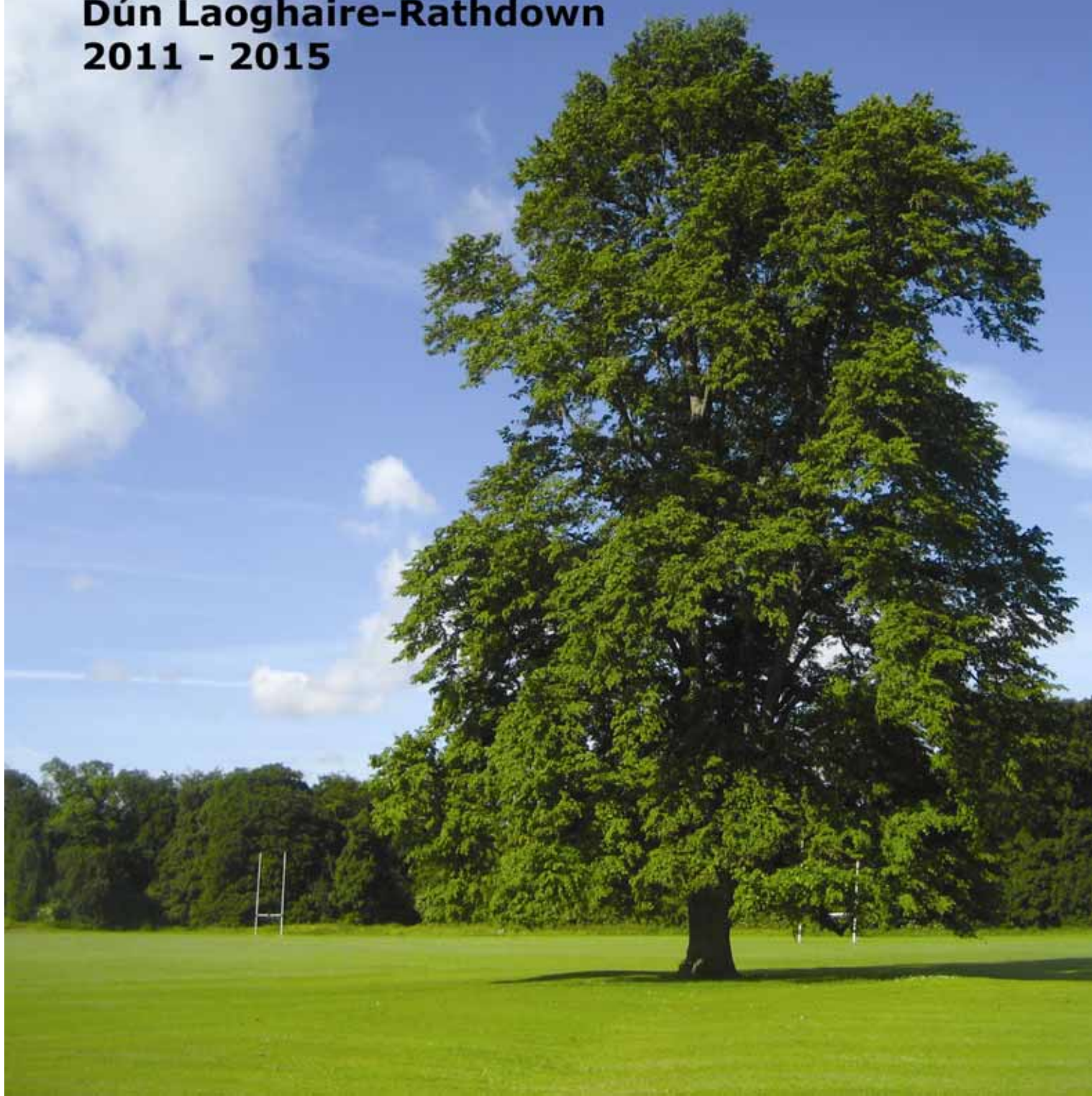


dlr TREES

**A tree strategy for
Dún Laoghaire-Rathdown
2011 - 2015**





*This page: Autumn Colour
Previous page: Lime tree in Marlay Demesne*

FOREWORD

An Cathaoirleach (pg 1)

1. THE NEED FOR A STRATEGY

Introduction (pg 3)

Tree Benefits (pg 5)

Aims and Objectives (pg 13)

2. POLICY STATEMENTS (pg 15)

A. The Trees of Dún Laoghaire-Rathdown (pg 17)

A.1. Gather Information

A.2. Evaluate Street Trees

A.3. Review Significant Trees

A.4. Log and Value Trees

A.5. Increase the Economic Value of Council Trees

A.6. Encourage Balanced Age-profile

B. Trees on Council Land (pg 19)

B.1. Pro-active Tree Management

B.2. Tree Pruning and Removal

B.3. Departmental Responsibilities

B.4. Approach to Specific Tree Threats

B.5. Approach to Natural and Built Heritage

C. Trees on Private Property (pg 34)

C.1. Management of Privately Owned Trees

C.2. Tree Protection and Preservation

D. Trees and Development (pg 37)

D.1. Tree Retention and Aftercare on Development Sites

D.2. Tree Planting and Development

D.3. Trees and Wildlife

D.4. Enforcement

E. Tree Planting, Design and Establishment (pg 40)

E.1. Planting Procedure and Species Selection

E.2. Life-stage Tree Care: Young, Semi-mature, Mature

E.3. Priority Areas for New Tree Planting

E.4. Potential Areas for Woodland Creation

E.5. Tree Replacement

F. Engagement, Awareness and Cooperation (pg 47)

F.1. Engage with Interest Groups

F.2. Education, Promotion and Awareness

F.3. Communication and Cooperation

3. ACTION PLAN (pg 51)

Key Actions 2011 – 2015 (pg 53)

Protect and Care for our trees

Plant more trees, in the right place

Promote education and awareness of trees

Cooperate and engage

APPENDICES

A. Context and Terms of Reference

B. References and Sources of Useful Information

C. dlr Tree Cover

D. dlr Tree Preservation Orders (TPO's)

E. Glossary



Trees provide a pleasant setting and contribute to public amenity at Marlay Park

Foreword, An Cathaoirleach

I am delighted to welcome dIr TREES: A Tree Strategy for Dún Laoghaire-Rathdown, one of the first tree strategies to be published in Ireland. Its adoption demonstrates the Council's commitment to public amenity, the environment and the quality of life of our residents. Its realisation will ensure that trees, an increasingly vital part of our infrastructure, continue to make our County a distinctive and desirable place to live, work and visit.

