60 meters) above the misty forest floor in Alerce Costero National Park in Chile, was initially thought to be roughly 3,500 years old, but scientists had never analysed its age systematically, Barichivich said.

"We wanted to tell the story of the tree with the only aim to valorise it and protect it," Barichivich said.

So in 2020, Barichivich and his colleague Antonio Lara, a forestry and natural resources professor at the Austral University of Chile, used a non-destructive technique to drill a tiny core from the tree, which captured 2,465 years' worth of tree rings. The borer, however, could not reach to the centre of the tree's 13-foot (4 m) diameter, which means that many of the alerce tree's growth rings could not be counted.

To account for the remaining years of growth, the team developed a mathematical model that took into account how *Fitzroya cupressoides* grows at different rates, from a sapling to a mature tree. The model also incorporated variations in growth rate based on competition and fluctuations in environment and climate.



The team then used the model to simulate the tree's growth trajectory 10,000 times, Barichivich said. Those simulations gave a range of predicted ages for the Gran Abuelo.

The model estimated the tree was most likely around 5,400 years old, Barichivich explained. The absolute oldest the tree could be was 6,000 years; there was about an 80% chance the tree was older than 5,000 years; and all of the simulated growth trajectories predicted it was at least 4,100 years old, he said.

"Even if the tree was a very fast grower, for all that size, it cannot be younger than that," he said.

Another factor suggests that the tree is very old: a biological law known as the growth-lifespan trade-off, Barichivich added. That trade-off suggests that slow-growing species tend to live longer and alerce trees grow incredibly slowly. Slower even than other long-lived species such as giant sequoias (*Sequoiadendron gigantea*) or Great Basin bristlecone pines, he said.

However, some tree-dating experts told Science Magazine that they were wary of using modelling data to estimate a tree's age.

"The ONLY way to truly determine the age of a tree is by dendrochronologically counting the rings and that requires ALL rings being present or accounted for," Ed Cook, a founding director of the Tree Ring Laboratory at Columbia University's Lamont-Doherty Earth Observatory in New York, told Science Magazine in an email.

While the tree has survived for thousands of years, its future is in doubt, Barichivich said.

The ancient tree has been encircled by a narrow platform walkway that is crushing its last living roots, he said, and the myriad tourists that come to see the tree every year do further damage when they walk on it.

Climate change and the attendant 10-year drought has also damaged the majestic alerce; a second tree growing from the top of the towering giant is now dying, he said.

To protect the Gran Abuelo from further damage, Barichivich and his colleagues have proposed placing a veil of netting 10 feet (3 m) high around the tree to prevent people from getting too close. They also recommend moving the walkway much farther away from the tree's ancient root system, he told Live Science.

Gambia Bans All Timber Exports to Combat Rosewood Smuggling

THE GAMBIA has banned timber exports and revoked all export licenses to try to combat illegal logging. The ban has come into effect immediately and the port authorities have been instructed to refuse to load timber logs onto any vessel.

In 2020, a BBC investigation revealed that vast quantities of protected West African Rosewood were being trafficked through the country from Senegal. Much of it ends up in China, where it is used to make furniture.

It has been listed as an endangered species since 2017, and last month Cites, the Convention on International Trade in Endangered Species, called on seven countries, including The Gambia, to suspend its trade.

The Gambia is consistently among the five largest global exporters of West African Rosewood (*Pterocarpus erinaceus*), despite declaring its own stocks close to extinction almost a decade ago.

By value and by volume, rosewood is one of the most trafficked wildlife products in the world. It is also called Hongmu or "red wood" and is prized for its colour and durability and is primarily used for antique-style furniture.

Figures obtained by BBC Africa Eye showed that China imported more than 300,000 tonnes from The Gambia between 2017 and 2020. That is the equivalent of about half a million trees and worth more than \$100m (£80m).



During a year-long investigation in both Senegal and The Gambia, multiple sources confirmed to the BBC that the rosewood being shipped out of The Gambia to China came from the Casamance region of southern Senegal.

