

• The Acorn Spring 2011 •
Cheshire Landscape Trust



A newsletter for Cheshire Parish Tree Wardens



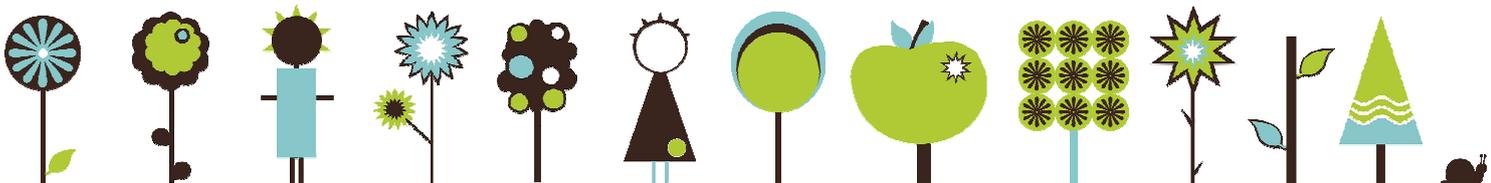
Contributions to the next ACORN by end of July 2011

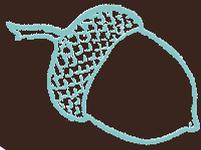
Rm A022, The Heath Business and Technical Park, Runcorn, Cheshire. WA7 4QX

Tel: 01928 518018 E-mail: cltooffice@tiscali.co.uk

www.cheshirelandscapetrust.org.uk

The views expressed in The Acorn are not necessarily those of the Trust, its Trustees or editor.





Musings from my tree...



Musings from my tree.....

Following a late start and a very cold December the planting season is now drawing to a close. All of our tree planting events from November's National Tree Week took place after Christmas, including the ceremonial tree plantings for the Community Pride Competition in Upton and Plumley. However, in spite of the late start, we still managed to get thousands of trees and shrubs in the ground with the help of all you good Tree Warden and Tree Guardian folk.



The Trust held a couple of very successful hedge laying workshops in the New Year. The Park School in Runcorn was our destination this year as we laid a section of hedgerow that runs around the front of the school. Check out the photos below for the before and after! Thanks to Tree Warden Pete Tonge for leading the workshops

Our struggle for funding continues. We were very disappointed to have our Heritage Lottery Fund bid for our Landscape Wardens project turned down and we were also unsuccessful in our bid for Community Orchard funding. To add to our woes we have heard that the two local authorities in Cheshire will be reducing our funding for the next financial year – Cheshire West and Chester Council by 20% and Cheshire East Council by a massive 65%. We will continue to contribute to the 'Big Society' though with decreasing funding it is getting more and more difficult.

On a positive note, the RHS has offered the Trust a stand free of charge at the RHS Tatton Show this summer. We plan to focus on community orchards and fruit growing and we hope it will prove to be an excellent way to promote what we do to a wider audience.

Katie Lowe
Cheshire Landscape Trust

Donations from Parishes & others

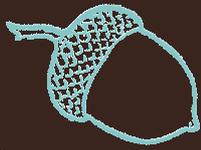
Please speak to your local parish council to see if they would be willing to make a donation to CLT. See below for a list of those who have already donated.

Little Leigh, Odd Rode, Friends of Willaston, Great Boughton, Guilden Sutton, Frodsham, Willaston, Helsby, Saughall and Shotwick, Northwich, Great Barrow, Ollerton with Marthall, Adlington, CHALC, Henbury, Wistaston, Davenham, Antrobus Heritage, Marton, Huntington, Christleton, Whitegate & Marton, Chorlton & Hough, Friends of Harmer's Wood Trust, Tarvin Community Woodland Trust



BIG THANKS to all those who have donated...we couldn't do what we do without your support!





Tributes



Jim Grogan

Jim Grogan, Tarvin Tree Warden and driving force behind the Tarvin Community Woodland has passed away.

His dream was that the Tarvin Community Woodland should not be built on but should be saved for the community to enjoy forever. He was successful because there is a 125-year lease and the woodland has been nationally recognised as an excellent example of what can be achieved by community action.

He lived to see the woodland brought back under management. It is kept safe and tidy, has secure boundaries with disabled access, the paths are in better condition and there is an active team of trustees to manage it into the future. He was so proud of what has been achieved and gained great pleasure from knowing how much all the people who use the woodland enjoy it, appreciate it and help to care for it.

His death is a great and tragic loss to his family, to all who knew him, to the village and to the wider community. We will miss him.

(thanks to John Daines, Tarvin Community Woodland Treasurer for this tribute)

Pete Schofield

It is with great sadness I report that Pete Schofield has passed away. Pete was a ranger at Marbury Country Park, a fine hedge layer and a good friend to CLT.