As environmental awareness improves, more and more of us are conscious that the value of our trees goes far beyond their visual role; they help remove pollutants from our air and water, provide us with oxygen to breathe, reduce flooding and erosion, and also make a huge contribution to wildlife and biodiversity. However, it is important to recognise that inappropriate or incorrectly managed trees can have a negative impact on the local area, and this strategy includes a commitment to rationalise existing street tree cover over the coming years.

Community involvement is a key element of the strategy. Improving our environment together will have a positive impact on our quality of life and the local economy, and dIr TREES encourages the balance of individual and wider public interests and expectations.

By adopting a clear and consistent approach, we will move from reactive to proactive tree care and promote healthy and attractive tree cover well into the future. Dún Laoghaire-Rathdown County Council is committed to managing, protecting and improving our tree resource, and this strategy sets out how we will do this over the next five years.



Councillor Lettie McCarthy
An Cathaoirleach



Dún Laoghaire, from Dalkey Quarry. Trees are integral to the character and distinctiveness of the County



Trees are important to a wide variety of birds, mammals, insects and other wildlife

Introduction

Good tree cover can transform the quality and image of a local area and the value and importance of trees have long been accepted. Trees have a major positive influence on the local environment and quality of life of Dún Laoghaire-Rathdown's residents and visitors. However trees can be a source of conflict because unlike the rest of the built environment they are alive and continue to grow.

This strategy aims to standardise and guide the Council's approach to trees throughout the county, provide clarity to actions and decisions, and encourage the balanced consideration of individual expectations, public amenity and best practice. The proposals will help safeguard the amenity, sustainability and value of Dún Laoghaire-Rathdown's trees. They will also improve the consistency and efficiency of tree management and foster a long-term safe, healthy and diverse tree cover.

This 2011-2015 strategy sets out principles relating to how we will deal with trees, gather accurate information on them, raise their profile and improve communication with local communities and stakeholders. Once this has been achieved, we will be in a position to develop a more specific and longer-term approach.

The county currently has good tree cover, but this is under threat of decline due to piecemeal removal, the dominance of smaller tree species, a poor age structure and lack of a strategic approach to planting and management. As the bigger, older trees begin to decline, there may be a shortage of large trees to take their place, which could result in a major loss of tree cover and its associated benefits. Careful selection and management of trees now can avoid some of the common problems later and can achieve better public amenity and long-term social, economic and environmental benefits.

The strategy comprises three main sections:

1. *Introduction / The Need for a Strategy: which covers the benefits of trees and the aims and objectives of the strategy.*
2. *Policy Statements: which state the Council's policy approach to trees.*
3. *Action Plan: which covers the Council's specific targets and our progress towards our tree objectives.*

The strategy is backed up by the following guidance documents:

1. *dlr Tree Planting and Management Guidelines: which cover best practice and standards in relation to tree planting and management.*
2. *Tree FAQ (Frequently Asked Questions).*

Other useful sources of information are listed in Appendix B.



Ballawley Park, Sandyford Road

The Benefits of Trees in Dún Laoghaire-Rathdown

Trees are a vital economic, environmental and social resource and are integral to the character of Dún Laoghaire-Rathdown. They form a key element of the county's infrastructure and are amongst the most important features in our towns, villages and rural landscapes. Trees help make the county a more desirable place to live, work, study and spend leisure time.

For thousands of years, trees have been grown and cultivated for shelter, food, timber, medicine, and for their intrinsic beauty. They are integral to our cultural heritage and have been worshipped, celebrated and revered in Irish folklore. The ancient Celts of Ireland centred their culture and laws around trees, and some of the letters of the Ogham alphabet, the first known written language in Ireland, were based on Ireland's native trees.¹

In modern times, there has been a resurgence of interest in tree culture and the many varied benefits that trees offer, due in part to increased environmental awareness. It is generally recognised that larger growing tree species confer the greatest benefits³¹ and should be used where possible.



SUMMARY OF TREE BENEFITS

1. Social/ Community Benefits

- Contribution to cultural and linguistic heritage
- Visual amenity and local distinctiveness
- Sense of place and local landmarks
- Soften the urban landscape
- Outline the changing seasons
- Local recreation
- Improve road safety
- Mental and physical health and well-being

2. Environmental Benefits

- Mitigation of air pollution
- Improvement in air quality
- Reduce storm-water flows and flooding
- Improvement in water quality
- Noise abatement
- Carbon sequestration
- Reduce urban 'heat island' effect
- Reduce local wind speeds
- Provision of shade and shelter

3. Biodiversity

- Shelter and food for wildlife
- Wildlife micro-climates
- Habitat linkages

4. Economic Benefits

- Increase residential & commercial property values
- Reduce heating/cooling costs
- Commercial benefits to businesses
- Health savings

Refer to appendix B for numbered references and sources.

Social and Community Benefits

Trees provide many social benefits to local areas by offering opportunities for recreation and education, contributing to people's health and well-being and improving local amenity and distinctiveness.

