Tree and Woodland Strategy

Cheshire West and Chester

Table of Contents

1. Executive summary

Trees and woodlands in Cheshire West and Chester help to create a quality of place and life that attracts people to live, study, visit and work in the area. As part of our green infrastructure, trees provide the backdrop for our towns and city. Our trees and woodlands are an essential feature of the Cheshire landscape with the 'story of the place' intimately linked to the historic forests of Modrum and Mora that once covered the area.

At a national level, there is increased focus and attention on trees and woodlands. The government's 25 Year Plan for the Environment aims improve the quality of our natural environment. This includes support for increased urban tree cover, a national tree champion and support for a "Northern Forest", which includes Cheshire West and Chester. There is strong support for Community Forests in the 25 Year Plan too.

Trees are an important asset. Trees and woodlands set the scene for economic development. They help underpin property prices, adding between 8 and 15% to house prices. The borough's trees and woodlands are part of our ecological networks, a vital recreational resource, helping to reduce air pollution, and are a valuable asset for improving health and wellbeing. They contribute to reduce flood risk and are a carbon sink, a sustainable fuel resource for local use.

Cheshire West and Chester Council owns over 500 hectares (ha) of woodland and approximately 28,000 trees.[1] Using the Green Infrastructure Valuation Toolkit, the economic value of the woodland and trees owned by the council is over £7bn. - a significant asset for the borough.

In terms of health and safety, trees are a "low risk/high impact" asset. The chance of any one tree causing a fatality is 150 million to 1, whereas the risk from a car is 17,000 to 1. Delivering the recommendations set out in Cheshire West and Chester's Tree and Woodland Strategy can help to minimise the risk to people and property and safeguard the wide range of benefits provided.

On average, the council receives 12 tree-related insurance claims per year. Having a robust assessment and tree management programme continues to be a critical response to claims[2].

This strategy sets out how the council manages its trees and woodlands, to continue to provide the wide range of benefits to communities and manage the risks to the council.

Management of the tree and woodland assets must take into account a wide variety of factors, including:

---

[1] Estimated from previous survey
[2] Based on data from Insurance Accounting for period 2009-13

- increasing levels of litigation across society
- changing climate
- pressures on budgets
- changing demands from communities.

This strategy has four themes:

1. Manage trees and woodlands safely
2. Set standards by which all trees and woodland in Cheshire West and Cheshire ownership will be managed
3. Raise awareness of the value of trees as part of our green infrastructure through consultation, education, and participation
4. Maximise the use of trees and woodlands as a resource to tackle issues across the council's priorities.

The Strategy also sets out how trees and woodlands outside its ownership are protected and where new woodland as part of Mersey Forest and Northern Forest can be created with the involvement of local communities.

This strategy identifies 20 actions across these four themes. Included in this, is the development of a single database for all council owned trees, development of consistent risk-based assessments and management cycles of the trees belonging to the council, delivery of The Mersey Forest Plan and exploration of new ways to generate income to secure the long-term management of Cheshire West and Chester's trees and woodlands.

The strategy helps to achieve the council's corporate plan, playing its role in helping the borough to thrive.

2. Introduction

Trees and woodlands are a vital component of the landscape of Cheshire West and Chester and are a critical part of the green infrastructure that provides a wealth of social, economic and environmental benefits for people in the area.

Cheshire West and Chester Council owns and manages over 500ha of woodland as well as 28,000 trees outside of woodlands. The trees and woodlands are spread across the borough, in both urban and rural areas. In managing these assets, the council has responsibilities to:

- Manage tree and woodland assets sustainably
- Ensure efficiency of commissioning and service delivery
- Maximise benefits to the community
- Reduce risk of accidents leading to litigation to the council.

In addition, the council has a responsibility for managing trees within the law, managing Tree Preservation Orders (TPOs), trees in conservation areas and within the planning system. The location of Cheshire West and Chester's TPOs and conservation areas can be found on the council's website[3].

The tree and woodland assets owned by the council bring a broad range of benefits to our communities, including sustaining property value, safeguarding against flooding, reducing air pollution and providing jobs and opportunities for business development. There is an ever-increasing evidence base to support the role that trees and woodlands play in sustaining and promoting good health.

This strategy brings together information and expertise from across the council to make use of the latest guidance and policy, and to direct actions and investment to meet these responsibilities. The strategy aims to maximise the benefits from having healthy, sustainably managed tree and woodland assets.

The strategy should also influence policy and promote the sustainable management of trees and woodlands in Cheshire West and Chester that are outside of the council's direct ownership. The Mersey Forest and Northern Forest are important mechanisms, supported by the local authority, to support and enable creation and management of woodland and trees outside woodlands.

---

[3] https://maps.cheshirewestandchester.gov.uk/cwac/webmapping

3. Cheshire West and Chester's Corporate Plan 2016-2020

Cheshire West and Chester's Corporate Plan 2016-2020 sets out the council's ambitions for a "thriving" borough. The Plan has ten objectives, based on priorities for thriving communities, residents and economy.

Figure 1: Cheshire West and Chester's corporate plan THRIVE wheel

The Tree and Woodland strategy helps to deliver several of these objectives:

Corporate Plan Objective	Contribution of the Tree and Woodland Strategy
Cleanest, safest and most sustainable neighbourhoods in the country	Well managed trees and woodlands in our neighbourhoods help to create sustainable places to live and support quality of place and quality of life. A clear statement of management priorities ensures residents are informed about management regimes for trees and woodlands.
Vibrant and healthy communities, with inclusive leisure, heritage, and culture.	Trees and woodlands provide a wide range of health benefits, from filtering air pollution to providing places for leisure and recreation.
Our resources are well managed and reflect the priorities of our residents	Trees and woodland are a major asset for the Authority which, if well managed, can yield a wide range of benefits for communities, residents, and businesses.
A well connected and accessible borough	Woodlands provide some of the most popular places for recreation in the borough and are key notes in the active travel network.
A great place to do business	The quality of place is an important influence on inward investment. Management of woodlands supports a range of businesses and helps to deliver low carbon energy, reducing the council's carbon footprint.
All our families, children and young people are supported to get the best start in life	Using woodlands for education and health programmes has been shown to reduce inequalities.

4. Trees and woodlands in Cheshire West and Chester

The latest National Inventory of Woodland shows that woodland cover across the borough is 4%. This is well below the national average of 10%, and the latest DEFRA Forest Policy sets a 12% woodland cover target. In 1992, Richard Smart published his account of the history of trees in the Cheshire Landscape. This focused primarily on woodland.

The story of Cheshire's woodlands is not unlike that of many other parts of the country. From extensive tree cover in Anglo-Saxon times, clearance for cultivation, at first focused along the river valley and the lighter soils overlaying the sand and gravel deposits in the area reduced woodland cover. The creation of Royal Forests for hunting introduced draconian laws on the protection of the forest. However, a mosaic of forest and open land, with settlements reliant on grazing and produce from the forest scattered across the landscape evolved and has left its mark on the landscape that we see today.

Clearance of woodland from the landscape continued up to the time of depopulation of the country caused by the Black Death. Once normality had returned, timber for houses and then shipbuilding was in considerable demand, with strict controls put in place in the 15th Century to regulate the volume harvested.

The next phase of woodland development came in the 17th and 18th centuries, with the development of the landscape movement, with increasing prosperity creating the opportunity for large scale change, including to the woodland area. Field sports also became more popular, creating another role for the woodland.

The First World War saw many areas of woodland lost to provide timber for the war effort. The Second World War brought the same fate to those woodlands too young for felling 20 years previously. The landscape of the area was altered dramatically by this large-scale harvesting.

Subsequently, many of these felled areas regenerated, but are often dominated by sycamore and have not yet regained the quality and mix of tree species that would have been seen previously.

Post-war focus on agricultural productivity not only reduced the number and length of hedgerows (see below, 'Trees outside woodland'), but also reduced the area of woodland and increased its fragmentation.

In the past 20 years, policy at the national level has focused on improving the quality of the existing woodland and targeted increase in woodland in other areas.

Ancient woodland, the possible remnants of the historic woodland cover, are also a key priority for protection, improvement and, where possible, expansion. These woodlands

provide a rich biodiversity resource and are important hubs in the ecological framework of the area.

In the early 1990s, Cheshire County Council was the lead council in establishing England's largest Community Forest - The Mersey Forest. This initiative is focused on the north of the area, the area with lowest tree cover. Since 1994, woodland cover in this part of Cheshire West and Chester has increased by 80%.

In 2018, The Mersey Forest Team along with Woodland Trust and other Community Forests across the M62 Corridor announced plans for joined up activity to plant an additional 50million trees in and around the Community Forests over the next 25 years to create a Northern Forest.

Figure 2 Northern Forest

Trees outside woodland

Whilst there is a great deal of historical information about woodland development, there is very little evidence that we can use to create a narrative for the development of those trees we find in and around towns and cities, and those scattered as single trees or small groups across the landscape.

The importance of hedgerow trees in the Cheshire landscape is highlighted in the National Landscape Character Assessment for Cheshire.

Many hedgerow trees have been removed since the 1950s, as the drive to increase agricultural production increased the grubbing out of hedgerow. The management of hedgerows with machinery often now prevents trees from emerging from within the hedge, and we are left with a declining hedgerow tree population.

One of the reasons for the lack of information is that these trees were often 'left over' after cultivation in historic times, or more recently added as part of 'landscaping' provided for new development as towns in Cheshire West and the City of Chester developed.

We have identified seven broad categories for these trees outside of woodland:

Trees in the rural landscape – these are often hedgerow trees that are a characteristic feature of the Cheshire West and Chester landscape. Cheshire has a rich cultural legacy of orchards. These continue to be planted by communities and community groups have been set up to manage several existing small-scale orchards.

Trees along main roads – these are often part of the hedgerow tree category, but often trees have been planted as part of the landscape improvements along new roads. Trees within falling distance of the road qualify in this category.

Street trees – (not main roads) often are planted as part of the landscaping of new development. It is interesting to note the difference in tree cover between the old City of Chester, with extremely low tree cover, and some of the suburban developments, with much higher levels, perhaps inspired by the garden city movement. Street trees historically have been large trees. More recently, there has been a trend to plant smaller trees that will not have the same long-term visual impact, nor provide the range of benefits that larger trees do.