Pete had taken part in the hedge laying at the Ploughing Match in September and earned an excellent 2nd place in spite of injuring his hand earlier that day. He was also in the process of laying the hedge at the Trust's nursery and was doing a superb job.

Pete will be greatly missed by all at Cheshire Landscape Trust. We send our heartfelt sympathies to his family and friends, in particular his friends and colleagues at Marbury Country Park.

A few words for Pete....

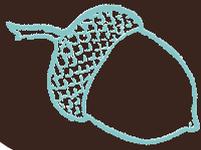
I first got to know Pete when I came to work in the Cheshire Countryside Management Service in 1985. He was one of the first rangers I met and from that day I always held him in high regard. Pete was modest, perhaps too modest. His practical skills are well known, but he should also be remembered for the quiet way in which he embodied all that is best in a Countryside Ranger, his ability to get on with people from all walks of life including farmers and landowners helped to ensure that through his work men, women and children from Cheshire and far beyond were able to enjoy the countryside; nowhere more so than at Marbury Country Park.

When I moved onto the Cheshire Landscape Trust, I knew that I had a good friend and colleague who was always ready to offer his knowledge and skills to further our work, without his help the Trust would not have been able to do what it does best. As a former climber, I know that there was never a better man to have with you on the crags. He will certainly be missed, but his works will certainly live on.

To Lynn, Amber and the rest of his family I say Pete was one in a million.

John Glttins





Dates for your Diary



Tree Wardens Meeting

9th April 2011

Guided walk around Tatton Park led by Alison Wilks (Knutsford Tree Warden)
Meet in the main Park Car park at 10.30am (parking charges apply)

Cheshire Show

21st & 22nd June 2011

For more info please visit www.cheshirecountyshow.org.uk

RHS Tatton

20th-24th July 2011 (20th July Members only)

For more info please visit www.rhs.org.uk

Joan's Watercolour Book now available to purchase! :)

Former Kelsall Tree Warden Joan Fairhurst is selling a book containing prints of many of her watercolour paintings. The books are £10 and between 50-75% of proceeds from book sales will go directly to 'Trees for Life'. If you are interested in purchasing a copy please send your name, address and cheque for £10 to: Joan Fairhurst, Crossing Cottage, Llanfynydd, Wrexham. LL11 5HN.

Cheshire Region Biodiversity Partnership Funding



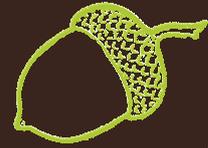
Many thanks to the Cheshire Region Biodiversity Partnership for awarding the Trust some funding through their small grant scheme. This has enabled us to plant 300m of hedgerow in Mickle Trafford and to install some new fencing at the Tree Nursery. CRBP's support is much appreciated.

The fence at the nursery will go a long way in preventing rabbit damage that has become something of a problem recently. Thanks to all the Tree Wardens that helped erect the fencing, in particular Robert Maddock, Pete Tonge and Anthony Powell.



IMPORTANT
Please read

Sell-off threatens plan to recreate old English woods



Dozens of projects to restore ancient woodlands are likely to be abandoned under the Government's plan to sell most of England's state-owned forests, *The Times* has learnt.

The forests are expected to be privatised without any requirement to uphold the Forestry Commission's commitment to replace rows of foreign conifers with native broadleaf trees such as oak, beech, ash and lime.

The commission had planned to restore more than 30,000 hectares (74,000 acres) of ancient woodlands which were planted with pine, fir, and spruce after the Second World War when timber stocks were low. Conifers create dense shade and inhibit the growth of bluebells, wood anemones and other wildlife found in deciduous woodland. Many of these plantations have reached maturity and are due to be harvested, creating the opportunity to replace them with native trees.

Wyre Forest in Worcestershire has 740ha of conifers which were due to be restored to native woodland. Other sites where restoration is now in jeopardy include Grizedale Forest in the Lake District, Savernake Forest near Marlborough, Wiltshire, Pencarrow Forest near Bodmin, Cornwall, Hemsted Forest in Kent and Mortimer Forest in the Marches.

But the Department for Environment, Food and Rural Affairs (Defra) is reluctant to reduce the sale value of the forests by adding conditions such as the type of tree that can be planted and whether they can be harvested. Conifers grow three times as fast as some native trees and are more attractive to companies likely to bid for the forests, including suppliers to new wood-burning power stations being built to meet Britain's carbon reduction targets.

A Whitehall source said a consultation document on the sale, due to be published this month, would ignore the question of restoring ancient woodland. It would contain a commitment to preserve the "public benefits" of existing native woodland but be silent on the commission's plan to expand them.