Cultural heritage:

- Trees are of immense value in the context of our cultural and linguistic heritage. They have been associated throughout history with stories, poems and songs, folklore, philosophy and religion, important events, the development of the Irish language and the naming of places.
- Ireland once had extensive tree cover, but less than one percent of it (approximately 69,000 hectares) remained by the end of the 19th Century. Ireland is still one of the least wooded countries in Europe although woodland cover is now increasing. Ireland's National Forestry Inventory estimates current woodland cover to be in the region of 700,000 hectares.
- Approximately 13,000 townlands in Ireland are named after trees, and 1,200 are associated with Oak.³⁴
- Ireland's indigenous system of law, Brehon Law, which functioned until the 17th Century, provided extensive protection to Ireland's native trees.
- Numerous famous Irish writers, playwrights and poets have written about trees, including William Yeats, Patrick Kavanagh, Brian Friel, James Joyce, George Moore and Flan O'Brien.
- The native ash tree, from which the hurley is made, is integral to the national sport of hurling and the sound of hurleys colliding is known as 'the clash of the ash'. In Ireland the demand for ash for hurleys cannot currently be met without relying on imports.



Blackrock Park

Visual amenity:

- Mature trees are able to contribute to local identity and sense of place, for example by providing local landmarks or contributing to local character and appearance e.g. Brooklawn, Stradbrook Road; Grange Hall; Ballawley Park, and Deer Park. Trees are also effectively used to screen unsightly structures or views and soften the built environment.



Ballawley Park, Sandyford Road

Recreation:

- Trees contribute to local recreation as features of interest and through the provision of a pleasant environment or setting e.g. Fitzsimons Wood, Killiney Hill, Rachmichael Wood and the woodlands in Marlay Demesne and Cabinteely Park.

Community:

- Local communities can benefit socially from trees, which can help generate higher public esteem for an area.^{24, 25, 26}
- Trees can also provide a community with local focal points and landmark links, for example the oak tree on the green in Old Connaught.



St. Patrick's Park, Dalkey

Safety:

- Trees can improve local road safety by acting as a physical buffer between vehicles and pedestrians. They can give the perception of making a street feel narrower, or can give the perception of higher speed if spaced closely together, both of which encourage drivers to slow down. Lack of trees can give the perception of a wide, open street, which encourages faster driving and potentially more accidents. Trees can also forewarn drivers of upcoming bends in the road.²⁷
- Tree and grass cover has been systematically linked to fewer violent crimes, fewer property crimes, a greater sense of safety, and better supervision of outdoor spaces. Recent evidence also links green residential settings to reduced aggression.^{28,30}

Health:

- Tree and grass cover has been systematically linked to fewer violent crimes. Research has confirmed that trees reduce the physiological symptoms of stress and the time taken to recover from stress.¹¹
- Trees have been shown to have a positive impact on mental and physical health and well-being.^{24, 25, 26, 11} A number of studies have found that even just looking at pictures of large vegetation (e.g. trees, shrubs etc.) can have a positive and measurable physiological impact on stress, blood pressure and heart rate.³⁵

Environmental Benefits

Trees are an increasingly vital part of our urban infrastructure because they can improve local air and water quality, reduce traffic noise, improve the local microclimate and help mitigate some of the adverse impacts of climate change.

dlr TREES Section 1 – The Need for a Strategy

Air quality:

- Particulate matter and nitrogen oxides are the two pollutants of most concern for air quality according to the *Dublin Regional Air Quality Management Plan*. The *Air Quality Standards Regulations 2002* set out legislative standards for these pollutants, as well as benzene, sulphur dioxide, carbon monoxide and others.
- Trees help improve air quality by removing dust and particulates^{12,13,14} and have been found to reduce street level dust and particulate pollution by up to 60%.¹¹
- Trees also remove benzene and gaseous pollutants (e.g. Sulphur dioxide, Ozone, Nitrogen oxides) from the air.¹⁵

Water quality and flooding:

- Trees have been found to reduce the effects of flash flooding by intercepting rainfall and storm-water runoff.¹⁶
- In addition to intercepting runoff, trees also filter particulate pollution and some nutrients harmful to water quality from storm-water flows.^{17,18}



Trees have been found to reduce the effects of flash flooding

Noise:

- The *Dublin Agglomeration Action Plan Relating to the Assessment and Management of Environmental Noise* was prepared to address the Environmental Noise Regulations. In the Dún Laoghaire-Rathdown County Council area, 6.5 % (5,191) of residential properties have been identified for which priority action is suggested. The dominant sound source is traffic.



Shankill Quality Bus Corridor with tree buffer

- Trees help reduce traffic and other noise by absorbing and deflecting sound, as well as masking it.¹¹

Carbon:

- A healthy tree can store carbon annually as it grows.^{19,20,21} Planting trees is one of the cheapest means of temporarily drawing carbon dioxide (CO²) from the atmosphere.²² Large growing trees are able to absorb more carbon as they increase in size.

Microclimate:

- Trees provide shade in summer, making streets and buildings cooler during hot weather.²³
- Trees can also reduce local wind speeds, provide insulation in cold weather and regulate temperature extremes⁶, which can make indoor and outdoor spaces more pleasant and comfortable.

Biodiversity

Trees are integral to our ecosystems and have enormous intrinsic biodiversity value. They provide species and structural diversity in our landscapes and also greatly benefit other wildlife. Trees can be thought of as a 'mini' ecosystem with complicated food chains and complex interactions between different species and populations. The value of individual trees for wildlife depends on their species, age and location. Different animal and plant species are associated with a tree at different stages of its life-cycle. Older trees have a much greater variety of microhabitats and generally support more species, for example a mature Oak tree can support hundreds of native plant, animal and insect species.

Creating and maintaining tree diversity (including age, structure and species) makes a significant contribution to biodiversity and wildlife.