Parkland trees – these may be remnants of historic landscape schemes or planted as part of the development of parks as the green lungs for towns and cities from the 1840s.

Garden trees – planted or self-seeded, these also provide a large population of trees outside woodland.

Trees on institutional land/corporate – schools and hospitals and the wider Local Authority estate often have trees within their grounds.

Trees in and around playgrounds/areas – in some areas trees may form part of the play infrastructure and provide support for rope swings and zip wires. These facilities are an important asset. These trees are identified as a specific category because they need to have both playground and tree safety inspections.

Commemorative trees – whilst these may fall into other categories, it is worth highlighting that trees are often planted to commemorate people and events and have a special place in the culture of local communities and for individuals.

Ancient and veteran trees – In a similar way, ancient and veteran trees could be found in any of the categories described above. Britain has a high proportion of Europe's ancient and veteran trees. They are essential elements of many landscapes, provide a rich habitat for many species and are of cultural significace for Cheshire West and Chester[4].

There are many overlaps in these categories, but they provide a framework for the strategy and helpfully shape the assessment and management regimes for the council.

---

[4] Link to a mao showing locations of identified ancient and veteran trees http://www.ancient-tree-hunt.org.uk/project

5. Benefits of trees and woodlands

Trees and woodlands provide a broad range of benefits for people, wildlife and the economy. Some of these are highlighted below. More detailed information can be found on the Forestry and Planning Hub website, a link for which can be found on the consultation web page.

The economy and tourism: New planting and woodland management makes a significant contribution to strengthening the economy by creating attractive settings for housing and business, enhancing transport corridors and gateways, enhancing tourist settings and creating new visitor attractions such as the Forest Parks and facilitating landscape enhancement as part of economic development initiatives.

Wood fuel, timber and forest industries: Local production and consumption of traditional and innovative products can support the transition to a low carbon economy and local jobs.

Wildlife, biodiversity and ecosystems: Existing woodland is an important element of the ecological network across Cheshire West and Chester. Ancient woodland, in particular, provides a rich resource for biodiversity. Appropriate management of existing woodland can enhance biodiversity.

Climate change: Trees and woodland play an important role in helping us to adapt to projected climate change, such as providing urban cooling, carbon storage, flood alleviation and water management, helping wildlife adapt, low carbon fuels and products, sustainable travel routes, and outdoor recreation opportunities.

Flood alleviation and water management: Trees and woodland management and planting can contribute to Water Framework Directive objectives, helping reduce river and surface water flooding, which is particularly important in a changing climate, and maintain water quantity and quality. The Forest and Water guidance in the UKFS helps to direct management to achieve this objective.

Access, recreation and sustainable travel: Creating publicly accessible woodland, improving access to and within woodlands, creating multi-use greenways, linking town and country, and using tree lined streets to complement rights of way.

Health and wellbeing: There is now a wealth of evidence to support the importance of trees and woodlands in helping to improve our physical and mental wellbeing. This includes providing places of quiet and contact with nature, to reducing air pollution and reducing the speed of cars along tree lined routes through to encouraging active travel and more active lifestyles.

Natural Play and Education: Similarly there is now a wealth of evidence to confirm that children thrive when involved in natural play and education (such as Forest Schools). This

benefit is most pronounced for those children who perform less well in formal or classroom-based activity or learning.

Life-long learning, training, skills and jobs: Cheshire West and Chester woodlands can deliver a wide range of opportunities for training and skills development. This can be through volunteering, providing training to those involved in the funding, planting, use and management of trees, woodlands and associated habitats, and can generate local employment through woodland production, management, timber products and marketing.

Culture, landscape, and heritage: Trees and woodland are an important part of the culture, landscape and heritage of Cheshire West and Chester. The character of the area and its historical development has a strong thread associated with trees and woodland. Large areas such as Delamere and Northwich now play a major role in the cultural offer of the area.

Empowering communities: Trees and woodlands have been shown to be an effective way to engage communities and individuals. This leads to local improvements, a feeling of ownership, making contact with new people and building social capital in communities. For some this also develops into greater commitment to long-term stewardship and even ownership.

6. Why a tree and woodland strategy is needed

Trees and woodlands provide a broad range of benefits to communities. As with any asset owned by the council, having a clear and broadly understood strategy enables the desired benefits to be achieved, within constrained budgets and limits the scale of the problems that may arise.

Inevitably, the council also has to deal with complaints about issues related to trees, which can often be time-consuming. A clear strategy, with supporting policy and guidance, provides a clear and consistent framework to respond to any complaints.

Having a standard approach across departments and ownerships supports the move by the council to locality working and enables local decisions to be made about commissioning or contracting additional local management to provide extra benefits to communities.

This strategy allows Cheshire West and Chester Council to:

- establish a consistent approach to trees and woodlands across localities and services
- enable more efficient commissioning and service delivery
- reduce risks to the council
- maximise the benefits delivered to the community by the tree and woodland resource
- support a robust planning policy in relation to trees and woodland
- deliver The Mersey Forest Plan
- develop a single database to store data on a range of attributes of the council's trees and woodlands
- continue to improve standards of management
- provide the basis for proposals for additional investment and bidding for, and influence of, external resources.

A new Tree Strategy Group has been set up as this Strategy has developed. This cross departmental Group will oversee the delivery of the key actions identified to deliver this Strategy.

In addition, this Strategy identifies how trees and woodland outside of the council's ownership are protected and managed through the planning system and other regulations. The Mersey Forest Plan and Northern Forest set targets and objectives for woodland management and creation across all landownerships, not just the local authority.

7.   Litigation/claims

A key consideration in developing the strategy is the cost to the council of litigation associated with trees. In the UK, five to six people a year are killed by falling trees. The risk of death from a falling tree is around 1:20 million. The risk per tree of causing a fatality is 1:10 million for trees in public places.

Over the past five years, the cost per year to Cheshire West and Chester from claims associated with trees and woodlands has on average been around £3,000.

Cheshire West and Chester Council is required to 'take reasonable care to avoid acts or omissions that cause a reasonably foreseeable risk of injury to persons or property'. In practical terms, this indicates that trees need to be inspected periodically by a competent person. Targeting of inspections to areas of greatest risk can help to make best use of the time and budget available[5].

Implementation of a tree and woodland strategy demonstrates that the council is managing its woodland and tree assets responsibly, taking measures to reduce the risk and therefore reducing the likelihood of successful claims against the council.

[5] Extracts taken from Trees in the Townscape -A Guide for Decision Makers

8.   Policy Framework

25 Year Plan for the Environment – a Green Future[6]

This government plan, launched in January 2018, sets a goal to hand on to the next generation an environment that is of better quality than that which we have today.

The approach is underpinned by a commitment to increasing natural capital, the stock of natural environment assets that deliver the types of benefits described in section 5 above.

Trees and woodland feature prominently in the Plan. Including Increasing woodland in England in line with the government aspiration of 12% cover by 2060 and Focusing on woodland to maximise its many benefits;

i. Supporting the development of a new Northern Forest

ii. Supporting larger scale woodland creation

iii. Appointing a national Tree Champion

Trees and woodland will also form part of a planned "Nature Recovery Network"

There are plans for 1m additional urban trees and the role of community Forests is strongly supported in the Plan, in particular for engaging people with nature and supporting health and education programmes.

Circular 36/78 Trees and Forestry

This document consolidates advice on trees and forestry and the preservation of trees and woodlands. The document:

- enshrines Local Authority powers to plant and protect trees and a duty to make provision for them when granting planning permissions
- advises on the treatment of trees and forestry in plans and on staffing for, and public involvement in, proposals relating to trees
- describes the purpose and scope of Tree Preservation Orders.

DEFRA Forest Policy

DEFRA published its latest Forestry and Woodlands Policy Statement in March 2013, a link for which can be found on the consultation web page. This also incorporated its response to the Independent Panel on Forestry. It affirms the Government commitment to protecting trees, woods and forests - improving resilience of the resource and increasing the contribution that they can make to economic growth and expanding them

---

[6] https://www.gov.uk/government/publications/25-year-environment-plan

to increase further their economic, social and environmental value. The policy calls for the development of a 'wood culture', increasing awareness of the role trees and woodlands play in our lives, and encouraging greater entrepreneurship in making use of our tree and woodland assets.

There is also encouragement within the policy statement for councils to make use of provisions within the planning system to achieve these goals. A planning and forestry network, called for in the policy, has been set up. More information can be found on the Forestry and Planning Hub website, a link for which can be found on the consultation web page.

UK Forestry Standard

The UK Forestry Standard sets out the criteria and standards for the sustainable management of all forests and woodlands in the UK, a link for which can be found on the consultation web page. The Forestry Commission employs the Standard in the management of its own forests, and private forests receiving grant aid have to be managed in accordance with the Standard.

Eight areas of activity are covered by the Standard.

- General forest practice
- Biodiversity
- Climate change
- Historic environment
- Landscape
- People
- Soil
- Water.

National Planning Policy Framework

The National Planning Policy Framework, a link for which can be found on the consultation web page, reinforces the importance of sustainable development. This plan demonstrates its contribution not only to the environment, but to the economy and social agendas, in particular, health. In addition, the Framework states that an 'approved community forest plan may be a material consideration in preparing development plans and in deciding planning applications'.

Guidance on issues such as the management of trees and woodland and the use of Tree Preservation Orders is available on the Planning Portal website, a link to which can be found on the consultation web page.

The Natural Environment White Paper

'The Natural Choice: Securing the Value of Nature', published in 2011, recognises that a healthy, properly functioning natural environment is the foundation of sustained economic growth, prospering communities and personal wellbeing. It aims to mainstream the value of nature across our society, including across government departments.

Biodiversity 2020

A strategy for England's wildlife and ecosystem services, published in 2011, has as its mission to halt overall biodiversity loss, support healthy well-functioning ecosystems, and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people.

In line with the UK Forest Standard Guidelines, conservation of biodiversity should be an essential part of Cheshire West and Chester's Tree and Woodland Strategy. Biodiverse woodlands and urban forests are not only more resilient to a range of external factors such as pest and diseases and climate change but provide a wider range of green infrastructure benefits.