The Woodland Trust said the value of each hectare would be cut by a third if any future owner was

required to plant native trees. The amount raised from selling the 30,000ha could fall by more than £100 million. But the trust said that the Government should consider the wider benefits of restoring ancient woodland and not just focus on maximising the proceeds.

Sue Holden, the trust's chief executive, said: "If the Government is determined to be the greenest government ever then it has to find a way to secure the future of the ancient woodland sites planted up with conifers over the last 60-70 years, which it currently owns. Ancient woodland is our richest and most fragile habitat, our equivalent of the rainforest. [Selling the sites] with no means of securing their restoration would mean a massive opportunity would be lost, probably forever."

Environmental groups are also concerned that new owners might try to discourage people from visiting the forests. Under the Countryside and Rights of Way Act, there is a permanent right of access on foot to land owned by the commission. But that does not extend to horse riders and cyclists.

The commission is also concerned about the future of its visitor facilities, including 413 car parks, 28 visitor centres and 177 waymarked walks. It fears that future owners will close car parks and other facilities and let trails become overgrown.

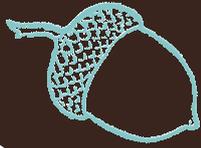
Defra said that it intended to "invite interest from a wider range of potential private and civil society partners on a number of new ownership options". It added: "We will not compromise the protection of our most valuable and biodiverse forests and the other public benefits they provide."

The planned sale applies to the 200,000ha owned by the commission in England. The Welsh and Scottish administrations have devolved powers over commission land and are committed to keeping it in public ownership.

The Times, 07.01.11, Ben Webster Environment Editor.

If you would like to sign a petition to **save our forests** please visit this link and sign up:
www.38degrees.org.uk/page/s/save-our-forests#petition





Organic Guide to Hedges



January is the perfect month for planting a new hedge. Garden organics Philip Turvil explains his passion for these unexpected allies in the food growing arena.

Hedges are rows of plants working as a team. They grow together to shelter your crops from unforgiving winds. They offer communal housing for valuable pest-eating wildlife and become crops themselves by yielding fruit or stick supports for peas and beans. Hedges are thoroughly organic since you're using natural tricks to obtain good crops but there are some points to consider before planting your cosy companion.

Choosing manageable hedges

Hedges can share many traits with weeds. They take space, nutrients, light, and water away from your crops. So, to sooth these disadvantages, plant hedges far enough away from fruit and veg so roots and shadows don't clash too much. This should reduce competition and allow you easy access to your harvest. Use appropriate species to limit hedge height and spread, such as the following formal or informal options:

- Mini-hedges planted 30-60cm away from crops, including lavender or sage for fragrant flavoursome edging.
- Half-way hedges planted over 1m away, such as juicy blackcurrants or larger growing worcesterberries. Step-over or espalier apple trees aren't usually classified as hedges, but suit this role well with stretching horizontal arms.
- Gorgeous native hedges reaching 1m tall (or several metres if permitted) such as hawthorn, blackthorn, or the delicious cherry plum. Opt for hazel or willow for fast growth and ready source of home grown plant stakes.
- Handsome ornamental hedges found on garden centre shelves. Look out for escallonia, forsythia, and griselinia. Stroll by the conifer selection, too. There are lovely varieties on offer besides the ill-perceived leylandii.
- Remember a hedge will be far more successful if growth rates of mixed varieties are roughly matched. This makes communal pruning easier, too.

Planting hedges

Creating a hedge is as satisfying as growing a tree. January is good planting weather for a quick spring start, especially if you plan to buy native varieties sold dormant

as 'bare-root'. These young plants are bundled together when 'asleep' into groups of 10 or so in pots of compost, ready for you to separate and position in rows. You can also buy potted plants.

Dig a trench about a spade deep and add a wheelbarrows worth of compost every 5m. This improves soil fertility and structure. Water to settle roots after backfilling, and irrigate again in prolonged dry weather. Delay planting if the soil is frozen or waterlogged. Occasionally lay compost over the soil, but limit the amount you use so the fertiliser doesn't 'go to their head' and cause plants to grow too much.

Trimming hedges

Be strict with young plants by pinching out growing tips to prompt a bushy habit then trim hedges every one to three years depending on vigour. Hedges should compliment your space, not get over excited and dominate it! The same is true of adding hedge trimmings to compost heaps. Include small amounts with other materials to maintain good balance.

If you've too many trimmings, store them to add gradually to the heap or compost them separately after mixing them with leftover grass or other nitrogen-rich 'activators'. Shredded trimmings make nice formal paths. It's best organic practice to keep materials on site.

