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DURHAM BIODIVERSITY PARTNERSHIP

Durham Veteran Trees

WOODS IN DURHAM SURVEYED—PARTIALLY!

The end of April saw the start of volunteer training days for the Durham Veteran Trees Project; the first of which being held at Flass Vale in the heart of Durham. A healthy turn-out from the Friends of Flass Vale—as well as a few others—made the day a success and saw a good number of trees make their way onto the database. Some of the more impressive trees were a large oak reaching well over two hugs (3m) in girth, a very tall tree of the populus genus (most probably an aspen) that was hollowing at the base and, of course, the various ancient hawthorns that are dotted around forming an ancient hedgerow possibly dating back 400 years.

The second Durham wood to host a volunteer training day was Pelaw Wood in Gilesgate. Another wood peppered with ancient hedgerows, Pelaw also contained many beautiful beeches and the odd sycamore here and there. The Friends of Pelaw Wood provided another good turnout and a thoroughly enjoyable day.



Volunteers spot a sweet chestnut at Witton Gilbert

The final Durham woodland was Witton Dene in Witton Gilbert, just north-west of the centre of Durham. Though the turnout was not quite as large, the enthusiasm of the volunteers was impressive and the number of trees surveyed during the training was as good as the other two woods. Witton Dene is a slightly smaller wood than Pelaw and Flass Vale, however St Michael's church and a neighbouring farmer's field boosted the numbers of

trees that could be considered for veteran or ancient status in the area.

Following the success of the Durham woods events, not only are more events being planned in other areas in which are in the Durham Veteran Trees Project remit, but return events may be made to Flass Vale, Pelaw Wood and Witton Dene to finish off the surveying that was done during the training events.

Event locations that are in the pipeline include Backhouse Park in Sunderland, Thornley Woodland Centre and Derwent/Derwenthaugh Woods in Rowlands Gill, and South Park, Darlington.

Any suggestions for other possible venues for events (training or otherwise) would be more than welcome, so please feel free to get in touch at:

jessemeredith@durham

biodiversity.org.uk

Or call Rainton Meadows on:
0191 584 3112

SOCKBURN HALL UNCOVERS FOUR

Sockburn Hall, just south of Darlington could arguably be called one of the most historically significant archaeological sites in the North-East of the UK. Found on a few acres of land in a bow of the Tees (the other side of the river being North Yorkshire), Sockburn Hall has been an important historical site since the 11th Century at the latest. The hall has now fallen into disrepair and is the focus of a project spearheaded by English Heritage to be fully restored and to reach its full potential as an important Anglo-Saxon and possibly Viking heritage site.

On the 4th of July, an event was held at Sockburn Hall

aimed at rewarding the volunteers for all of their hard work this year as well as the launch of an exciting new book about the Saxon remains at Sockburn. On this day, there were two guided walks and talks around the site: one from English Heritage talking about the history of the area and how it can be seen today, and the other from the Veteran Trees Project, talking about the importance of the trees on the site in terms of tying them in with the historical background as well as the wildlife of the site.

The trees of note on the site include a giant white willow on the bank of the river, two

huge walnut trees that could easily be 400 years in age, and a deceptively old copper beech that (though it only has a girth of less than 2.5m—its growth stunted by exposure to howling winds and management practices) could perhaps have been even older.



Veteran trees Project Officer, Jesse Meredith, gives a talk to volunteers at Sockburn Hall

Don't forget!

