Trees Matter!

Bringing lasting benefits to people in towns

Introduction

Why we need more trees in towns and cities

Trees are an important part of our natural life support system: they have a vital role to play in the sustainability of our towns and cities and we need to take better care of them, both now and in the future.

Until quite recently, the values we attached to trees and woods were very straightforward. In the countryside they produced timber and some habitat for wildlife, whilst in the towns they were valued almost entirely for the way they looked.

Now there is a growing recognition that trees and woods can provide a whole range of multifunctional contributions to environmental, social and economic sustainability.

Trees and woods help to improve the quality of life for the millions of people who live and work in urban areas, and since ours is among the most urbanised societies in the world, the UK is a very good place to show how the urban forest can contribute to sustainable development.

The multiple benefits of urban and community forestry are strongly advocated in the Countryside Agency's joint vision with Groundwork *The countryside in and around towns*[1], which highlights the importance of multifunctionality in greenspace planning, a principle that is now beginning to be widely recognised.

Trees Matter! provides a comprehensive review of the benefits which can come from urban trees and woods. This is supported by reference to scientific research from around the world. Since the first edition was published in 1998 there has been some increase in the UK evidence base, but the majority of references are still from overseas, suggesting that we need to take the study of our own trees and woodlands much more seriously.

Most people agree that trees are a good thing, and yet we see them starved of natural food and water, damaged at their roots by earthworks, felled for development, casually vandalised or insensitively pruned. Many of the most significant trees in our towns and cities were planted more than a century ago, so although this living legacy is wonderful, it is under serious pressure and in steep decline. With care, we can continue to enjoy it for a few years yet, but we also need an extensive programme of replacement planting to provide the trees and woodlands for the future that will match the vision of the past.

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We cannot afford to lose the benefits that trees and woodlands bring to those who live and work in towns. Please use *Trees Matter!* to persuade as many people as possible that we must act now to make sure there will be a thriving urban forest for future generations to enjoy.

Summary of benefits

Trees and woodlands make a very positive contribution to sustainable urban living. What is more, investment in well-managed greenspace can deliver many different benefits at the same time. Trees in towns can improve public health whilst also moderating the local impact of climate change, boosting wildlife and reinforcing the distinctive character of a place. Here are just a few of the reasons why **Trees Matter!** They can provide the following multi-functional benefits for people:

Page 4–5

A more moderate climate:

The shelter and shade from trees can save up to 10% of the energy needed to heat and cool nearby buildings. They also reduce the effects of air pollution and make outdoor spaces much more comfortable.

The leaves and twigs of trees slow down the rate at which rainwater hits the ground and this helps to reduce the likelihood of localised flash flooding.

Trees absorb carbon dioxide as they grow and the carbon that they store in their wood helps to reduce the rate of global warming.

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Healthier lives:

By filtering polluted air, reducing chemical smog formation, shading out harmful solar radiation and providing an attractive, calming setting for recreation, trees can have a positive effect on the incidence of asthma, skin cancer and many stress related illnesses.

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A more successful local and regional economy:

Trees help to create jobs and increase productivity and innovation. They encourage inward investment and can increase property values by up to 18%.

Page 9

Land stabilisation and reclamation:

Tree roots help to bind the soil together and prevent erosion. Some trees can also clean up contaminated land.

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Useful products:

Even in towns, trees yield traditional products such as timber, fruit and horticultural mulch, whilst renewable non-fossil fuel, high-value chemicals and pharmaceuticals may be the wood products of the future.

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Richer and more accessible wildlife:

Trees play a vital role in the urban ecosystem, by helping to support a great variety of wildlife which people can enjoy close to home.

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Enhanced landscape quality

Trees and woods can bring out the best in an area's local character. They provide a sense of long-term stability and a living link between the past, the present and the future.

Trees soften the landscape of hard-edged towns and cities, making them greener, more comfortable and more attractive.

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More sustainable communities:

The landscape is the place where people meet. When communities play an active part in caring for their local trees and woods, this helps to build more confidence and shared enjoyment.

A better local climate

Carbon dioxide is one of the world's major greenhouse gases. As trees grow they absorb and store the carbon in their timber, making forests important in the fight to reduce the rate of global climate change. However, since it takes a wood the size of a football pitch to absorb the carbon emissions of an average person in the UK[2], this role for trees in towns will always be strictly limited.[3] Efficient use of energy and transport offer more substantial opportunities for those who live and work in towns to lessen their effect on climate change. Nevertheless, all extra trees are valuable and their role in absorbing carbon is certainly symbolically important.