The Natural Environment and Rural Communities (NERC) Act came into force on 1st October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act.

Localism

The Localism Act has placed a greater emphasis on the sub-national, local and neighbourhood levels' role in planning and in the decisions about designations of local green spaces, including woodland, for community use.

Tree and Design Action Group

The Tree and Design Action Group (TDAG) was formed in 2007 to increase awareness of the role of trees in the built environment. TDAG has published two guides that provide an excellent resource for the management of urban trees – these can be found on the TDAG website, a link for which can be found on the consultation web page.

'Trees in the Townscape' sets out 12 best practice principles and provides 34 case studies to support best practice. When developing this strategy, we have tried to follow these 12 principles.

'Trees in Hard Landscapes' provides practical guidance on how to overcome the challenges for integrating trees in 21st century streets. Where possible, this guide should be used to support the Cheshire West and Chester Trees and Woodland Strategy to ensure that latest and best practice is used to maximise the value from urban trees.

Local

Cheshire West and Chester Local Plan

The Local Plan for Cheshire West and Chester sets out the vision for sustainable development in the borough.

The Plan (Part one) has two main environmental policies that support delivery of the Tree and Woodland Strategy.

Policy	Policy Title	Policy wording
Env 3	Green Infrastructure	The Local Plan will support the creation, enhancement, protection and management of a network of high quality multi-functional Green Infrastructure. This will be achieved by: • Development incorporating new and/or enhanced Green Infrastructure of an appropriate type, standard and size or contributing to alternative provision elsewhere. Increased planting of trees and woodlands, particularly in urban areas and the urban fringe.
Env 4	Biodiversity and Geodiversity	The Local Plan will safeguard and enhance biodiversity and geodiversity through the identification and protection of sites and/or features of international, national and local importance. Sites will be protected from loss or damage taking account of: • The hierarchy of designations of international, national and local importance • The irreplaceability of habitats, sites and/or features and contribution to the borough's ecological network of sites and features • Impact on priority habitats and protected/priority species Development should not result in any net loss of natural assets and should seek to provide net gains. Where there is unavoidable loss or damage to habitats, sites or features because of exceptional overriding circumstances, mitigation and compensation will be required to ensure there is no net loss of environmental value.

Part two of the Local Plan has a specific Trees, woodlands and hedgerow policy (DM45)

"In line with Local Plan (Part One) policies ENV 3 and ENV 4, development will be supported where it conserves, manages and, wherever possible, enhances existing trees, woodlands, traditional orchards, and hedgerows. All significant healthy trees, woodlands, traditional orchards, and hedgerows should be integrated into the development scheme. Where possible, existing significant trees should be incorporated within public open space.

Where it is demonstrated to the satisfaction of the Council that integration is not possible and the above assets would be lost, development proposals must:

1. include replacement trees, woodlands and hedgerows within the site, or where this can be demonstrated to not be practical, contribute to off-site provision, prioritised within the locality of the development;

2. include replacement planting at a ratio of at least two new trees for each tree lost. Replacement trees should be of heavy or extra heavy standard, and where prominent trees are to be removed, large specimen trees may be required; and

3. use locally native species, where appropriate. Development affecting all existing and new woodlands should:

4. support proposals which assist in the positive use of woodlands;

5. promote sustainable management to deliver multiple benefits; and

6. support the aims and policies of the Mersey Forest Plan, where relevant.

A tree survey and arboricultural impact assessment to BS5837:2012 standard (or subsequent revisions) will be expected to be submitted with planning applications where existing significant trees are likely to be affected by the proposed development."

Trees and woodlands are also included in Policy, DM 46 - Development in conservation areas; DM 47 - Listed buildings and DM 52 - Solar energy. Trees and woodlands ate also covered by green infrastructure policy such as DM 44 - Protecting and enhancing the natural environment and in the specific area policies such as those for Stanlow.

The Forestry and Planning hub, a link for which can be found on the consultation web page, provides guidance on Trees and Planning. This resource has been developed in response to the Government's Forestry and Woodlands Policy Statement. Specifically, it addresses the commitment by the previous Government to help to support a sector-led Forestry and Planning network.

Mature trees can be an asset to a new development. They give a place a sense of character, as well as providing a ready-made landscape. The CABE Space (Commission for Architecture and the Built Environment) publication: 'Does money grow on trees?' (March 2005) looks at how well planned and managed parks, gardens and squares can

have a positive impact on the value of nearby properties and can attract inward investment and people to an area. The results showed that people were willing to pay a substantial premium to live in a leafy neighbourhood, so adding value to the development.

The Tree and Design Action Group (TDAG) have published guidance on "Trees in the Hard Landscape" and "Trees in the Townscape" that brings together best practice related to urban trees. A link to the TDAG website can be found on the consultation web page. These guides should be used to inform future implementation of tree planting across all services within the borough and are available on the TDAG website.

Retaining trees is always desirable, though many trees are lost each year because of development. Some trees are removed due to their condition or because they are directly in the way of development. However, many are lost due to unsuitable protection during the construction phase.

Frequently, trees are retained within new developments but fail to survive more than a few years. This failure is due to either problems occurring during the construction phase, or the lack of space to incorporate adequate root and crown spread of the trees.

Activities that kill or harm trees on construction sites include:

- root severance
- compaction of soil around roots
- flooding
- raising water tables
- changing soil levels
- fires
- damage from machinery
- harmful substances, e.g. petrol and cement.

All of these are common occurrences or hazards on development sites. It is essential that none of these activities occur within the main root spread of a tree. The area that needs to be protected is defined in BS5837:2012 – 'Trees in relation to design, demolition and construction – recommendations'

Any new development or redevelopment that impacts on trees or woodland will require a tree audit.

Cheshire West and Chester Green Infrastructure Framework

This Framework addresses the natural environments within both the urban and rural locations of Denbighshire, Flintshire, Wrexham, Cheshire West and Chester, Cheshire East and the Wirral. It sets out a vision of how a healthy natural environment can help sustain economic growth and self-supporting communities.

The Framework's purpose is to:

- identify priorities for management of the natural environment across this wide area
- support delivery of cross-boundary initiatives and local projects
- provide robust evidence for policy to protect and enhance the natural and historic environment in plans produced by local authorities, community partnerships and infrastructure providers
- address the conditions of the Growth Point.

Cheshire West and Chester Ecological Framework

As part of the evidence base for the new Cheshire West and Chester Local Plan, an Ecological Framework[7] has been developed. This Framework uses existing data on sites of importance for biodiversity and identifies important networks and areas for habitat improvement.

Ancient semi natural woodland and ancient and veteran trees play an important role in this Framework. Directing planting and improving tree and woodland management within the Ecological Framework can improve habitat and species connectivity, supporting improvements to biodiversity across the borough.
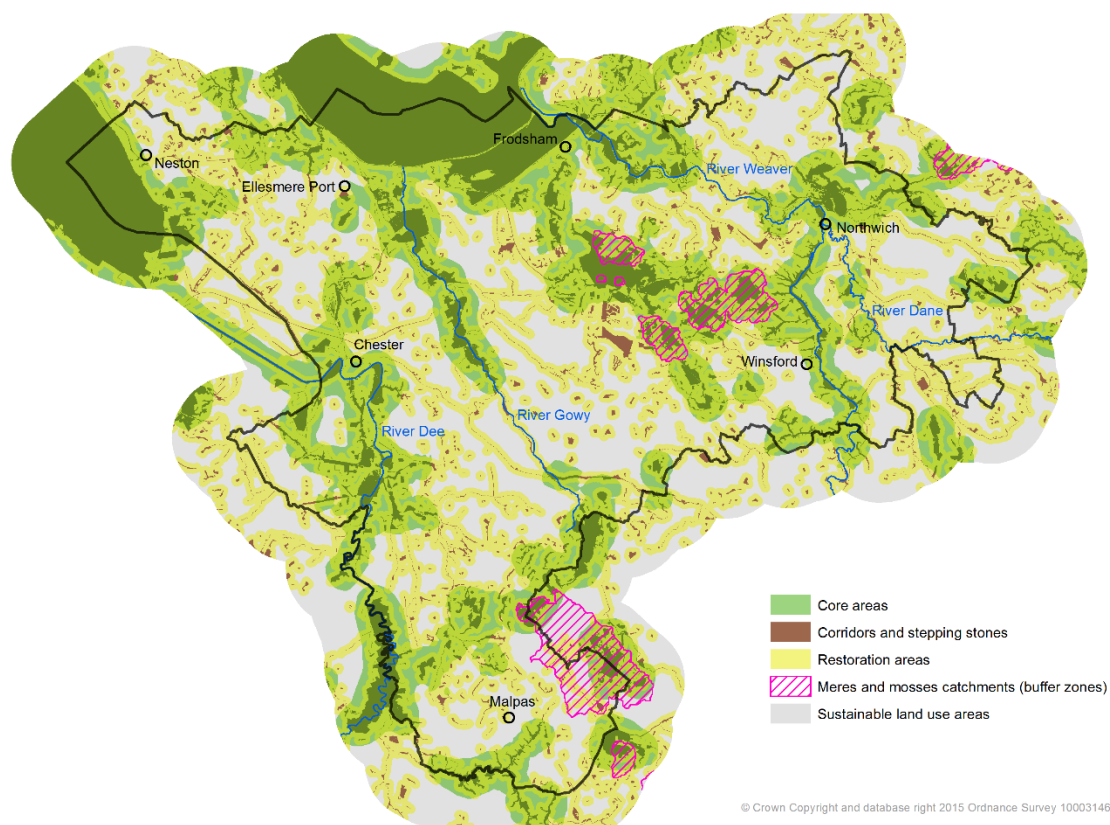
7

Figure 3 Cheshire West and Chester Ecological Framework

The Mersey Forest Plan

The Mersey Forest is a partnership that delivers a wide range of social, economic and environmental benefits for Merseyside and North Cheshire, by getting 'more from trees'[8].