Hedge Benefit 1: Other residents

Lots of wildlife lives in hedges when not eating pests on crops. Ground predators such as beetles and spiders enjoy rummaging in damp leaves at their base, while birds and insects will thank you for the shelter, berries, and flowers, including those from the wild plants and weeds that grow alongside.

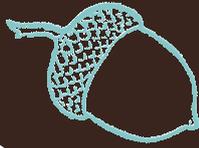
Hedge Benefit 2: Offering shelter

Hedges help crops by slowing down strong winds for distances up to 10 times their height. They're a better windbreak than fences and walls that produce destructive swirls either side of a solid structure. Sheltered growing conditions reduce water loss and let young plants establish more quickly. Eager predators and pollinators can also get to work earlier in the season. Even runner beans and Brussels sprouts offer a temporary hedge, so scatter taller crops throughout your patch to create 'mini shelters'.



Grow Your Own, Philip Turvil, January 2011.





Vandals chop down 'Holy' hawthorn & Community Orchard planted



Vandals Chop Down the 'holy' hawthorn tree said to have sprouted from the staff of Joseph of Arimathea

A woman places a ribbon on the remains of a "holy" tree that once flourished in the shadow of Glastonbury Tor which has been reduced to a 6ft stump by vandals (Simon de Bruxelles writes).

The hawthorn tree, known as the Glastonbury Thorn, was said in legend to have sprouted from a staff owned by Joseph of Arimathea, Jesus' uncle. The vandals also tried to uproot the iron cage that was supposed to protect it, but failed.

The Holy Thorn is unique because it flowers twice a year – once at Christmas and once in May. Several specimens still survive, including one at Glastonbury Abbey, all grown from cuttings from the original Holy Thorn that was destroyed by Oliver Cromwell's puritans in the 17th century. The tree that was destroyed this week was replanted during the Festival of Britain in 1951.

Every December, four flowering sprigs from a tree in the graveyard of St John's Church are cut by children from the neighbouring primary school and sent to the Queen for her Christmas dinner table. It was the day after this year's cutting ceremony that the specimen, on Wearyall Hill leading to Glastonbury Tor, was cut down.

Katherine Gorbing, director of Glastonbury, said: "The mindless vandals who have hacked down this tree have struck at the heart of Christianity. It holds a very special significance all over the world and thousands follow in the footsteps of Joseph of Arimathea, coming especially to see it. It is the most significant of all the trees planted here and can be linked back to the origins of Christianity."

John Coles, Glastonbury's mayor, said: "I'm stood on Wearyall Hill looking at a sad, sad, sight. This tree was visited by thousands of people each year and is one of the most important Christian sites. It is known all over the world."

As the Thorn was not the subject of a tree preservation order the vandals are unlikely to face criminal prosecution even if they are caught. Avon and Somerset Police confirmed they had begun an investigation and appealed to the public for information.

The Glastonbury Thorn became the subject of pilgrimages in the Middle Ages. Legend said that Joseph of Arimathea visited England after the death of Jesus, bringing with him the Holy Grail, the cup used at the last supper.

The Times, Friday December 10th 2010 Simon DeBruxelles

Community orchard for Penarth by green campaigners. Members of a green action group in the Vale of Glamorgan are celebrating the creation of a community orchard.



The trees have been planted on land in Cosmeston Lakes park near Penarth.

Gwyrddio Penarth Greening (GPG) raises awareness about climate change through a number of practical community projects urging residents to grow and buy local produce. They've planted apple trees as well as a mix of other fruit trees - damson, medlar, pear, plum and quince.

Traditional native varieties of apple such as Pig Aderyn and Pig yr Wydd have been used in the orchard.

The group is also planning to plant an edible hedgerow around the orchard's boundary which will contain a mixture of blackthorn, crab apple, elder, hazel and dog rose.

GPG's campaign is based around the transition town model where communities work together to tackle the effects of climate change and reduce their carbon footprint.

This model has also been adopted by the nearby town of Llantwit Major and by Chepstow in Monmouthshire.

"We hope that the orchard will encourage people to grow their own food, and that it will become a place where horticultural skills and knowledge are shared," said local garden designer Anthony Slaughter, who organised the planting.

"People tend to be quite ignorant about where our food comes from, because we're so alienated from nature.

"But as people become more aware of the impacts of climate change, they realise how urgently we need to reduce food miles and grow food locally."

Last year the group launched a loyalty card encouraging people to shop with local retailers in the town. The scheme has proved a success and currently has 50 retailers signed up to it.

GPG hopes that Penarth's new community orchard will play an important role in maintaining local biodiversity by providing a haven for wildlife.