Trees are an important source of nectar for birds and insects

Trees contribute to biodiversity by providing:

Shelter, Habitat and Food

- Habitat for lichens, bryophytes (e.g. mosses) and fungi (e.g. mushrooms, toadstools etc.).
- Habitats for woodland ground flora, including wildflowers such as bluebells and many other native plant species.
- Important nesting and roosting sites for a wide variety of insects, birds and mammals, including bats.

dIr TREES *Section 1 – The Need for a Strategy*

- Shelter for mammals, including red squirrels, hedgehogs and badgers.
- Nectar, pollen and sap for invertebrates, including bees.
- Flowers, fruits, foliage and buds for a wide range of invertebrates, birds and mammals.
- Leaf litter for detritivores, such as earthworms and millipedes.

Habitat links

- Provide connectivity between a range of habitats and provide opportunities for species movement.

Microclimates

- Peeling bark, rot holes and crevices.
- Shaded and damp conditions beneath the tree.
- Leaf litter and root associations in the soil (e.g. mycorrhizal communities).



River Dodder



Deer Park



Alder catkins



Deadwood habitat, Loughlinstown Ecology Park

Economic Benefits

Trees are increasingly recognised as contributing direct and indirect economic benefits to local areas. Some of these are summarised below.

Residential and Commercial property values:

- Research indicates that residential and commercial property values are 7% to 15% higher in locations that have mature trees.^{2,3,4} This demonstrates that trees make an area more pleasant and desirable.



Good quality trees are known to improve residential property values.

Reduce heating and cooling costs for buildings:

- Trees improve the environmental performance of buildings through provision of shade in summer, regulation of local air temperatures and provision of insulation and shelter from winter winds.^{5,6} Trees can therefore reduce the amount of money spent on heating and cooling houses and offices.

Business benefits:

- American research shows businesses leasing office spaces in developments with trees find their workers are more productive, with less absenteeism.⁷ Desk workers who can see nature from their desks were found to experience 23% less time on sick leave.²⁹
- Trees can also influence consumer behaviour. Research shows people are prepared to pay more for parking in landscaped business districts, and are willing to pay on average 11% more for goods (with this figure being as high as 50% more for convenience goods).^{8,9,10} Trees can therefore help attract



Street trees in Glasthule

dIr TREES *Section 1 – The Need for a Strategy*

businesses to the county.

- The website <http://www.naturewithin.info/consumer.html> provides many resources outlining the benefits of trees to commercial areas.

Refer to appendix B for numbered references and sources.



The People's Park, Dún Laoghaire



Dún Laoghaire ferry terminal

Aims and Objectives

The tree strategy has four overall aims, each with a series of objectives. Specific actions and timescales will be developed on a cyclical basis so that progress can be measured.

1. Protect and Care for our trees

- *Gather information on the county's trees.*
- *Improve the efficiency and sustainability of tree management.*
- *Manage trees with a pro-active, clear and consistent approach.*
- *Reduce the Council's long-term costs arising from trees.*
- *Provide clarity over why decisions and actions are taken.*
- *Encourage balanced consideration of individual expectations, public amenity and best practice.*
- *Foster long-term safe, healthy, and diverse tree cover.*
- *Take steps to reduce tree threats and the effects of climate change.*

2. Plant more trees, in the right place

- *Increase the quantum of tree cover on Council owned land.*
- *Plant large tree species where space allows.*
- *Plant a wider variety of trees*
- *Encourage people to plant trees on their land.*
- *Develop policies to inform tree planting programmes and strategies.*
- *Plant the right tree in the right place.*
- *Ensure a balanced tree age-profile throughout the county.*

3. Promote education and awareness of trees

- *Promote awareness of the importance of trees.*
- *Promote tree conservation and planting.*
- *Provide training to Council staff responsible for tree management.*
- *Facilitate and provide tree related events.*

4. Cooperate and engage

- *Engage with communities.*
- *Foster good communication with all stakeholders.*

The aims and objectives have been developed into policy statements that cover the following

- A. *The Trees of Dún Laoghaire-Rathdown.*
- B. *Trees on Council land.*
- C. *Trees on Private Property.*
- D. *Trees and Development.*
- E. *Tree Planting, Design and Establishment.*
- F. *Engagement, Awareness and Cooperation.*



Laurel in flower, Rathsalagh, Shankill

2. **POLICY STATEMENTS**

A. The Trees of Dún Laoghaire-Rathdown

- A.1. Gather Information
- A.2. Evaluate Street Trees
- A.3. Review Significant Trees
- A.4. Log and Value Council Trees
- A.5. Demonstrate an Increase in the Value of Council Trees
- A.6. Encouraged Balanced Age Profile

B. Trees on Council land

- B.1. Pro-active Tree Management
- B.2. Tree Pruning and Removal
- B.3. Departmental Responsibilities
- B.4. Approach to Specific Tree Threats
- B.5. Approach to Natural and Built Heritage

C. Trees on Private Property

- C.1. Management of Privately Owned Trees
- C.2. Tree Preservation

D. Trees and Development

- D.1. Tree Retention and Aftercare on Development Sites
- D.2. Tree Planting and Development
- D.3. Trees and Wildlife
- D.4. Enforcement

E. Tree Planting, Design and Establishment

- E.1. Planting Procedure and Species Selection
- E.2. Life-stage Tree Care: Young, Semi-mature, Mature
- E.3. Priority Areas for Tree Planting
- E.4. Potential Areas for Woodland Creation
- E.5. Tree Replacement

F. Engagement, Awareness and Cooperation

- F.1. Engage with Interest Groups
- F.2. Education, Promotion and Awareness
- F.3. Communication and Cooperation



Chestnut tree, Dún Laoghaire. Trees contribute significantly to local character.

A. THE TREES OF DUN LAOGHAIRE-RATHDOWN

The Council will gather information on public and private trees and will use this information to develop targets and rationalise, protect, conserve and enhance local tree cover.

