Slide 1

This presentation aims to highlight resources we and others have available to help local authorities with their community engagement, including: -

- free tree packs available to schools and communities,
- the Tree Equity tool – highlighting where the benefits from tree cover are particularly lacking,
- the Llais y Goedwig network that supports community tree and woodland groups and the CommuniTree tree nursery project, and
- citizen science projects including the ancient tree inventory

Slide 2

Coed Cadw – the Woodland Trust. We are a UK wide charity. Our strategic objectives focus on the protection and restoration of native trees and woodland, the expansion of native tree cover, and public engagement with trees and woodland.

WE have about 25 staff in Wales. About half of them are involved in managing our own estate, we have small landowner outreach team that advises farmers and other landowners on woodland creation and restoration, and a team that focuses on public engagement, communications, advocacy and campaigning.

Our organisation is not designed to deliver services to government or public sector, but we do seek to provide supporting advice and information.

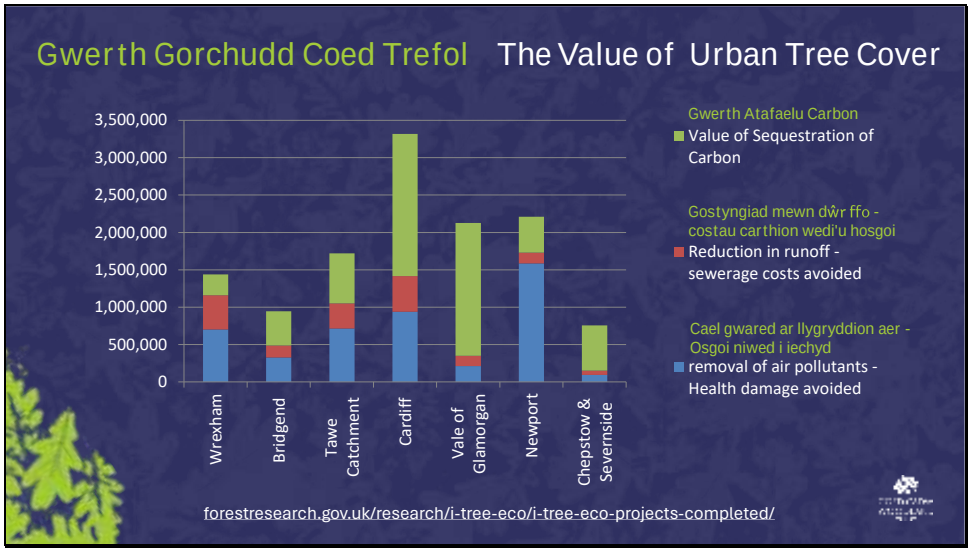
Slide 3

Trees and woodland deliver lots of benefits. Here are some of the many infographics that try to summarise them. This presentation doesn't aim to go through all of those but highlights some that particularly relate to well-being.

You can consider trees and woodland as means to many ends, rather than as an end in themselves. Local authority Tree and Woodland strategies ideally should be cross-cutting, organisation wide documents that reflect this full range of benefits. We suggest that a good place to fit them is within Well-being Plans.

https://www.woodlandtrust.org.uk/protecting-trees-and-woods/benefits-of-urban-trees/

Slide 4



There are now robust ways of putting a value on the benefits that urban trees provide. This chart covers carbon, flooding and air pollution benefits. The data comes from I-tree eco assessments that the Government agency Forest Research has carried out for some authorities in Wales. Similar measures are now included in the UK Natural Capital Accounts prepared by the Office for National Statistics.

It is possible now for a council to track some of the value of its tree and green space natural resource. If you are losing mature trees and greenspace that natural capital value will be going down. It is difficult and expensive to recover from that because the greatest value comes from mature trees and long-established habitats. New planting cannot compensate for their loss. This needs to be factored into the Biodiversity Net Benefit requirement that now applies to new development.