They also plan to launch a community garden for the town later in 2011.

www.bbc.co.uk 6th January 2011, author not acknowledged.





Traditional Orchard Survey: Mapping England's Orchards



Traditional orchards history & heritage

Traditional orchards are a much loved part of our British heritage and countryside.

Providing local communities with delicious fruit and peaceful places to enjoy, traditional orchards can be recognised by the presence of full-sized (standard) fruit trees which may be centuries old.

Through the careful planting and cultivation of a great range of fruit varieties, traditional orchards are a source of pride and have significant cultural value, holding clues to our past culinary tastes.

Traditional orchards are cultivated using low-intensity methods such as the absence of pesticides and fertilisers, and the use of grazing animals instead of machines for mowing. The combination of old trees and natural management provides an invaluable refuge for wildlife.

Fruits can provide important food sources in autumn and winter for wildlife and spring blossom is not only beautiful to see but an important nectar source for invertebrates. Rare plants, lichens and small mammals flourish. Birds and insects find food and shelter amongst the decaying wood of old trees.

Once a common sight within the landscape, the traditional orchard habitat is now under serious threat and this is the reason the UK Biodiversity Action Plan now includes traditional orchards in its list of priority habitats. Threats to old orchards include neglect, intensification of agriculture and pressure from land development. Supermarkets have long been importing cheap fruit from overseas which has led to orchard habitats becoming economically unviable and increasingly rare.

core facts

- historically we have grown more than 2,000 varieties of cooking & eating apple in Britain
- orchards in England have declined by more than 60% in the last 50 years

Mapping England's orchards

The People's Trust for Endangered Species (PTES) is co-ordinating a project to map the traditional orchards of England. Orchards are hotspots for biodiversity and support a wide range of wildlife including many species which are nationally rare or scarce, including the noble chafer beetle. Knowing where orchards are is essential for the conservation of this important habitat and the vast array of species that are associated with it.

The aim of this project is to create an inventory of traditional orchards in England which will support the Habitat Action Plan and form a baseline from which to guide all future conservation work.

PTES is calling on hundreds of volunteers to help both locate and survey these orchards. A typical orchard survey will record the species, number and condition of the fruit trees. This can be carried out at any time of year.

A completed inventory of this priority habitat will facilitate the monitoring of any further losses and will be one step towards protecting this icon of the English countryside.

The inventory is published on the internet and is available to download at www.naturalengland.org.uk or to view at www.magic.gov.uk.

How can you get involved?

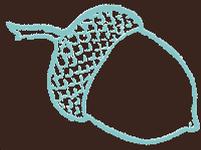
We need the help of local volunteers and land owners, orchard groups, wildlife trusts, parish councils and agricultural colleges.

1. Do you own, manage or know of an orchard that should be included within the traditional orchard inventory?
2. Do you have time to spare to help survey traditional orchards in your local area? No experience necessary, maps and guidance will be provided.

To get involved please call 020 7498 4533 or email anita@ptes.org www.ptes.org/orchards

thank you





20,000 new trees for London as Mayor joins volunteers to launch 'RE:LEAF'



The Mayor, Boris Johnson, today rolled up his sleeves to help Trees for Cities and an army of volunteers plant 10,000 brand new trees to create an urban woodland in Roding Valley Park.

The mass planting, organised by Trees for Cities and Redbridge Council, takes place in a huge week of tree planting funded by the Mayor and six additional borough councils. Collectively, this is set to plant 20,000 brand new trees across London.

The Roding Valley planting is taking place across the week (10-16 January) with staff volunteers from News International, Redbridge Council, City Hall, local school children and local community groups all pitching in. The trees being planted are native whips (young trees), including oak, ash and hazel.

It all forms part of the Mayor's new campaign - RE:LEAF London - aimed at encouraging individuals, businesses and organisations to plant more trees in the capital and value the social and environmental benefits of trees. RE:LEAF London is a partnership which has brought together key organisations involved in protecting and planting trees. Ideas being considered to boost tree cover include the development of community orchards and tree-nurseries, more mass tree planting events and voluntary tree warden schemes.

Boris Johnson, Mayor of London, said: 'Trees immeasurably improve our quality of life and I am determined to boost their numbers. We are already on target to plant 10,000 wonderful new street trees by 2012 in areas most in need of them. I am now calling on others to play their part to boost tree numbers further still. Just this week a green-fingered band of boroughs, charities and private organisations have joined forces with me to plant a grand total of 20,000 trees, including a brand new 10,000-strong woodland in east London. This shows what can be achieved when people work together to improve our city ahead of the 2012 Games and beyond.'