Along a 170km- (105 mile) long stretch of the border between the two countries, the BBC found at least 12 depots containing rosewood and other timber. They were all within Gambian territory.

Mystery of Land Ownership Stumps Planting of Queen's Jubilee Tree in Staffordshire

By Adam Smith, Senior Reporter for the Express & Star

A PLAN to commemorate the Queen's Platinum Jubilee by planting a rare tree in a Stafford village has been stumped by a legal mystery. No-one knows who owns the land where Doxey resident Neil Thomas hopes to plant a wild service tree to mark Queen Elizabeth II's record-breaking 70-year reign.

The grassy bank outside the 62-year-old's home in Greensome Lane is regularly mown and maintained by Stafford Borough Council.

However, the authority says it does not own the land and HM Land Registry has no record of who does.

Mr Thomas, a former parish councillor, says: "I have always been a fan of the Queen and thought a service tree near my home for the last 13 years would be a wonderful way to commemorate her outstanding service to this

country and to the whole world.

"I can hardly plant a tree on someone else's land without their permission so I asked the borough council, which regularly cuts the grass. But the council does not own the land and has no record of who does."

Mr Thomas has put out an appeal to find out who owns the land where he wants to plant the Jubilee tree.

He said: "I would love to hear from anyone who can shed any light on this mystery. The tree-planting season does not begin until October so we have three months to find out."

In March, Doxey villagers got together to

plant over 100 native trees in an initiative led by the parish Church of St Thomas and St Andrew.

The event was attended by the Vice Lord Lieutenant of Staffordshire, James Leavesley.

Mr Thomas has already purchased the "Service Tree" ready to be planted, and he chose it as it is native to the British Isles.

He said: "Wild service trees (*Sorbus torminalis*) are native to the British Isles and belong to the same large family as the wild rose, hawthorn and rowan or mountain ash, but they are much rarer than any of these and often grow on the edge of ancient woodland."

Tree Preservation Orders and Conservation Area News

Broadland Tree Preservation Orders Served, Confirmed and Revoked

TPO No	Address	Served	Trees Protected	Status
2021 No 13	97 Thunder Lane, Thorpe St Andrew	30/11/2021	Cypress	Confirmed
2022 No 2	87 Fakenham Road, Taverham	24/01/2022	A1 – various species	Confirmed with modification
2022 No 3	Hill House, 2 Middle Hill, Reedham	04/02/2022	Beech	Provisional