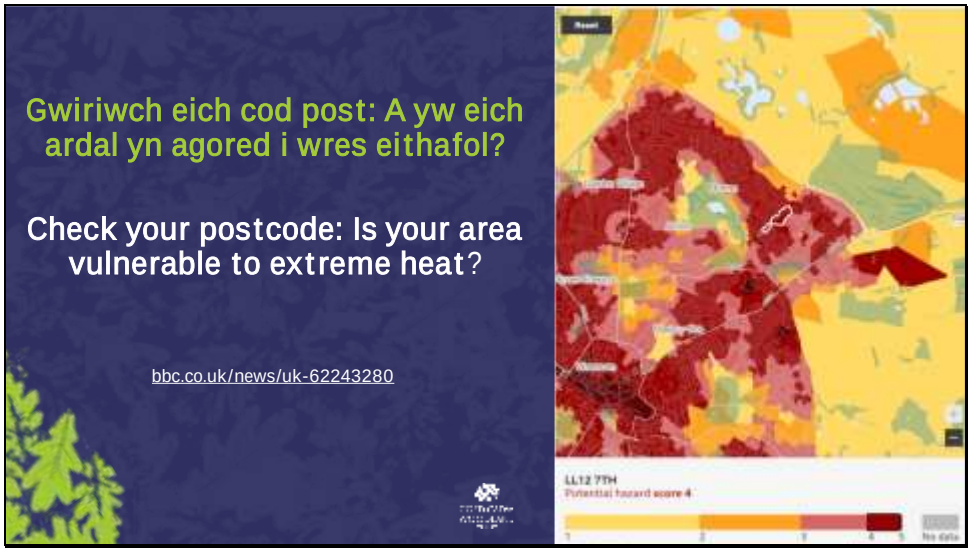
https://www.forestresearch.gov.uk/research/i-tree-eco/i-tree-eco-projects-completed/

Slide 5

Starting with some of the most directly obvious well-being benefits

- Trees provide direct shade from radiant heat for buildings and people, and reduce the ambient temperature through evaporative cooling.
- In Cardiff, we are experimenting with thermal imaging technology which directly measures the cooler temperatures under tree cover, providing comparisons such as this one illustrated on the right.
- A mature tree transpires up to 450 litres of moisture a day – equivalent to five room-sized air conditioners left on for 19 hours. https://www.divercitymag.be/en/planting-a-tree-in-the-city-replaces-five-air-conditioners/
- Research at the University of Manchester, using computer modelling, has shown how increasing urban green space by just 10% could mitigate for a 3°C rise in urban temperatures

Slide 6



The BBC has provided this handy free on-line tool that maps heat vulnerability. This map is covers part of the northern side of Wrexham

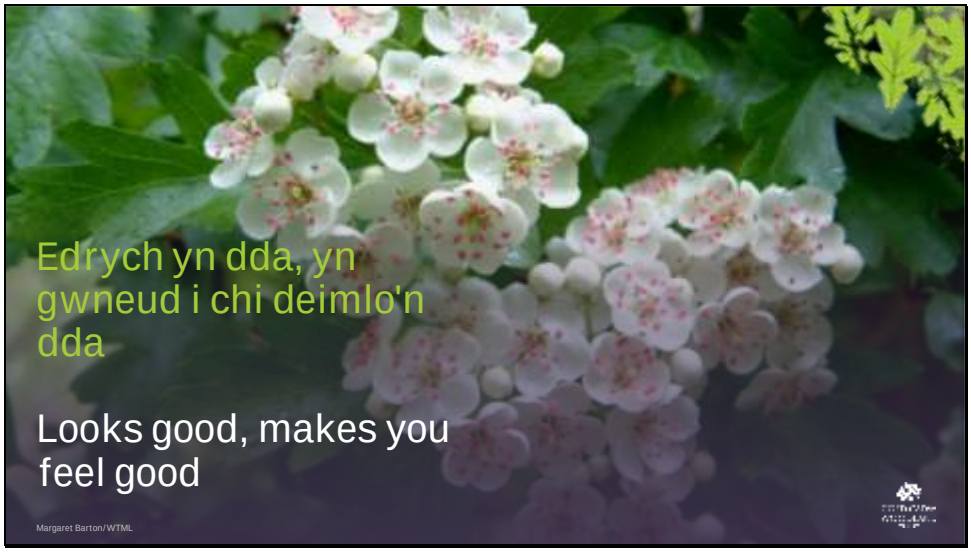
Slide 7

When houses had front gardens especially ones that included trees and hedges, they provided their own Sustainable Urban Drainage. Now that so many people have removed front gardens in favour of hard surface car parking, more flash flooding and water quality issues are inevitable. This is a good example of individual freedom of action combining to create an expensive community-wide problem.

Could you not use council tax discounts to incentivize the retention of front gardens? Does anyone know of any council that is doing this?