- A.1. Gather information on street trees, rare trees and other trees, hedgerows and woodlands that are integral to local amenity, culture and heritage, or of significance to historic, scenic and natural landscapes.
- A.2. Evaluate existing street tree cover throughout the county and identify locations where pruning or removal and replacement of existing trees is required. This process will be prioritised on a phased basis, subject to available resources. It will include the removal of Cherry trees, which have unsuitable rootstocks and are causing widespread footpath damage, and their replacement with more suitable tree species in appropriate locations.
- A.3. Review and identify trees of particular significance or importance, which may merit inclusion in future *County Development Plans*.
- A.4. Prepare an inventory of the Council's trees and value them using a recognised tree valuation system.
- A.5. Increase the economic value of tree cover on Council owned land over time.
- A.6. Encourage a balanced age-profile and diversity of trees throughout the county to ensure long-term tree cover. This may require selective tree removal and replacement.



Mature trees in Deer Park, Mount Merrion. New planting is necessary throughout the County to ensure continuity of tree cover when existing trees begin to decline.



Amenity trees at Castlebrook, Dundrum



Amenity trees at Stepside Golf Course

B. TREES ON COUNCIL LAND

The Council is responsible for all trees on Council-owned or 'taken-in-charge' land, including road verges, public cemeteries, public footpaths, open spaces, parks and social housing. The Council is not responsible for trees on verges or open spaces that have not been taken-in-charge or where there is a private management company. Social housing tenants are responsible for the management of trees in their gardens, however approval is required before undertaking tree works or removing trees. Queries about trees in the gardens, verges or open spaces of social housing should be referred to the Council's Housing Department.

B.1.

Pro-active Tree Management

The Council will adopt a pro-active and systematic good practice approach to tree management and inspection with the aim of promoting good tree health, condition, diversity, public amenity and a balanced age-profile. This approach will highlight necessary works at an early stage and enable hazards to be identified and made safe in a cost effective way.

B.1.1. Quality of service

B.1.1.1. Customer care - Customers will be treated in accordance with the Council's *Customer Care Policy*.

B.1.1.2. Public notification (tree works) - Pruning and felling works listed in the annual tree care programme will be presented annually to the relevant Local Area Committee Meetings. The Council will endeavour to contact local resident groups prior to additional major tree works or tree removal but this is not always possible.

B.1.1.3. Public notification (tree planting) - Tree planting works listed in the annual tree care programme will be presented annually to the relevant Local Area Committee meetings. Additional and replacement tree planting may be carried out without prior consultation.

B.1.1.4. Arboricultural Officer – The Council will nominate an Arboricultural Officer to drive and manage *dlr TREES*.

B.1.1.5. Tree management system - The Council will implement a computerised tree management system and inventory in line with recognised good practice, subject to available resources.

B.1.2. Quality of work

B.1.2.1. All tree works will be undertaken as per British Standard *BS 3998:1989 Recommendations for tree work* and current Health and Safety requirements.

dIr TREES Section 2 – Policy Statements

All staff undertaking tree works shall be competent, with appropriate training, experience and qualifications.

- B.1.2.2. Tree topping (reduction in height) causes large wounds, exposing trees to decay pathogens and causing their long-term decline, as well as being unsightly and potentially unsafe. Topping is therefore only considered where trees have serious defects, that cannot be otherwise reasonably addressed, and their short-term retention is essential or highly desirable.



Tree topping is unsightly and causes tree decline

- B.1.2.3. Tree planting works will be undertaken in accordance with the Council's *Tree Planting and Management Guidelines* and *British Standard BS 4043:1989 - Recommendations for Transplanting Root-Balled Trees* and *BS 4428:1989 – Code of practice for general landscape operations (excluding hard surfaces)*.
- B.1.2.4. Any tree surgery contractors engaged to work on amenity trees shall be competent and adequately qualified, trained, experienced and insured.
- B.1.2.5. Tree surveys will comply with current best practice.
- B.1.2.6. Staff undertaking tree works will be given appropriate training and guidance, which will include health and safety implications and awareness of protected species (such as bats, red squirrels and nesting birds).

B.1.3. Tree inspections

- B.1.3.1. The Council aim to log, map and survey street trees in particular problem areas based on maturity of trees and a preliminary hazard/risk assessment. The Council aim to survey street trees on a cyclical basis, subject to resources.
- B.1.3.2. The Council aim to log, map and survey Council-owned trees in open spaces and parks based on the following hierarchy:
- Local open spaces (older estates prioritised)
 - Flagship Parks
 - Local Parks

dIr TREES Section 2 – Policy Statements

B.1.3.3. The Council aim to log, map and survey trees within the curtilage of social housing on a cyclical basis, subject to resources.

B.1.3.4. The Council aim to log and map woodlands, rare trees (such as *Sorbus hibernica*, which is endemic to Ireland) and hedgerows. Council-owned woodland or hedgerow trees along main pedestrian or vehicular routes will be surveyed based on maturity of trees and a preliminary hazard/risk assessment, subject to resources. Ecological surveys will be carried out where resources allow.

B.1.4. Tree work procedure

The Council is proactive in establishing trees in our parks, open spaces and streets. While we recognise the need to conserve existing tree cover, we also recognise that removal of trees is sometimes justified for sound arboricultural reasons and that pruning works can be necessary to ensure that trees are safe and healthy. In many cases the decision to do tree works must be taken at short notice and there is no single procedure for acting on these decisions. Circumstances where the Council will consider tree removal and pruning are outlined in sections *B.2.3 Tree Pruning* and *B.2.4 Tree Removal*.

B.1.4.1. Tree retention – Tree retention is favoured where a reasonable alternative to felling is available, however in some cases removal may be the best management solution.