2022 No 5	12 High Street, Cawston	18/02/2022	Beech	Provisional
2022 No 6	The Blue Boar PH, 259 Wroxham Road, Sprowston	11/05/2022	Oak	Provisional
2022 No 7	151 Taverham Road, Taverham	27/05/2022	Oak x 4	Provisional
2022 No 8	87 Cawston Road, Aylsham	31/05/2022	T1 & T2 walnut, T3 lime, T4 Scots pine, T5 Bramley apple, T6 beech, T7, T11 & T12 silver birch, T8 hawthorn, T9 maidenhair, T10 Norway maple.	Provisional
2022 No 9	Low Farm Barns, Postwick Road, Brundall	08/06/2022	Oak x 3	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
20191982	Bircham Centre, Market Place, Reepham	211	T1 & T2 holly – fell.	31/12/2019
20201760	Land West of Abbey Farm Commercial Park, Church Street, Horsham St Faith	TPO	G1 5 x ash and sycamore and G19 1 x verge tree - full details provided within the attached cover letter.	21/09/2020
20220220	The Hollies, 43 Waterloo Road, Hainford	TPO	T1 & T2 species unknown – fell. T3 species unknown - remove dead overhanging branches.	Appeal lodged
20220378	8 Station Road, Brundall ,	TPO	T12 pine -fell.	03/03/2022
20220625	The Norwich Golf Club, Drayton High Road, Hellesdon	TPO	T1 spruce - 4m height reduction. from 14m to 10m.	13/04/2022
20220738	Land to the South of Salhouse Road, Sprowston	TPO	T11 oak & T12 Monterey cypress - approx height 18m. Reduce by 3-4m. T13 red cedar - approx height 16m. Reduce by 2-3m. All three trees will have crowns raised to 4m on southern aspects and any major dead wood will be removed. A group of sycamore trees is present in close proximity to plot 1 (Figure 4). It is unclear from the tree protection plan which tree number is affixed to this group of sycamore. One stem from south-eastern edge of the group is to be removed as it greatly overhangs the garden of plot 1. The remaining trees in the group trees are to have their lateral branches reduced by 2-3m where they extend southwards towards plot 1.	Split decision
20220755	Brook House, 2 Parkside Drive, Old Catton	TPO	T1 yew - reduce crown by 1.5m to alleviate bias (current spread 9m and height 9m). T2 yew - reduce crown by 1.5m to alleviate bias (current spread 7m and height 7m). T3 yew - reduce crown by 1.5m to alleviate bias (current spread 10m and height 9m). T4 yew - reduce crown by 2m to bring into uniform shape and reduce over-extended branches (current spread 12m and height 8m). T5 cedar - reduce western portion of crown by 2m to alleviate likelihood of branch failure and alleviate shading to garden (current radial spread 6.5m).	Split decision
20220761	Whiteacres, Tunstall Road, Halvergate	211	T1, T2 and T3 ash - approx height 10m. Branches overhang neighbouring property by approx 2m. Cut back to boundary.	Approved