Major cities across the globe are searching for solutions to curb flooding damage. Urban trees have emerged as a natural and effective approach to enhancing stormwater management.
https://citygreen.com/how-urban-trees-prevent-flooding/

Slide 8



There is now a great deal of evidence on the physical and mental health value of having tree cover where people live.
Views of trees have been found to enhance mood, improve self esteem and lower blood pressure. They have a restorative and therapeutic effect on the mind & body, and views of trees and **hospital patients recover more quickly if they have a view of trees and nature from their windows.**

Accessible and comprehensive referenced evidence review:
1. Green Cities : Good Health.
http://depts.washington.edu/hhwb/Thm_StressPhysiology.html
"Research shows that nature experiences provide an antidote to stress and support general wellness, offering restorative experiences that ease the mind and heal the body"
"Passive experiences (such as views from a window or while walking nearby) of trees, parks, and gardens can effectively reduce stress.[31,32] This effect is increased if initial stress or anxiety levels are high.[33,34] For example, public housing residents with nearby trees and grass were more effective in coping with stressful major life issues compared to those with homes surrounded by concrete.[35]

2. The benefits to people of trees outside woods (TOWs). Report for the Woodland Trust. Natural Capital Solutions. Rouquette, J.R. and Holt, A.R. (2017). Woodland Trust Research Report
"*Short-term physical benefits of trees have been measured simply through sitting in a room with tree views, which promoted more rapid decline in blood pressure following a stressful activity than sitting in a room with no view (Hartig et al. 2003). The benefits of a view of trees extend to hospital settings, where Ulrich (1984), in a now classic paper found that after*

surgery, patients with a room with views of trees recovered quicker and required fewer painkillers than those with no view of trees."

3. Health Benefits from Nature Experiences Depend on Dose
Danielle F. Shanahan1, Robert Bush2, Kevin J. Gaston3, Brenda B. Lin4, Julie Dean5,Elizabeth Barber2 & Richard A. Fuller1. Nature.com/scientificreeports 23 June 2016
https://www.nature.com/articles/srep28551.pdf
"We show that people who made long visits to green spaces had lower rates of depression and high blood pressure, and those who visited more frequently had greater social cohesion. Higher levels of physical activity were linked to both duration and frequency of green space visits. A dose-response analysis for depression and high blood pressure suggest that visits to outdoor green spaces of 30 minutes or more during the course of a week could reduce the population prevalence of these illnesses by up to 7% and 9% respectively."

4. For a thorough review, recommendations and a comprehensive literature review see:
BRAGG, R., ATKINS, G. 2016. **A review of nature-based interventions for mental health care**. Natural England Commissioned Reports, Number204. 113 pp and
BRAGG, R. and LECK, C. ***Good practice in social prescribing for mental health: The role of nature-based interventions***. Natural England Commissioned Reports, Number 228. York.

5. Wolf et al 2020. Urban Trees and Human Health: A Scoping Review Int J Environ Res Public Health. 2020 Jun; 17(12): 4371.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7345658/
PMCID: PMC7345658
PMID: 32570770

Slide 9

And lastly – the economic benefits…
Having attractive neighbourhoods, with lots of green space and tree cover has direct economic benefits. These can be expressed through higher property prices, and greater attractiveness as a destination – for tourism or just for shopping; and for inward investment. Several local authorities are now using this argument to gain competitive advantage in attracting inward investment.
https://www.warwickdc.gov.uk/info/20323/trees/577/the_benefits_of_urban_trees
https://www.cambridge.gov.uk/media/3263/why-trees-matter.pdf
http://www.coventry.gov.uk/info/67/nature_and_conservation/493/tree_management/2
https://www.north-ayrshire.gov.uk/Documents/CorporateServices/LegalProtective/Planning/tree-woodlands-policy.pdf

Industrial areas and employment sites with access to natural green space can have more productive employees, with greater job satisfaction too.

Several studies have also shown investing in green space and tree planting increases property and land values and encourages further investment51. Others indicate buyers are willing to pay more for views of trees and the natural environment
1. The economic benefits of woodland. Europe Economics (2015) Report for the Woodland Trust
2. Economic benefits of greenspace: A critical assessment of evidence of net economic benefits. Saraev, V. (2012) Forest Research Report to the Forestry Commission

For summary and evidence review article on trees and property prices see:

3. https://depts.washington.edu/hhwb/Thm_Economics.html

4. The presence of larger trees in yards and as street trees can add from 3% to 15% to home values throughout neighborhoods
Wolf, K.L. 2007 (August). City Trees and Property Values. Arborist News 16, 4:34-36

5. Business District Streetscapes, Trees and Consumer Response. Wolf, K.L. 2005. Journal of Forestry 103, 8:396-400
Shoppers claim that they will spend 9% to 12% more for goods and services in central business districts having high quality tree canopy.
Shoppers indicate that they will travel greater distance and a longer time to visit a district having high quality trees, and spend more time there once they arrive.