*You don't have to wait until the project-organised events mentioned on this newsletter! Feel free to contact each other and organise your own events or tell other people where to go to find your favorite trees. Also, if there's anything you would like to see on the next newsletter, or if you know of where there are trees that need measuring, or if you have any questions at all, you can either email Jesse Meredith, the Veteran Trees Project Officer, at: jessemeredith@durhambiodiversity.org.uk, call Rainton Meadows on: **0191 584 3112**, or visit the website: www.durhamveterantrees.org.uk*

VETERAN TREES PROJECT GOES TO SCHOOL

Another focus of the Veteran Trees Project is the education programme. This basically involves an outreach to schools (mainly primary schools at this stage to tie in with Key Stages 1 and 2 of the National Curriculum) to teach them about the importance of trees in general, but most importantly, what happens as the both the trees and the woodlands themselves grow older. In doing so, an educational resource pack has been developed based around the *About Trees* education pack from Flights of Fancy, an educational resources company. The pack includes hundreds of tree seeds to be planted, trigonometric height measures, instructions about how to make leaf skeletons and a tree identification key as well as

information about the importance of trees. This pack has been supplemented with various worksheets containing information about the habitats created by trees as well as the habitats that trees themselves live in.

Since the start of the Veteran Trees Project, a number of schools have been visited and have had their very own veteran tree days. Witton Gilbert Primary School had a Veteran Trees Nature Trail through the local dene early in April. The Environment Club of St Mary's Primary School in Sunderland had an afternoon learning about trees and planting seeds of their own. Every single pupil of Ox Close Primary School in Spennymoor had the chance to learn

fantastic facts about trees and planted silver birch, alder and Norway spruce seeds at the end of May.

The Veteran Trees Project will continue to visit schools throughout the duration of its 2 year period (and perhaps longer!), so if you know any schools that may be interested in having their own veteran tree days (anything from whole school days involving hundreds of children, to after-school clubs with less than 10!) please contact Jesse Meredith, the Veteran Trees Project Officer on:

jessemeredith@durhambiodiversity.org.uk

Or call Rainton Meadows on:

0191 584 3112

BRING BACK THE ELMs!!!

As you may or may not know, elms were at one time, almost as common than oaks in the UK. This was up until they were hit by a plague of epidemic proportions known as Dutch Elm Disease. Dutch Elm Disease (DED) was first written about in North-Western Europe around 1910. It was only a slow-spreading infection at this point and it took almost a decade for any research to be undertaken to determine the cause of the infection, which was identified as a fungus in the genus *Ophiostoma*. Research in the UK didn't start until the 1920s when Dr Tom Peace of the Forestry Commission began publishing data following its appearance in the British Isles.

Two decades later in 1940, the epidemic seemed to have died down, but not before reducing elm populations in Europe by 10-40%, much less than had been expected. So researchers in Europe came to the conclusion that the disaster, that had been thought to have been imminent, was averted. However they were wrong. The disease struck back with another wave in the late 1960s that was far more destructive.

Forestry Commission research showed

that the new outbreak of the epidemic was caused by a far more voracious and aggressive form of the Dutch Elm Disease fungus: the original pathogen being *Ophiostoma ulmi* and the more aggressive being *Ophiostoma novo-ulmi*; and

the two varied in almost all of their biological properties. Imported infested elm logs were determined as the means of introduction into the British Isles and within a decade,

20 million elm trees (at least two-thirds of the combined populations of all three native elm species: English elm, Smooth-leaved elm and Wych elm) were dead. After 30 years, the number had risen to 25 million.

To this day, elm populations have not been able to recover to anywhere near the levels at which they once were, and it is unlikely that they ever will. However, there are projects underway to help the massively-reduced populations increase to make elms one of the more common native trees once more.

One such project has been in the pipeline for a quarter of a century, and now finally looking to start making a difference. The Conservation Foundation has

been searching all over Britain for the last 25 years looking to map any remaining elms to help ensure their protection. During their search, they uncovered a number of ancient elms that have continued to grow where large communities of elms have been wiped out by the disease. It is thought that these trees are immune to infection from the fungus responsible for the later form of Dutch Elm Disease.

The Conservation Foundation have taken thousands of cuttings and seedlings from these surviving trees and are now looking for them to be planted out in areas where elms trees once stood. They are looking for school groups or other community groups to help plant and monitor young native elms to help boost numbers of trees and determine whether these trees have developed a natural immunity to the disease.