20220764	The Thatch, Chapel Lane, Thorpe St Andrew	211	T1 <i>Thuja</i> - fell and re-plant 3no 8/10cm girth lime trees along the boundary. T2 beech - reduce by up to 2m all over from approx 14 to 10m in width and approx 18 to 16m in height. T3 & T4 sycamore – dismantle and re-plant 1no 8/10cm girth sweet chestnut tree in a more suitable location.	Approved
20220769	Oakhill Wood, Brundall	TPO	T1 horse-chestnut – current height approx 20m and measured dbh 3.7m. Reduce damaged limb to 3m above wound.	Approved
20220778	Brackens, 38 Nightingale Drive, Taverham	TPO	Oak - height approx 17m and canopy extends 12m over driveway. Reduce overhang by 5m back to boundary. Sycamore x 2 - fell.	Split decision
20220789	2 Oaklands, Taverham	TPO	T1 <i>Acer</i> - current height 8m & current diameter 9m. Reduce canopy to height of 7m and diameter of 8m. Thin by 10%. T2 conifer - current height 11m reduce height to 7m. 15% crown thin. T3 Scots pine - current height 11m reduce to 8.5m. 20% crown. T4 Scots pine - current height 7m reduce to 6m. 20% crown thin.	Split decision
20220795	Holly Cottage, 22 Church Lane, Wroxham	211	T1 magnolia – fell.	Approved
20220796	Cheyne, 11 Barberry Close, Taverham	TPO	T1 sycamore - 12m/7m. Raise lower crown to approximately 5.5m and reduce crown by approximately 2.0m.	Approved
20220808	9 Bircham Road, Reepham	211	T1 oak - crown lift canopy of smaller branches and reduce back large branches at bottom of the canopy to a suitable growth point. Cut back suckers around the trunk up to 4m in height. These are to be cut right back to the trunk to discourage new branches around the trees lower canopy.	Approved
20220813	105 Taverham Road, Taverham	TPO	T2 beech - to front of 105 Taverham Road and trunk 1 m from boundary of 105/103 Taverham Road. Lower branches are 3m from ground and branches extend to be barely 2m from ground on both properties. Remove two lowest limbs protruding east/south-east and encroaching 103 Taverham Road drive. Equally limbs protrude over corner of 103 Taverham Road. Gutters to property at 103 Taverham Road. This would raise crown to 4.5m on easterly side and stop extended branches rubbing on telephone cable to 101 Taverham Road or parked vehicles at 103 Taverham Road.	Split decision
20220814	Chapter li, Hemblington Road, Strumpshaw	TPO	T1 sycamore - approx 14m. Pollard at 7m removing around 7m from the top. Leaving lower growth.	Approved
20220825	56 A Thunder Lane, Thorpe St Andrew	TPO	T1 Scots pine - remove big curved branch. T5 Scots pine - remove lower branches leaving just the smaller fan above.	Approved
20220833	The Chestnuts, Low Road, Wickhampton	TPO	T1 sycamore - 8m spread, height 10m. Reduce crown by 1.5m to reduce impact on neighbouring horse-chestnut and garden.	Approved
20220853	Hall Drive Pond, Hall Drive, Salhouse ,	211	T1, T2 & T3 ash - 13m high. Remove deadwood from the crowns. T4 & T5 willow - 12m high. Pollard at approx 5m due to excessive lean toward property and utility lines. T6 willow - 6m high. Coppice at approx 1m to manage.	Approved
20220860	37 Mousehold Lane, Sprowston	TPO	T1 horse-chestnut - crown spread 4.6m. Reduce crown by 1-1.5m to east to increase clearance between crown and wall of house to 2.5m. T2 oak - crown spread 8.4m to south and 8m to east. Reduce and raise crown to east and south to provide approx 4m clearance from roof. T5 oak - crown spread 8.5m. Remove smaller branches closest to dwelling to provide at least 4m clearance between branches and roof.	Approved
20220877	22 Burma Road, Old Catton	TPO	T1 Scots pine – dead. Remove.	Approved
20220879	8 Stanmore Road, Thorpe St Andrew	211	Silver birch - reduce height from 15m to 7.5m.	10/06/2022
20220893	8 Westbourne Road, Coltishall	TPO	Lime x 9 - remove lower branches to provide access along driveway.	27/05/2022
20220894	Petersons House, Petersons Lane, Aylsham	211	Walnut - approx height 12m. Prune away from neighbouring property by 2m and crown lift by 2.5m. Reduce growth on the east side by 1.5m.	02/06/2022
20220900	Woodlands, 21 Norwich Road, Strumpshaw	TPO	T1 ash - current height 18m and spread 10m. Reduce height by up to 4m and reduce laterals by 1-2m.	Approved
20220901	Wellingtonia, 17 Norwich Road, Strumpshaw	TPO	T1 Wellingtonia - crown lift to 4m in order to create adequate clearance under the tree.	Approved
20220904	Meadow View, 102 Lower Street, Salhouse	211	T1 cedar – remove 2 branches. Area overhanging 104 Lower Street to be trimmed 25 to 75mm. Height of cedar to remain the same (Works agreed with Tree Officer).	Approved