6. The Impact of Mature Trees on House Values and on Residential Location Choices in Quebec City
Marius Thériault, Yan Kestens and François Des Rosiers
http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.645.7277&rep=rep1&type=pdf

7. The contribution of trees to residential property values, DJ Morales, Journal of Arboriculture Volume 6, NO 11 (1983)
City trees have been shown to have the potential to raise property prices by between 5 and 18% by a series of international studies."

8. The economic benefits of parks and open space: how conservation helps communities grow smart and protect the bottom line —S Lerner , and W Poole , (1999)
"Between 1988 and 1996 in Chattanooga, Tennessee, new parks, greenways and street trees have injected an estimated $500m into the city through encouraging inward investment."

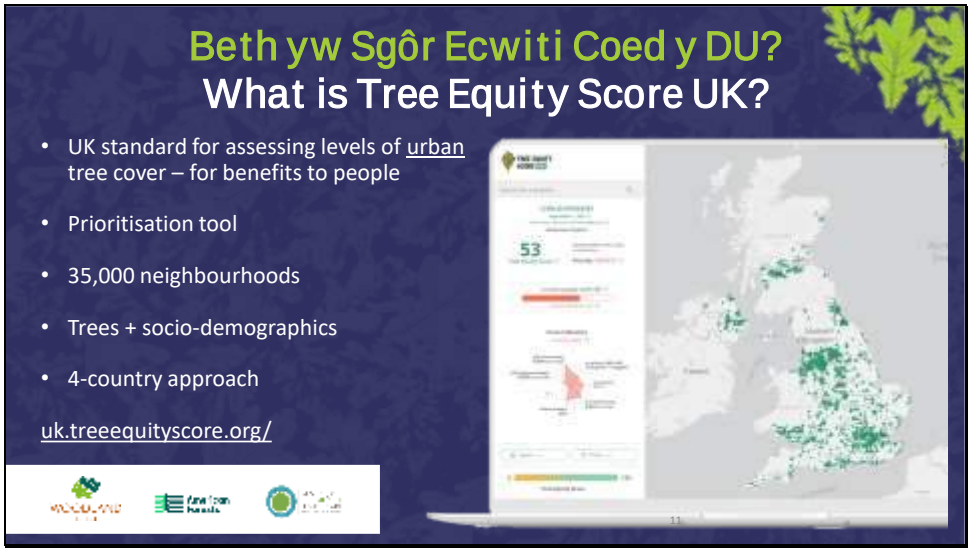
9. The good news for gardeners is that most healthy, mature trees will add value to a property. As social-scientist Kathleen Wolf points out in an article for Arborist News, **'homes with trees are generally preferred to comparable homes without trees, with the trend across studies being a price increase of about 7%.**
https://www.homesandgardens.com/news/trees-that-increase-property-value

Slide 10

Tree equity is the idea that all communities should have equitable access to the benefits of trees where they live. While some urban areas enjoy abundant greenery and tree cover, others lack these essential natural assets.

https://www.woodlandtrust.org.uk/protecting-trees-and-woods/benefits-of-urban-trees/tree-equity/