The vision is to deliver the Mersey Forest Plan 'More from Trees' with partners, communities and landowners transforming their landscape and revitalising a woodland culture in and around our towns and cities. Woodland will cover 20% of the area thanks to the planting of new woods and individual trees, complementing other habitats. Woodlands will be managed so that they achieve their potential, and all of us will prosper thanks to the economic and social benefits of environmental regeneration.

In 1989, 12 areas of England were chosen by the Government to be the focus of long-term tree planting programmes to improve the local environment for the benefit of people, wildlife and the economy. In 1991, the largest of these designated community forests was named The Mersey Forest and has since expanded from 356 to 529 square miles. The Mersey Forest Partnership has planted 9 million trees to date.

---

[8] www.merseyforest.org.uk/plan

At the time, Cheshire County Council, along with Ellesmere Port and Neston Borough Council and Vale Royal Borough Council were three of the original nine partners that established The Mersey Forest and put a team in place. This team is employed now by Cheshire West and Chester Council to deliver the Government approved Forest Plan. The Plan identifies where there is the greatest need for new community woodland.

The Plan was refreshed in 2014, updating the specific policy areas for Cheshire West and Chester and once again expanding the area of the borough that is covered by the Forest Plan. Twenty-two policies specifically relate to how the Mersey Forest will be delivered in Cheshire West and Chester, including the development of Northwich Woodlands Forest Park, one of five across the Forest area. These policies are:

C1. Urban areas, settlements and employment sites: Plant individual trees, groups of trees and small woodlands on appropriate and available urban areas, settlements and employment sites, such as school playing fields, open spaces, streets, highway verges, in the grounds of large institutions, derelict land, and development sites. This may be particularly important in Chester. Target planting to meet identified green infrastructure needs.

C2. Settlement buffers: Plant trees and woodlands around settlements to provide a buffer with the surrounding landscape but maintaining important and valued views.

C3. Around Chester: Plant trees and woodlands around Chester to provide a buffer with the surrounding landscape but maintaining important and valued views. For example, plant trees at the Countess of Chester Country Park. Create copses and woodlands in the agricultural land to the south of Chester and around the River Dee.

C4. Around Ellesmere Port: Plant trees and woodlands to create a multi-use linear or green ring around Ellesmere Port, linking the M53 and Shropshire Union Canal Corridor, Rivacre Valley and Booston Wood.

C5. In and around Stanlow, Ince and Elton: Plant interim and long term small woodlands and copses within a pattern of hedgerows and hedgerow trees. Small scale planting on marshland fringes could act as a screening.

C6. Northwich Woodlands Forest Park and around Northwich: Further develop the Forest Park, its use, connectivity, and interconnection with Northwich, to complement the regeneration of the town in its rural setting. Expand woodlands to include Wallerscote, taking into consideration existing non-woodland habitats, and buffer ancient semi-natural woodlands. Create a woodland setting for the employment sites to the east of Northwich, principally at Wincham.

C7. Around Winsford: Create woodland as an attractive setting for new development, employment sites, and transport corridors; screening the visually intrusive urban area from the surrounding landscapes.

C8. Motorways: Plant linear trees and woodlands and copses around motorways, to help to screen them.

C9. Rolling farmland from Neston to Saughull: Create small woodlands. Help to screen busy highways and commercial developments, and buffer riparian zones. Maintain hedges and plant hedgerow trees and orchards and create ponds. The farmland nearer to the Dee Estuary is used for foraging by birds.

C10. Rolling farmland around Hooton, Childer Thornton, and Capenhurst: Create small woodlands and copses within a pattern of hedgerows and hedgerow trees, screening man-made structures and buffering ancient semi-natural woodland.

C11. Agricultural land around Chester and the West Lowland Plain: Create small copses and woodlands to screen major highways and views towards Stanlow. Maintain hedges and plant hedgerow trees and orchards.

C12. River Gowy: Sensitively locate planting in and around Gowy landfill and derelict land. Maintain open habitat in the Gowy Meadows.

C13. Frodsham Ancient Woodlands Forest Park: Establish a woodland framework around Frodsham and Helsby, linking to the Sandstone Ridge and long-distance trail, and into the Weaver Valley. It is inappropriate to plant on the sandstone escarpment ridge line. Create a woodland buffer on suitable land between the settlements and the motorway. Around Aston, create large woods, maintain hedges and plant hedgerow trees and orchards. Buffer and connect ancient semi-natural woodlands.

C14. Around Delamere Forest: Create a well-wooded landscape around Delamere Forest and towards the Cheshire Plain. Extend and plant woodlands in agricultural areas, on steeper slopes of the Sandstone Ridge and Fringe, and along the long-distance trail. It is inappropriate to plant on the sandstone escarpment ridge line. Take into account other habitats in the area such as meres and mosses. Maintain and restore hedgerows and hedgerow trees and orchards. Create heathland and meadows.

C15. Delamere Forest, Sandy Woods, and Sandstone Ridge: Expand the well-wooded landscape around Delamere Forest, along the Sandstone Ridge and long-distance trail, and on steeper slopes. It is inappropriate to plant on the sandstone escarpment ridge line. Extend and plant medium to large woodlands from Oakmere to Little Budworth. Take into account internationally significant meres and mosses in the area, along with other non-woodland habitats. Maintain and restore hedgerows, hedgerow trees, and orchards, and create heathland and meadows, including following quarry restoration. Retain water bodies.

C16. Weaver Valley: Extend the wooded nature by planting on the valley shoulders, sides and, where appropriate, floor, buffering and connecting ancient semi-natural woodland.

Ensure planting does not block the line of the valley floor. Manage existing woodlands with special regard to ancient semi-natural woodlands.

C17. Rolling farmland around Antrobus, Comberbach, Arley, and Whitley: Create woods within the open agricultural landscape, buffering ancient semi-natural clough woodlands. Maintain hedges and plant hedgerow trees and orchards.

C18. Rolling farmland from Kingsley to Hartford: Plant trees and small woodlands, especially on the transitional slopes of the Sandstone Ridge, including hedgerows, hedgerow trees, and orchards, and to restore areas of sand quarrying.

C19. Rolling farmland from Tarporley to Winsford: Create small copses and restore and plant hedgerows and hedgerow trees. Do not restrict long distance views to Lowland Plain, Weaver Valley, Peak District and the Peckforton Hills.

C20. Eastern Lowland Plain and nearby areas: Create occasional woodlands, buffering ancient semi-natural woodland within and just over the boundary. Maintain and plant hedgerow trees. Help to screen views of large-scale industry, but do not obstruct long distance views of the Sandstone Ridge and Peak District.

C21. Around Rudheath Woods: Mange the remnant heathland. Develop and potentially extend the sandy woods as a recreational resource.

C22. Drained marshes, mudflats and saltmarshes of Frodsham Marsh, the Lache Eyes, Ince Banks, and Dee Estuary: Woodland planting is inappropriate. Safeguard the open nature of these designated areas and manage hedgerows.

Northern Forest
The "Northern Forest" has been developed by the Woodland Trust and the Community Forests. The Northern Forest spans the M62 Corridor, from Chester and Liverpool to Hull. It builds on the existing partnership between the Trust and five Community Forests. It takes its inspiration from the Community Forest Plans and strategies in the area, such as The Mersey Forest Plan

Over the next 25 years £75bn of investment in housing and transport infrastructure is planned across the M62 Corridor.

There are already 13 million people living in the project area. 650,000 new homes are projected to be built and the population is due to rise by 9 percent over the next 20 years.

The 25 Year Plan, the Industrial Strategy[9], and the Clean Growth Strategy[10] each calls for integrated infrastructure investment, including green infrastructure, to secure increases in natural capital.

---

[9] https://www.gov.uk/government/policies/industrial-strategy
[10] https://www.gov.uk/government/publications/clean-growth-strategy

The Northern Forest aims to secure significant green infrastructure and natural capital gains through the creation of a new 'Northern Forest. It can deliver national, regional and local policy and strategy.

The target is to plant 50 million new trees over the next 25 years. The estimate is that it will the cost £500m. It will create a productive forest across the Northern Powerhouse that not only provides biomass and future timber, but also helps to deliver wider social and environmental benefit to improve health, reduce flood risk, tackle poor air quality, improve water quality, provide opportunities for recreation, tourism and leisure, and create attractive places to live, work and invest. The estimated economic benefit is £2.5bn.
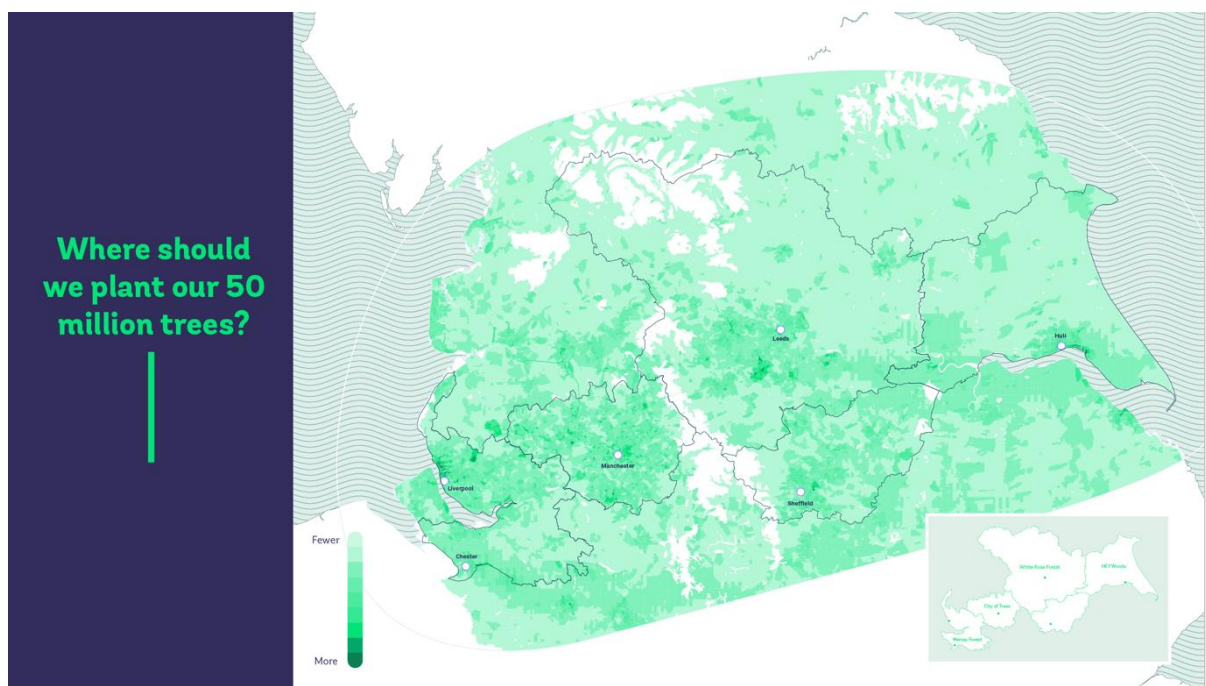

Figure 4 Planting 50 million trees north England

9. Assessment of current tree stock

The starting point for producing a tree strategy is the ability to quantify and understand the mix and make-up of the tree stock within the boundaries of the area it will cover. Without this information, even in a basic form, it is hard to create a coherent policy and subsequent action plan that adequately addresses the proposed aims and stated objectives in a strategy.