In addition, the Mayor is funding 10,000 brand new

street trees across London in places where they are most needed. 9,500 of these are already taking root, with the rest due in the ground by 2012. The Mayor is also helping to fund a tree planting programme in the five Olympic and Paralympic Games boroughs under London Wildlife Trust's Trees for the Hosts scheme.

Trees offer a range of benefits such as attracting wildlife, providing shade and cooling, helping to improve local air quality and reducing flood risk. The Mayor has a target to encourage an increase in tree cover by working with boroughs and other partners from 20 per cent today to 25 per cent by 2025 - with around two million more trees for London.

Organisations signed up to RE:LEAF London are the Forestry Commission, the Woodland Trust, Trees for Cities, the Tree Council, London Tree Officers Association, London Wildlife Trust, BTCV, the Conservation Foundation and the London Orchard Project in addition to the London boroughs.

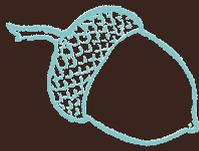
Trees for Cities' Chief Executive, Sharon Johnson, said: 'The creation of this new 10,000-tree urban woodland, in just one week, is Trees for Cities' largest project to date and sees 2011 off to a flying start.'

'News of global warming, melting icecaps and pollution form a cacophony that surrounds us. We are very aware of its existence, but often feel unsure about whether we can make a difference. Together, we can. This project couldn't be achieved without the support of our volunteers, who are working alongside local people to create this new woodland area for future generations to enjoy, providing a lung for their neighbourhood and a green view around the busy roads.'

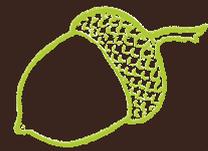
Additional tree planting part-funded by the Mayor is taking place in Barking & Dagenham (500 trees); Croydon (2000 trees); Hammersmith & Fulham (3800 trees); Sutton (180-240 trees); Newham (approx 1950 trees); Brent (30 trees).

<http://www.london.gov.uk> , author not acknowledged, 12 January 2011





Exclusive: Bees facing a poisoned spring



New kind of pesticide, widely used in UK, may be helping to kill off the world's honeybees

A new generation of pesticides is making honeybees far more susceptible to disease, even at tiny doses, and may be a clue to the mysterious colony collapse disorder that has devastated bees across the world, the US government's leading bee researcher has found. Yet the discovery has remained unpublished for nearly two years since it was made by the US Department of Agriculture's Bee Research Laboratory.

The release of such a finding from the American government's own bee lab would put a major question mark over the use of neonicotinoid insecticides – relatively new compounds which mimic the insect-killing properties of nicotine, and which are increasingly used on crops in the US, Britain and around the world.

Bayer, the German chemicals giant which developed the insecticides and makes most of them, insists that they are safe for bees if used properly, but they have already been widely linked to bee mortality. The US findings raise questions about the substance used in the bee lab's experiment, imidacloprid, which was Bayer's top-selling insecticide in 2009, earning the company £510m. The worry is that neonicotinoids, which are neurotoxins – that is, they attack the central nervous system – are also "systemic", meaning they are taken up into every part of the plant which is treated with them, including the pollen and nectar. This means that bees and other pollinating insects can absorb them and carry them back to their hives or nests – even if they are not the insecticide's target species.

In Britain, more than 1.4 million acres were treated with the chemical in 2008, as part of total neonicotinoid use of more than 2.5 million acres – about a quarter of Britain's arable cropland.

The American study, led by Dr Jeffrey Pettis, research leader at the US government bee lab in Beltsville, Maryland, has demonstrated that the insects' vulnerability to infection is increased by the presence of imidacloprid, even at the most microscopic doses. Dr Pettis and his team found that increased disease infection happened even when the levels of the insecticide were so tiny that they could not subsequently be detected in the bees, although the researchers knew that they had been dosed with it.

Dr Pettis told The Independent his research had now been put forward for publication. "[It] was completed almost two years ago but it has been too long in getting out," he said. "I have submitted my manuscript to a new journal but cannot give a publication date or share more of this with you at this time."

However, it is known about, because Dr Pettis and a member of his team, Dennis van Engelsdorp, of Penn State University – both leaders in research focusing on colony collapse disorder (CCD) – have spoken about it at some length in a film about bee deaths which has been shown widely in Europe, but not yet in Britain or the US – although it has been seen by The Independent.

In *The Strange Disappearance of The Bees*, made by the American film-maker Mark Daniels, Pettis and van Engelsdorp reveal that they exposed two groups of bees to the well-known bee disease nosema. One of the groups was also fed tiny doses of imidacloprid. There was a higher uptake of infection in the bees fed the insecticide, even though it could not subsequently be detected, which raises the possibility that such a phenomenon occurring in the wild might be simply undetectable.