Slide 11



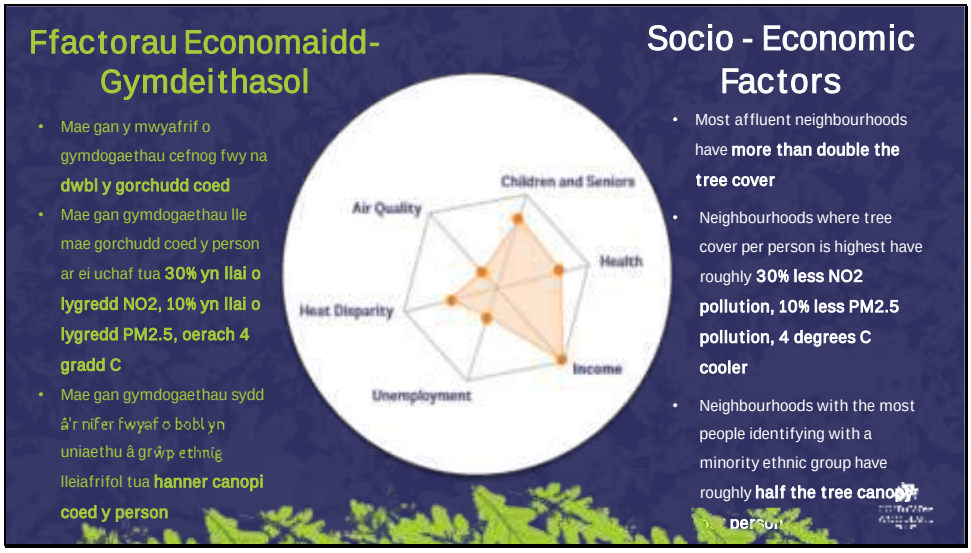
Is there tree equity in your communities? The Woodland Trust and Centre for Sustainable Healthcare have partnered with American Forests, the US non-profit organisation that created Tree Equity Score. This free UK wide tool calculates a Tree Equity Score out of 100 for urban neighbourhoods. The lower the score, the greater the need for trees – a score of 100 means tree equity has been achieved.

It is a tool to help target and prioritize interventions to where they will deliver the most benefits – and it also gives you free access to Google tree canopy mapping.

https://uk.treeequityscore.org/

There is a presentation on how the Tree Equity Score works and how to use it recorded by the Wales Green Infrastructure Forum
Webinar: - https://www.youtube.com/watch?v=7k5Kw7BP4C4
Discussion - https://www.youtube.com/watch?v=qn4Pvj_nnF4

Slide 12



This isn't just tree canopy mapping. In calculating the score there is an adjustment for socio-economic factors to highlight where additional tree cover will deliver the greatest benefits

Slide 13

The Woodland Trust gives away hundreds of thousands of free trees to schools and communities every year

We make two deliveries a year, in March and November. We're currently taking applications for tree packs to be delivered in November 2024. Applications for November delivery are expected to close in August, or sooner depending on stock availability.

We provide a lot of on-line guidance on planting and caring for those trees, and a Tree Tools for Schools resource pack, but we cannot provide direct on-the-ground support – if this is something you can do, that would be a good way of adding value to this scheme.

https://www.woodlandtrust.org.uk/plant-trees/schools-and-communities/

Our free tree packs have been generously funded by lead partners Sainsbury's, Lloyds Bank, OVO, Bank of Scotland and Sofology

Slide 14

Llais y Goedwig is an independent grassroots community woodland network for Wales. It currently has more than 100 member groups, as indicated in the map on the right. It has two aims

- To promote and represent community woodland groups in Wales.
- To provide assistance and support to local community woodland groups and initiatives.

Community groups in your area that have direct involvement in looking after trees and woodland can join the network
https://llaisygoedwig.org.uk/the-network/

One of the projects they run is to support the development of local community tree nurseries across Wales.
Has your authority considered how local community tree nurseries can help your authority with sourcing and handling of trees and engaging communities in tree planting and aftercare? An example is the relationship between the Coeden Fach tree nursery and Swansea Council – there is a link in the notes
https://democracy.swansea.gov.uk/documents/s69800/07A%20-%20Annual%20Review%20of%20Performance%202019-20%20-%20Extract.pdf

Slide 15

The Ancient Tree Inventory is a volunteer-based citizen science project that covers the whole of the UK. https://ati.woodlandtrust.org.uk/
You can look up the data base to see what ancient trees are mapped in your area, and anyone can put forward details of a tree to be included in the database. Those will be subject to verification before being added to the database. This database is by no means complete and we greatly welcome whatever you can do to promote further recording.

Some other citizen science initiatives which provide opportunities for engaging with people : -
Nature's Calendar – recording the timing of seasonal events
https://naturescalendar.woodlandtrust.org.uk

- Help us track the effects of weather and climate change on wildlife near you
- What effect has recent weather had on wildlife? Does climate change affect timings in nature? Join Nature's Calendar and help scientists discover answers to these questions.
- Records the timing of events such as leaf buds bursting and blackberries ripening.
- The data is managed by scientists at CEH and contributes to a long biological record that dates back as far as 1736.