In some cases removal is the best solution

dIr TREES Section 2 – Policy Statements

- B.1.4.2. Protected species - Where tree works have potential to affect protected species or their habitat, the Council will have regard to legislative requirements and the procedures outlined in the Council's *Parks Biodiversity Policy*. Essential tree works will be undertaken in a way that minimises adverse impact and ecological advice will be sought where necessary. Protected species commonly associated with trees include bats, nesting birds, badgers and red squirrels.
- B.1.4.3. Ivy – Common Ivy is a native plant of great importance to wildlife. It provides important nesting sites for blackbirds, wrens and other birds, and its nectar is of particular value to insects, particularly butterflies, and bees which often depend on it for survival during winter and early spring. For these reasons, ivy is normally retained except where removal is necessary to aid visual tree health assessment or where ivy growth is excessive and adversely affecting tree health.
- B.1.4.4. Standing deadwood - Where it is safe and appropriate to do so, standing deadwood will be left in-situ to provide habitat for native species and contribute to local distinctiveness.



Standing deadwood, Nutgrove

dlr TREES Section 2 – Policy Statements

- B.1.4.5. Tree stump treatment - When a street tree is felled it is not always possible to replant at the same time. Under these circumstances a short tree stump is left as a temporary measure. Tree stumps are then removed later once there are a sufficient number for their removal to be economical. Stumps are typically left around 1.3 metres (about 4 feet) tall, with the tops chamfered to remove rough edges and only stumps greater than 15cm (6 inches) diameter are retained, otherwise the tree is felled to ground level.
- B.1.4.6. Replanting - Where possible, all trees that are removed will be replaced with an appropriate species during the next planting programme as per policy E.5.
- B.1.4.7. Tree waste - The Council will continue to explore alternative uses for arisings from tree work to ensure as much as possible is reused or recycled.
- B.1.4.8. Emergency works - The Council will have in place an emergency procedure for dealing with fallen or hazardous trees. The procedure will be reviewed periodically.
- B.1.4.9. Trees planted by residents on Council land – Inappropriate trees and shrubs planted on Council land without prior written permission are to be removed.
- B.1.4.10. Up-lighting – Where it would lead to an improvement in local civic amenity, the up-lighting of trees in civic open spaces will be considered on a case-by-case basis, subject to available resources.

B.2.

Tree Pruning and Removal

The Council receives many requests for trees to be pruned or felled. Individual requests, queries and recommendations will be dealt with efficiently, consistently and fairly, having regard to the positive public contribution that trees make throughout the county. The Council will avoid unnecessary tree works.

B.2.1. Unauthorised pruning, removal or damage to Council owned trees

Unauthorised works or damage to Council-owned trees may result in a charge being levied. This charge will reflect the amount of damage sustained and where the life/safety of the tree(s) is undermined it will include the cost of total replacement and compensation for loss of tree value. These charges will be drawn up by professional parks staff and each case will be

dlr TREES Section 2 – Policy Statements

assessed on an individual basis using a recognised tree valuation system (e.g. CAVAT / Helliwell).

B.2.2. Priority rating system for tree works

To enable efficient use of resources, tree works will be prioritised and programmed based on the following 'traffic light' categories:

- **Red – Urgent and essential.** Action immediately or within 3 months;
- **Amber – Essential.** Action within 12 months;
- **Green – Desirable.** Action when resources allow, within 24 months;
- **None required – Unnecessary works.** No action.

B.2.3. Tree Pruning

Excessive/heavy tree pruning can weaken trees and make them more susceptible to decay and disease, particularly older trees. Trees often respond to excessive pruning by producing a flush of vigorous growth that can exacerbate existing problems and increase long-term maintenance requirements.



Flush of growth

Appropriate pruning can, however, prolong the life of a tree that may otherwise have to be removed (for example a veteran tree) and will normally be undertaken only where any of the following circumstances apply, or are likely to apply if pruning is not done. Each case will be judged individually on its merits:

B.2.3.1. Dead branches, dying or dangerous trees

(priority red) - Tree pruning is acceptable where a tree represents an immediate and unreasonable danger to public safety, which can be adequately addressed by reasonable pruning of the tree.

B.2.3.2. Obstruction

(priority red - amber) - Tree pruning is normally acceptable where a tree is causing an obstruction to a public highway, public right of way, public footpath or cycleway, access to property or public open space. The following height clearance is considered appropriate where reasonably practicable and where it can be achieved without harming tree health or form:

- Pedestrian areas: 2.5m;
- Collector roads and access roads: 3.5m;
- Distributor roads: 4.5m.

dIr TREES Section 2 – Policy Statements

B.2.3.3. **Public lighting**

(priority red – amber)

Tree pruning is normally acceptable where a tree is within five (5) metres of AND obstructing or interfering with public lighting, although removal is the preferred long-term option.



Tree interfering with public lighting

B.2.3.4. **Legal Nuisance** *(priority red)* - Tree pruning is normally acceptable where a tree is causing a legal nuisance, such as damage to private property.

B.2.3.5. **Severe Problems** *(priority red - amber)* - Tree pruning may be acceptable under the following circumstances:

- A tree is preventing or restricting essential repair and maintenance of property or authorised construction work.
- A tree is in physical contact with buildings.
- A tree is physically encroaching **over** private property, e.g. gardens, to the extent that reasonable enjoyment is prevented.
- A tree is obstructing road signs and other public equipment e.g. parking meters.
- A tree is severely obscuring sight lines at road junctions and accesses.
- A tree is obstructing essential public CCTV cameras.
- There is currently no legal right to direct sunlight as there is no expectation for existing buildings or other structures to be removed for this reason. However, situations where a tree is genuinely blocking daylight from habitable rooms to an **exceptional, severe and unreasonable** degree may be dealt with on a case-by-case basis. Minor pruning works may be acceptable in some situations, however any decision would take into account the health and significance of the tree, its contribution to wider public amenity, the orientation of the

dlr TREES Section 2 – Policy Statements

house, and whether the tree was already present when the occupier moved into the property.