There is much more immediate benefit to be gained from the contribution that trees in towns can make to improving climate at a local level. People want to live and work in comfortable surroundings and trees and woodlands help to moderate the local climate. This seems likely to become increasingly important since scientists are predicting far more extreme weather patterns, increased risk of winter flooding and a greater likelihood of summer drought. Here are some of the ways in which trees help to moderate the local climate:

Shelter

Trees slow down wind speeds substantially[4], and so help to shelter urban open spaces. They also help to reduce air turbulence, especially around buildings, making towns and cities more comfortable for people. This is especially important for the elderly and the very young. The shelter from trees and woods in towns also reduces the heating and air-conditioning costs of buildings. This can save as much as 10% of annual energy consumption, and cut down the air pollution caused by burning fossil fuels.[5]

Cooling the air

As trees lose moisture from their leaves, the surrounding air is cooled. This, coupled with the shade they cast, and the heat reflected upwards from their leaves, significantly reduces summer air temperature in towns.[6]

A belt of woodland creates a more sheltered environment over a distance of up to 20 times its height

The tree canopy acts as a natural 'umbrella', with leaves and twigs slowing the rate at which rainwater reaches the ground

Flash-flood protection

The canopy of the urban forest plays a valuable role in moderating rainstorm impact. The rain is intercepted by the leaves and then evaporates or drips more gradually to the ground. This lessens the likelihood of flash-flooding and helps to conserve ground water.[7] Using trees in towns as part of sustainable urban drainage systems (SUDS),[8,9] is a self-sustaining and cost-effective storm-water management strategy which should be used to complement much more expensive hard-engineering options. The study of a river catchment in south-east Northumberland estimated the value of existing woodlands for flood alleviation at around £1,200 per ha. This figure is based on savings to the engineering costs of flood control.[10]

A study conducted by the organisation American Forests estimated that a 20% loss of trees and other vegetation in the Atlanta metropolitan region would produce a one billion cubic foot increase in stormwater run-off.[11] It was calculated that it would cost at least $2 billion to build containment facilities capable of storing that quantity of excess water. This provides a strong argument for retaining and planting trees in cities.

Another American organisation, Tree People, has studied the impact of urban forestry on stormwater management[12] and air quality in the city of Los Angeles. Here, new woodland is being carefully positioned within urban river catchments in order to optimise its impact on stormwater runoff.[13]

Urban flooding is increasing with climate change. The softer elements of the landscape can provide sustainable flood protection

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Healthier lives

Air pollution is a major public health issue and trees trap and absorb certain pollutants very effectively

Stress and a lack of physical exercise, polluted air and ultra-violet solar radiation all cause significant damage to the health of the nation. The trees and woods in towns can help to reduce these problems considerably in the following ways:

Cleaner air

The UK Government estimates that more than 24,000 people die prematurely each year as a result of air pollution.[14] When the fine sooty particles known as $PM_{10}s$ are carried into the lungs they have a tendency to make chronic diseases such as asthma and bronchitis worse. The canopies of trees act as a physical filter, trapping dust and $PM_{10}s$ on the surface of their twigs and leaves. They are also very effective for filtering other toxic particles such as lead.[15] The trees of Chicago, USA have been shown to remove 10.8 tonnes of $PM_{10}s$ on an average summer's day.[16] Whilst a study in the West Midlands, UK, suggests that doubling tree cover across the region would reduce the concentration of fine PM_{10} particles by 25%. This could prevent 140 air pollution related premature deaths in the region every year.[17]

Gases such as carbon monoxide (CO), nitrogen dioxide (NO_2) and sulphur dioxide (SO_2) are known to cause respiratory problems and can also increase sensitivity to allergens. Trees absorb these gases through their leaves. In the Greenwood Community Forest, near Nottingham, it has been estimated that the existing woodland reduces concentrations of SO_2 and NO_2 in the air by 4%-5%.[18]

At street level ozone (O_3) is a smog-forming gas which is produced when vehicle exhaust fumes are exposed to strong sunlight. Ozone can irritate the lungs and aggravate symptons such as coughing and chest pain. When concentrations are high it can also sting the eyes, nose and throat.[19] The cooling and shading effect of urban trees helps to reduce the rate of ozone production.[20]

Noise reduction

Noise pollution is a major cause of stress and trees can reduce the problem in two ways. Firstly, if a belt of trees is dense enough it can reduce noise levels by as much as 6-8 decibels for every 30 metres width of woodland.[21] This can be cheaper and more attractive than an earth mound, noise barrier or fence.[22] Secondly, there is evidence that simply hiding the source of some kinds of noise can make them seem less intrusive and in these circumstances the visual screening effect of trees can also be significant.[23]

Shade

Excessive exposure to the sun is being seen increasingly as a serious threat to health. The thinning of the protective ozone layer, coupled with more extreme local weather patterns, is being linked to the increased incidence of skin melanomas - now the most rapidly increasing form of cancer in the UK.