20220908	Taverham Scout Group, Sandy Lane, Taverham	TPO	4 x dead trees – remove.	Approved
20220910	The Orchards, 20 Norwich Road, Aylsham	211	T1 Portugal laurel - manage as small bush. T4 sweet chestnut - reduce declining branches in upper crown with natural fracture cuts leaving a short stub as a deadwood habitat. T5 & T6 yew - tip reduce and raise low branches over neighbouring access drive to give 4m ground clearance. T7 yew - remove two rubbing and abrasion damaged branches in lower crown to west over neighbouring access drive. T8 yew - raise low branches over neighbouring access drive to give 4m ground clearance. T9 holly - coppice stem beside shed which is light suppressed and extends over neighbouring access drive. T20 locust – re-pollard re-grown shoots leaving a short stub to encourage re-growth. T28 holly - reduce crown height to 10m and shape into natural dome shape. T29 yew & T38 & T40 common lime - raise and reduce back low branches over highway to give 5.5m clearance. T31 & T33 locust - clean crown of deadwood, suppressed and crossing branches. T34 locust - fell. T36 yew - raise low branches to give 4m ground clearance over clothes drying area, tip reduce upper side branches by 1.5m over drying area. Remove holly growing through crown to the north-east. T37 Portugal laurel - reduce and shape crown to allow more light. T39 common lime - raise low branches over highway to give a 5.5m clearance and reduce height one of the two co-dominant stems in upper crown to give dominance to the remaining stem.	Approved
20220911	Tall Trees, 17 Pond Lane, Drayton	TPO	T1 willow – 17m. Tip back laterals growing over 17 Pond Lane by 2.5m.	31/05/2022
20220918	Gribbins, 21 The Avenue, Wroxham	211	T1, T2, T3 & T4 conifers (lapsed hedge) - 11m high. Reduce height to approx 7m due to debris falling and blocking neighbours' gutters.	07/06/2022
20220920	Northwood, 104 Lower Street, Salhouse	211	Variegated holly & leylandii - prune/trim 25 to 75mm. Revised height & width just under 6m.	Approved
20220925	Warren Residential Home, 157A Wroxham Road, Sprowston	TPO	T1 beech - reduce southern side by 2.5m and western and north-western sides by 2m back to suitable pruning points.	Approved
20220932	Trees, Lady Lane, Hainford	TPO	G1 silver birch - removal of 3 stems at northernmost end of group to ground level and removal of 2 small suppressed stems leaning westerly over garden to ground level. T5 silver birch - reduce northern portion of crown by 1.5m. Current spread of northern portion of crown 7m. T7 oak & T9 beech - removal of deadwood. T8 Scots pine: dismantle to ground level and beech either side. T12 oak - a reduction of 3-4m (current diameter of crown 12m, height 15m). T13 oak - reduce northern portion of crown by 1.5-2m. Current spread of northern portion of crown 10m. T14 beech - reduce the northern portion of the crown by a maximum of 2m. Current northern portion of crown 8m. T15 holly - reduce height by 3m. Current height 10m. T2 cherry - reduce eastern portion of crown by 1.5m. Current easterly spread 7m.	08/06/2022
20220926	Cottage Plantation, 5 Gurney Drive, Sprowston	TPO	T1 pine - reduce height as per photograph. T2 chestnut – reduce crown as per photograph.	26/05/2022
20220928	63 Bishops Close, Thorpe St Andrew	211	T1 oak - reduce lateral branches on western aspect of crown by 1.5m. Current radial spread 6m and crown lift to 3.5m.	Approved
20220929	Dawdys Farmhouse, The Street, Halvergate	211	Scots pine x 2 - fell and replace.	08/06/2022
20220940	The Old Rectory, 23 Norwich Road, Strumpshaw	TPO	T1 sycamore – fell.	09/06/2022
20220962	1 St George's Loke, Sprowston	TPO	T1 Monterey cypress – reduce height by 2m from 19m to 17m, garden side from 7m to 5m and road side from 6m to 4m. Remove broken and dead branches.	07/06/2022
20220964	15 Stanmore Road, Thorpe St Andrew	TPO	T1 cedar - fell and replace with liquidamber	06/06/2022
20220965	24 Stanmore Road, Thorpe St Andrew	211	T1 magnolia - reduce by 2 to 3 m leaving height of approx 3 to 4 m and spread of approx 3m.	06/06/2022
20220966	16 Oxcroft, Acle	TPO	T1, T2 & T3 hornbeam and T4 whitebeam – reduce height by 3m to a finishing height of 7m to reduce shading and regulate size and shape.	07/06/2022

20220988	35 Charles Close, Wroxham	211	Removal of dead blue Atlas cedar.	Approved
20220993	Saint Laurence Church, Church Lane, Brundall	TPO	Remove dead tree - retain it as a monolith at 6-8m.	Approved
20220996	Keepers Cottage, Wroxham Road, Rackheath	TPO	Ash – dead. Remove.	Approved
20221016	1 Barnby Road, Badersfield	TPO	Damson – dead. Remove.	Approved
20221070	11 Saint Edmunds Road, Taverham	TPO	Pine – dead. Remove.	Approved

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 actual decision or the date on which the application was received by Broadland District Council.
- 6) This list is not intended to be a definitive list of all the relevant details. The reader should always refer to the specific application on the 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.