Although the US study remains unpublished, it has been almost exactly replicated by French researchers at the National Institute for Agricultural Research in Avignon. They published their study in the journal *Environmental Microbiology* and said: "We demonstrated that the interaction between nosema and a neonicotinoid (imidacloprid) significantly weakened honeybees."

Neonicotinoids have attracted growing controversy since their introduction by Bayer in the 1990s, and have been blamed by some beekeepers and environmental campaigners as a potential cause of CCD, first observed in the US in 2006, in which billions of worker bees abruptly disappear from their hives.

Between 20 and 40 per cent of American hives have been affected, and CCD has since been observed in several other countries from France to Taiwan, though it has not yet been detected in Britain. Although Bayer insists its products are bee-safe, French and German beekeepers have blamed them for large bee losses. Neonicotinoids have been banned, to different degrees, in France, Germany, Italy and Slovenia, although they are freely sold and widely used in the US and Britain.

In the UK, the Co-op has banned them from farms from which it sources vegetables, but the Government has rejected appeals from beekeepers and environmentalists for their use to be suspended as a precaution. This week, however, an Early-Day Motion was tabled in the Commons by Martin Paton, the Labour MP for Gower, calling again for the Government to suspend use of the compounds following major new controversy in the US surrounding Bayer's latest neonicotinoid – clothianidin – which is increasingly being used in Britain. In November, a leaked internal document from the US Environmental Protection Agency showed that it was continuing to license clothianidin, even though its own scientists reported that the tests Bayer carried out to show the compound was safe were invalid.

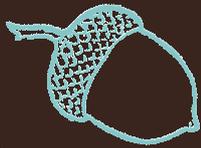
Leading the calls for neonicotinoids to be banned in Britain is Buglife, the invertebrate conservation charity, which last year published a review of all the research done on the chemicals' impact on "non-target" insects such as honeybees and other pollinators.

Yesterday the Buglife director, Matt Shardlow, said of the Pettis study: "This new research from America confirms that at very, very low concentrations neonicotinoid chemicals can make a honeybee vulnerable to fatal disease. If these pesticides are causing large numbers of honeybees, bumblebees, solitary bees, hoverflies and moths to get sick and die from diseases they would otherwise have survived, then neonicotinoid chemicals could be the main cause of both colony collapse disorder and the loss of wild pollinator populations.

"The weight of evidence against neonicotinoids is becoming irresistible – Government should act now to ban the risky uses of these toxins." Bayer insists its neonicotinoids are safe for bees when used properly. Dr Julian Little, a spokesman for Bayer CropScience UK, said it was difficult for it to comment on an unpublished study. "It makes it impossible to look at their methods, it makes it impossible to check whether you can repeat the work, you don't know where they got the imidacloprid from, you don't know how they gave that to the bees," he said. But he added: "I'm sure there are some very interesting effects Dr Pettis has seen in a laboratory, but in reality, when you get to what's important to everybody, which is what happens in the field, you don't see these things happening. Bees are very, very important insects to Bayer CropScience and we recognise their importance."

www.independent.co.uk, Thursday, 20 January 2011, By Michael McCarthy, Environment Editor





The Flowers of Spring



As the first days of March unfold, Spring is in the air and even if we molly-coddled humans need convincing, buds are swelling,

flowers are blooming and such is the enthusiasm of the robin in my garden that he has started serenading from 10pm every night. If the purple sea of crocuses in the churchyard giving way to dancing yellow heads of daffodils has you rushing off to the nursery in search of pretty blooms for the garden but wilting at the cost, then consider the visual feast presented each year by our native and naturalized trees for the bargain price of a walk along the hedgerows.

Blackthorns are usually dotted inconspicuously amongst other hedge trees but when in flower they sing out in startling white tufts against the still black twigs of the rest of the row. Hawthorn flowers wait until the leaves have opened and present a more frothy appearance against the fresh green background for mile after mile. Here in Cheshire, you may be lucky enough to find damsons promising a delicious harvest to come. Wild cherries are only a little less glamorous than their ornamental cousins, and the snowballs of rowan, elder and guelder rose are hard to miss harbingers of summer.

However, the green and yellow flowers of the maples are more subtle and deserve a closer look and herein lies a problem for the tree-flower connoisseur: trees are rather taller than we are! The Victorians would no doubt have lopped branches off to obtain their quarry but, quite apart from the legal consequences, I would advocate a live and let live approach and suggest searching for a young specimen with flowers at eye-height or an overhanging branch that can be gently tugged down for examination.