- B.2.3.6. **Formative Pruning** (*priority amber*) - Tree pruning may be acceptable where a young tree is in need of formative pruning to improve its form or shape.
- B.2.3.7. **Remedial Pruning** (*priority red - green*) - Tree pruning may be acceptable where a tree is in need of pruning to improve its health, longevity or shape. For example to remove dead wood or diseased material, remedy damage, make the tree safe, or shape the crown.
- B.2.3.8. **Woodland Operations** (*priority amber - green*) - Tree pruning may be acceptable where trees require coppicing, pollarding, brashing or similar works in the interests of good practice and in accordance with a woodland management plan.
- B.2.3.9. **Utilities and Trenching Works** – Trees in conflict with utilities will be dealt with on a case-by-case basis. The utility company must consult with the *Parks and Landscape Services* section of Dún Laoghaire-Rathdown County Council in advance of any pruning, trenching or other works likely to affect Council owned trees, and will refer to the Council's *Directions for Roadworks Control* document.

- B.2.4. Tree Removal**

It may be necessary to remove trees when any of the following circumstances apply. Each case will be judged individually on its merits.
- B.2.4.1. **Dead, dying, diseased or dangerous trees** (*priority red*) - Tree removal will be considered where a tree represents an immediate and unreasonable danger to public safety that cannot be overcome by other reasonable measures. Trees may have died through natural causes or become unsound or unstable for a number of reasons. Trees may be removed to prevent the spread of serious tree diseases.
- B.2.4.2. **Obstruction** (*priority red - amber*) - Tree removal will be considered where a tree is causing severe obstruction to a public highway, public right of way, public footpath, public sewer or cycleway that cannot be overcome by other reasonable measures.
- B.2.4.3. **Legal Nuisance** (*priority red*) - Tree removal will be considered where a tree is causing a legal nuisance, such as damage to property that cannot be overcome by other reasonable measures.

dIrr TREES Section 2 – Policy Statements

B.2.4.4. **Thinning** (*priority amber – green*) - Tree removal will be considered where thinning-out is desirable for tree health. Trees are often over-planted to give a rapid rate of establishment and subsequently thinned out to select the best specimens. Phased tree removal can be essential to give growing trees adequate space to develop and mature.

B.2.4.5. **Severe problems** (*priority amber - green*) - Tree removal will normally be appropriate (as a last resort and where the tree is not of special significance) if a tree is causing a severe problem that cannot be overcome by other reasonable measures; for example severe obstruction of street lighting, public CCTV cameras, major damage to public footpaths, sewers or prevention of essential repairs to public property.



Cherry roots

B.2.4.6. **Landscape, Biodiversity and Heritage** (*priority amber - green*) - Tree removal is sometimes necessary to address over-riding biodiversity, heritage or landscape requirements and may be considered where no reasonable alternative is available. Examples of over-riding requirements may include the need to prevent encroachment on a protected structure, the restoration/retention of an important public viewpoint, or where there is potential to bring about significant public benefit and enhancement of the local landscape or townscape. Historical records may be used to determine the level of management required. Tree removal is sometimes necessary to improve wildlife habitat, for example Sycamore thinning in woodland, or to promote a particular type of habitat or encourage native trees.

B.2.5. Minor or Seasonal Inconveniences

Trees will not normally be removed or pruned for the following reasons, which are considered to be foreseeable seasonal or minor inconveniences associated with living near trees. Each case will be judged on its merits.

B.2.5.1. **Shading** - Tree works will not normally be carried out to address shading of direct sunlight. Trees are often perceived to block light to nearby properties and the level of alleged nuisance is variable and subjective. There is currently no legal right to direct

dIr TREES *Section 2 – Policy Statements*

sunlight and pruning or removal of trees for this reason often has a negligible impact on the amount of diffuse light reaching a house or garden, and a negative impact on the health and appearance of the tree.



View South from Killiney Hill Park



Blackbird at Loughlinstown Ecology Park

dIrr TREES Section 2 – Policy Statements

- B.2.5.2. **Loss of a private view** - Tree works will not normally be carried out to address the loss of a private view. Vegetation and trees grow and, over time, contribute to the county's distinctive character. It would be impracticable to prune every tree that affected a view, and this would have a major negative impact on public amenity.
- B.2.5.3. **Root Invasion in Gardens** - Tree roots in gardens are a natural occurrence and root presence is unlikely to be affected by tree pruning. Tree felling or branch pruning in response to root invasion in gardens would not normally be appropriate.
- B.2.5.4. **Television, broadband, mobile telephone and satellite reception** - Tree works will not normally be carried out to address the above. Most televisions allow for a degree of variation in reception, which usually enables a viewable image, whereas satellite-television dishes need a clear line of view to the satellite, which can be affected by obstructions such as a tree, hill, building or traffic sign. Wireless broadband and mobile telephone reception can also be affected by these obstructions.
- Pruning may help improve reception in the short-term. However, the flush of extra growth associated with pruning will often make the problem worse, and the tree might not be the main cause of the problem. In most cases relocating the receiver or satellite dish, or using a booster, can resolve the situation and is far less destructive than felling or pruning a tree. Residents are advised to seek specialist advice.
- Removal or pruning of trees throughout the county to enable clear reception would have a major adverse impact on local amenity and cannot be considered.
- B.2.5.5. **Bird droppings, fallen leaves or other deposits** - Tree works will not normally be carried out to address bird droppings, fallen leaves or other deposits. These are natural processes and not currently recognised as a legal nuisance. If a path is littered with leaves, fruit or bird droppings, it is best to cleanse the path, as pruning will usually have a negligible impact.
- B.2.5.6. **Other minor inconveniences** - The following minor inconveniences are generally not responsive to pruning:
- . Aphid honeydew dropping from leaves on to cars and pavements, which is a seasonal natural process and addressed by regular

dIr TREES Section 2 – Policy Statements

cleaning of affected windows, surfaces and structures by the owner;

- Roots causing minor lifting of driveways, which can often be repaired without the need for tree pruning or removal;
- Insects associated with trees, (spiders, aphids, wasps, flies etc.);
- Pollen allergies or asthma, which cannot usually be addressed by the removal of a particular tree;
- Blocked flight-paths of sporting birds e.g. pigeons.