There is a way that you can help. If you know of areas where elms used to stand, but where killed by the disease, let the Veteran Trees Project Officer, Jesse Meredith, know via email:

jessemeredith@durhambiodiversity.org.uk

Or call Rainton Meadows on:

0191 584 3112

ACUTE OAK DECLINE-THE INS AND OUTS

In April of this year, the Forestry Commission published a practice note explaining the spread of a dieback condition in oak trees, known as Acute Oak Decline. Oaks have suffered for many years with various forms of dieback disorders, but normally they can be managed. This year has seen the rise of this condition which has no known management methods to halt spread or even save the oak affected. Indeed it seems that if an oak is 'infected' with the condition, there is no way to save it. Oak decline is not newly discovered, in fact oaks in this country have been under threat of decline (in various forms) for the best part of the last century.

The actual definition of the word 'decline' or 'dieback' is simply poor health in oak trees, and this can have many different causes. These causes can generally be described as 'biotic' (living—such as invertebrate or fungal attack) or 'abiotic' (not-living—such as poor soil conditions or drought). Acute oak decline is one of two known forms of decline that can be found in Britain today; the other, known as chronic oak decline, has a much slower effect than acute oak decline and in most cases can be more easily managed.

Trees suffering from the chronic form of dieback suffer symptoms relatively slowly, sometimes spanning decades, examples of which include thinning of the canopy (loss of small branches and twigs) and sometimes—particularly with more severe cases—whole branch loss. Less common symptoms include a dark watery fluid running down the main stem. The main cause of chronic oak decline is a root rot fungal infection by species such as *Armillaria*, *Phytophthora* and *Collybia fusipes*.

Past outbreaks of acute oak decline have been far more worrying as symptoms develop much more rapidly and end in high mortality rates. However, the causal agents of these had been established as defoliating caterpillars of the leaf roller moth (*Tortrix viridana*) or mildew fungus (*Erysiphe alphitoides*). In the past, outbreaks have only really lasted no more than a decade before stabilising or disappearing.

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The recent episode of acute oak decline has shown a rapid decline in oak health, mainly affecting mature oaks that are more than 50 years old. The cause of this outbreak has not been officially identified, though it seems to be caused by a pathogenic bacteria, but an investigation by Forest Research is currently underway.

"The spread of the decline has only been noted in the Midlands and Wales at this point, however because it seems to be able to spread easily, the threat still looms over the north of the UK"

In previous outbreaks of acute oak decline, the main symptoms were noticeable in the canopy and the foliage, however the main symptom of this episode of acute oak decline is extensive

bleeding of a dark, sticky fluid from longitudinal lesions and cracks in the bark starting about 1-2m above the ground, usually starting in Spring and can stop at different times of year. One tree can have as many as 20 discrete bleeding lesions all over its trunk. The main problem with this is that the symptom is only really noticeable when the tree is near death, and it can be as little as four or five years after the first symptoms are spotted that the oak dies. Not only this, but the condition appears to be

easily transferable, which gives it the potential to threaten large numbers of trees across the country.

The spread of the decline has only been noted in the Midlands and Wales at this point, however because it seems to be able to spread easily, the threat still looms over the north of the UK. It is not known exactly how the condition is spread, so precautions have been suggested for people using oak woodlands to take to prevent any subsequent infections of trees. These include disinfecting footwear and equipment with methylated spirits and taking care not to remove material from woodlands.

Other methods to be employed to help stop the spread are to avoid contact with known infected trees, disinfect soles of footwear and/or bicycle tyres before and after entering an oak woodland, do not remove foliage or deadwood from any woodlands and to let somebody know about possible infections that you spot (either contact Jesse Meredith, the Veteran Trees Project Officer, or the Forestry Commission at: ddas.ah@forestry.gsi.gov.uk).