The ObservaTree project aims to protect UK trees, woods and forests from existing or new pests and diseases. This citizen science project involves 200 specially trained volunteers, but anyone can raise a concern and submit a report of a tree health problem through the linked Tree Alert website run by Forest Research.
https://www.observatree.org.uk/
https://treealert.forestresearch.gov.uk/

Slide 16

Our “Tree Tests” document sets out, in some detail, our suggestions for what local development plans and tree and woodland strategies and associated documents should say about trees and woodland.

Slide 17

Wrexham council have put public engagement at the heart of their tree and woodland strategy

- On the left is the 2023 Tree of the Year – an ancient sweet chestnut in Acton Park in Wrexham
- On the right is their Tree and Woodland Pledge which they have developed as a demonstration of our commitment to increasing tree canopy cover, and protecting existing woodland across the county borough.

https://www.wrexham.gov.uk/service/wrexham-woodland-pledge/tree-and-woodland-pledge

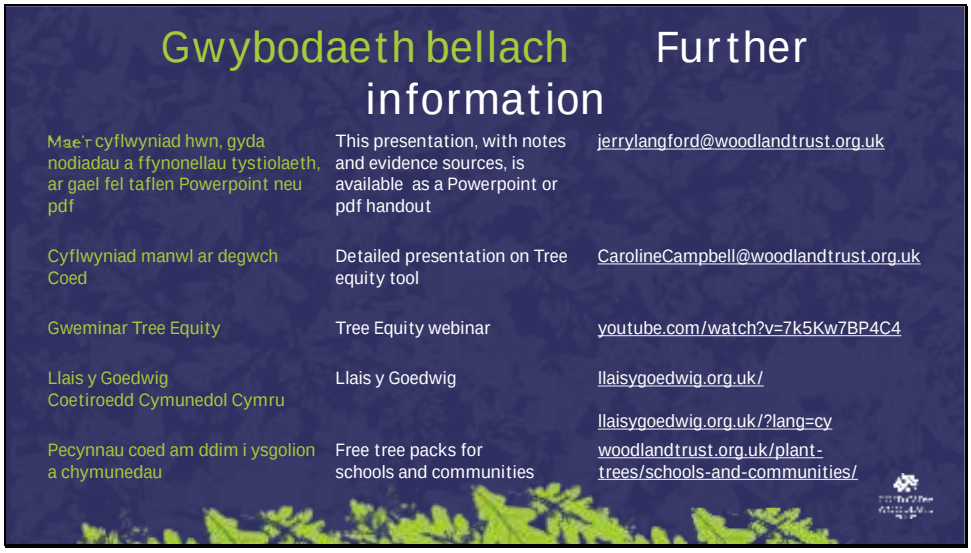
Slide 18

Wrexham council have put public engagement at the heart of their tree and woodland strategy

- On the left is the 2023 Tree of the Year – an ancient sweet chestnut in Acton Park in Wrexham
- On the right is their Tree and Woodland Pledge which they have developed as a demonstration of our commitment to increasing tree canopy cover, and protecting existing woodland across the county borough.

https://www.wrexham.gov.uk/service/wrexham-woodland-pledge/tree-and-woodland-pledge

Slide 19


Gwybodaeth bellach
Further information
Mae'r cyflwyniad hwn, gyda nodiadau a ffynonellau tystiolaeth, ar gael fel taflen Powerpoint neu pdf
This presentation, with notes and evidence sources, is available as a Powerpoint or pdf handout
jerrylangford@woodlandtrust.org.uk
Cyflwyniad manwl ar degwch Coed
Detailed presentation on Tree equity tool
CarolineCampbell@woodlandtrust.org.uk
Gweminar Tree Equity
Tree Equity webinar
youtube.com/watch?v=7k5Kw7BP4C4
Llais y Goedwig Coetiroedd Cymunedol Cymru
Llais y Goedwig
llaisygoedwig.org.uk/
llaisygoedwig.org.uk/?lang=cy
Pecynnau coed am ddim i ysgolion a chymunedau
Free tree packs for schools and communities
woodlandtrust.org.uk/plant-trees/schools-and-communities/

Slide 20

Diolch
am wrando
Heb glywed digon?
Gallaf ddweud mwy wrthych
Thank you
for listening
Not heard enough?
I can tell you more
JerryLangford@woodlandtrust.org.uk
COED CADW
WOODLAND
TRUST