Whilst Cheshire West and Chester does not have a complete assessment of its tree and woodland stock in one database, the various services hold information in a variety of formats. The data for the extent of woodland ownership is more readily available than that for trees outside woodland.

The 2005 Tree Survey provides the most up to date strategic assessment of the borough's tree and woodland stock. This information can be analysed to help inform the development of the Tree and Woodland Strategy and its action plan.

- Total number of trees outside woodland owned by the council (according to the tree survey): 25,178
- Total area of woodland owned by the council (determined using the council's land ownership data, FC Woodland Inventory and TMF core data): 510ha.

Age Structure

Figure 2 shows that based on the last survey of trees and woodlands, the current age structure is not healthy. There are too few trees in the younger age categories to replace the older trees as they start to move to over maturity and eventual death. However, there are a large number of trees that have no age recorded. Further work to assess why this is the case is needed.
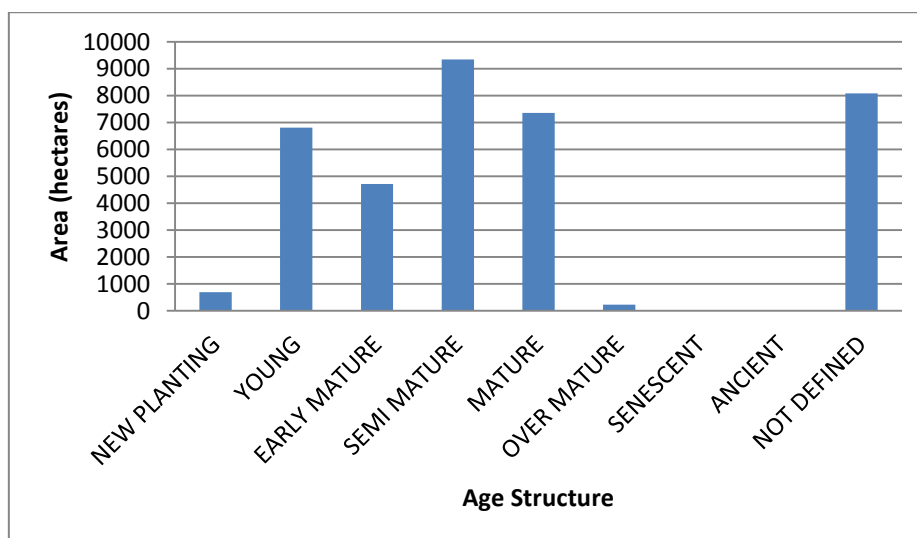

Figure 2: Age structure of trees

Species composition

Figure 3 shows the top ten most common trees from the survey of trees outside woodlands. Lime is most common tree identified in the last survey, and there is a large population (1500 +) of Ash trees. It is likely that in the coming years these will be affected by Ash Dieback and start to die.
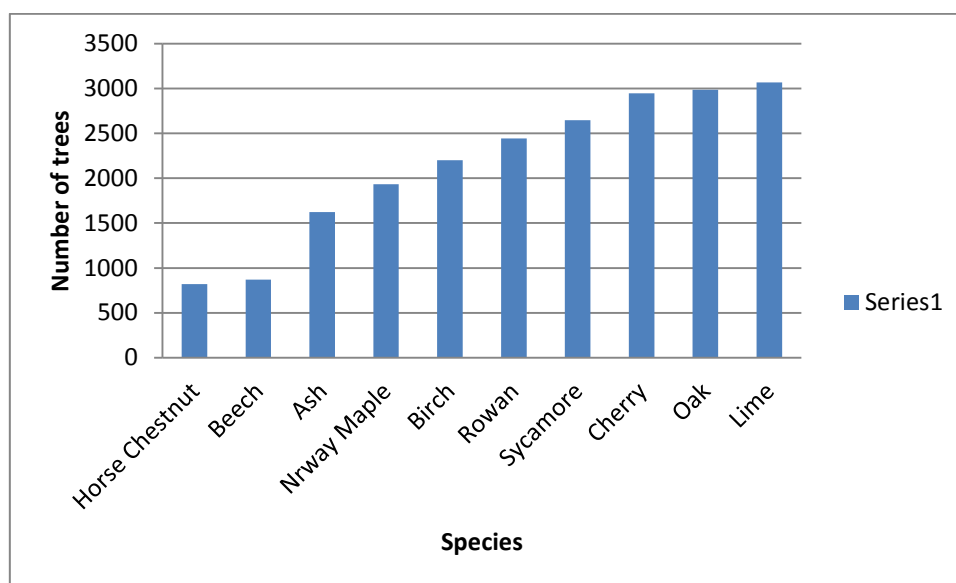

Figure 3: Species composition (top ten most common)

Tree and woodland distribution

The major concentrations of trees and woodland owned and managed by the council are in and around the major towns in the borough and City of Chester. This provides the opportunity to ensure that the assets are delivering benefits for communities. The vast majority of the borough's population is concentrated in these urban areas. However, it also highlights the need to have a robust strategy for managing the tree and woodland assets to reduce risk, whilst optimising benefits.

Key issues arising from the analysis of the data include:

- the age profile of the trees is heavily weighted to older trees, - there is a lack of younger trees to replace older trees as they start to die or need removal.
- Ash is the fifth most abundant tree. Ash dieback will affect many of these trees. This will require careful management, taking note of national guidance and experience from other areas.
- ownership is concentrated in the urban areas.
- the data used for this analysis is now in need of updating to improve the quality of decision-making about the tree and woodland assets.

10. Assessing the value of the benefits provided by the current tree stock

In recent years there has been an increasing focus on developing methods to place a monetary value on the services and benefits provided by trees and woodlands. This approach can be controversial, the rich cultural and ecological value of woodlands could be argued to be priceless. Trees and woodlands do have an intrinsic value, not dependent on the good and services that we might receive as a society.

Current policy, as set out in the 25 Year Plan for the Environment aims for no net loss of natural capital such as trees and woodlands, highlights the intrinsic value of nature and points to the need to value the green infrastructure benefits that are provided by, for example, trees and woodland.

Putting a value on these assets owned by the council enables informed decisions to be made about future funding and management of trees and woodlands to safeguard the asset and ensure that the benefits provided are sustained in the long term.

The Green Infrastructure Valuation Toolkit has been used to arrive at a valuation of the benefits provided by the trees and woodlands owned by Cheshire West and Chester[11].

This toolkit uses a framework to identify values in the form of:

- Gross Value Added
- Support for property values
- Wider non-market value (for example, improved health).

The results show that trees and woodland provide a wide range of benefits. There are significant benefits in terms of the economic performance of the area (GVA and support for property value). The wider economic benefits are the most significant, with the health and wellbeing benefits the single most important benefit.

Benefits	Benefit Monetisation		
Benefits groups	GVA value	Land and property value	Other economic value
1. Climate change adaptation and mitigation	£194,189		£5,183,783
2. Water management and flood alleviation	£1,496,542		
3. Place and communities			

---

[11] http://www.merseyforest.org.uk/services/gi-val/

4. Health and wellbeing	£888,303		£7,412,487,294
5. Land and property values		£83,540,393	
7. Labour productivity	£50,411,648		
8. Tourism	£105,412,972		
9. Recreation and leisure			£18,435,642
10. Biodiversity			£448,636
11. Land management	£5,335,908		
Total economic value of benefits	**£163,739,564**	**£83,540,393**	**£7,418,119,713**

11. Sustainable tree and woodland management and certification

Woodland areas

The UK Forest Standard sets out the basis for sustainable woodland management and this underpins the council's Tree and Woodland Strategy. The Standard sets out both legal requirements and best practice for sustainable woodland management. For example:

- Legal requirement: 'it is a legal requirement for appropriate protection and conservation must be afforded where sites, habitats and species are subject to the legal provisions of the EU Directives and UK country legislation...' (General Forest Practice)
- Best practice advice: 'Consideration should be given to promoting and facilitating local forest and woodland based enterprises and economic activities' (Forests and People).

The adoption of Tree and Woodland Management Plans and Woodland Certification is seen as being the best methods for achieving verifiable and sustainable management of the woodland under Local Authority control.

As resources allow, the council should look to enter woodland in its ownership into the Woodland Certification Scheme. This provides independent verification of sustainable management to an internationally agreed standard. As well as proving good stewardship of the resource, it also provides independent evidence of good management that can be used to help settle legal disputes.

Trees outside woodlands

Work on trees outside woodland should follow the appropriate guidance as set out in the following documents:

- D.O.E (ODPM) Circular No. 36/78 'Trees and Forestry'
- D.O.T (ODPM) Circular No. 52/75 'ROADS'
- The Highways Act 1980
- BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations
- BS3998:2010 –Tree Work – Recommendations

Management of these trees can also form part of the Woodland Certification Scheme, providing a consistent approach to sustainable management of all the council's tree assets.