The dappled shade of trees provides a useful barrier to this harmful ultra-violet radiation, as well as reducing heat-induced stress amongst people and animals. Provision of adequate summer shade is seen as particularly important in car parks, in school grounds [24] and around retirement homes.

Shade is increasingly important for protection against harmful solar radiation

Emotional well-being

The popular belief that people feel better in green, leafy surroundings is now supported by a growing amount of scientific evidence. The stress of life in urban Britain is a very significant factor in the health of the nation, and many people find a green environment more relaxing. Urban residents suffering from stress have been shown to experience less anxiety and insecurity when they have a view of trees, and the physical signs of stress such as muscle tension and pulse rate are measurably reduced within as little as 3 to 4 minutes of a stressed person moving into leafy green surroundings.[25][26][27][28]

Hospital patients with a view of greenery have been shown to recover more rapidly, and require less pain-killing medication than those who only have a treeless view of buildings.[29] These findings are echoed in two studies of prisoners who occupied cells with or without a natural view. There were fewer complaints of illness among those inmates with a green outlook.[30][31]

Tree related therapy

Trees also have a more active role to play in therapy. Tree and woodland-related activities such as fruit-picking, basket-making and plant propagation are used to develop dexterity and co-ordination, and the therapeutic benefit appears to be made all the greater because of the contact with natural materials and living plants.[32]

Green surroundings make regular exercise more enjoyable and beneficial

Encouraging physical exercise

In an increasingly sedentary, vehicle-bound society, lack of physical exercise is a very serious threat to public health. It is directly linked to such issues as heart disease and diabetes, whilst a general lack of mobility increases the risk of falls and fractures, particularly in old age. A well-treed urban landscape is more sheltered, more stimulating, and more likely to encourage local journeys on foot or bike, thus making active outdoor exercise more enjoyable. Since the air is also less polluted when filtered by trees, physical exercise is made healthier still.

The growing national concern with obesity and other exercise-related health problems in the UK has stimulated a number of initiatives including BTCV's *Green Gym*. This programme encourages people to stay fit by undertaking practical conservation work such as tree planting.[33]

Walking the Way to Health (WHI),[34] an initiative of the Landscape, Access and Recreation division of the Countryside Agency, promotes the health benefits of regular brisk walking. These include improved weight control, extended life expectancy and reduced risks of coronary heart disease, strokes, diabetes, high blood pressure, bowel cancer and osteoporosis.

The cost of physical inactivity to the economy has been estimated at £8.2 billion in England.[35] Urban greenspace can make a cost-saving contribution to the National Health Service and the wider economy by providing a safe and stimulating setting for physical exercise. These benefits can be very significant. For instance, the public's activity in a park in Portsmouth has been estimated to save the local economy £4.4 million each year.[36]

The local and regional economy

People are attracted to live, work and invest in green surroundings, so a commitment to the trees and woods in towns is a very cost-efficient way of underpinning the local and regional economy.[37][38] Some people will be employed directly in expanding and managing the urban forest, but green infrastructure has a more significant economic role to play in creating a stimulating working environment, improving the health of the workforce and attracting inward investment.

People will pay a premium for property in an attractive well-treed neighbourhood

Direct employment

People are employed as nursery workers, landscape and arboriculture contractors and tree officers in the production, planting and aftercare of trees and woods in towns. There is also an increasing amount of work for those such as rangers, educational play leaders and conservation officers who help local communities to gain the maximum enjoyment from the woods on their doorsteps.