If you would like more information about acute oak decline, please visit:

[http://www.forestry.gov.uk/pdf/fcpn015.pdf/\\$FILE/fcpn015.pdf](http://www.forestry.gov.uk/pdf/fcpn015.pdf/$FILE/fcpn015.pdf)



With the current episode of acute oak decline threatening our mature oaks, trees such as this magnificent oak in Lanchester could be lost within a decade unless proper management and surveying precautions are undertaken.

TREE IDENTIFICATION DAY GOOD-TO-GO!

With the summer holidays upon us, what better way to spend your day than to take a walk through the Durham Botanic Gardens... Well, there is one better! How about joining the Veteran Trees Project for a guided walk around the Durham Botanic Gardens with Dr Phil Gates, botanist at Durham University to help boost your tree identification skills? The event will be

catered as well as being an interesting walk around one of the best gardens in the UK to have a look at the amazing variety of trees housed there.

The event will take place on Friday the 27th of August at 4pm in the afternoon, so if you would like to attend the event, please send a confirmation email with the names of any people attending to the Dur-

ham Veteran Trees Project Officer, Jesse Meredith at:

jessemeredith@durhambiodiversity.org.uk

Or call Rainton Meadows on:

0191 584 3112

See you there!

TELL US A STORY

“When I was a child, I remember my father taking me to watch him play football at the local working men’s club in Shipston-upon-Stour, Warwickshire. The football pitches back onto farmer’s fields, but in between the fields and the pitches was a small patch of woodland containing a few sycamores. One of these sycamores was absolutely huge—I’m sure it isn’t simply looking back as a child as at one point, there were three of us INSIDE the tree! - and my brother and I had taken to playing around, inside and up in the branches of this tree whilst waiting for my father to either get changed to start the match or collect his things before taking us home. This tree opened my eyes to the importance of trees and awakened my interest in them at a very young age, in fact, without the memory of this tree, I probably wouldn’t be the Veteran Trees Project Officer today!”

- **Jesse Meredith**

Durham Veteran Trees
Project Officer

Do you have any stories of your own that have particular personal importance or historical significance? They could be stories of trees that were planted in a Jubilee year, or planted in memory of a loved one, or perhaps you proposed to your partner under a tree. If so, the Veteran Trees Project would like to know. Not only was the Veteran Trees Project established to protect our big, old trees, but also to ensure that trees that are important to us that may not particularly be that old have the protection and maintenance necessary for them to one day become the veteran trees that are so vitally important today.

If you would like to tell us your story, please email them to the Veteran Trees Project Officer at:

jessemeredith@durhambiodiversity.org.uk

Or call Rainton Meadows on:

0191 584 3112

Or write a letter to:

**Rainton Meadows,
Chilton Moor,
Houghton-le-Spring,
Tyne & Wear,
DH4 6PU**

Any stories received have the chance of being written up onto the next newsletter as an article, so keep your eyes peeled for future publications with your names on them! Hopefully the trees that you tell the project about will be recognised as important, not just for biodiversity, but also for personal reasons and will receive the protection that they deserve, and who knows, maybe others will create their own ties to the trees in the future.

OUR RECENT TRAVELS...

The Veteran Trees Project covers not just the Durham area, but also Darlington, Gateshead, South Tyneside, Sunderland and the North Pennines AONB. The target is to find 1,000 trees from this area by the end of next year. Since Easter when the last newsletter was released, trees have been recorded in the following areas:

Witton Gilbert Dene

Flass Vale

Pelaw Wood

Durham Botanic Gardens

Darlington South Park

Chester-le-Street Riverside

Rainton Park Wood

Various woods off the A167

Lanchester woods (along A691)

Steelyhill Wood (Cornsay Colliery)

Woods at Pity Me

Woods at Shincliffe

Ivesley Equestrian Centre

Sockburn Hall, Darlington

If you would like to head out to woods with the Veteran Trees Project Officer, or have any suggested areas to be surveyed, please email Jesse Meredith on:

jessemeredith@durhambiodiversity.org.uk

Or call Rainton Meadows on:

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A large, hollow oak measured during the Witton Gilbert Volunteer Training Event