12.   Tree planting

Cheshire West and Chester has a low level of woodland and tree cover. Despite an 80% increase in woodland cover in the Mersey Forest area, there is still more to do. The age profile of the urban tree population is shown in Section 9. There has been a lack of new planting of street trees and a need to start a programme in order to have a balanced age profile where the benefits are sustained in the long term. This approach requires long-term, professional and strategic planning.

New planting

Where appropriate and as resources allow, Cheshire West and Chester Council will plant new areas of woodland and urban trees where there can be shown to be net benefits and where there is a need to provide for long-term replacement of ageing urban trees. For the north of the borough, the Mersey Forest Plan provides a detailed strategy for new planting. This plan is approved by the Government and is a material consideration in planning as set out in the National Planning and Policy Framework.

The plans for Northern Forest cover the whole of Cheshire West and Chester. It is anticipated that, if implemented fully, Northern Forest will lead to the planting of 2m trees, in urban areas and in the wider countryside.

The Planning system can be an important mechanism for delivery of new trees and woodlands. (see Section 17)

Restocking and replanting

In line with UK Forest Policy, Cheshire West and Chester Council will aim to achieve no net loss of woodland, restocking or enabling planting off-site of any area of woodland felled and replacing any urban trees that are routinely felled.

13. Biodiversity

When looking at tree and woodland biodiversity, it is essential that these habitats are seen in the context of adjacent and nearby habitats. A green infrastructure approach, as advocated earlier in this document, provides the opportunity to do this.

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities Act 2006, to have regard for the conservation of biodiversity in England, when carrying out their normal functions.

Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include three woodland habitats that are

found in the council's ownership and are also highlighted in the Cheshire Biodiversity Action Plan, a link to which can be found on the consultation web page:

- Lowland mixed deciduous woodland
- Wet woodland
- Wood-pasture and parkland.

Hedgerows and the trees within them are also a priority habitat.

There is much less information available on the biodiversity value of street trees, though research has highlighted their ecological value. A study of four urban areas on Merseyside revealed that the greatest influence on their ecology was the proportion of green space, particularly trees. Sufficient amounts of green space of relevant ecological quality in urban landscapes may even allow the presence of specialist forest or endangered species.

Wildlife corridors are vital in helping to overcome habitat fragmentation and to ensure that species can reach the different resources they need, and that populations of species do not become isolated or die out due to inbreeding. The new Ecological Framework for Cheshire West and Chester identifies key corridors and hubs for biodiversity. The Framework emphasises the need for a mosaic of habitats, with trees and woodland as one component, to be created to support biodiversity.
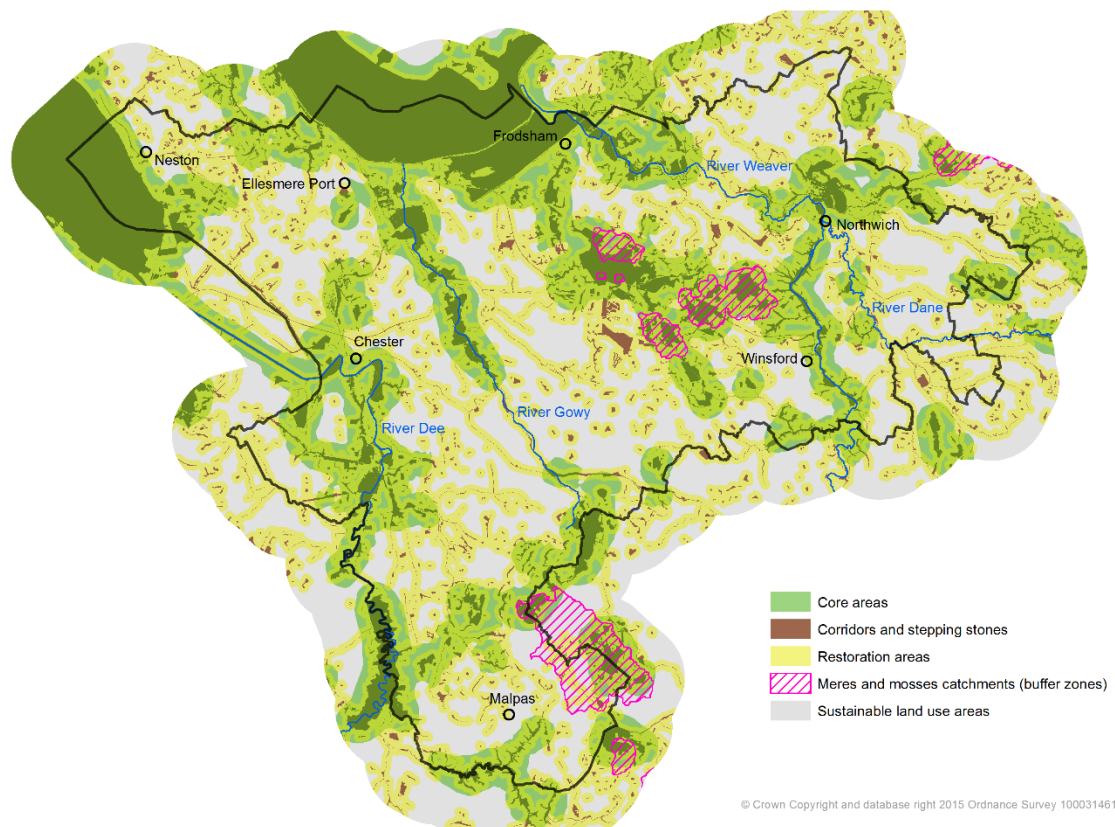
Figure 5 Cheshire West and Chester Ecological Framework

This Framework can help to direct new woodland and tree planting across Cheshire West and Chester toward restoration areas, on local authority and other land too.

The Lawton Report, 'Making Space for Nature' in 2010 identified a need to have 'more, bigger, better and more connected' habitats in order to increase opportunities for biodiversity.

Cheshire and Warrington Local Nature Partnership is as a key partner in ensuring that the biodiversity benefits are maximised through the delivery of this Strategy.

14.   Landscape

Landscape character

Landscape character is the distinct and recognisable pattern of elements that occur consistently in a particular type of landscape, and how people perceive this. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement. It creates the particular sense of place of different areas of the landscape.

Trees are an important element in the landscape which contributes to define the landscape character of the area.

A Landscape Character Assessment for Cheshire West and Chester was completed in 2016 and is available via a link on the consultation web page. The Landscape Assessment provides a rich source of information to inform policy and project delivery. The Landscape Character Assessment is supported by the Cheshire West and Chester Local Plan – Policy GBC5 - Protection of Countryside and Landscape.

At a national level, Natural England has published National Character area profiles. These were developed in response to the Natural Environment White Paper, Biodiversity 2020, and the European Landscape Convention. The profiles are provided as guidance documents that can help communities to inform their decision-making about the places that they live in and care for. Statements of Environmental Opportunity (SEOs) are included in the profiles. These offer guidance on the critical issues, which could help to achieve sustainable growth and a more secure environmental future. These statements can be specifically about trees and woodland.

For example, from National Character Profile 62:

'SEO 2: Manage and expand areas of semi-natural woodland, restore and reinstate hedgerows and hedgerow trees, protect and restore ancient woodland, for example in the Delamere Forest Park and throughout the Mersey Forest, thus reducing habitat fragmentation to benefit landscape Character, biodiversity, resource protection and climate regulation while enhancing the recreational, educational and experiential qualities of the NCA.'

Within the Cheshire West and Chester administrative boundary, there are three Natural Character Area Profiles, all of which can be accessed via links on the consultation web page.

15. Climate change and adaptation

Trees and woodlands provide a range of services that help mitigate and, in particular, help us adapt to projected climate change.

Tree planting is increasingly being promoted as a mechanism for dealing with the expected increases in temperature likely to occur in the future through climate change. Research by Manchester University shows that a 10% increase in green infrastructure (mainly serviced through tree canopy cover) in heavily urbanised areas can reduce ambient temperatures by between 4 to 5 degrees, the expected temperature increase parts of the UK will experience in the medium to high emission scenarios envisaged by climate scientists.

Trees can significantly contribute to improving and ameliorating the worst impacts of climate change in urban centres. For example, trees and woodlands can help to reduce flood risk and are increasingly being used as part of integrated catchment scale flood risk reduction strategies. In town and city centres trees can capture and store water. In the wider countryside, trees and woodlands also play a role in helping to manage water flow, particularly on flood plains, by slowing down the movement of water to water courses and increasing the percolation of water into the ground, which then either slows down water movement or, whilst below field capacity, store the water.
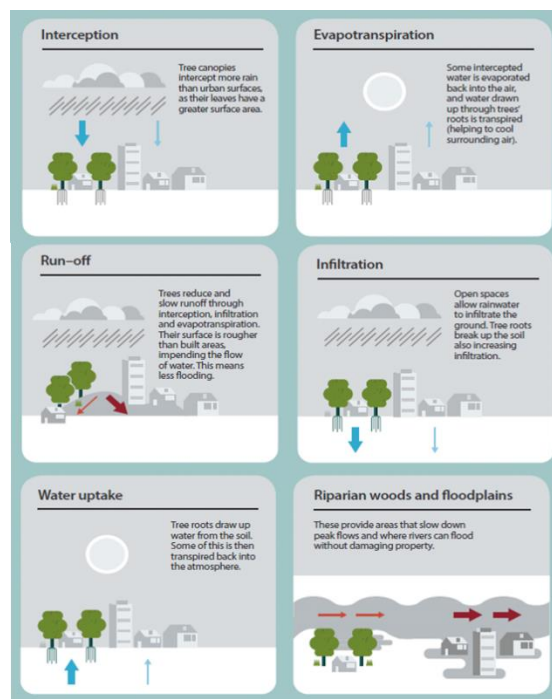

Figure 6 Trees and flood risk reduction

Trees provide the ecosystem services required for effective climate adaptation most effectively when they have established large mature canopies. Planning effectively for climate adaptation of urban areas will require greater efforts to retain and plant more large species trees.

Trees and woodland are also a carbon sink, with woodland across the borough storing approximately 400,000 tonnes of carbon. However, sustainable management of trees and woodlands is critical to safeguard both the sink and the on-going sequestration of carbon.

Trees and woodlands themselves will be affected by the projected change to our climate. Safeguarding the benefits that are provided will require adaptive management.

16. Pests and diseases

The Independent Panel on Forestry identified the increase in tree pests and diseases over the last 50 years. Through the increase in international trade of plants, many new pests and diseases threaten our trees and woodlands.

In addition, deer threaten woodland ecosystems and grey squirrel can cause significant economic damage to woodlands.

A Tree Health and Plant Biosecurity Action Plan has been developed and deer management groups have been set up across the UK.

17. Cheshire West and Chester - aims and objectives for tree and woodland management

Policy 1 - manage trees and woodlands safely

Issues

Trees growing in public areas will always pose an element of risk which, on the whole, is accepted as part of daily life. Each year in the UK 5-6 people are killed by falling trees in public areas. The risk of death due to a tree is 1:10million (data from National Tree Safety Group document - "Common sense risk management of trees").

To manage risk in the best way possible, the council should undertake a systematic tree inspection and risk assessment from which a tree maintenance programme can be developed. Inspections are targeted at the areas of greatest risk, with the borough zoned into areas of high, medium and low risk.

Cheshire West and Chester Council have a number of professionally qualified foresters and arboriculturists who can provide advice on services and issues related to the safe management of trees and woodlands. In addition, staff who deal with the day-to-day management of trees have, to varying degrees, had training in the identification of problems that need to be managed.

Over the last ten years, there has been a marked increase in the number of tree diseases. These are thought to be a result of international trading in plants and a changing climate allowing expansion of the natural range of some pathogens.

National Government will dictate the response to these threats. However, locally, knowledge of the species found in the borough area and also forestry and arboricultural expertise to be able to assess the risk/impact of any new disease, will ensure that trees and woodlands are managed safely and efficiently.

With the development of locality working across the borough, it is important to have a standard protocol for dealing with tree and woodland queries related to safety issues. This protocol should be managed through the strategic work of the Total Environment and Mersey Forest teams, providing support to other services and monitoring the implementation of the protocol.

Development management/planning and the management of TPOs play a key role in safeguarding the tree and woodland assets owned by the council and others.

Policy statements
- We will efficiently and proactively inspect council trees to identify and remove unacceptable risks, having a competent person involved in all tree related issues (see Appendix 2).

- Owners of any trees considered to be a legal nuisance or danger to the public highway will be requested to remove those tree/s or tree parts. In the event of no action, the Council will exercise its statutory powers under the Highways Act or Local Government (Miscellaneous Provisions) Act to alleviate the problem. (e.g. Highways Acts 1980).
- We will provide clear guidance on how we respond to requests and enquiries about trees and woodland, and in particular, requests to carry out work on council owned trees (see Appendix 2).

Policy 2 - to set standards by which all trees and woodland in Cheshire West and Chester ownership will be managed

Issues

Development of a systematic and consistent approach for the management of tree and woodland assets owned by Cheshire West and Chester ensures that any request for information about tree and woodland management can be answered by reference to the 'Cheshire West and Chester Council Tree and Woodland Management Standards'.

Whilst in local areas, additional work or ways of working may take place and be funded locally, a central core of activity will take place across the whole estate.

Professional forestry and arboriculture advice and guidance will ensure that the standards are in line with goals for the council to:

- Manage tree and woodland assets sustainably
- Ensure efficiency of commissioning and service delivery
- Maximise benefits to the community
- Reduce risk of accidents leading to litigation to the council.

This standard will be in line with national guidance, for example, the UK Forest Standard, and will include, amongst other things*:

- only removing trees where it is wholly appropriate
- information about when trees may be removed
- standards for woodland management plans
- standards for carrying out arboricultural and silvicultural works
- guidance on the numbers of trees required to be provided in the event of removals
- inspection cycle of trees and woodland - with targeting statement to identify how the most important areas for inspection are identified
- management cycles for pruning, thinning, felling and restocking trees outside woodlands
- how data on the tree resource is recorded and held.
- engaging local communities and other tree and woodland owners through local fora to improve joint actions and improve management standards.

Cheshire West and Chester Council has a legal duty to protect wildlife in line with, for example, the Natural Environment White Paper.

Policy statements

- We will work across all services and departments to a standard protocol for managing our existing and new tree and woodland assets (see Appendix 3)

- We will encourage others to manage their woodlands sustainably and seek ways to increase tree and woodland cover, particularly in areas where the benefits that can be provided are needed, for example, through the Mersey Forest Partnership
- We will protect and, where possible, enhance wildlife and the associated habitats in accordance with British and European Law
- We will use Landscape Character assessment to guide tree and woodland management and creation.

Policy 3 - to raise awareness of the value of trees as part our green infrastructure through consultation, education and participation

Issues

By providing accurate information on the benefits provided by Cheshire West and Chester's trees and woodlands, it will be easier to raise the awareness of their importance to a broad range of audiences. We are also able to start to quantify these benefits in monetary terms, to be able to compare different types of investments and their returns.

There is an active network of tree wardens across Cheshire West and Chester managed by Cheshire Wildlife Trust. Delivery of The Mersey Forest Plan has both raised public awareness and also support for trees and woodlands as an essential part of the quality of place across the borough.

Encouraging community involvement, and the use of trees and woodlands as part of our education and public health systems, helps to achieve the DEFRA Forest Policy ambition to create a woodland culture.

Trees and woodlands also need to be seen in the wider context of green infrastructure, as part of the network of green and blue spaces across Cheshire West and Chester.

Raising awareness of the value of trees (currently assessed at over £7bn) and the need for additional trees in particular places to address local issues will assist delivery of the wide range of benefits for investors and the community as a whole.

Policy statements

- We will look at models such as I-trees and the Green Infrastructure Valuation Toolkit to assess the value of Cheshire West and Chester's tree and woodland assets
- We will promote the value of the benefits provided by our tree and woodland assets across all services within Cheshire West and Chester and champion these values more widely with partner organisations
- We will support community involvement in helping to manage our trees and woodlands through Tree Wardens, Friends of groups and other initiatives
- As the lead authority for The Mersey Forest, we will highlight the value of trees and woodlands, engaging education, health and other sectors and increasing support from the general public. We will also support their role in developing the green infrastructure agenda and approach, highlighting the key role that trees and woodland play
- We will ensure that trees and woodlands are fully recognised and supported through the planning system, protecting, improving and expanding tree and

woodland cover, supported by S106 and CIL and other emerging funding opportunities as appropriate.

Policy 4 - to maximise the use of trees and woodlands as a resource to tackle issues across the council's priorities

Issues

Too often, trees and woodlands are seen in isolation as a resource that is managed as a backdrop to daily life. However, it is also the case that there are good examples from across the borough where trees and woodlands are seen as an essential element in the delivery of the council's principal objectives.

With budget pressures unlikely to reduce, there is a need to maximise the value from all public assets. The use of woodland areas for education, health improvement, social care and adaptation to climate change will make good use of the council's resources in a sustainable and cost-effective manner.

This should be managed through the strategic work of the Total Environment and Mersey Forest teams, by providing support to other services and highlighting opportunities to deliver vital services and objectives.

Policy statements

We will proactively advocate the use of trees and woodland to help tackle key priorities for the council including:

- Jobs and growth – providing "more from trees" in line with the Mersey Forest Plan, helping to create a great place to grow up, live, work and work.
- Health – through engagement with the public health services within the council and the National Health Service.
- Education – through Forest Schools.
- Climate Change adaptation - for example Urban Catchment Forestry, Wood Allotments.
- Social Services.

19 Implementation, monitoring and review

The proposed cycle is shown below:

- Action Plan – refreshed every five years
- Strategy – reviewed every five years, refreshed every ten years
- Policy – reviewed every five years, refreshed every ten years
- Systematic Tree Management cycle - 10 years[12]

Annual monitoring of key indicators set out in the Action Plan and those that indicate that the strategy is being achieved, for example:

Indicator	Target	Measure
Tree and woodland cover	1. No net loss 2. Increase woodland cover to 12% across the borough	Area of woodland /number of trees outside woodland
Sustainable management	Management plans conform to UKFS	% of woodland area in UKFS compliant management plans
Reducing risk	No claims upheld	Number of lost claims

---

[12] Over the ten years all Cheshire West and Chester Council owned trees will have gone through an assessment for management and had work undertaken where needed

20. Tree Strategy Action Plan

The following section sets out the key actions for each of the four main themes in this strategy.

	Action	By whom	By when	Document	Indicator	Target
To manage trees and woodlands safely	Develop a satisfactory system to collate and manage information on the council's trees and woodlands	Total Environment	March 2019		Monitoring of claims against council owned trees and woodlands	Successful defence of all claims against trees owned by the council
	Maintain a register of qualified staff to deal with forest and tree related matters	Total Environment	August 2018			
	Develop and implement a tree inspection cycle based on a risk based zoning system	Total Environment	October 2019			
	Publish "Priority Ranking System" to respond to questions about trees and requests for work to be carried out	Total Environment	August 2019	Appendix 2		
	Stay informed about pests and diseases and the implications for the authority (depends on the tree species etc)	Mersey Forest	Ongoing			
To set standards by which all	Work toward all council owned trees and woodlands being in management plans that meet UK Forest Standard	Total Environment	40% by December 2020		Woodlands and trees outside	80% of all the council's woodlands in

trees and woodland in Cheshire West and Chester ownership will be managed			80% by December 2025		woodlands are well managed	UK FS management plan by 2016 All TOWs in priority areas (zone 1) in cycle of management All priority woodland areas for biodiversity in management plans by 2016; coordinated contracting of tree and woodland work by July 2016
	Agree standard for the management of trees outside woodlands that sets a baseline for activity in all localities	Strategic tree management group	December 2019	Appendix 3		
	Support localities to develop additional opportunities for woodland management activity beyond the locality standard	Total Environment	Ongoing			
	Promote the sustainable management of trees and woodlands that are not in the authority's ownership	Mersey Forest	Ongoing			
	Work towards simplifying contracts for all tree and woodland operations. Assess opportunities for long term contracts for long term management of timber and biomass from council owned trees and woodlands	Mersey Forest	Assessment of existing arrangements by September 2018			
	Ensure that priority habitats and in particular Ancient Woodlands are well managed and provide a key element of Cheshire West's Ecological Framework	Total Environment	Ongoing			

	Calculate the benefits and value of trees and woodlands and promote this locally and more widely	Mersey Forest	September 2018		Public perception of value of trees and woodlands	80% of residents support the work by the council to manage trees and woodland in their ownership
To raise awareness of the value of trees as part our green infrastructure through consultation, education and participation.	Encourage community involvement through programmes such as the Mersey Forest, Tree Wardens etc.	Mersey Forest/Total Environment	Ongoing		Public perception of value of trees and woodlands	80% of residents support the work by the council to manage trees and woodland in their ownership
	Deliver the Government- approved Mersey Forest Plan in the northern areas of the borough and identify areas of importance to protect, improve and expand tree and woodland cover in the south of the borough.	Mersey Forest	Ongoing			
	Engage with the wider green infrastructure debate to ensure that the role that trees and woodlands play is recognised, highlighted and widely used in	Total Environment	Ongoing			

	implementation.					
	Explore opportunities for income generation through woodland management.	Mersey Forest	Initial plans by September 2018		Net income from tree and woodland managemen t	20% increase in net income by 2020, through sustainable forest management
	Maximise the use of tree and woodland assets through a planned programme of joint work with Planning, Social Services, Public Health and other services	Total Environment /Mersey Forest	Initial discussions by August 2018 and framework for joint action by September 2019		Social return on investment by the council's tree and woodland assets	Baseline assessment and agree improvements in key areas of social return
To maximise the use of trees and woodlands as a resource to	Increase trees and woodland cover in areas of identified need such as areas of surface flood risk, health inequalities, poor air quality etc.	Mersey Forest	Plan in place by March 2019	Needs assess-ment (partly in Mersey	Social Return on Investment by the council's	Baseline assessment and agree improvements in key areas of

tackle issues across the council's priorities				Forest Plan)	tree and woodland assets	social return
	Annual director level forum to support and develop opportunities for woodland (and other GI) assets owned by the Authority to be used more effectively across departments to address key the council's priorities	Strategic woodland management group	November 2018			
	Integrated programme of service delivery coordinated and supported through "Total Environment" service to deliver the council's Priorities	Total Environment	April 2019			
	Tree Strategy Group to oversee delivery of this strategy, including review of staff capability, resources, best practice, plan progress and promotion of the benefits of the council's tree assets	Total Environment	September 2018			

Appendix 1: Risk management zoning

Risk management zoning enables the limited resources available to be targeted at places that are likely to have the greatest risk of harm or damage to people or buildings.

The example below is a risk assessment system developed in the USA, which has been applied across the world. Targets, that is, people and property, which are likely to be harmed or damaged by trees, are ranked into four zones, according to their frequency of use and value. Each zone is attributed a rating of one to four (four being the highest risk).

High risk targets are those with constant use, by many people, such as roads or homes. Lower risk targets are parts of open space infrequently visited, such as meadows or woodlands, away from boundaries or paths. This is called "Zonal Target Assessment".

The target ratings are:

- 4 - Constant use or permanently occupied structure
- 3 - Frequent use
- 2 - Intermittent use
- 1 - Occasional use

These form the three target zones:

- Red - target ratings of 3 and 4
- Amber - target rating 2
- Green - target rating 1

Each tree (including trees along woodland paths) is individually assessed for its condition and likelihood to fail by a suitably qualified and experienced tree inspector. The assessment of the defective part is rated according to its size:

- 4 - Greater than 75cm diameter
- 3 - 46 to 75cm diameter
- 2 - 16 to 45cm diameter
- 1 - Up to 15cm diameter

Its failure potential is similarly ranked:

- 4 - Severe
- 3 - High
- 2 - Medium
- 1 - Low

The sum of the three scores is then calculated giving the risk rating for each tree. Those with the highest risk ratings receive remedial action to lessen the risk to acceptable levels. All trees rated at 9 or higher shall receive remedial works, which may require the removal of the tree, or more commonly pruning.

The survey is undertaken by visually assessing the tree from ground level. Arrangements can be made for even more detailed assessment by ultra-sonic testing or by a climbing inspection. The data is collected on handheld computers, plotting the trees position on the council's electronic mapping and basic database. Integral to the system, and a core requirement of the HSE, is the re-inspection of trees on an appropriate cycle; this is based upon the target zones:

- Red - Annually
- Amber - Every three years
- Green - Every five years

Similarly, the council is expected to constantly review, and if necessary, revise the system to account for the risk posed, legislative requirements and to ensure the council's approach accords with good practice, such as British Standards.

In other councils, two amendments to this approach have been suggested:

The introduction of groups

The assessment of groups of trees where appropriate, in place of every individual tree, enables the council to link its tree and woodland husbandry plans to the risk survey, making the two processes more closely aligned, as well as introducing efficiencies in both the surveying and work scheduling stages.

Fluid risk zones

Initially, risk zones were developed based upon the distance a tree was from a target. As the survey has progressed it has become clear that some trees beyond this distance could potentially threaten the target.

To make the survey more robust, trees will be assessed based upon their size and position as to whether they could impact on the target. In reality this means some trees further away will be rated at higher risk, whilst others closer to a target, due to their small size, rated a lower risk. Overall it is anticipated that more trees will receive a higher risk rating than a lessened one; and so, these shall be inspected on a more frequent basis.

Appendix 2: Cheshire West and Chester Council Tree Query Priority Ranking System

This sets out the urgency of responses to tree management issues, starting with the top priority, dealing with trees that are causing an immediate risk to safety.

Safety of highway users (includes visibility problems) or safety of adjoining land

1. Hazard requiring immediate remedy. Tree structurally unsound (e.g. Dutch elm disease) where removing the tree is not appropriate or too costly, a cheaper means e.g. barrier or pollarding (NOT necessarily the most desirable arboricultural or visual option) will be adopted.
2. Growth which obscures visibility of traffic, pedestrians, signs or signals, or forces pedestrians into a live carriageway or traffic across the central road hazard line marking.

Legal (other than 1 and 2 above)

3. To remedy an actionable nuisance (e.g. subsidence) after confirmation from County Solicitor or County Treasurer of the need to take appropriate action. Where possible work will be deferred into the next financial year as the action required is often seasonal.

Non-actionable nuisance (or where we wish to carry out work to prevent a tree being damaged by an adjoining landowner):

4. Shading, overhangs, and minor cracking to driveways and/or walls.

Desirable but not essential in current year

5. Formative pruning of mature trees e.g. reconstruction of crowns of pollarded trees.
6. Maintenance of recently planted trees e.g. including watering, weed control, stakes, ties etc. and semi-mature trees.
7. Clearance pruning to avoid future problems.
8. Replacement tree planting.

Unavoidable biological problems (no action)

9. Interference with television reception.
10. Leaf fall; minor dead wood.
11. Honeydew and other insect issues.
12. Birds roosting and associated issues.

Appendix 3: Systematic management of Cheshire West and Chester Council owned trees

Regular and systematic cycles of tree management have been shown to be cost effective in reducing the need for expensive, reactive management.

The cycle of management of the council's trees outside woodlands, across highways, street scene, green space etc. follows the risk zoning map in that the areas with greatest

risk (large trees in areas of greatest public use/proximity to buildings) form the basis for a planned programme of regular tree management activity.

The management cycle is to carry out assessment (linked to the risk assessment) of works to be carried out and programming of works on a 10-year cycle.

Over this 10-year cycle, all necessary management works will have been carried out to satisfy:

1. Reduction/management of risk
2. Tree management Priority Ranking System

The steps for the Tree programme are:

- Tree risk and management assessment based on risk zoning system
- Added to database
- Work specification
- Work programme developed / updated
- Scheduled works undertaken
- Database updated.

All tree works must be carried out in accordance with British Standard 3998 - Recommendations for Tree Work. Works that may be undertaken as part of the cycle of management include:

Crown lifting

The removal of the lowest branches of a tree so that the remaining lowest branches are at a specified height, usually 2.4m over a footpath and 5m over a road. This operation is undertaken for a number of reasons, such as to allow access under a tree; to clear branches from low structures; or to allow light under the canopy.

Crown thinning

The removal of a specified proportion of branch material from the interior of the crown, without affecting the shape of the tree. This operation is usually undertaken to reduce crown density; form a healthy branch structure by removing dead; diseased, damaged, crossing and rubbing branches, and allow more light through the canopy. Many tree species evolve a canopy density for adaptive reasons and crown-thinning can increase turbulence and cause drought stress and branch failures. For this reason, crown thinning is usually only acceptable when carried out as part of crown cleaning or balancing works.

Crown reduction

Reducing the overall size of the crown area by a specified percentage by pruning back the leaders and branch terminals to lateral branches that are large enough to assume the terminal roles (at least one third the diameter of the cut stem). Crown reduction up to a maximum of 15-20% may be acceptable to semi-mature trees providing cuts do not

exceed 5-7cm and where shaping and restricting size and spread is essential. Crown reduction of mature or older trees is not normally acceptable as it can severely affect tree health and may lead to the death or decline of the tree and is generally only acceptable as management of last resort.

Topping

This entails cutting at a certain height to reduce the height of the tree. Topping is not acceptable as it severely affects the public amenity and health of the tree, sometimes leading to death. Topping can also lead to future problems due to a flush of weak re-growth that can represent a danger and also exacerbate existing problems. If height reduction is considered essential and unavoidable, crown reduction (see above) is preferred.

Pollarding

This severe operation entails the removal of the entire tree's branch structure back to the trunk. This is an ancient way of maintaining trees that is sometimes necessary, particularly on trees that have been pollarded previously. Only certain species will tolerate this degree of pruning, and new growth may be weak and prone to tearing off. This method of management is not therefore normally acceptable unless required for the health, integrity or safe retention of the tree.

Dead wooding or crown cleaning

This operation is similar to a crown thin except that only dead, diseased, crossing and rubbing branches are removed to tidy up the appearance of the tree. No healthy, sound wood is removed. This operation is recommended to help maintain a healthy, safe tree.

Formative pruning

The removal of problematic or potentially problematic branches to ensure good tree development