Best value greenspace management

Much of the open space in towns is managed as close-mown grass. This tends to be poorly used and expensive to maintain. Developing woodland as an alternative to grassland reduces maintenance costs whilst providing recreational open space which benefits a wider range of people. [39][40]

Inward investment

A tree-rich urban landscape is increasingly recognised as an important requirement for successful modern businesses. It is therefore important to care for the established trees, but the environmental advantage can be strengthened further by planting temporary woodland on vacant development sites. This helps to screen unsightly land and greatly improves the image of industrial areas which are undergoing urban renewal.[41] An attractive green environmental setting can also deliver secondary economic benefits in the form of increased commercial rents and local tax revenues.[42]

Property values

Several studies, in North America and more recently in the UK, have shown that average house prices are between 5% [39][43] and 18% [44][82] higher where property is associated with mature trees.

Managing the urban forest provides direct employment for local people

Improving difficult urban land

Land is at a premium in the UK, and in the most heavily populated regions there is a long history of using, abusing and then reusing it. Some trees have a remarkable capacity for growing in hostile conditions. If chosen wisely and planted at a young and adaptable age, then they can bring wasteland back into productive use.

Derelict industrial land is often colonised quite naturally by trees

Soil stabilisation

Tree roots help to bind and stabilise the soil and this, combined with the effect the leaves and branches have on reducing the impact of rainstorms, helps to lessen the rate of soil erosion and downstream sedimentation. This physical protection brings significant economic benefits for highway drainage and wastewater management. Studies in Maryland, USA, have shown that the annual sediment yield from treeless urban areas was as much as 1 000 times greater than that from wooded urban areas - 50 000 tonnes compared to 50 tonnes per square mile.[45]

Land reclamation

Many towns and cities have areas of derelict and degraded land - a legacy of past industrial development, waste disposal and mineral exploitation. Establishing trees and woodland on this wasteland is a practical and very cost-effective option[46] which can greatly improve the appearance of derelict sites, enhance their value to wildlife and make them an asset for recreation.

Where this land is contaminated, particularly with heavy metals such as lead, zinc or nickel, some trees are capable of absorbing the pollutants through the process of phytoextraction. By repeatedly felling and removing the timber, the level of contamination can gradually be reduced.[47] At the same time, the movement of pollution by leaching and erosion is slowed down.

One of the simplest and most effective roles that trees in towns can play is as a living screen. A relatively narrow belt of trees around the boundary of a bare development site can make it more attractive prior to building, improve the prospects for regeneration and provide a green and pleasant backdrop when the land eventually becomes a built development.

Adopting an ecological approach to the planting of trees results in cost- effective, sustainable greening

Useful products

Fruit, charcoal and woodchip are just three of the products that can come from trees ain towns

Although timber production has so far been of little commercial significance in the urban forest, there are various by-products, such as charcoal, woodchip and green waste compost which are playing an increasingly important part in the economics of urban forestry management.

Timber and wood products

85% of the timber used in the UK is imported.[48] Trees in towns can yield both timber for construction and very high quality fine woods for furniture, crafts and even veneers, but the quantities are always likely to be small.

Woodchip and bark are increasingly used as a soil-covering mulch in landscape schemes and for the surfacing of children's play areas. Compost is increasingly in demand as an alternative to peat and is being produced from municipal green waste. The process is improved by the addition of shredded waste wood prunings and autumn leaves. Barbecue charcoal from UK urban woodlands is now available commercially.

Renewable energy crops

Concern about pollution from fossil fuels and radioactive nuclear waste is leading to increased demand for renewable sources of fuel. Fast growing wood biomass crops of willow are one such developing source. Some of these biomass crops are being planted in urban areas, close to the energy end-users.[49] Wood energy cropping can provide local jobs and a local fuel supply and it also has the potential to provide an interim productive use on land zoned for eventual built development. Waste wood chip produced as a by-product of the management of urban trees is increasingly being used to provide heating in wood-fuelled boilers.[50]

Food

Trees can successfully produce fruit such as pears, apples, plums and cherries in the UK and they can also yield crops of nuts. Wines and syrups can also be manufactured from the bark and sap of species such as birch and maple, and urban trees such as lime and sycamore are important to beekeepers for local honey production. The fruit trees in domestic gardens, allotments and school orchards may not be economically significant, but they provide a valuable source of locally harvested fresh food. This is frequently grown organically and eaten by those who cultivate and gather it. In our urban society that experience is increasingly important.

Chemical extracts

Tannins, dyes and turpentine have been extracted from trees for centuries, whilst over 20 species of British trees and shrubs are known to possess medicinal properties.[51] Yew shoots, for instance, are being harvested commercially as a source of the cancer drug taxotere.[52] Now, new technology is making it possible to extract far more of the chemical constituents of timber, for use in the manufacture of solvents, plastics, adhesives, preservatives and fibres. So far, there is very little tradition of extraction from the urban forest, but in the future this may offer a more attractive commercial proposition.