Wind pollinated tree flowers are even easier to miss and a search through my small library of tree field-guides yields few pictures to help. Those that do occur are tiny and indistinct and if there is a mention of flowers in the text, it is merely that they are 'inconspicuous'. Yet they are a marvel of miniature engineering and intricate detail – a magnifying lens is

needed for a full appreciation. One of the most consistent and comprehensive guides I have is the Kingfisher Field Guide to the Trees of Britain and Europe by David Sutton, but even this does not show both male and female flowers of the ash tree, so tree-flower hunting can have the aura of pioneering discovery too.

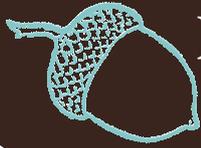
The following is a table of some trees and their flowering periods, but this is only a rough guide as so much depends on the weather, the location and the individual. I dutifully trekked out every few days to fill in the 'abundance of flowers' box for an ash tree in my tree survey but it was barren until a full four weeks after I had first noticed ash in flower in the chilly hills of Derbyshire. Good hunting!



Alison Wilks
Knutsford Tree Warden

Alder	February-March
Wych Elm	February-March
Yew	February-April
Blackthorn	March-April
Hornbeam	March-May
Ash	April-May
Beech	April-May
English Oak	April-May
Sycamore	April-May
White Willow	April-May
Wild Cherry	April-May
Crab-apple	April-June
Field Maple	April-June
Guelder Rose	May-June
Hawthorn	May-June
Horse Chestnut	May-June
Rowan	May-June
Whitebeam	May-June
Holly	May-August
Elder	June-July
Lime	June-July
Sweet Chestnut	June-July





Efforts to cut bee deaths exacerbating decline, UN says



Globalisation is killing bees, as the opening up of trade allows pests and diseases to travel swiftly around the world, says a UN study. Attempts to halt the fall in bee numbers are making the problem even worse, the authors found.

Unexplained bee deaths have become an increasing issue in the past five years, a phenomenon labelled 'Colony Collapse Disorder'. Bees in the US, Europe and Asia have been affected, although it is hard to gather reliable data on how many have died.

Some bee colonies die off naturally, chiefly in winter, but the scale of losses reported by beekeepers has prompted governments and scientists to examine why bees appear to be under threat and to try and solve the problem by changing the ways they are kept.

But attempts to halt the fall in bee numbers through breeding programmes and massing bees in huge hives are exacerbating the problem, a UN official has told *The Guardian*. Industrialised hives create ideal breeding conditions for some of the very pests and fungal diseases thought to be responsible for many bee deaths. Moving the hives from farm to farm to encourage pollination spreads the diseases further.

"We are creating the ideal conditions in the man-made hives that promote pests chemical contamination and other factors," the official said.

More than a dozen factors are behind the bee deaths, said the UN environment Programme (Unep) in its report, *Global Bee Colony Disorders and Other Threats to Insect Pollinators*. These include air pollution, new fast-spreading fungal disease and varieties of parasites such as the Varroa mite, as well as the loss of habitat for wild flowers in intensely farmed areas.

The increased use of pesticides—including broad spectrum and systemic pesticides, which are absorbed by plants and can be expressed in pollen and nectar—appears to be another important factor, according to the UN. It said that when some pesticides were allowed to combine, they formed a potentially lethal cocktail that could damage bees' sense of direction and memory.

The scientists were unable to pinpoint the most important factors, saying more research was needed. Last year a £10m British research project was launched to study the decline of bees.

Given the growing global human population, researchers are concerned that the loss in numbers of bees and other pollinating insects could lead to serious problems with food supply. Of the 100 crop species that provide 90% of the world's food, more than 70 are pollinated by bees. Bees contribute about \$200bn a year to the global economy.

Achim Steiner, executive director of Unep, said: "The way humanity manages or mismanages its nature based assets, including pollinators, will in part define our collective future in the 21st century. Human beings have fabricated the illusion that they have the technological prowess to be independent of nature. Bees underline the reality that we are more, not less, dependent on nature's services in a world of close to 7 billion people"

The report suggested that as many as 20000 flowering plant species upon which bees depend could become extinct if conservation efforts failed.

Air pollution is also making it harder for bees to find plants-scents that could carry 800 metres in the 19th century may travel only about 200 metres today, impairing bees' ability to find food.

Martin Smith, the president of the British Beekeepers Association, welcomed the UNEP report, and said: "The BBKA calls on the UK government not only to take action to protect existing habitats but to find the ways and means to create new habitats beneficial to bees and other pollinators. We urge increased planting of wild flower margins around agricultural fields and also stronger guidance to local authorities on increasing flowering trees and wild flower planting in towns and cities."



*Fiona Harvey
Thursday 10th March 2011, The Guardian*

The Acorn is funded by:

