

manchester **Tree Strategy** 2006 - 2010

Foreword

Trees add a great deal to our lives. They are beautiful of course, but they are so much more than that. Trees are our living air conditioners and natural umbrellas.

Their leaves and branches filter out pollution, reduce the risk of flooding and shade us from the sun's harmful ultra-violet rays (increasingly important - even in Manchester!)

They provide a home for wildlife, a playground for kids and a sheltered stress-relieving sanctuary for all of us.

The Manchester Tree Strategy is a welcome call to action. It sets out a long-term vision for the best possible long term care of all the city's trees. The trees need our protection - and we certainly need theirs.

Professor Chris Baines - Wildlife TV presenter, conservationist and gardener



The publication of our Tree Strategy signals a new commitment by Manchester City Council to looking after one of our most valuable natural resources. Manchester is rich in parks, open spaces, nature reserves and river valleys, with hundreds of acres of woodlands, and over 23,000 trees along our roads, streets and highways.

We have a significant number of diverse and beautiful trees that play a vital role in contributing to the city's well being, which in turn helps to boost our economy. But we cannot take this resource for granted: we must manage and constantly replenish Manchester's tree stock for our children and future generations.

Trees make a fantastic contribution to Manchester, adding to the city's beauty and contributing significantly to people's quality of life. For City Centre residents, workers and visitors, we want to create tree-lined boulevards to provide oases of calm in the midst of our lively and increasingly successful city. Attracting and retaining residents by creating "neighbourhoods of choice" is high on our agenda and a quality environment is an increasingly important component of our regeneration and planning frameworks.

Trees around schools are said to improve children's concentration and trees around hospitals are said to aid recovery. Trees contribute greatly to all our lives and they should not be limited to the historically affluent parts of the city. Some parts of our city suffer from a legacy of environmental exclusion and the huge rebuilding programme currently taking place across the city must redress that historical imbalance.

We aim to become Britain's Greenest City, and a key part of achieving this is by demonstrating our commitment to Manchester's trees through such steps as the requirement for a net 10% increase in trees in new developments and the protection of trees during construction.

Trees contribute to Climate Change mitigation by absorbing and locking up carbon dioxide thus helping the world avert catastrophic Climate Change; and increased tree cover will provide shade, cooling and protection as we prepare to adapt the city for the effects of unavoidable Climate Change.

Many people, community organisations and agencies are actively involved in managing Manchester's tree resources and I hope that this Strategy will help us to establish the extent of Manchester's resource, to ensure that we raise awareness of its importance and to manage our trees carefully for many years to come.

**Cllr. Neil Swannick
Executive Member
for Planning and Environment**



Overview

Background

This Tree Strategy was developed in response to community interest about how trees are managed across Manchester. It is the result of extensive stakeholder engagement with businesses, charities, public sector agencies community and special interest groups from across the City.

This Tree Strategy is one of a range of environmental strategies adopted by Manchester. These strategies provide the Council with a framework to manage its operations and protect the city's environment. More importantly the strategies set out expectations for the city, expectations that can be adopted by other agencies and the private sector as well as providing the bedrock for the development of policies such as the Local Development Framework.

The Tree Strategy is a key environmental strategy of the Council and as such will influence all of the Council's policies and operations that affect trees. The inclusive nature of the strategy's development should also seek to ensure that other groups, organisations and individuals can play an active role in its delivery. To find out more about the City's environmental programmes and strategies visit www.manchestergreencity.co.uk



"Great cities have great trees. Apart from doing the obvious things like creating habitats for wildlife ,allowing us to wake up to birdsong and cleansing the air they make us feel good. There is something within most of us that finds trees attractive, they make our urban environments so much more liveable".

**Wayne Hemingway-Founder,
Hemingway Design**

This section of the report provides an overview of the strategy.

Purpose

The strategy aims to improve the coherency, consistency and quality of action across the city by understanding the present status of tree resources and securing the future of Manchester's trees.

The Tree Strategy aims to do this by providing:

- 1 An overview of the existing tree and woodland resources in Manchester.
- 2 An increased understanding of the importance of trees in promoting well-being, environmental sustainability and improving quality of life.
- 3 An overview of existing information about trees, a report of progress in auditing the city's existing tree resources and a framework for improving the quality of information available.
- 4 A range of case studies to inform and inspire people to improve their knowledge and management of trees.
- 5 An increased understanding of the existing legislation, policies and management activities which protect the city's trees; and a framework for increasing use of these where protection is necessary.
- 6 A policy framework to inform and support decisions made by the Council and others in relation to trees.
- 7 A basis for identifying new planting opportunities, taking a long term approach to the replacement of old trees, and improving the protection of existing trees.
- 8 A vision that can be used to motivate and draw together interested parties in improving Manchester's tree and woodland resources.
- 9 An Action Plan to be implemented by Manchester, including public agencies, the community and anyone with an interest in Manchester's trees.

Audience

The Tree Strategy aims to be an introduction to Manchester's trees. It aims to signpost people to key information, activities and organisations that influence or impact on Manchester's trees. The information in this document is intended for anyone interested in promoting and protecting trees in Manchester.

Development

The Tree Strategy was developed using:

- Stakeholder engagement including a dedicated tree conference, 'Valuing Manchester's Trees' in September 2005.
- Meetings with interested parties and the creation of a Tree Strategy Group.
- Extensive research to improve understanding of the extent and quality of Manchester's tree and woodland resource.
- A review of existing policies and legislation aimed at protecting Manchester's trees.
- A review of existing management activities and programmes in place at the council, public agencies, key businesses and voluntary organisations.

These activities resulted in the development of a vision, four key objectives, and an action plan.

Vision

The strategy aims to:

- Secure a long-term future for our trees and woodlands, providing the right management and strong protection for generations to come.

Objectives

- To **Involve** Creatively
 - Promote the value and importance of trees across Manchester.
 - Engage, educate and actively involve all stakeholders across Manchester.
- To **Manage** Sustainably
 - Ensure a best practice approach to the management of trees and woodland.
 - Develop a city wide audit of trees and woodland.
- To **Plant** Appropriately
 - Plant more trees.
 - Improve landscape value and diversity.
- To **Protect** Strongly
 - Protect and conserve the city's trees and woodland.

Action Plan

The action plan, available at the end of this document on pages **31** to **42**, has been developed by appraising opportunities for improvement and positive action that are considered to deliver progress against the four objectives.

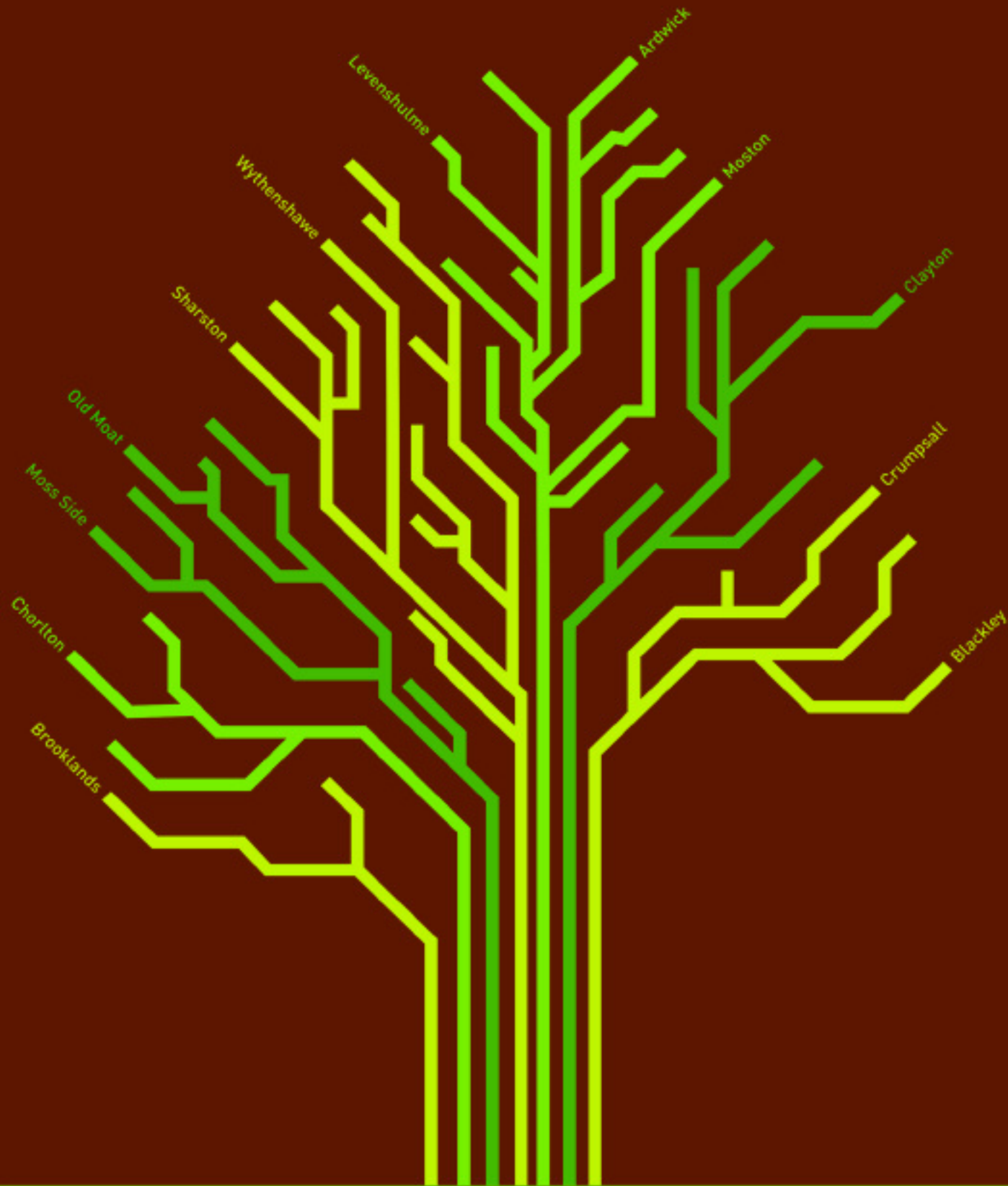
Practical actions include:

- The preparation of management plans and biodiversity assessments for all Council owned Woodlands by 2010.
- The development of a single system approach for tree data recording in 2008.
- The review of all tree related policies as part of the Local Development Framework by 2008.
- The establishment of Voluntary Tree Wardens by 2007.
- The delivery of over 50 tree related events and activities annually.
- Campaigns in schools and communities to promote the value of trees.
- The planting of over 16,000 trees by 2010.

Foreword

Overview

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HOW MANY ON YOUR ROUTES?

We want you to help us celebrate and protect Manchester's trees.
Post photos and stories of your favourite trees here:
www.manchestergreencity.co.uk/trees

1 Introduction

Why have a Manchester Tree Strategy?

Manchester has understood the vital role that trees and woodland play in the improvement of our quality of life for over 150 years. Among the first public parks to be established in England were in Manchester (Philips and Queens Parks, 1846). Thousands of trees were planted over the years to improve the landscape and provide a necessary counter to poor air quality, but places did miss out. The City Centre was until recently stark and relatively treeless. We now have the challenge of retro-fitting trees into Manchester's Victorian cityscape. In today's society, trees play an important role in the continued regeneration of the city, and it is essential that they are sufficiently protected and recognised as a local resource. Trees are essential. Globally, without trees our atmosphere would not support human life. At a time when deforestation is occurring at an unprecedented rate in developing countries and tropical regions, maintaining an effective tree resource within the city becomes increasingly important.

The sustainable community strategy for Manchester has been revised. You can read the latest version at www.manchesterpartnership.org.uk.

A strategy that protects the City's trees and improves their conservation will contribute to building neighbourhoods of choice which is a key objective of the Community Strategy.

The Tree Strategy for Manchester aims to establish a robust framework for the management and protection of the city's trees and woodlands, actively involving partners from the public, private and voluntary sectors. The strategy will encompass international, national and local policies, highlight exciting current initiatives and outline new opportunities. The strategy will be integrated into the citywide regeneration frameworks and the drive to become Britain's Greenest City. It will also support the Council's environmental strategies including the Waterways, Biodiversity and Energy Strategies.

People care - Their view on trees

The people of Manchester have been vocal in their concern for the city's trees. For hundreds of representatives of friends groups, community groups and voluntary organisations, as well as private businesses and environmental organisations, the management and protection of our trees has always been of importance.

The Community Network for Manchester reflected this interest in the development of a tree sub group. To support this group, the Council held a Manchester Tree Conference in September 2005, which provided an opportunity for people to discuss the future of Manchester's trees and woodlands. Over sixty representatives attended the event from a range of public, private and voluntary organisations. During the day, the delegates participated in workshops, where they discussed the most important considerations for a citywide tree audit, what should be included in the tree strategy and what its core goals should be. Over 600 ideas, comments and queries were provided, and a complete report of all points raised in the conference was produced. The results were then appraised and grouped into categories. These were eventually condensed into a vision and four main themes - involving and engaging people, planting more trees, managing our trees and protecting them. These provide the basis for the vision and four objectives on which the strategy is based.