Enjoyable access to wildlife

Concern for nature conservation is reflected in the Government's Biodiversity Action Plan and is reaffirmed by various international conventions and conservation policies. Wildlife is also enormously popular with the general public, with over 2 million members of the various UK nature conservation charities and a huge market for wildlife related products such as bird-feeders, nest-boxes, books and binoculars.

Much of Britain's native wildlife has its origins in the natural broadleaved woodland of the British Isles. As a consequence, the trees and woods in towns provide extremely successful habitats. They support a great diversity of popular wildlife and an opportunity for people to enjoy nature on the doorstep.[53]

A complement to other wildlife habitats

The greatest diversity of wildlife tends to be found where woodland, wetland, grassland and other habitats are interwoven. The woodland provides shelter, screening, seclusion and reduced disturbance. Many species depend on a combination of open glades and woodland cover[54] and the woodland in towns can provide a strategic link between one natural green space and the next.
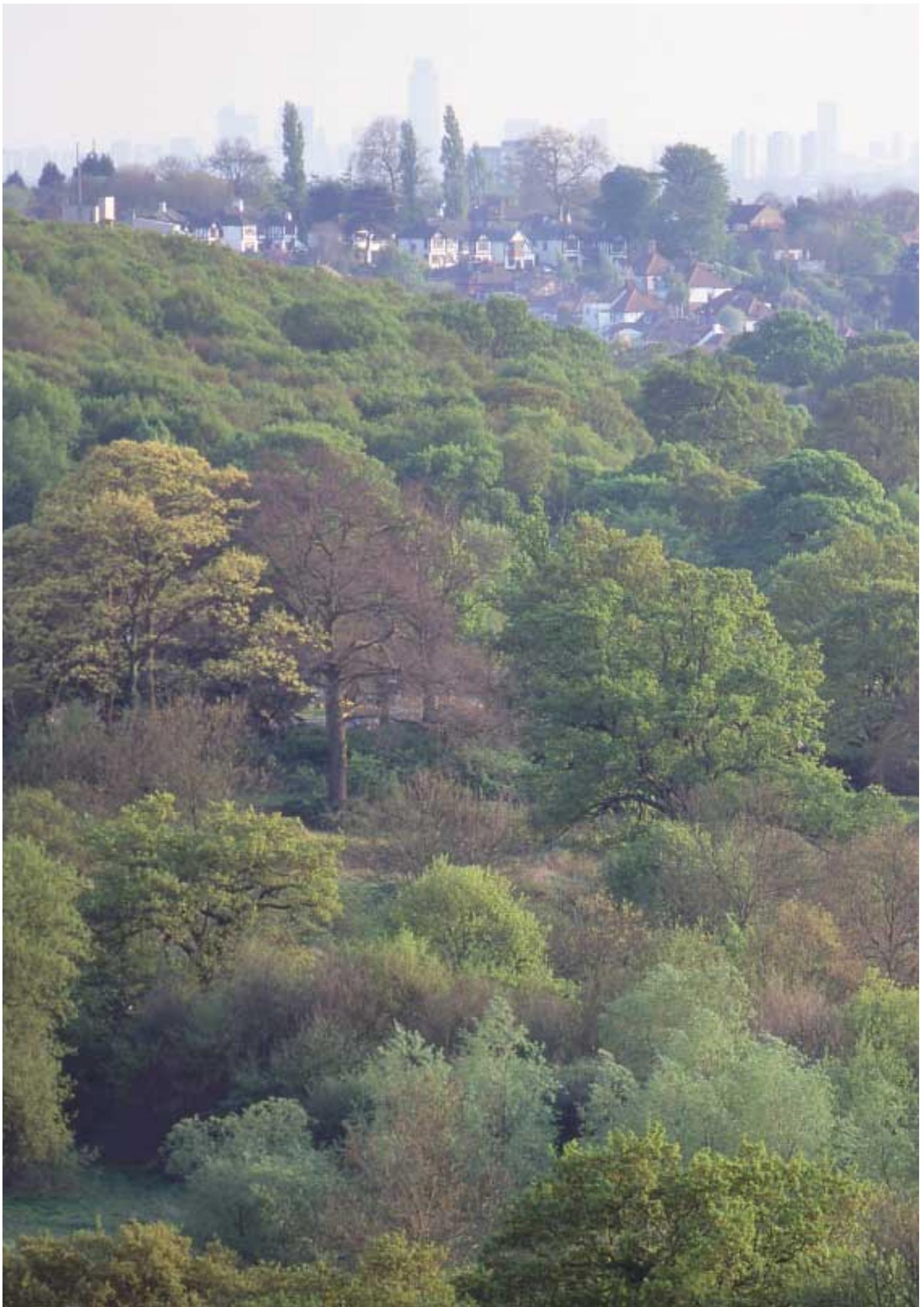

Re-establishing vegetation

All vegetation is of some benefit to wildlife. However, native plants which have been established locally for a long time are known to support greater numbers of invertebrates and these in turn support more birds and other creatures.[55 56] Favouring native species of trees and shrubs in new planting tends to encourage more wildlife.

Increasing biodiversity

Different kinds of wildlife will thrive in different kinds of woodland. For example, whilst young pioneer thickets of seedling birch and willow are extremely valuable for summer bird migrants such as warblers, the dense scrub woodland of hawthorn and blackthorn provides important cover for songbirds and a rich supply of food for berry-eating winter visitors such as redwings and fieldfares.[57] Long-established ancient woodland is much more likely to contain the hollow trees and standing dead timber needed by species such as bats, wood-boring beetles, tawny owls and woodpeckers.[58 59 60] The structure of a woodland is also influential, with tree canopy, shrub layer,

Many popular garden birds are actually woodland species. They thrive in the urban forest

ground flora and leaf litter all favouring particular species of plants and animals [61 62] and there is wildlife value in isolated ancient trees, as well as those which form a part of woodlands. Fallen logs and branches provide important habitat for insects and fungi.[63]

Public enjoyment

Urban woodland is, by definition, very close to where most people live and work. It offers particularly convenient opportunities for environmental education and popular pastimes such as bird-watching[53] and it also generates a great deal of the wildlife which people enjoy in their private gardens.[64]

It is not always necessary to have direct physical access in order to enjoy woodland wildlife. People can be satisfied simply by knowing that wildlife exists around them,[65] and undisturbed sanctuary areas can increase wildlife populations for the adjacent neighbourhood.[66 67]

Trees can complement a mosaic of other habitats

Enhancing landscapes

Many studies have confirmed the public's preference for urban landscapes with a rich tree cover. [68] The greenness of the UK's towns and cities is part of the country's appeal to tourists, and it is an aspect of environmental quality which is a positive influence in encouraging inward investment. In new built development there has been a move in recent years towards the more careful conservation of existing trees and woodland as a way of increasing the value of new development and of reinforcing local landscape character.

The softening effect of trees

Trees and woodlands help to soften and complement the built environment, making it greener and more attractive. This is particularly the case where new planting is integrated into the established urban forest as part of the design process for new built development, transport corridors and other elements of urban regeneration. The beneficial impact of trees and woods is greatest where development is planned so trees can dominate the skyline.

Trees as a link with the past

Trees can live for centuries, and many older trees have important cultural or historical significance to individuals, local communities and, sometimes, even to the population as a whole.[69] It is particularly important to identify and respect the veteran trees in any landscape.[70]

There is a long tradition of using landmark trees as boundary markers, meeting places or prominent specimens. The role of trees in civic design is an important aspect of the British urban heritage, with trees used in formal avenues and as a complement to significant buildings. It is important for the cultural past to influence decisions about the future.

Reinforcing local distinctiveness

Trees can strengthen the distinctive local character of a place. The natural trees and woodlands of an area tend to reflect the local climate, soils and land form. They help to create a sense of continuity and timelessness which can counter the uniformity of so much new development, encouraging greater pride amongst local people.

Our cultural links with trees crop up everywhere

Many of the UK's most prestigious landscapes would be transformed if they lost their trees

More sustainable communities

Growing and planting trees is a popular way of bringing communities together to improve their surroundings

Two satisfied customers in a free garden tree scheme!

The quality of urban living is improved by a close and friendly relationship with neighbours. Trees and woods can help to bring people together and strengthen communities,[66] whilst the involvement of people in the practical care of local trees and woods can help to build a stronger sense of 'ownership' and civic pride.