Feedback from the Conference highlighted that responsibility for, and interest in, trees and woodlands across Manchester ranges across many different people, including companies, private landowners, the council, public agencies, and Forestry organisations.

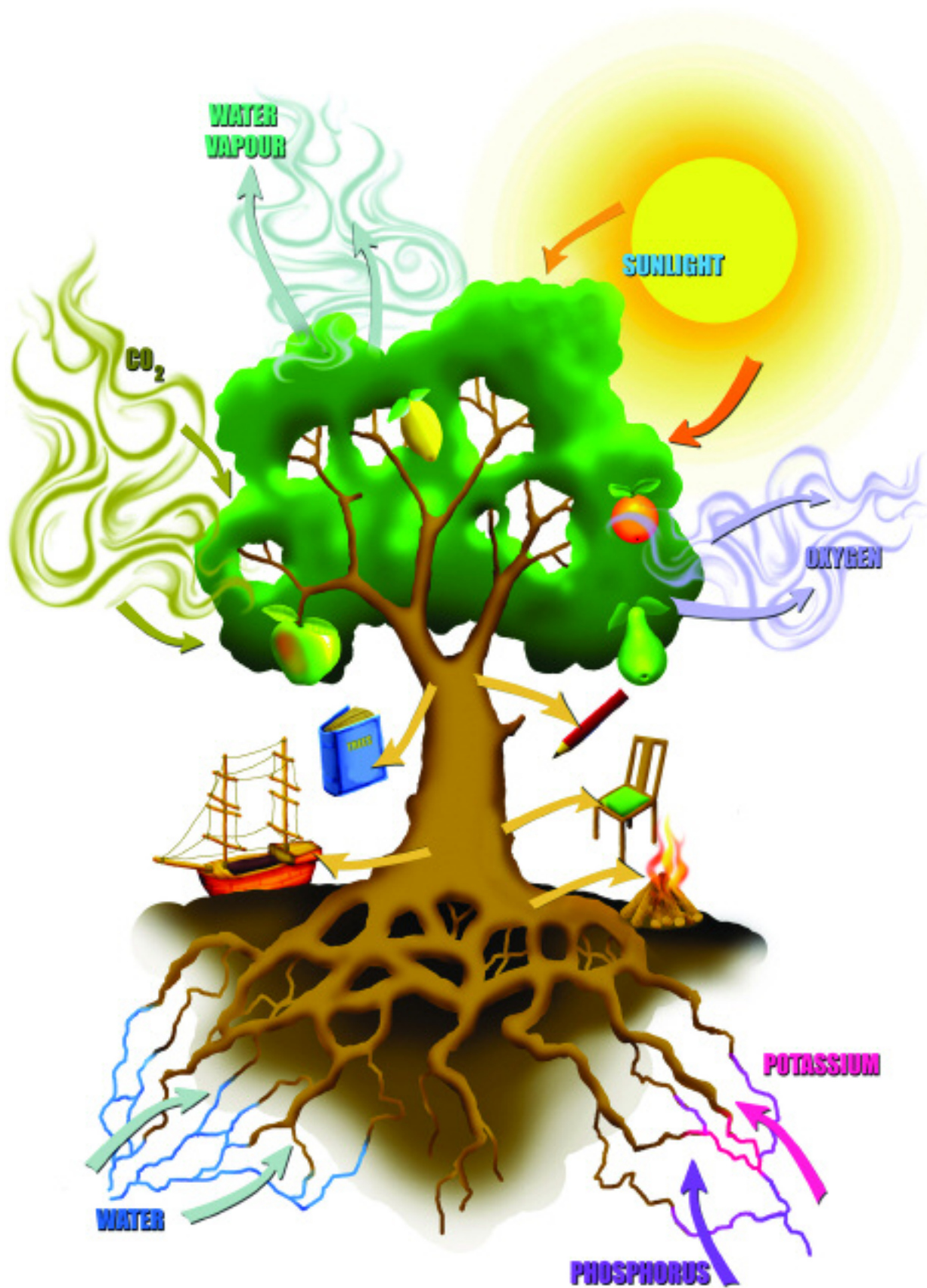
As such, the protection and effective management of trees requires a co-ordinated approach between all the different interested parties. To support this, a Steering Group comprising of representatives from different council services, public, private and voluntary bodies was established for consultation during the development of the strategy and this will be maintained in order to oversee and support its implementation.

2 Context



2.1 The Importance of Trees

The trees and woodlands of Manchester have numerous benefits, not just for the City's residents, but for the wider environment. They impact on our lives directly and indirectly. It is important to understand why we need to invest in them.



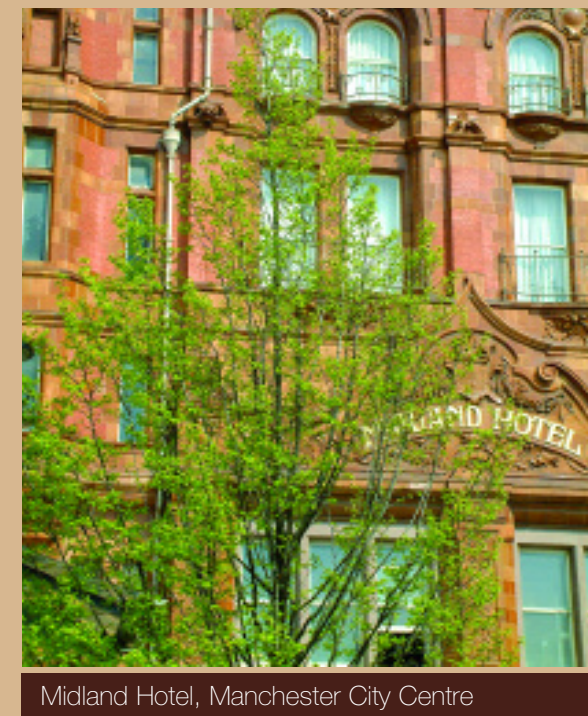
2.1.1 Trees and the Environment

Trees are a core provider of the basic building blocks of life. We need air, food, water, heat and shelter in order to survive. Trees directly provide the oxygen we breathe, food to sustain us, fuel to keep us warm and materials to shelter us. They are also an important part of the water cycle, taking up water from the soil and releasing it to the atmosphere.

Trees and the Atmosphere

Trees grow by absorbing sunlight and carbon dioxide and releasing oxygen, in a process known as photosynthesis. They also draw up water from the ground and release it as water vapour, affecting the local humidity and helping to maintain the water cycle. Some species of trees also absorb harmful pollutants. This is why trees are sometimes described as 'green lungs'.

There is now a consensus across global scientific and political communities that man-made emissions of certain gases (carbon dioxide, methane, nitrous oxide) are causing a change in the way our atmosphere behaves, trapping warmth from the sun that would normally be radiated back into space.



Midland Hotel, Manchester City Centre

"Through a child's eyes trees and woodlands are places of wonderment. Something to climb, to explore, somewhere to make a den, or play hide and seek, somewhere to do the things that kids do. Trees are for life. For our lives, and for those of future generations".

Phil Hackett, Brookdale Park User Group

We release carbon dioxide by burning fossil fuels in transport, electricity production and by using gas. While it is clear that this will cause a rise in global temperatures, it may also 'switch off' or divert a sea current called the Gulf Stream, which currently warms the UK. It is clear that events predicted by climate change modellers are already happening; including sea level rise, increased incidence of extreme weather events (flood, drought, storms, gales) and polar ice melting.

These same models suggest that a catastrophic level of change will occur within the next fifty years unless we significantly reduce man-made emissions of these gases. Because trees absorb carbon dioxide they can be used as a temporary solution to lock away or store carbon dioxide, helping to reduce its levels in the atmosphere. This technique for tackling climate change is known as carbon sequestration.

Potential Impact of Climate Change on Trees

While the effect of climate change on Manchester's trees is not yet fully understood, there is already some evidence of the following effects occurring across the UK:

- Waterlogged soils following wetter winters causing an increase in tree root death
- Late summer droughts leading to an increase in forest/woodland fires
- Increase in soil erosion
- 'Invasive' types of plants, animals, bacteria, disease and viruses upsetting the balance of ecosystems, causing loss of species.

However, warmer weather could also lead to longer growing periods, advanced budburst and increased crop yield in the UK.

Biodiversity and Trees

There is a fundamental relationship between biodiversity and trees. Biodiversity means ‘the variety of life on Earth’. It would be fair to say that without trees, the World’s biodiversity could disappear. Trees bring birds, insects and small mammals into Manchester, and provide the environment to support an enormous number of species. A city rich in the number and variety of tree species provides habitats for a diverse wildlife population.

One of the best ways of indicating the biodiversity value of trees is to look at how many insects one single tree supports. A single oak tree for example can support more than 400 species of insect.

Tree or Shrub	Number of Insect Species
Oak (pedunculate & sessile)	284 - 423
Willow species	266 - 450
Birch (silver & downy)	229 - 334
Hawthorn	149
Blackthorn	109
Poplar species (inc aspen)	97
Crab Apple	93
Scots Pine	91
Alder	90
Elm	82

Trees also provide host to a wide range of lichens. Lichens are made by a mix of fungus and algae and are normally green/yellow in colour. Most lichens are highly sensitive to air pollution, and are therefore excellent indicators of air quality. In highly urban areas, few lichen species are found since most cannot tolerate even moderate levels of air pollution.

The good news is that the presence of lichens is increasing across Manchester, and they have started to appear closer to the city centre in urban parks such as Angel Meadows.

Trees, woodlands and forests play very important roles in the site designation of areas of biodiversity value across Manchester. There are currently 34 Sites of Biological Importance (SBIs) and 19 have been awarded specifically due to the wildlife and ecological value of trees present.

Manchester has a wide range of woodland habitats with Blackley Forest Local Nature Reserve in the north containing beech woodland to Sunbank Wood and Cotteril Clough Site of Special Scientific Interest (SSSI) in the south, both containing areas of semi-natural ancient woodland.

Innovative projects such as Project Bullfinch at Chorlton Water Park further strengthen the positive relationship between trees and conserving Manchester’s wildlife. The Mersey Valley Countryside Wardens and Red Rose Forest have planted hundreds of fruit trees and bushes to create an orchard for the bullfinch that is highlighted as a priority species within the Manchester Biodiversity Strategy.

Trees can survive many hundreds of years but their life is not infinite. New trees need to be planted regularly in order to replace older trees. Leaf cover is a term used to describe the extent of benefit provided by a tree. Increased leaf cover means increased conversion of carbon dioxide to oxygen, shade, more food to support insects, small mammals and, in the case of fruit trees - us! As such, the amount of leaf cover in the city is a better indicator of the value of the tree population than just the number of trees in Manchester. In order to minimise loss of leaf cover, it is necessary to plant around eight new trees to replace one mature tree.

“The Hamilton Road Area Community Association has planted 50 trees and have strenuously supported the proposal for a Tree Strategy for Manchester.”
Barry Johnson, Hamilton Road Area Community Association

Then, as these trees mature, they can gradually be thinned out to allow them room to grow. The value of leaving standing or fallen dead wood should not be forgotten either. Dead and decaying wood provides ideal habitats for a wide range of invertebrates which in turn will attract small mammals and birds

The city’s parks and trees also need to connect to each other in order to provide corridors for wildlife to move through and within the city. These are known as ‘wildlife corridors’. Impenetrable fencing, large areas of hard landscaping, and extensively built up areas act as barriers to the movement of Manchester’s wildlife. Trees often need to be grouped together in order to reproduce. The ‘Urban Forest’ project aims to link Manchester’s green spaces to provide wildlife corridors.

Native vs Non-Native
When people discuss tree conservation, there is a great deal of debate regarding whether non-native trees should be planted. In general (though not always), non-native species (those introduced from other countries) support fewer species so have a lower biodiversity value.

An example of this is coniferous woodland that, due to a higher proportion of recently introduced species, tends to have lower biodiversity than a broadleaved woodland.



Increasingly however, as the world experiences climate change, this is affecting the migration patterns of birds. They arrive earlier when migrating from the north, and leave later to migrate to the south. Planting non-native species in appropriate settings can be of significant benefit in ensuring that trees are able to support the increased variety of visiting birds.

For example, winter thrushes, fieldfares, waxwings and redwings rely on rowan berries over winter, but the berries on native rowans have started to fall and ferment during the Christmas and New Year period when they are reliant on them. This can cause problems due to consumption of fermented berries or even lead to starvation. The non-native asiatic rowan species hold their berries longer; providing a vital food source for these birds when other food sources are scarce.

The species of tree planted can also affect the local character of an area. Planting non-native species in ancient woodland for example, can appear incongruous. Some local areas are recognised by the type of tree planted, and the introduction of a starkly contrasting species may adversely effect visual enjoyment of an area.

Non-native species can be very beautiful, and may also be able to occupy locations that would be inappropriate for our native species, due to the size of root system or period of leaf fall. Good examples of this can be found at Fog Lane Park in Didsbury, where an enormous scotch laburnum (possibly the tallest in Britain) is greatly appreciated, and Wythenshawe Park, which hosts an impressive ginkgo, and the best collection of dawn redwoods in Lancashire.

Non-native trees can play an important role in Manchester. The priority is to ensure that, at all times, the right species of tree is planted in the right place to protect wildlife and maintain local character.

2.1.2 Quality of Life - the social and economic impact of trees

The presence of high quality, well-managed trees and woodlands can dramatically enhance the appearance of an urban environment. This in turn has a significant bearing on people's perceptions, both of their surroundings and of their quality of life.

Trees contribute to our quality of life in many ways. Put simply, they look nice. Trees add significantly to the appearance of an area, and their presence (or absence) can change how we feel about it, and the value we place on it.

Research by the Office of the Deputy Prime Minister (ODPM) has shown significant increases in house prices (up to 15% or more) for properties that are in tree-lined streets or have trees nearby in comparison to treeless areas. Tree lined streets have a lower incidence of vacancy or dereliction. Money can grow on trees! Research undertaken by The Commission for Architecture and the Built Environment (CABE) 'Start with the Park' project demonstrates that businesses want to be located in well-managed, green locations, and research has also shown that areas with more trees have less crime related problems.

Trees don't just promote a sense of well-being and citizenship; they can also directly help to cut crime and disorder. Spiky planting schemes on the perimeter of premises using holly or berberis can deter intruders. Trees can also be used as natural barriers to deter the use of motorbikes and other antisocial activities within woodlands. Conversely, dense, tangled undergrowth or high hedges can increase perceptions of risk, and provide cover for criminal activity. Again the principle of the right tree in the right place is key to enhancing as opposed to negatively affecting the quality of an area.

A well-wooded environment is an asset to our economy. The Manchester Strategic Regeneration frameworks recognise the importance of trees in relation to building sustainable communities and the effect that well managed trees and woodland can have on our city. As such, planting schemes form an integral part of regeneration activities, helping to build, support and enrich local character.

They can improve the energy efficiency of buildings by acting as windbreaks, and their foliage can help to screen out the noise and visual impact from busy roads or railways nearby. Area regeneration frameworks are being established that carefully plan the long-term social, environmental and economic future of Manchester. Continued regeneration in North Manchester is looking to link over 50 natural green spaces and parks covering some 500 hectares. This green corridor will link the City Centre with the city's largest open space, Heaton Park.

Trees can also substantially reduce energy costs. For example, strategically placed trees can prevent heat loss from homes, schools or offices in the winter, and they can also reduce air conditioning costs by shading buildings in the summer. As such, energy is conserved (which, city-wide, can amount to a significant figure) whilst the business or individual homeowner saves money on bills.

The Tree Council of Britain is confident that spending time in a tree rich environment can help us live longer. Their research has shown that people who are surrounded by a tree and woodland environment feel a greater sense of well-being. A visit to an urban park or woodland area can be of great benefit to the whole family - adults can relax and enjoy the peace and beauty of their surroundings (thus relieving everyday stress and tension) whilst they exercise their pets, and their children are involved in an exciting and safe outdoor playground.

Being in a place with trees can reduce stress levels and blood pressure significantly in less than 20 minutes. A study conducted by Texas University found that biological symptoms of stress reduced in most of the study group within 3-5 minutes of seeing trees, and that even driving down a tree-lined avenue could reduce blood pressure, relax muscles and lower stress levels.

Manchester City Council shares this view, and recognises the health benefits of access to tree-rich open space. Warden or self-led health walks and trails feature prominently in Manchester's parks and open spaces.

This is also recognised in guidance issued by English Nature who aim to ensure that all people living in the UK have readily available access to natural environments.

Beauty and Landscape

Trees play a vital role in the creation of an attractive and original landscape not just in the countryside, but also in cities. Trees can offer the different areas of Manchester their own 'sense of place', providing natural beauty that reflects local character. The types of tree planted can help to define a neighbourhood. In the city centre and urban parks, street trees and greenery can counterbalance changes to the cityscape.

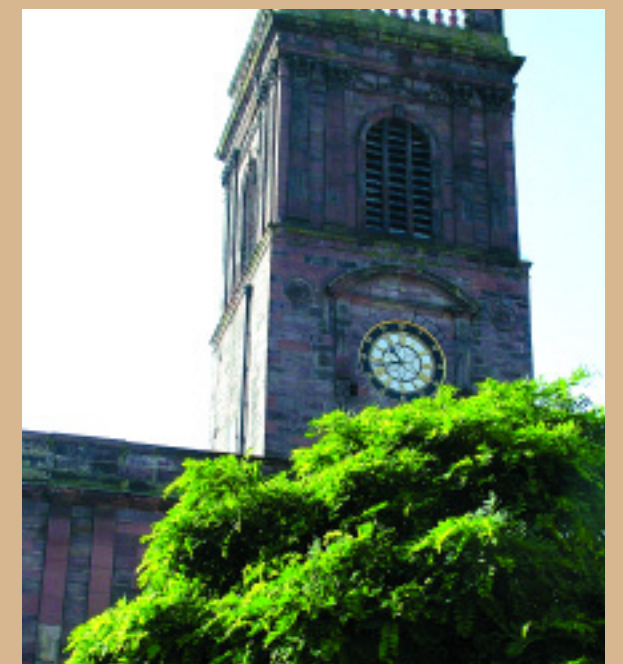
In the suburbs, trees feature prominently in the river valleys, along the roads and streets, private gardens and in the community parks. Not only do they enhance the surrounding scenery and have aesthetic value in their own right, but they can also provide a screen to block out unwelcome views.

Cultural and Heritage value

Trees do not just contribute to the area's landscape - they also have cultural and historical significance. They play a major part in artwork, culture, literature, myth, stories and craftsmanship. Trees are an important theme in religion, literature and art. Trees are also planted as memorials to commemorate special people or events, perhaps due to the fact that they are able to outlive us.

Trees may be accompanied by local legends or folklore and this can help people connect with their ancestral and cultural heritage, and some of Manchester's oldest trees were planted to combat the pollution of the industrial revolution. Trees were often planted as memorials; Marie Louise Gardens in Didsbury was originally planted in 1904 with 72 different species of trees, many of which still exist.

Trees can also play a part in areas receiving conservation status; for example, the quality of tree cover in Chorltonville, South Manchester was an important factor in its designation. Literature, paintings and sculpture across Manchester celebrates the role of trees in our community.



St. Annes Square, Manchester City Centre

2.1.3 Tree Products

Imagine a world without tree products. No paper, books, wooden furniture, beautiful beams, or MDF. To date, more than 5,000 uses of wood have been identified, including some of our most important medicines. Archaeological evidence suggests that man's first tools were made of wood and around a third of the world's population rely on wood as their primary source of heat and light generation. If we rely on trees to provide so many of our everyday items, we need to make sure that enough trees are planted to replenish the ones we've used. Trees can take a long time to grow, so we need to make sure that our use of trees now does not damage the ability of future generations to enjoy the wood products we take for granted.

After a brief cessation following an international outcry in the late 1970s, the world is now losing its wood resources at an unprecedented rate. Logging and land clearance in the Amazon has reduced the size of the rainforest by a fifth in the last ten years, and an area bigger than the size of Wales was lost last year. The wood becomes fuel and luxury hardwood furniture for Western nations such as the UK, and the land is cleared to make way for cash crops and cheap grazing to produce meat.

Initiatives have been established to help consumers choose wood and wood products from sources that are managed to a high standard of biodiversity, and that replant trees at an appropriate rate to ensure that overall leaf cover and wood availability does not suffer.

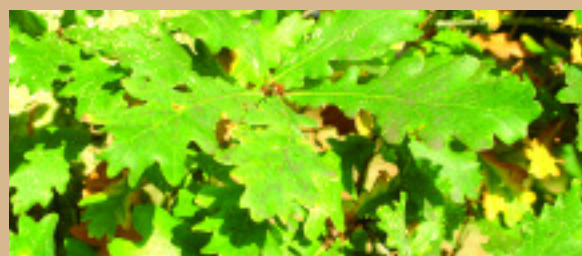
The Forest Stewardship Council provides a certification scheme for wood products to help consumers identify wood products from sustainable sources. Their logo can be found on a wide range of paper and wood products, and reassures consumers that they are not contributing to the unsustainable loss of some of the world's most biodiverse habitats.

Manchester's Trees as Products

Trees need to be managed. Some woodland needs to be "thinned out" by removing some trees to make others stronger. Some trees become unsafe, damaged or diseased and need to be removed. But this material is potential product, not waste.

Manchester's trees offer an opportunity to provide a source of marketable or usable timber. This timber can be extracted during the course of tree and woodland management. Although much of Manchester's woodland is predominately managed for recreation, amenity and wildlife, there is still scope to manage for timber in sufficient quantities to provide materials for mulch, arts and crafts, and limited fuel supplies. Waste wood collected from sites managed by the council tends to be either reused on site as mulch, left as deadwood to form important wildlife habitat, sent to a waste wood centre, or recycled by contractors. The council does not send waste wood to landfill. However, in parks, there are opportunities to avoid the need to transport waste wood materials, increasing the facilities for composting or reusing on site.

Local examples of where it's already happening include the coppice trial at Kenworthy Wood Co-operative Bank Community Woodland in Northenden, where willow is coppiced to produce thin branches which can be used to make baskets and fences. The Mersey Valley Warden Service based at Chorlton Water Park also uses timber sourced from trees grown on site to make nest boxes and planks which can be used in step building and fence construction. In 2005, over 300 nest box kits were created. Benches, seating and a variety of artwork has been created from trees and natural materials in Manchester.



Oak leaves

Manchester's Trees as Fuel

Climate change necessitates a much more efficient use of fuels to help reduce carbon dioxide emissions. One way of reducing the net carbon dioxide emissions from fuel is to use a sustainable cycle of wood growth and burn this wood as fuel. When fossil fuels such as oil and gas are burned they release carbon dioxide into the atmosphere. Trees absorb carbon dioxide as they grow, and release it upon burning, ensuring that there is no net gain of carbon dioxide in the atmosphere.

This is known as a 'carbon neutral' fuel supply. Fast growing woods such as willow provide an excellent opportunity to provide carbon neutral fuels but, as they use a lot of land, this approach to reducing carbon dioxide emissions may be more appropriate in rural areas.

While Manchester has a relatively limited potential fuel source from tree felling and pruning activities, there are some specific opportunities that warrant further investigation, including use of land awaiting remediation for short rotation willow coppice, and on-site use of waste wood to provide a localised heat supply.

In addition to wood waste from felling and pruning, Manchester also produces significant quantities of wood waste from households, construction sites and manufacturing activities. The general waste stream also contains a reasonable quantity of waste wood. Wood from these sources presents a much more viable potential fuel source for use in Manchester and a wood chip and pellet production facility is already available in Greater Manchester to turn waste wood into fuel. The Council has prepared guidance for construction companies to help them reuse and recycle wood waste, and seeks to encourage businesses to use wood sustainably via its Business Pledge scheme.

See www.manchestergreencity.co.uk for more details on these initiatives.

2.1.4 The Problem with Trees

In reading the strategy, it is easy to assume that trees are always good news. However, while trees offer many benefits, they can also be a cause of concern.

The main ways that trees adversely affect quality of life are:

- Planting the wrong tree in the wrong place
- Pests and diseases

While it is true that trees can occasionally cause problems, in the vast majority of cases this is the result of maintenance issues, poor planting strategies or a failure to understand the needs of trees when making changes to an area. As such, we should view problem trees as challenges to be resolved, rather than reasons to avoid tree planting or remove existing trees.

Planting the Wrong Tree in the Wrong Place

The biodiversity, aesthetic and amenity value of a tree is affected by its location. For example, while a large oak may look beautiful in a park, when planted directly adjacent to a house its root system may disrupt the foundations, causing subsidence. This does not necessarily mean we should plant only small species. Measures such as root barriers and crown lifting (where lower tree branches are removed) can help to prevent problems such as root damage or unwanted shading.

Likewise, while a monkey puzzle tree may be a great feature in a park, it could look out of place in an ancient woodland setting. In some cases, introduced species may disrupt a stable, biodiverse habitat by out-competing or overshadowing valued species. As such, it is key to plant the right tree in the right place. We are also facing challenges in Victorian areas of the city, where lots of trees are the same age, and they are all reaching the end of their life at the same time. We are working to replace these trees in phases with a variety of species so we don't lose the important character of the area, or create similar problems for the future.

In some cases insufficient thought was given to the species of tree used for street tree planting in Manchester. Problems have also arisen due to modern changes such as increases in underground wires and pipes, and the installation of impermeable, inflexible paving. Dangerous overhanging branches and pavement breakage has ensued, which may not be evident to people who enjoy the tree's aesthetic value. As such, conflicts of interest can occur.

Overhanging branches are rarely dangerous unless the tree is diseased or weak. The problem is usually that they obstruct traffic or pedestrians or cause unacceptable shading. This, along with pavement breakage, is usually a maintenance issue.

This is particularly true in the case of the city's railway sidings. Local residents appreciate the role of trees in helping to screen unsightly railway lines and the sound of leaves moving in the wind can help to mask undesirable railway noise. However, few people can be unaware of the disruption caused by 'leaves on the line' and overhanging branches or unstable trees can present a serious safety risk to railway users.

When contentious works such as tree thinning along railway lines is taken it is essential that communication is undertaken with local residents well in advance of any works, and that residents know that replanting is being undertaken elsewhere to make good any loss in tree stocks.

In 2003, the Government introduced new legislation so that local councils can take action against people who fail to respect the impact of their trees and hedges on neighbours. High hedges and other planting that blocks light or access to previously available scenic views may result in the issue of notices requiring pruning or felling.

Even if appropriate planting has taken place, occasional high winds and storms may make trees potentially hazardous, when branches are lost or, in rare circumstances, a whole tree is uprooted.

Ensuring that the correct species of tree is planted in the correct place can go a long way to preventing the majority of the problems caused by trees. Regular assessment and good communication is essential. People need to be aware of trees and tree management. They also need to be kept informed about tree management and planting in their area, why it is happening and what the outcomes will be.

Pests and Diseases

Trees can be prone to infection and disease. Past instances include dutch elm disease and a recent outbreak of sudden oak death. It is difficult to predict the effects of climate change in the context of pests and diseases, but any change leading to increased stress on trees is likely to result in increased problems with pests and diseases.

The Forest Research Agency, predicts an increase in certain diseases such as needle blight of pine, root infections, sooty bark disease of sycamore and alder dieback as climate change progresses. It may also herald the arrival of exotic, non-native pests and diseases such as the green spruce aphid, bark beetle and horse chestnut leaf miner, as more of these pests may survive the increasingly mild winter months.

Manchester poplars have been attacked by a disease known as the 'poplar scab' or "spring defoliation". This is associated with the presence of a microscopic fungus called *Venturia populina*. This disease has been known for a long time but has only started to cause problems in the last few years. The reason for this is unknown. Manchester's experience of the disease suggests that the biggest factor in determining the likelihood, seriousness and spread is weather conditions.

Observations suggest that trees located in woodland, dense stands or deep valleys tend to be at higher risk, and suffer more severe infection than trees located in isolated or exposed positions. Forestry Commission research has led to an emergent theory that the climate change effects of increasingly warm damp springs followed by prolonged dry weather, may be improving the conditions for disease transmission.

Poplar scab weakens trees over a period of up to three to five years and almost always results in the death of the tree. Both the presence of Manchester poplars and incidence of the disease are concentrated in parks in the north of the City, but it is spreading.

A citywide survey undertaken by the Council estimated that there are over 2,500 Manchester poplars. Only trees seriously diseased or dying with no chance of recovery will be removed and full ecological surveys will be undertaken before removal. Leaving both fallen and standing decaying wood, for their wildlife value, will be considered where this does not risk spread of the disease. Appropriate replacement planting will also be undertaken. There will be an introduction of a wider range of genetic varieties and we will aim for a wider spread of trees of different ages to help strengthen tolerance and 'future-proof' against potential threats.

The survey has identified 879 north area trees infected and warranting removal, located in Boggart Hole Clough, Broadhurst Park, Broadhurst Clough, Brookdale Park, Cheetham Park, Crumpsall Park, Heaton Park, Nuthurst Park, Philips Park and Queens Park. In addition, around 570 trees are showing signs that they could be infected and have been categorised as requiring 'future consideration'. The central and south area surveys did not identify any trees as infected, and 150 trees in the central area were listed for 'future consideration'.

Two trees were identified as infected within Sunnybrow Park in the East Area survey and 316 were listed for 'future consideration' throughout this area. Around 100 trees were removed from Heaton Park in September 2004, and in 2005, a further 200 trees were removed from Heaton Park, Boggart Hole Clough and Broadhurst Clough. The Council maintains a vigilant watch on the diseased poplar stock, and has identified over 400 dying or dead trees that are likely to be removed during 2006, with more trees likely to follow in the next two years.

Since the survey was complete, some recent observations have identified light infection in trees in the southern area. The disease occurs annually, so trees appear to get infected each year. The disease's origin is still not clear, and, in the UK, it is concentrated in the Manchester area, probably due to the prevalence of the poplar species within the city.

However, the disease's spores are airborne and can travel very long distances, and it is present outside Manchester, so simply removing all trees showing signs of infection is not seen as a viable way to control the disease.

This disease is threatening up to three quarters of the poplar population; a much-loved feature of Manchester's landscape, and it is understandable that this is causing significant local concern, particularly where removal is essential. As such the council and its partners have put a stringent conservation and management plan in place.

“Erwood Road is seen as one of the best roads in Manchester with its four rows of trees. They make it an area to be proud of”.

Peter Thompson, Friends of Cringle Park

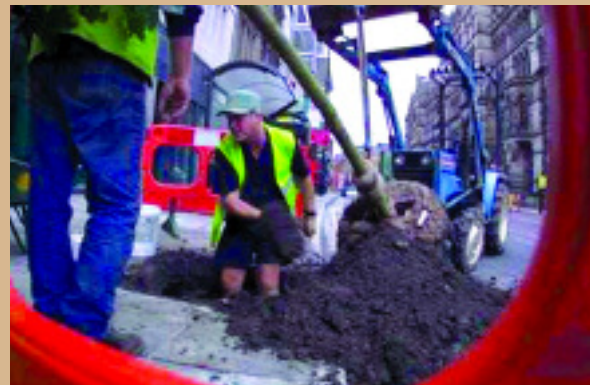
2.2 Where trees are found in Manchester

2.2.1 Street Trees

At present, Manchester has approximately 23,000 street trees. Street trees are planted along roadsides, verges and in pavements. They are managed by the Council, who oversee a programme of checks, routine maintenance and emergency work throughout the year.

The council has a database of all street tree stock in the city. Each tree is registered individually on the database, and systematically checked every two years. This is an ongoing process and to date, over 23,000 trees have been entered onto the database. Of the trees identified, the most common species observed is ash, followed by common lime, sycamore, norway maple and london plane.

The trees that are planted on our streets today are generally ornamental species, although there are still many native and veteran trees thriving across the city. New trees are located so as to avoid problems with building foundations or blocking natural light.



City Centre tree planting, Portland Street

“As a keen gardener and an 'old' woodwork teacher, not only do I appreciate the timber and the history of this invaluable resource but also the trees themselves, their shape, their form, their colours”.

Paul Roberts, Allotments Society

2.2.2 Woodlands

There are six main types of woodland found across Manchester, mainly in our river valleys, parks and open spaces.

Semi-natural woodland is evenly distributed across the north and south of the city. Large areas exist in the north at Bailey's Wood, Heaton Park and Boggart Hole Clough. In the south around the airport and Wythenshawe are smaller isolated bodies of mature oak woodland. Some of these woodlands have good structure and diverse ground flora, Sunbank Wood being a good example.

Wet woodland is a UK Biodiversity Action Plan (BAP) priority habitat, which supports a diverse range of flora and fauna. Good examples are Willow-carr Woodland at Stenner Woods and Rose Hill Woods. Nan Nook Wood contains an area of Alder-Carr woodland. The Carr woodlands occur as part of larger woodland bodies with the ground flora being generally more diverse than the adjoining areas.

Ancient woodland sites are those, which have had continuous woodland cover since at least 1600AD. Having been established for a long time they can support a rich and diverse flora and fauna. Ancient woodland occurs at Cotteril Clough, Sunbank Wood, Well Wood, Bailey's Wood and Boggart Hole Clough.

Plantation woodlands have increased over the past fifteen to twenty years due to the Community Forest Initiative. Older plantations tend to be dominated by exotic species such as white poplar, sycamore, grey alder and horse chestnut with little value for wildlife. A good example of plantation woodland, which is being managed to encourage wildlife is Blackley Forest, which was planted in 1953 as one of the first community woodlands.

Mixed woodland contains both deciduous and coniferous trees, such as Wythenshawe Park.

Young self-seeded woodland occurs along existing and disused railway lines and sidings, the canopy being predominantly pioneer species such as birch, willow and sycamore. These offer valuable wildlife corridors into the city.

Green Corridors and the Urban Forest

Green networks are being developed across the city as part of Regeneration, Waterways and Community Forest projects. Parkland and open spaces are being interlinked to join up with the established network of open spaces and woodland edge along the city's rivers and flood plains.

There is significant opportunity to continue developing and improving these links. In addition to improving public amenity, creating links between existing woodland can help wildlife to move through and within the city. Breaking down the barriers between people's perceptions of 'city' and 'countryside' is the basis of the urban forest concept which is part of Red Rose Forest's objectives.

This is being realised year by year, as the city's trees and woodlands mature and are managed sustainably. The overall aim will be to create a diverse, living landscape that is sensitively and innovatively managed to grow for many years to come.

2.2.3 Hedgerows

Manchester has some good examples of maturing hedgerow in the Irk, Mersey and Medlock Valleys, but information regarding the quantity and quality of hedgerows in Manchester is limited. Hedgerows are important since they not only contribute to the attractiveness of the landscape but also provide a habitat for a variety of species. They also act as a corridor through which species can travel from one area to another. The removal of hedgerows would threaten many plants, animals and birds.

Half the total species of British lowland mammals and at least 14 out of the 91 recognised species of birds live in hedgerows. Many more species are periodic visitors. Since the middle of this century there has been a large net loss of hedgerows within the U.K. Between 1984 and 1990 121,000 km of hedgerows were lost (Department of the Environment Report).

Urban hedgerows may be affected by a number of factors such as inappropriate management practices and poor maintenance leading to a decline in value for wildlife, uncertain ownership and new building developments or street furniture resulting in damage or removal of hedgerows.

There is also an increased trend to turn front gardens into parking areas, threatening some of the best hedgerows in the City. Also, Highways regulations require wider entrances and sight lines to properties, leading to further loss of hedgerows. This means it is very important to identify opportunities to plant new hedgerows, and to find alternatives to hedgerow removal wherever possible.

2.2.4 Parks, Open Spaces and Allotments

Manchester has 154 parks, open spaces and river valley sites totalling 1,270 hectares. Within these green spaces, there are more than 50 woodlands covering 190 hectares. These range in scope from ancient semi-natural woodland to mature woodlands and young plantations. The city also has 42 actively used allotment sites.

The Council manages the city's parks, open spaces and allotments. Long term and appropriate management is essential to ensure that these areas remain safe and attractive for visitors and wildlife for years to come. Unfortunately, the cost of dealing with misuse of parks and vandalism reduces the resources available to improve their quality.

2.2.5 Trees in private ownership

A significant percentage of Manchester's trees grow on privately owned land, such as railway sidings, golf courses, university or college grounds, business premises and residential gardens.

The management of such trees is the responsibility of the private owner and as such problems may arise where they do not have sufficient knowledge, time or resources to ensure proper maintenance of their trees. The standard of care for trees on private land can range from complete indifference to those who take great pride in their trees and invest time and money into long term sustainable management.



Queens Park, Cheetham

Conflicts may arise when tree owners do not realise the aesthetic value placed on their trees by other members of their community and remove trees without consulting neighbours. Similarly, large trees may increasingly cause a nuisance to neighbouring communities by overshadowing gardens or windows, blocking access to natural light. Should this occur, neighbours can contact the Council who will explore every opportunity to negotiate an amicable settlement. As a last resort, and after all other options have been investigated, the Council may decide to place an Improvement Notice under the Antisocial Behaviour Act 2003 to remedy the nuisance. If trees are unsafe on business premises, the Health and Safety Executive may choose to act.

Unless a tree is in a conservation area, protected by a Tree Preservation Order (TPO), or unreasonably blocking visual amenity, private individuals and companies are at liberty to do as they see fit with their trees. However, it is considered good practice to consult neighbours before engaging in works which may adversely affect local character.

2.2.6 Schools

Trees within school grounds provide a great hands-on tool to raise awareness and understanding of the importance of nature through school-based initiatives. They can be part of an 'outdoor classroom' for children where they can undertake curriculum focused activities. They also provide shade from harmful UV-Rays.

Eco Schools is an environmental award scheme for schools, rewarding and accrediting schools that have made a commitment to continuously improving their environmental performance. The council is working with over 75 schools to help them achieve the Eco Schools standard. School grounds are a key theme of the standard and well-managed trees can play an important role in helping increase the schools environmental credentials.

2.2.7 Churchyards and Cemeteries

Trees are a traditional feature of churchyards and cemeteries; indeed many of Manchester's oldest trees are found there. Trees do much to create a peaceful atmosphere within the site.

The council maintains five cemeteries in Blackley, Gorton, Manchester General Cemetery, Philips Park Cemetery and Southern Cemetery. Management in the cemeteries involves the pruning of the mature trees and the removal of any dead and unsuitable trees where necessary. The tree's condition is checked regularly.

For hundreds of years, particular species planted in churchyards have carried much significance. For example:

Tree species	Significance
Yew (Taxus baccata)	Since records began, yew has been considered one of the most sacred trees due to their longevity. Yew lives up to 1,000 years
Holly (Ilex aquifolium)	People used to believe that the bushes protected tombs and monuments from lightning strikes.
Common Oak (Quercus robur)	Oak leaves were inscribed on tombs as a symbol for power, authority or victory
Rowan (Sorbus aucuparia)	Rowan is believed to deter bad spirits from bothering the dead
Cypress (Cupressocyparis leylandii)	Bodies were once were laid upon cypress branches before burial. The mourners carried its branches as a sign of respect

The Council has been investigating the possible use of woodland burial sites. This will provide an opportunity for trees and graves to be integrated more closely than conventional cemetery layouts as memorials and headstones are generally not permitted, but often trees are planted to mark the grave.

In closed churchyards and cemeteries, trees can make a valuable enhancement to the landscape, but they can cause problems that include the obscuring of grave structures and disruption by tree roots and branches.

Trees on Development Sites

Whenever land is due to be developed, this presents a potential risk to trees on the site. As such, measures such as tree preservation orders can be made to protect them, or planning conditions can be established to ensure that tree resources are conserved.

However, there is nothing to prevent a developer from removing unprotected trees from a site prior to submitting a planning application, which is why ensuring that all trees of value have adequate protection is important. Once a developer submits an application, if there is any activity that may involve removal of, or works adjacent to trees, a tree survey and management plan will be required by the Council, and this may form part of a planning condition.

Guidance is issued to developers to help them understand the steps they need to take. Manchester City Council has a target to increase tree cover across new developments by 10% each year. Developers are required to provide details of existing tree coverage and surveys with their planning submissions. Work is under way to maintain tree coverage on new developments in order to deliver progress against the target.

Enjoying Manchester’s trees

Health walks across Manchester are central to people’s enjoyment of their local environment and their engagement with trees. Research from the Health Promotion Group has shown that views of natural scenery such as trees and fields promote a drop in blood pressure and reduce feelings of stress

Experienced Park wardens from the Council run health walks across the city, on at least a weekly basis, with popular sites such as Clayton Vale offering up to seven walks per week. The wardens use their local knowledge to point out important natural, heritage, cultural and landmark features during the walks, to enhance walker’s enjoyment. Wooded and tree filled environments have been selected for many of these walks; Boggart Hole Clough in the North, Alexandra Park, Platt Fields and Chorlton Water Park in the South and Central part of the city, and Highfield Country Park and Clayton Vale in East Manchester. Further details on the individual walks can be found on the Council’s website.

Zest is a new healthy living project for North Manchester aiming to improve the health and well-being of the people in the area. Zest has selected Blackley Forest Local Nature Reserve as a key site for their health walks.

2.3 Managing Trees in Manchester

2.3.1 Policy and Legal Framework

Legislation, agreements, policies and initiatives are in place on an international, national, regional and local basis to help protect the world’s tree resources. This section provides an overview of the main measures in place.

International

The Bern Convention on the Conservation of European Wildlife and Natural Habitats (1992). This imposes obligations to conserve wild plants, birds and other animals with particular emphasis on endangered and vulnerable species and their habitats. Provisions of this Convention underlie the EC Habitats Directive and the UK’s wildlife legislation (for example Wildlife and Countryside Act 1981).

The Rio Summit (1992)

- Key issue - Ecosystem protection

Agreements were reached on protecting forests and woodlands as World forests declined by around 90,000 sq km a year during the 1990s.

Agenda 21 (1992)

- Chapter 12 Combating deforestation

Chapter 12 of Agenda 21 makes provision for the following programme areas:

- Sustaining the multiple roles and functions of all types of forests, forest lands and woodlands;
- Enhancing the protection, sustainable management and conservation of all forests, and the greening of degraded areas, through forest rehabilitation, reforestation and other rehabilitative means;
- Promoting efficient utilisation and assessment to recover the full valuation of the goods and services provided by forests, forest lands and woodlands
- Establishing and/or strengthening capacities for the planning, assessment and systematic observations of forests and related programmes, projects and activities, including commercial trade and processes

The Helsinki Agreement (1993)

Four resolutions were adopted at Helsinki regarding trees:

- 1 The sustainable management of European forests
- 2 The conservation of their biodiversity
- 3 The implications of climate change
- 4 Forestry co-operation with the countries of Central and Eastern Europe.

E. The Kyoto Agreement (1997)

The Kyoto Protocol is an international agreement setting targets for industrialised countries to cut their greenhouse gas emissions. Introduction of carbon credits for tree planting and other forest and land use-related activities have positive effects on achieving the agreement.

National

Town and Country Planning Act 1990 and the Town and Country Planning (Trees) Regulations 1999 are the primary acts for the protection of trees. They form a legal framework for the designation of Tree Preservation Orders.

Planning Policy Statements (PPS)

Set out the Government’s national policies on different aspects of land use planning in England. PPS 1 (Delivering sustainable development) and PPS 9 (Biodiversity and Geological Conservation) provide support for both the protection and enhancement of biodiversity and natural habitats.

Local Nature Reserves (LNRs)

The designation of LNRs is a key way of protecting wildlife habitats and natural features and increasing the public’s awareness of their local environment. Manchester currently has four LNRs; Chorlton Water Park, Blackley Forest, Clayton Vale, Chorlton Ees and Ivy Green.

Antisocial Behaviour Act 2003

Popularly known as the ‘Leylandii clause’ the Act makes provision for local Councils to determine complaints by the owners/occupiers of domestic properties adversely affected by evergreen or semi evergreen hedges over 2 metres in height. The Council are able to charge a fee for this service, which is to be paid by the complainant. The Council may also reject the complaint if they consider that insufficient effort has been made to resolve the matter amicably.

The Act specifically excludes complaints about the effects of roots, such as damage to property, nor does the Act allow for the remedial notice to require the reduction of the hedge to a height of less than 2 metres or the removal of the hedge.

Removal includes action that would result in the death or destruction of the hedge. It must be stated that the Council will enforce this legislation only as a last resort after all opportunities for a settlement have been explored.

British Standard (BS) 3998: ‘Recommendations for tree work’

Provides guidance on the appropriate maintenance and management of trees. The standard is used to provide a technical framework for appropriate works on trees.

It is to be introduced as a requirement that all contractors follow this standard when undertaking work on behalf of the Council, and we will also be encouraging our partners to do the same.

British Standard (BS) 5837: ‘Trees in relation to construction’

Provides guidance on how to decide which trees should be retained and how best to protect them when a site is being developed. It also gives guidance on how to incorporate trees into the new landscape.

While it does not give specific legal protection, it does have wide-ranging implications and is of significant value in ensuring that developers follow an appropriate code of practice in protecting trees on site. Both British standards can be used in conjunction with a Guide available from the Arboricultural Association

Currently, the standard recommends that ‘trees of particular historical, commemorative or other value, or good specimens or rare or unusual species’ should be retained.

The definition does not specifically state trees which are important as wildlife habitat as a reason, but lists wildlife value as one of the ‘other value’ elements that may cause a tree to be retained. It also recommends removal of trees with significant fungal decay at base or main bole and trees with a major cavity or cavities for safety reasons.

Trees that are retained near a development need protecting from construction damage. The BS provides guidance on the minimum distance around the tree that should be protected by fencing:



Minimum distances for protective fencing around trees
(and groups of trees/ woodlands)

Tree age	Tree vigour	Trunk diameter (at 1.5m above ground) in millimetres	Minimum distance in metres
Mature trees	Normal vigour	<350	4.0
		350 - 750	6.0
		>750	8.0
Mature trees and overmature trees	Low vigour	<350	6.0
		350 - 750	9.0
		>750	12

The standard is regularly used in local plans as a request to ensure that tree surveys are conducted in accordance with good practice, and as a recommended framework to help guide the developer about what is and isn't likely to be acceptable. A survey helps local planning authorities evaluate the impact of any proposal on adjacent trees, and future impacts of trees on buildings, allowing them to adjust the scheme where necessary.

The Council and its partners are currently introducing a requirement for all developments potentially affecting trees to submit a management plan in accordance with the standard.

DEFRA publication
"Tree Preservation Orders - A Guide to the Law and Good Practice"

This publication provides an excellent overview of tree preservation orders and the issues surrounding them. In particular, it outlines suggestions for conditions that can be applied to planning application to ensure that appropriate tree protection and aftercare is in place.

It also highlights issues such as the importance of ensuring that developers identify and look after trees adjacent to site access routes, or those which may be affected by the laying of services or roads beyond the site boundary, and the importance of enforcing aftercare arrangements to ensure that trees planted during the planning process become established.

Regional
The NW Regional Plan
- Regional Spatial Strategy (RSS)
Together with the UDP this forms the development plan for Manchester. The overriding aim of the regional plan is to promote sustainable patterns of development and physical change. It recognises the significant 'ecological footprint' of the North West and sets out policies that give support for urban green spaces and further tree planting and enhancing the public realm. The RSS is currently under review, and it is anticipated that the new RSS will further strengthen the importance of trees in cities and urban areas.

Agenda for Growth - the Northwest Regional Forestry Framework
An Agenda for Growth is the framework for forestry in England's Northwest. Created by the Forestry Commission after considerable consultation both within and beyond the forestry and timber sectors, it will help to shape the woodland and forestry sector in our region for the next twenty years.



Plane Trees and the Town Hall

Local
The Unitary Development Plan (UDP)
for Manchester contains planning policies which set the framework for the control of development, use of land and conservation within the city. It sets out policies for the protection and enhancement of habitats and promotes the protection and enhancement of woodlands and trees. These policies will be reviewed and updated in the Local Development Framework (LDF) that will replace the UDP in 2010.

Guide to Development 2
The Guide to Development 2 was released in May 2005 as an advisory document to assist developers and planners in understanding the council's preferred development principles.

Council policies within the Guide to Development in Manchester 2 recognise the significant positive contribution both existing and new landscape features such as trees can make to the character of the city and quality of the environment. The Guide states that different parts of the city have distinct or individual characters, which can be attributed to the quality of the landscape.

Planting is recognised as both softening the urban environment and contributing to sustainability by reducing the effects of carbon dioxide emissions.

Following its trial period, the Guide was updated, and sustainability principles including tree-related policies were strengthened. The Guide was approved as a Supplementary Planning Document (SPD) in April 2007. The SPD contains a requirement for developers to submit a "sustainable environment report".

The report must show how the impact of the development on biodiversity has been addressed and how it will contribute to the Greenest City target to achieve a 10% net increase in tree cover across new developments.

Green City

The Greening Manchester Report of March 2005 proposes a programme and campaign for Manchester to become Britain's Greenest City.

Working in partnership with businesses, public agencies and the community, the Council is committed to put in place policies, targets and actions necessary to result in Manchester being able to justify, against internationally recognised benchmarks, the title "Britain's Greenest City".

In addition to targets regarding the Kyoto Accord which may lead indirectly to tree planting for carbon sequestration and biofuel projects, a specific target is in place for trees in Manchester. Target 5 of the Greening Manchester Programme is to complete a city wide tree audit, assemble a management and development strategy and require a nett increase of 10% new tree planting on all new developments.

Go to **www.manchestergreencity.co.uk** for more information on the campaign.

Key Environmental Strategies

The Tree Strategy is part of a framework of key environmental strategies:

- The Manchester Biodiversity strategy highlights priority habitats and species that are of primary concern across the City;
- The Manchester Waterways strategy highlights a range of potential environmental interventions across the City's Rivers and canals that will benefit the treescape;
- The Manchester Energy strategy aims to increase energy efficiency and sustainability across the City.

2.3.2 Protection and Enforcement

Tree Preservation Orders (TPOs) are used to protect selected trees and woodlands if their removal would have, 'a significant impact on the environment and its enjoyment by the public'. They can apply to a single tree or a group of trees. Priority for TPOs is generally given to trees that are considered to be under threat, for example where imminent development is proposed.

Conservation areas Manchester has 35 conservation areas. Generally, all trees in conservation areas have interim protection. Anyone proposing to carry out works of pruning or felling must give the Council six weeks' notice of their intention. This is to enable the Council to examine the proposal and decide whether or not to issue a TPO.

Planning briefs are non-statutory guidelines prepared for certain large sites that are expected to be subject to development. Briefs normally contain details of important trees that are considered sufficiently valuable to retain. In order to protect the trees it is normal practice to issue a TPO., as it can be used to protect important trees. Conditions are attached to planning permissions to protect these trees during development from damage by building machinery, and to require that certain trees are retained.

This requires the developer to submit a landscape plan showing retained trees together with new planting for which a maintenance requirement should be required as standard. The onus is on the owner or developer to comply with these conditions, and any infringement may render them liable to enforcement action.

The Council's role in Protection and Enforcement

The main ways that the Council engages in tree protection, are by using the measures outlined above. There are currently almost 300 TPOs in place in Manchester (June 2006). They are reviewed on an ad hoc basis when major development is considered, or when reports on valuable trees are received from local agencies or the general public.

Approximately 20 applications for TPOs are received per year, and in the last two years, 39 TPOs have been issued. Over the same period, the Council has received only seven enforcement complaints regarding trees. Formal action will be pursued where necessary. In 2003, the unauthorised destruction of six protected trees within a conservation area resulted in a fine of £30,000 for the developer concerned. Anecdotal evidence of tree damage associated with developments far exceeds the number of formal complaints. It is not possible for the Council to continuously monitor all trees, so measures are needed to improve the extent to which such incidents are reported by the public.

A benchmarking exercise indicated that we have much fewer protected trees in the north of the city than the south, and so efforts to increase tree protection in the north have been underway for two years. The tree campaign taking place during 2006 aims to improve awareness of the value of trees in Manchester, and also provides an opportunity for people to nominate trees they believe are worthy of increased protection.

The Public's role in Protection and Enforcement

Manchester City Council cannot stop trees being cut down in private grounds, but if the council becomes aware of a threat to a tree we can immediately place an 'interim TPO' on it and if necessary this can be enforced. We can issue a TPO to stop the work, provided the tree is worthy of an order i.e. condition and location. Trees with TPOs on them can't be worked on without written permission from Planning. A TPO can only be issued if it meets set criteria.

If a tree doesn't have an interim or permanent TPO, the council only has powers to stop a tree being removed from locations such as gardens if they are in a conservation area. In conservation areas, an application describing proposed works must be sent to the council, who will determine if the work is justified. A letter authorising, amending or refusing the application will then be issued.

In parks and woodlands, the Council doesn't normally notify the general public about tree felling or pruning unless it's a major job, or if local interest groups (such as 'friends of' organisations) have expressed an ongoing interest in the location. Notice Boards in parks provide a contact number for park wardens and their incident response teams.

When works are conducted on street trees, the councillor for the local area is informed, and in some cases, leaflets are also distributed in the local community. When works are planned for trees in council owned domestic premises, the local councillor is informed and tenants will receive a letter or leaflet outlining the works.

A 2005 survey of Local Authority Tree Officers by Gardening Which? found that, on average, 24% of the street trees in their care were damaged by utility board trenching. This can range from a handful to thousands of trees. Damage may only become apparent ten to twenty years after the event, so we do not yet understand the full extent of damage caused by extensive cable installations in the recent past.

While it is important to ensure that trees in the vicinity, as well as on the site of new developments are considered for protection when building works are undertaken, a vigilant and informed public can also help to prevent some of the damage.

2.3.3 Management initiatives

There are a wide range of organisations who act as maintenance agencies and manage schemes in Manchester, details of which are given in Appendix 1.

2.3.4 Case Studies

This section contains details of best practice in tree protection, community involvement and sustainable management. The section contains Manchester examples together with national and international case studies.

Manchester Examples

**Involving Creatively
Roots of East Manchester**

Local residents of all ages across East Manchester are currently working in partnership to create habitats for wildlife and improve the appearance of the local environment.

The Roots of East Manchester Tree Campaign aims to raise awareness and understanding of the importance of trees and the environment, and to encourage community ownership of newly planted trees. To date, Philips, Bradford and Delamere Parks have benefited from new trees, and four Giant Redwoods were planted at Openshaw Park.

Friends of Parks

Friends of Parks are groups of local residents who volunteer to care for and improve their local park or green space. They have a vital and inspirational role in conserving and enhancing the trees and woodlands in parks. Manchester currently has 47 Friends groups.

Manchester's Friends network is recognised as an example of good practice of community involvement by GreenSpace, a not-for-profit organisation set up to help those committed to the planning, design, management and use of public parks and open spaces.

Green Streets

The Green Streets project was established in December 2001. It helps local communities in Manchester, Salford and Trafford to green their neighbourhoods by planting street trees, making hanging baskets, filling planters with flowers, creating community gardens or establishing environmental art works. The Green Streets initiative is the result of a partnership between Manchester City Council, Red Rose Forest and Manchester City Centre Management Company, resulting in 1,058 trees being planted in Manchester.

**Managing Sustainably
Project Bullfinch**

An innovative tree project has been set up to safeguard one of Britain's most beloved but under threat bird species.

Local community groups and Chorlton High School planted hundreds of fruit trees and gorse shrubs at Chorlton Water Park Local Nature Reserve. Bullfinches are mainly fruit eaters so the fruit trees were planted to provide wintering feeding resources whilst the gorse plants will provide more natural habitats for the birds. Bullfinches are classed as priority species within the Manchester Biodiversity Strategy as their population has decreased in the UK over the past 30 years.

**Planting Appropriately
Newlands Moston Vale**

Newlands is a unique land regeneration scheme that is working to reclaim 435 hectares of neglected land in Northwest England.

Newlands will support and enhance the wider Irk Valley project and invest 1.7million pounds in environmental improvements on an area of former landfill. The land regeneration of Moston Vale will also set a benchmark for the restoration of other areas of environmental development in the region, and is the first Newlands site to receive full approval and begin works.

Agreed physical improvement will include extensive use of solar lighting along newly built footpaths and recreation areas, in a greenspace setting of wildflower areas amongst 7,500 trees.

Extensive community consultation,15 years management funding and the Forestry Commission's 99 year management commitment will ensure a sustainable long term future of the project.

Co-op Bank Community Woodland

As part of the development of the Red Rose Forest, the Co-operative Bank celebrated its 125th anniversary by helping create over 250 hectares of community woodlands in Trafford, Wigan, Salford and the Mersey Valley. The chosen site for Manchester was Kenworthy Wood, in Northenden. Kenworthy Wood, in the Mersey Valley, is managed by the Mersey Valley Countryside Warden Service. In 1997 and 1998, 13 hectares of new woodland and over 1km of new path networks were created on site. Approximately 30,000 trees of predominantly native species such as silver birch, alder, oak and ash, were chosen to suit local climate and soils.

Red Rose Forest

Red Rose Forest, established in 1991, is a partnership of Natural England, the Forestry Commission and the local authorities of Bolton, Bury, Trafford, Wigan, Manchester and Salford. Red Rose Forest covers almost 777 square km of Greater Manchester .

Red Rose Forest concentrates on increasing tree cover, encouraging investment and visitors to the area and plays a vital role in greening and improving England's North West.

Since 1991, Red Rose Forest has planted around 1,183 hectares of woodland. Part of the Red Rose Forest plan is to plant 25 million trees over forty years.

**Protecting Strongly
Blackley Forest Local Nature Reserve**

Declaring sites as Local Nature Reserves reflects the importance of sites in relation to recreation and biodiversity conservation. Designated sites are shown in the City's Unitary Development Plan. LNRs offer many benefits not only to wildlife but also to the quality of life for the people of Manchester.

The value of Blackley Forest for Manchester was rewarded in May 2005, as it received Local Nature Reserve (LNR) status from English Nature, only the second to be designated in the city. The Biodiversity Strategy aims to have eight new LNR designations over the next four years and two new sites will be designated in Summer 2006.



Friends of Blackley Forest event

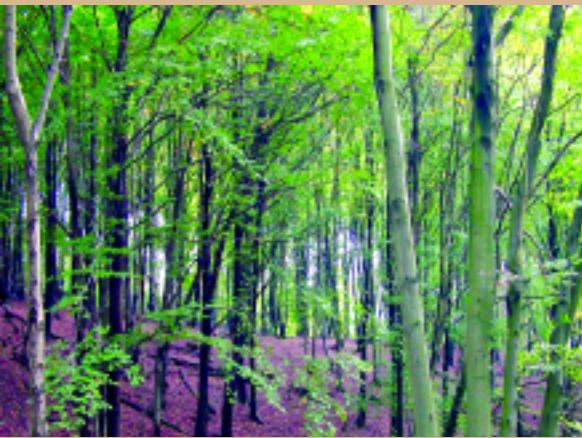
National Examples

Involving Creatively
The Tree Council

The Tree Council began in 1973, the 'National Tree Year' with its slogan of Plant a Tree in '73. Founded the following year with government support, the Tree Council organised its first National Tree Week in 1975 and became a registered charity in 1978. The Tree Council's nationwide Tree Warden Scheme was launched in 1990. There are now thousands of Tree Wardens in 130 local networks, covering town and countryside throughout the British Isles. Tree Wardens are active volunteers who champion, conserve and enhance their communities' trees and woods. In 2000, they set a Guinness World Record by planting 107,781 trees over three days, including over 300 in Manchester.

Mersey Forest

The Mersey Forest is the largest of England's 12 Community Forests and covers 420 square miles of Merseyside and North Cheshire. The Mersey Forest School Grounds Development programme has developed an holistic approach to tackling the problem of bleak and uninspiring school grounds. In addition to encouraging a more child friendly and environmentally sound environment, the programme also promotes behavioural change. Children, teachers, staff, parents and governors were involved in the design, implementation and management of planting schemes.



Mixed deciduous woodland, Mersey Forest

Managing Sustainably
Wakefield Metropolitan District Council
Tree Strategy

Wakefield MDC have developed their first comprehensive tree and woodland strategy for 2004-2009. The Treescape strategy recognises the importance of trees to health, economic regeneration and quality of life. It includes a comprehensive action plan to be delivered by the Council and its Partners, and this is to be reviewed every five years. It is both innovative and challenging, providing opportunities for all local stakeholders to get involved and contribute to enhancing Wakefields tree resource.

The Wakefield District Treescape Partnership was established as a Steering Group to guide and develop the Treescape and also to involve the local community. The Treescape Partnership also committed to developing a district-wide Tree Warden scheme.

Protecting Strongly
Trafford Metropolitan Borough Council
Supplementary Planning Guidance
/ Developer Contributions towards
Red Rose Forest

Trafford MBC is one of the first local authorities to implement a policy to automatically consider imposing planning conditions and / or negotiate 'Section 106' planning obligations with applicants in order to secure the planting of trees, hedges and woodland on all development proposals throughout the Borough

Their target is to increase Trafford's mature woodland cover from the current 1.9% to 16% by 2035 as part of its commitment to Red Rose Forest objectives. They aim to ensure that such obligations are related to the scale and type of the proposed development. Where planting cannot be provided on site in line with the target, a financial contribution of £235 per tree is sought to enable off site planting as close to the development as possible.

The policy has been in operation for almost two years, and the Authority has been able to negotiate funding of approximately £100,000 for environmental improvements.

International Examples

Managing Sustainably
New York Street Trees/Trees Count

Between 1995 and 2001, the New York City Department of Parks and Recreation planted over 85,000 street trees and cleared a backlog of 9,000 dead trees. In 1996, New York's first tree census took place, following which the city's 500,000 street tree population was entered onto a database called Tree Manager, and a citywide tree maintenance system was installed. The Department also started Greenstreets; planting flowers, shrubs and trees on pavements and traffic islands, and have since created over 1,765 Greenstreets locations.

The New York project was reviewed in 2005, and it was recognised that without the support and involvement of communities, it is not possible to effectively identify, establish baselines for and manage tree resources. The project also identified that tight controls on tree protection and detailed tree resource monitoring during the development process is essential to ensure that planting schemes result in a net benefit to tree resources.

In 2005, the Department organised another tree census named 'Trees Count!'. So far, trained volunteers have counted 228,228 trees. Information on how citizens should care for their street trees and Greenstreets is given on the Department's website, providing an interactive way for New Yorkers to get involved and find out what's planned for the City's trees.

"Fog lane Park in Withington is one of the most diverse for its trees in the north of Engalnd. The Scotch Laburnum is potentially the tallest in Britain at present, while the silver limes are also particularly fine for the north".
Owen Johnson, co-author Collins Guide To Trees of Britain and Europe

Planting Appropriately
Trees for Madrid

Trees for Cities is an independent charity which was established in 1993 to work with local communities on tree planting projects. Their objective is to educate and involve communities in tree planting and training initiatives whilst tackling the issue of climate change. Trees for Madrid is a recent project undertaken by Trees for Cities, with the aim of planting native tree species in the city. An urban woodland with 1,000 trees and shrubs in the south-east of Madrid will be the initial stage of the project. Two neighbourhood groups and three local schools are already very involved in the project planning.

Protecting Strongly
Japanese Tree Management

In Japan, rapid development from 1950 onwards led to the loss of almost three quarters of their tree resources. In the 1980s this rapid tree loss was noticed, and action was taken. Now, trees are valued as an integral part of the landscape. In order to cut down any tree over three years old, approval must be sought, and reparation must be paid to local authorities.

Due to the pressures of housing and increasing population, all new city developments must contribute to the creation and management of amenity woodland adjacent to the City, even if previously developed land is being reused. The policies have resulted in an estimated 15% increase in tree cover since they were introduced in 1985.



Tree reflections New York, USA

3. Strategy Development

3.3.1 Conclusions

Our research and consultation to date has shown that as a city we must:

- Apply more mandatory controls as the case studies show this will give results
- Make sure people know about how trees are being managed in the city
- Improve our understanding of existing tree resources, and introduce ways to monitor changes in tree cover
- Have planting schemes that fully compensate the lose of any mature trees
- Prioritise tree planting to develop wildlife corridors
- Favour the planting of native trees as they provide better habitats for biodiversity, while recognising that non-native trees also add value to our tree stock
- Include trees in new developments not just for environmental reasons but also for health and economic reasons
- Buy wood which is sustainably managed as the rainforests are still at risk
- Increase public participation in tree management and protection
- Actively check whether valued and newly planted trees are receiving adequate protection, and ensure that we enforce commitments and requirements.



Wythenshawe Park

In order to achieve sustained improvement in our tree stock we need to set challenging but achievable targets. Specifying an increase in the number of trees fails to give sufficient weight to the need to protect and manage our existing stock. However we currently do not have a sufficiently accurate figure to provide us with the current level of leaf cover. Neither do we even have an accurate figure of the number of trees in Manchester. The number of trees will always be changing but it is vital that we can start to have a baseline to provide a means by which we can monitor our progress.

Looking at New York’s experience the most cost effective and comprehensive way of achieving this is to involve the local community, but this needs to be supported with mandatory controls and collation of tree data during development and regeneration projects. Manchester’s tree-scape has developed over hundreds of years and will continue to change. Trees will be lost, while more are planted in a continual cycle of regeneration. We need to understand and monitor these long-term changes.

At present we have some detailed information about street trees and an overview of trees and woodlands in parks, open spaces and river valleys. Information regarding trees in private ownership is very limited. Unfortunately, all of this information is not accessible in a way that is easily comparable and collatable. In order to effectively manage trees, we urgently need to make this information readily available. We need to have tree and woodland data in a cohesive and agreed format that enables it to be accessed easily. An audit of all tree stock across the city, and the development of an effective tool for sharing tree-related information is a therefore a priority.

It will necessitate the development of a database which will have different layers of information representing the different tree groupings, such as street trees, trees in parks and trees in gardens, providing a comprehensive picture and baseline of the city’s tree resource. The council in co-operation with its partners will all need to work together to provide such a resource, but we are not starting from scratch. By compiling existing information held by council departments, developers and key partners, we can then prioritise audit resources to those places we know least about such as trees in private ownership.

We also need to ensure that when trees are planted, they remain viable, and thrive. A review of tree planting in new developments suggests that there is a relatively low survival rate in comparison to trees in parks or even street trees. Ensuring that management plans are in place for trees planted, periodically checking that they are being implemented, and using enforcement measures where encouragement does not succeed will greatly improve the quality and quantity of trees in Manchester, and address a subject identified as a primary concern by participants in the conference and Tree Strategy Group.



Tree planting, Chorlton Water Park

3.3.2 Opportunities

In taking a strategic approach to the management of trees across the City, an understanding of existing assets, weaknesses, key opportunities and potential threats that may affect our ability to provide a diverse tree resource can be summarised as:

Strengths

- Over 150 parks and tree-rich open spaces
- Internationally and locally important tree resource
- Robust charity and volunteer network
- A world class geographic information system to enable us to share tree information of new tree planting e.g. green stocks

Weaknesses

- Lack of cohesive and accessible information on the total tree resource
- Loss of important specimens in recent years due to disease, age and development
- Inappropriate planting historically leading to tree loss, particularly in street tree population
- Lack of funding for sustained maintenance

Opportunities

- Positive climate in terms of funding and public attitude
- Increasing availability of IT based information and tools
- Increasing use of wood based fuel to provide climate efficient fuels
- Engagement with the newly formed Natural England

Threats

- Climate Change
- Pollution and impact damage
- Vandalism
- Inappropriate development
- Lack of awareness of role of trees in sustainable development

3.3.3 Vision

The strategy aims to:

- Secure a long-term future for our trees and woodlands, providing the right management and strong protection for generations to come
- Objectives**
- To **Involve** Creatively
 - Promote the value and importance of trees across the city
 - Engage, educate and actively involve all stakeholders across the city
 - To **Manage** Sustainably
 - Ensure a best practice approach to the management of trees and woodland
 - Develop a city wide audit of tree and woodland
 - To **Plant** Appropriately
 - Plant more trees
 - Improve landscape value and diversity
 - To **Protect** Strongly
 - Protect and conserve the city's trees and woodland



BTCV at Sunbank Wood

Priorities

In order to achieve these objectives we need to:

- Continue to develop sound management practices in order to protect trees and ensure their future survival
- Establish detailed and consistent baseline information in order for us to monitor the impact of our actions
- Increase awareness of the importance of trees and participation in tree management across all parts of the community, and improve the protection offered to existing tree resources
- Use all development as an opportunity to increase tree resources, and require tree cover to increase by at least 10% each year across new developments and the redevelopment of existing sites
- Establish good practice for timber disposal, to ensure it is reused as material or fuel, rather than placed in landfill
- Increase protection measures, and make sure that when commitments have been made, they are enforced



Alder cones

4. Action Plan

In response to the vision and objectives the Tree Strategy Group has created a five year action plan. The Action Plan provides a range of themed initiatives, grouped according to their contribution to the each of the objectives listed above. It is intended that all those with an interest in trees should work together to deliver the Action Plan.

Progress in delivering the Action Plan will be overseen by a tree and woodland forum, formed from the members of the Tree Strategy Group. They will continue to meet periodically to share information and assess the extent to which the action plan is effectively delivering tree-related improvements across the city.

A review of progress in implementing the action plan and an assessment of its ongoing relevance will be conducted every two years, and a progress report will be issued.

If necessary, elements of the Tree Strategy and / or action plan may be revised to reflect the results of the review. A quarterly progress update will be provided to the Sustainable Neighbourhoods Partnership.



Indian Bean tree, Brazennose Street

Key to Abbreviations

CN4M	Community Network 4 Manchester
FC	Forestry Commission
GMEU	Greater Manchester Ecology Unit
GMWDA	Greater Manchester Waste Disposal Authority
GW	Groundwork Environmental Regeneration Agency
MCC	Manchester City Council
	Section/Department
MIMP	Manchester is my Planet
MMU	Manchester Metropolitan University
RRF	Red Rose Forest
RVI	River Valley Initiatives
SNP	Sustainable Neighbourhoods Partnership
TPO	Tree Preservation Order



Cherry tree, Wythenshawe Park

Action Plan

Objective 1	Lead agency	Agencies involved	Targets and milestones				
			2006	2007	2008	2009	2010
To Involve Creatively	MCC	RRF CN4M RVI	Create a web area within the Green City site to help inform people about our tree resources, and notify them of tree/biodiversity related events. CN4M to provide links to other sites	Maintain and improve Web area	Maintain and improve Web area	Maintain and improve Web area	Maintain and improve Web area
	MCC	ALL	Implement Celebrating Manchester's Trees Campaign TPOs to valued trees				
	G/w		Establish links to local tree campaigns using beacons roots campaign	Investigate opportunities to roll out scheme city wide			
	MCC	RVI	Deliver 10 tree related Wildabout Manchester events	As 2006	As 2006	As 2006	As 2006
	MCC	RRF GW Tree Council RVI	Hold at least three tree related events during National Tree Week. Including an annual Celebrating trees event and a school event	As 2006	As 2006	As 2006	As 2006
	GW	MCC RRF	Investigate opportunities for Green Gym Scheme				

Objective 1	Lead agency	Agencies involved	Targets and milestones				
			2006	2007	2008	2009	2010
To Involve Creatively	MCC	MCC GW RVI	Increase access signage and information by producing 2 tree specific interpretation panels for use in the City's streets and parks		Produce 2 tree specific interpretation panels		Produce 2 tree specific interpretation panels
	MCC			Develop a site signage system to notify the public of intended works to trees	As 2007		
	MCC	MCC	Encourage developers to include notification of works including removal or planting of trees on site boundary information		Introduce measures to require developers to include notification of works including removal or planting of trees on site boundary information		
	MCC	ALL	Develop and publish guidance to encourage people to report trees at risk and tree related offences	Maintain an effective system for the reporting of at risk trees, or suspected tree offences	As 2007	As 2007	As 2007
	MCC	MCC GW RVI	Hold at least 10 tree themed walks a year as part of the Healthy walks initiatives	As 2006	As 2006	As 2006	As 2006

Action Plan

Objective 1	Lead agency	Agencies involved	Targets and milestones				
			2006	2007	2008	2009	2010
To Involve Creatively	MCC	ALL	Operate a Manchester Tree and Woodland Forum meeting quarterly	As 2006	As 2006	As 2006	As 2006
	RRF	CN4M MCC	Develop a pilot tree warden scheme and recruit wardens	Establish tree warden network and determing funding requirements	Maintain Warden Network	As 2008	As 2008
	CN4M	ALL	Co-ordinate and evaluate community group tree activity	As 2006	As 2006	As 2006	As 2006
	MCC	ALL	Encourage and promote private sector contributions to strategy objectives	As 2006	As 2006	As 2006	As 2006
	MCC	ALL	Research and develop material for use in schools and promote appropriate usage via eco-schools	Use packs to support pupils in conducting School grounds surveys for at least 5 schools	Deliver teacher training days	As 2008	As 2008
	MCC	ALL RVI GW	Hold 50 tree related school based projects per year, including events to celebrate the cultural and religious significance of trees	As 2006			
	RRF CN4M	SNP	Hold a capacity building event on tree management	Hold two tree specific training days through the Community network	As 2007	As 2007	As 2007
	MMU	MCC	Develop tree identification guide with MMU students	Publish guide on www.manchester greencity.co.uk			
	Universities	City Centre mgt Company RRF MCC	Implement one tree - focussed university project	As 2006	As 2006	As 2006	As 2006

Objective 2	Lead agency	Agencies involved	Targets and milestones				
			2006	2007	2008	2009	2010
To Manage Sustainably	RVI MCC	RRF	Prepare Mgt Plans and biodiversity assessments for all Council owned woodlands			Complete Woodland Mgt Plans for Manchester parks and River Valleys	Management Plans reviewed and renewed
	MCC	RRF	Provide tree focussed training / workshops to Staff and interested parties				
	MCC	EA Network Rail Highways Agency M/c Airport Developers	Encourage private landowners and external partners to commit to long term management of trees and woodlands		Integrated tree Management plans for partners and Statutory bodies e.g. Network Rail, Environment Agency, private landowners	Designate one privately owned woodland as a Local Nature Reserve or Site of Biological Importance	
	RRF	ALL	Encourage and assist owners to take up grant aid for woodland and hedgerows	As 2006	As 2006	As 2006	As 2006

Action Plan

Targets and milestones							
Objective 2	Lead agency	Agencies involved	2006	2007	2008	2009	2010
To Manage Sustainably	MCC	ALL	Work with all programmes involving release of council land or significant council expenditure to identify potentially valuable trees, encourage new planting and improved tree management as part of relevant major programmes	As 2006 and also ensure that tree resource management is explicitly required within tender and contract documentation	As 2007	As 2007	As 2007
	RRF	MIMP Local timber Yards MCC	Explore development of trial biofuel and biomass planting and timber waste fuel production to progress alternative and sustainable energy production	Implement Timber waste project			Reduce timber material going to landfill to zero
	MCC	GMWDA	Continue tree recycling points and aim to collect at least 50 tonnes across the City	Expand Christmas tree recycling points and aim to collect at least 50 tonnes across the City	As 2007	As 2007	As 2007
	MCC	RRF	Introduce checks to ensure that no council wood waste enters landfill	Identify the best market for composted materials	Increase on site composting	As 2007	As 2007
	MCC	ALL	Promote use of online waste exchange and wood processing facilities for wood waste	As 2006	As 2006	As 2006	As 2006
	CN4M	ALL	Undertake at least 3 Community tree surveys	As 2006	As 2006	As 2006	As 2006
	MCC	RRF CN4M	Develop and offer Tree care and tree survey training to key stakeholders	As 2006	As 2006	As 2006	As 2006
	MCC	CN4M RVI	Designate 5 tree focussed biodiversity hotspots	As 2006	As 2006	As 2006	As 2006
	GMEU	RVI	3 SBIs revisited and reassessed specifically for tree value	As 2006	As 2006	As 2006	As 2006

Targets and milestones							
Objective 2	Lead agency	Agencies involved	2006	2007	2008	2009	2010
To Manage Sustainably	MCC	GMEU ALL	Develop a project plan for a Citywide tree audit and establish and agree a single system approach to data recording based on MCC's corporate GIS	Develop an integrated database to record trees and woodlands. Publish a baseline	Have a robust overview and record of Manchester's tree stock	Monitor trends and changes in tree cover	
	MCC	RRF	Digitally record 5000 trees in parks per year	Continue digitisation of trees in parks	As 2007	As 2007	As 2007
	MCC		Transfer existing records into GIS format	Digitise records of all street trees	Digitise records of all street trees		
	CN4M	MCC	Develop and encourage community layers of tree information	As 2006	As 2006	As 2006	As 2006
	MCC	ALL			Introduce guidance for contractors, project delivery agencies and how developers to record and provide records in GIS format	Implement guidance as a requirement for contractors and on project delivery partners and agencies	Implement guidance as a requirement for developers
	MCC		Provide accessible information through the corporate GIS system	As 2006	As 2006	As 2006	As 2006

Action Plan

Targets and milestones							
Objective 3	Lead agency	Agencies involved	2006	2007	2008	2009	2010
To Plant Appropriately	MCC	CN4M RRF GW	Plant 3000 trees per annum across Manchester parks, Open Spaces and allotments	Plant 3000 trees per annum across Manchester parks, Open Spaces and allotments			Establish the equivalent of 1 hectare of planting per annum
	RVI MCC	CN4M RRF	Plant at least 1000 hedgerow species		Develop tree planting in Gardens campaign		
	RVI MCC	CN4M RRF, GW	Plant 4 new orchards	As 2006	As 2006	As 2006	As 2006
	MCC	RRF	Plant and maintain 600 new trees along Manchester's streets and Highways		Investigate opportunities for natural burials and finalise report on feasibility		
	MCC	RRF			Identify potential new sites for planting totalling 5 Ha on Public Land		Increase the area of new woodland by 10 Ha.

Targets and milestones							
Objective 3	Lead agency	Agencies involved	2006	2007	2008	2009	2010
To Plant Appropriately	MCC	RRF	Continue new tree planting as part of the planning process to ensure at least 10% net increase in tree cover per year	AS 2006	Use section 106 agreements or equivalent to secure planting new trees		
	RVI MCC	RRF CN4M	Prepare management plan for invasive species and conduct clearance of invasive species at two woodlands	Provide guidance and advice on appropriate planting and aftercare	Deliver2 Practical events on removing invasive species from Woodlands		Create wildlife tree copses in all parks by 2010
	MCC		Further develop city-wide beacon trees project		Investigate the development of tree nurseries		Introduce tree nurseries at two locations
	MCC	ALL	Complete Moston Vale Planting scheme	Complete New Islington Planting Scheme	Integrate significant tree planting into at least one regeneration scheme	As 2008	As 2008
	RRF FC	ALL	Identify locations with poor tree cover across the City	Develop, identify funds for and implement planting schemes at two identified locations	Develop, identify funds for and implement planting schemes at two identified locations	Develop, identify funds for and implement planting schemes at two identified locations	Develop, identify funds for and implement planting schemes at two identified locations

Action Plan

Objective 4	Lead agency	Agencies involved	Targets and milestones				
			2006	2007	2008	2009	2010
To Protect Strongly	MCC	SNP			Introduce indicators and checks to monitor tree cover changes resulting from development activity	Review and update all tree related policies as part of the Local Development Framework to increase tree protection and require a 10% increase in tree cover across developments	Monitor success of tree related policies
	MCC	GMEU Natural England	Increase the number and area of existing woodland sites with LNR and SBI designations by at least one	As 2006	As 2006	Review LNR and SBI designations to assess performance against Natural England guidance	
	MCC	MCC	Use planning conditions and technical supervision to ensure high quality of arboricultural surveys and work i.e. under BS 3998 and BS 5837	As 2006	As 2006	As 2006	As 2006
	MCC	MCC	Monitor sites to ensure compliance with tree conditions	As 2006	As 2006	As 2006	As 2006
	MCC	MCC CN4M	Wider promotion of existing TPO Process (e.g. tree campaign). Ensure that trees of high value are actively sought and TPOs issued accordingly to increase the number of protected trees	Review the existing TPO process Review existing enforcement effectiveness	Increase protected trees by 2%	Increase protected trees by 2%	Increase protected trees by 2%



The Forest Certification Scheme and Woodland Grant Scheme

run by the Forestry Commission encourages woodlands to be managed in an environmentally sound and appropriate way.

Forest Stewardship Council Certification

Certification against this standard ensures that, not only are woodlands and forests managed in a sustainable way which promotes biodiversity, but also that wood products such as paper, furniture and timber that carry the FSC logo have been sourced from well managed sites.

Red Rose Forest

Red Rose Forest is one of twelve community forests across England. The Red Rose Forest aims to increase tree cover and encourage investment and visitors to the area, believing that this will make Greater Manchester a greener, more rewarding place to live, work, visit and do business.

Red Rose Forest was established in 1991 and covers almost 700 square km of Greater Manchester. Manchester is at the heart of the Red Rose Forest core forest area.

The Council's Role

The Council has extensive tree management experience and expertise ranging from training in Arboriculture to species identification, landscape design, horticulture, surveying and mapping. This includes over thirty park wardens working in every ward across the City. They play an active role in using trees and woodland as an important educational resource for local communities.

The Council aims to manage parks and open spaces sustainably to suit the needs of people and wildlife. As a result of pro-active and sensitive management, Manchester now has one of the highest numbers of green flag parks in the Country.

Sustainable woodland management practices applied in the City's parks include:

- thinning cycles
- wood product recycling
- encouraging natural regeneration
- leaving standing decaying wood and fallen timber on site where appropriate to provide a habitat and food source for wildlife
- encouraging native species
- woodland wildflower planting
- removal of invasive, non-native species
- promoting accessible and networked green spaces
- promotion of biodiversity and environmental education.

Over 50,000 trees within the Council's responsibility are managed directly by the Council. The aim of management is to provide Manchester with an appropriate and safe tree stock. Inspections and programmes of work are undertaken on a five-year rolling programme.

The Council also provides a 24-hour emergency call out service for trees on Council land. Dangerous trees on private land, when the owners cannot be traced or are unwilling to implement works on trees, are also dealt with when they are a danger to the public as a duty of care.



Winter woodpile

The Mersey Valley Countryside Warden Service

has managed 195.5 hectares of urban countryside on behalf of Manchester City Council since 1978. These managed countryside areas vary in terms of landscape, habitat and size, and together create a green corridor along the river Mersey across South Manchester. The aims of the Warden Service are threefold: increased access and opportunities for recreation for local people, plus enhancing the nature conservation value of the landscape. The Mersey Valley woodland areas mostly comprise high density mixed plantations dating from the 1970's and 1980's. The Warden Service implements a winter thinning programme.

This enhances the woodlands for both people and wildlife, as thinning the dense woodlands improves both physical access and perceptions of safety for the visiting public, and creates opportunities for ground flora by letting light reach the plantation floor. Rotational coppicing is used as a woodland management technique in some areas especially in willow plantations, creating withies for use by local community artists. The in-house Sustainable Woodland Project has enabled the Warden Service to process and sell logs, charcoal and other timber products to the local community, which are essentially by-products of the regular thinning regime.

All the Mersey Valley woodlands will come under Woodland Management plans by 2007, and they are registered under the Forestry Commission's Woodland Grant Scheme that requires a high standard of management. Trees are regularly assessed for damage and disease, and individual trees are felled if deemed necessary.



May Blossom

The Irk Valley Project Partnership

was established in 2000, to manage the Irk Valley and Moston Brook corridors. As the largest of the City's river valleys, the Irk's natural greenspaces and river banks have extensive woodland cover; including Blackley forest Local Nature Reserve and one of the City's few areas of semi-natural ancient woodland at Baileys Wood in Charlestown.

Site-specific management and maintenance plans are provided by the Irk Valley Project Officer and implemented by a combination of specialist estate workers, contracting services, the Council and organised volunteer groups. Most of the Irk Valley woodland is under Council ownership. Grants have been rewarded through the Forestry Authority's Woodland Grant Scheme system.

The Medlock Valley Project is a similar partnership to the Irk, and it manages the smallest of Manchester's river valleys. The River Medlock runs east to west into the City Centre from the boundaries of Tameside and Oldham. It still retains a semi-natural character in areas like Clayton Vale and Philips Park, with extensive tree cover along its banks.

Community Groups have a key role to play in maintaining Manchester's tree resources. Getting involved with local tree planting initiatives, or helping to identify valued trees in your local area is key to supporting the delivery of the Tree Strategy and its Action Plan. There would be considerably fewer trees in Manchester if it were not for the willingness of the public to get involved in planting and maintaining trees. Contact details for groups with an interest in trees in your local area may be obtained by contacting the Community Network for Manchester.

Glossary

Biodiversity Variety of animals and plants.

Biofuel Fuels devised from biological materials including crops (especially trees) and animal wastes.

Broadleaved Having broad and flat leaves that persist from year to year.

Budburst The time at which the buds on trees and other woody plants begin to grow each year.

Carbon sequestration Refers to the process by which atmospheric carbon is absorbed in to carbon sinks such as the oceans, forests and soil.

Climate Change Means a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Coniferous Plant bearing cones.

Coppicing Traditional management of cutting down trees and shrubs near ground level, allowing the species to regrow from the stump and re-cutting at intervals of one or more decades to provide long straight poles.

Ecosystem The relationship between air, land, water, animals, plants etc.

Fauna Animals.

Flora Plants.

Fossil fuel Fossil fuels are the remains of plant and animal life that are used to provide energy by combustion; coal, oil, natural gas.

Invasive A plant that moves in and takes over an ecosystem to the detriment of other species.

Local Nature Reserve Is a statutory designation in England made under Section 21 of the National Parks and Access to the Countryside Act 1949 by principal local authorities.

Photosynthesis The process by which green plants use sunlight to synthesize nutrients from carbon dioxide and water.

Pioneer species Fast growing species which are the first to colonise an area of open land.

Reforestation The planting or seeding of trees in an area that previously contained forest.

Sites of Biological Importance Is the name given to the most important non-statutory sites for nature conservation in Manchester and provides a means of protecting sites that are of local interest and importance.

Site of Special Scientific Interest An area of land which in the opinion of English Nature is of special interest at a national level due to its flora, fauna or geological or physiological features.

Species A set of animals or plants in which the members have characteristics to each other and can breed with each other.

Sustainability The ability to provide for the needs of the world's current population without damaging the ability of future generations to provide for themselves.

Water cycle The recycling of water between the earth and the atmosphere.



Notes

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Partners and Participants

- Association of Manchester Allotments
- City Centre Management Company
- Community Network for Manchester
- Environment Agency
- Friends of Manchester Parks Groups
- Groundwork Manchester Salford and Trafford
- Leach Rhodes Walker Architects
- Forestry Commission
- Greater Manchester Ecology Unit
- Red Rose Forest
- Manchester Airport
- Manchester City Council
- Manchester Metropolitan University
- Manchester Museum
- Manchester Wildlife
- Medlock Valley Project
- Mersey Valley Countryside Warden Service
- Network Rail
- New Deal for Communities
- Rambler's Association
- Red Rose Forest
- Salford City Council
- Taylor Woodrow
- Tree Aid New Sudan
- Trafford MBC
- Tree Council
- University of Manchester
- Urban Splash
- Wakefield MBC
- Willow Park Housing
- Withington Civic Society

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এই লিফটো বা প্রায়শঃই এছাড়াও পাওয়া যাবে অন্য ভাষায়, বঙ্গ অক্ষরে, ব্রৈলি এবং ক্যাশেটে। যদি এটি আপনার বা আপনার পরিচিত কারও, যেমন কোনো আত্মীয় অথবা প্রতিবেশীর কাছে লাগে, ব্যা করে আমাদের সাথে যোগাযোগ করুন ০১৬১ ২৭৭ ৫৭৭২ এই নম্বরে। আপনি যদি অন্য ভাষায় এই লিফটেরটির কপি চান তাহলে বলা করে যোগাযোগ করুন ০১৬১ ২৩৪ ৩২৭৯ এই নম্বরে।

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یہ ایملیٹ دوسری زبانوں، بڑی کھائی، زریں اور آواز ٹیپ پر بھی دستیاب ہے۔ اگر آپ آپ کے کسی ہاتھ والے شکاری دوست اور یا اس کے نیچے مقرر ہو تو یہ مہمانی ہمارے ساتھ 0161 277 5972 پر رابطہ کریں۔ اگر آپ کو یہ ایملیٹ کسی دوسری زبان میں ملتا ہے تو براہ مہربانی 0161 234 3219 پر رابطہ کریں۔