Public involvement

People gain a great deal of satisfaction from growing and planting trees, caring for them and sharing that experience with others. As Trees for Cities have experienced through their Trees for London project, a strong sense of ownership develops between individuals and their personal trees, vandalism is often greatly reduced, and the sense of individual and communal achievement builds confidence. Success with trees can help to encourage people to deal with other shared aspects of the sustainable communities agenda.[71 72]

Popular landscapes

A major reason for people valuing woodlands is the sense of tranquillity and enclosure which they create, but at the same time this can also prompt a perceived threat to personal safety. Research into public perception of urban fringe woodlands shows that many of these fears can be alleviated by designing and managing the woodland landscape to include open structure, good sight lines and waymarking.[73 74] Employing the services of rangers, play leaders and voluntary wardens can make the woodland more popular and reduce the sense of insecurity for those who visit.[75]

By far the most popular individual recreational activity in the UK is relaxing out of doors.[76] Traditionally, many of the people who live or work in towns enjoy their recreational 'countryside' experience in parks, public recreation grounds and informal urban wildspace. Trees and woodlands greatly enhance this experience, with the added environmental benefit that there is no need to use transport in order to get there.

Education

Trees and woodlands can be used as an educational resource. It is possible to relate them to the national curriculum and to use them in teaching a wide range of topics, from biology and geography to maths, languages, art and design.[77] Children (and adults) also learn through play, adventure and exploration. Easy access to trees and woodland provides an invaluable facility for both formal and informal learning in the urban environment.

The Forestry Commission's Forest Education Initiative provides learning resources which use trees, forests and forest products. In addition, an increasing number of Forest Schools are also being established which build self-esteem and confidence through regular visits to special woodland sites. Children learn to appreciate nature, to master tasks of increasing complexity and acquire associated social skills.[78]

Conclusions

Trees are not an optional extra - they deserve to be at the heart of policies for health, economic regeneration, environmental protection, nature conservation, education and community development. The UK has one of the most urban societies in the world, and there is a pressing need to provide many more people with the benefits that can come from trees and woodland on their doorstep.

Trees are an economic bargain, but the benefits they bring are difficult to evaluate. Nevertheless, the financial benefits which are clearly attributable to trees will generally far outweigh the cost of their planting and continuing aftercare.[79]

Despite the benefits they bring, the care of trees and woods in towns is seriously under-funded in the UK. Many mature trees are badly neglected or insensitively treated, whilst the failure rates for new planting are often unacceptably high. There needs to be far greater commitment to professional aftercare and more encouragement for local communities to play an active part in long-term management.

If more people demanded the benefits that can come from healthy trees and woodland on their doorstep[80][81] then the policy-makers and professional practitioners would be much more likely to find new ways of weaving urban forests into the heart of their activities. We need more well documented models to add to the evidence quoted here. Most of all we need to take the urban forest much more seriously and to plant the trees and woodlands which will grow to form our legacy for people in the towns and cities of the next century.

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Published case studies of best practice in urban forestry

The National Urban Forestry Unit's case studies of Urban Forestry in Practice are a series of booklets which describe best practice across the breadth of urban forestry. The case studies and other NUFU publications can be ordered online at www.nufu.org.uk.

Useful web sites

American Forests
www.americanforests.org
Arboricultural Association
www.trees.org.uk
CABE Space
www.cabespace.org.uk
European Forest Institute
www.efi.fi
European Urban Forestry Research & Information Centre
www.fsl.dk/euforic
Forest Research
www.forestresearch.gov.uk
Forestry Commission, The
www.forestry.gov.uk
Institute of Chartered Foresters
www.charteredforesters.org
International Society of Arboriculture
www.isa-uki.org
Landscape, Access and Recreation (LAR) division of the Countryside Agency
www.countryside.gov.uk
National Community Forest Partnership
www.communityforest.org.uk
National Urban Forestry Unit
www.nufu.org.uk
Tree Council, The
www.treecouncil.org.uk
Tree Link
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USDA Forest Service, Northeastern Research Station
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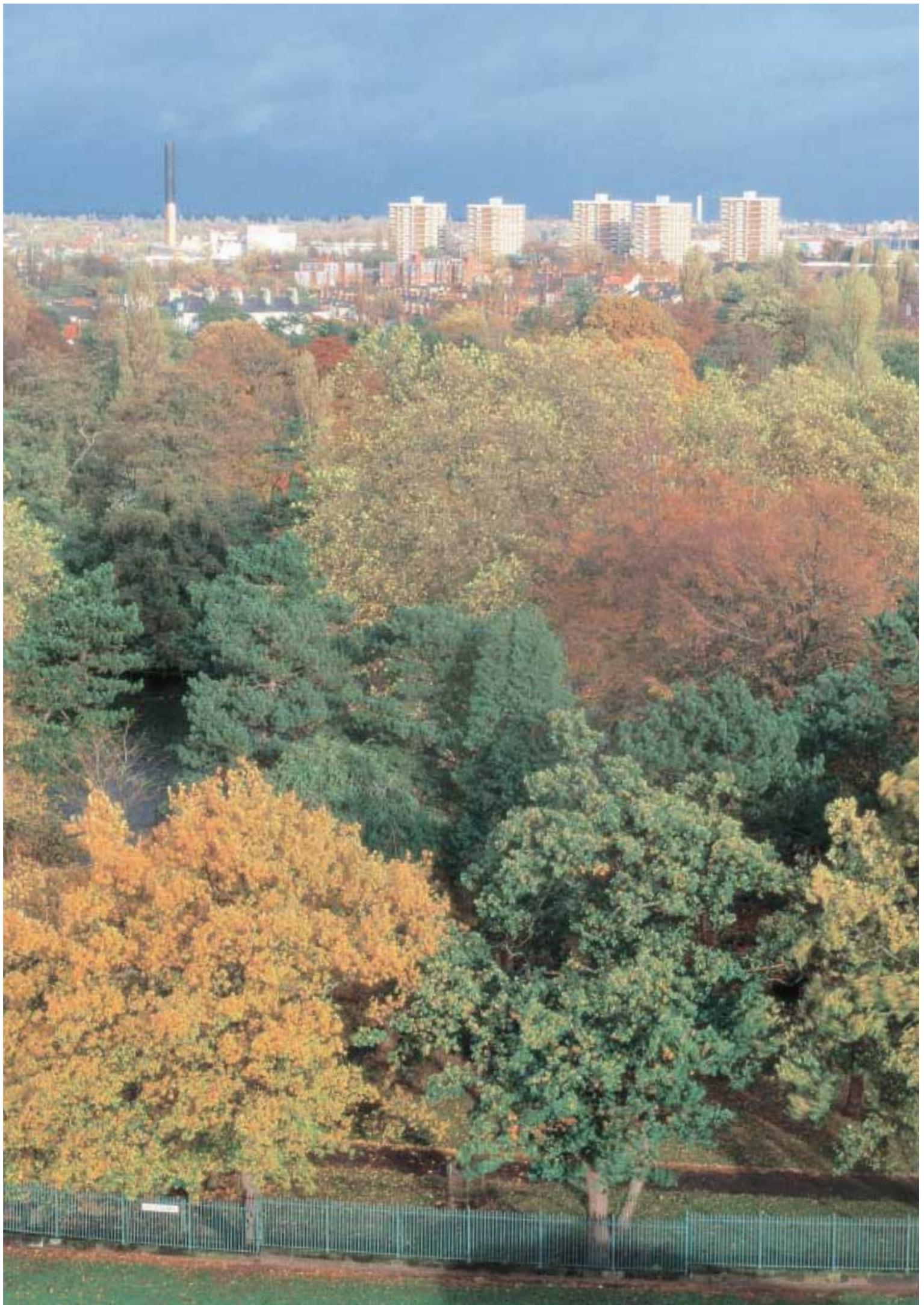
Partners in this publication

National Urban Forestry Unit

The National Urban Forestry Unit (NUFU) is an independent charity which works in partnership with organisations in the public, private and voluntary sectors. Its main aim is to help create a more tree-rich environment as an important means of improving the quality of life for the millions of people who live and work in towns and cities.

Trees for Cities

Trees for Cities is an independent charity that plants trees and re-landscapes public spaces in urban areas of greatest need. Its vision is to stimulate a greening renaissance in cities around the world that will impact on global warming, create vital wildlife habitats and beautify the urban landscape, as well as encourage greater social cohesion through the active participation of local people. A special effort is made to involve children and young people in the projects. The public can get involved by sponsoring trees, registering as a volunteer, enrolling on training programmes and going to its dance party fundraisers.

The Landscape, Access and Recreation division of the Countryside Agency

The Landscape, Access and Recreation (LAR) division of the Countryside Agency is working with English Nature and the Rural Development Service as a confederation of partners. The confederation paves the way for the creation of a new integrated agency which, once the necessary legislation has been enacted, will have responsibility for biodiversity, landscape, sustainable management of the countryside and recreation and access.

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