B.3.

Departmental Responsibilities

The Council will formalise departmental responsibilities in relation to trees and make this information publicly available. Responsibilities may change from time to time.

B.4.

Approach to specific tree threats

The Council will take reasonable steps to address specific tree threats.

B.4.1. Vandalism

It is our experience that local community involvement and interaction achieves the best results in reducing vandalism and antisocial activity. The Council will support and encourage local residents in developing a greater sense of civic responsibility and ownership of local open space.

B.4.1.1. Local liaison - The Council will liaise with local Gardaí and resident groups to discourage and address serious acts of vandalism to trees.

B.4.1.2. Legal action - Where practicable the Council will pursue legal action against individuals who have damaged Council-owned trees.



Snapped street tree



Fire damaged Oak tree

dlr TREES Section 2 – Policy Statements

B.4.2. Pests and diseases

B.4.2.1. Signs of tree pests and diseases will be investigated and action taken, having regard to current best practice.

B.4.3. Utilities

B.4.3.1. Procedures for dealing with trees and utilities will be developed in consultation with the main utility providers and adhere to the recommendations of the current *NJUG (UK National Joint Utilities Group) Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees*.

B.4.3.2. The Council's *Direction for Roadworks Control* document shall include provisions for the retention and protection of trees.



Utilities being installed close to a street tree

B.4.4. Council works

B.4.4.1. Parks and Landscape Services will be consulted on Council works proposals that may affect trees. Adequate provision shall be made for the protection and retention of important trees in accordance with *Section D* and the Council's *Guidelines for the Development and Taking-in-charge of Public Open Space*.

B.4.5. Driveways and new entrances

B.4.5.1. Removal of Council owned trees to facilitate the construction of new entrances and driveways will be considered, by Parks and Landscape Services, on a case-by-case basis. Parks and Landscape Services will, where they consider felling to be acceptable, calculate the value of the tree and replacement costs using a recognised system.

dIr TREES Section 2 – Policy Statements



Footpaths are regularly replaced as a result of damage by Cherry tree roots



Trees contribute to the heritage setting by the tea rooms at Killiney Hill Park

dlr TREES Section 2 – Policy Statements

Payment of these costs shall then be made to Parks and Landscape Services, who can arrange for tree removal and replacement at an appropriate time of year. Parks and Landscape Services must be consulted on any driveway planning application affecting trees on Council land.

B.4.6. Footpaths

B.4.6.1. To enable a shared approach to be developed, the Transportation Department will consult with Parks and Landscape Services at an early stage when planning to undertake pavement maintenance near trees. Parks will provide a reasonable level of advice and assistance, subject to resources. In some cases it may be acceptable for trees to be removed and replaced, however felling is generally considered as a last resort as it may be possible to address problems by other means.

B.4.7. Traffic sight-lines

B.4.7.1. Balanced consideration must be given to the value of existing trees in the context of sight-lines for new entrances or improvement of existing entrances.

B.4.8. Growing conditions

B.4.8.1. Ground preparation, provision and planting of new trees will be done in accordance with the Council's *Tree Planting and Management Guidelines*.

B.4.8.2. Reasonable steps will be taken where possible to address circumstances that are restricting healthy tree condition.

B.5.

Approach to Natural and Built Heritage

The Council will have regard to the natural and built heritage when planning and carrying out tree planting and management.

B.5.1.1. Tree works will be carried out in accordance with *ParkLife*, the Parks Biodiversity Policy.

B.5.1.2. Regard will be given to the following when dealing with tree planting and management, as per the Council's *Tree Planting and Management Guidelines*:

- Protected species legislation and the principles of wildlife conservation and biodiversity;
- The presence and value of existing Local Biodiversity Plan Habitats, which include some woodland, heathland, semi-natural grassland, scrub, hedgerows, natural watercourses and marsh;
- The appearance, significance and special qualities of recognised heritage features.

C. TREES ON PRIVATE PROPERTY

C.1.

Management of privately owned trees

The Council will encourage the proper management of privately owned trees and where necessary will consider exercising its discretionary powers to address over-riding issues of public safety, in accordance with legislative provisions.

- C.1.1. Tree legislation - The Council's *Tree FAQ (Frequently Asked Questions)* shall outline the relevant legislation applicable at the time this policy was adopted.
- C.1.2. Private landowners - The Council will liaise with private landowners (e.g. golf courses) to encourage sensitive tree management.
- C.1.3. High Hedges - There is currently no legislation in Ireland in relation to controlling the height of hedges. In the UK the control of height of evergreen hedges comes under Part 8 of the *Anti-Social Behaviour Act 2003*. The Council does not get involved in issues regarding the height of hedges on private lands unless they are hazardous to public road users. Residents with issues in relation to trees and hedges on neighbouring properties are encouraged to try to resolve the issues between the two parties or seek independent legal advice. Involvement in resolving tree and hedge disputes between private landowners is not considered part of the remit of the Council.
- C.1.4. Trees hazardous to public road users – Where a tree or other vegetation is a potential hazard to public road users, or where it obstructs or interferes with the safe use or maintenance of a public road, the road authority may serve a written notice on the owner or occupier of land requiring the preservation, felling, cutting, lopping, trimming or removal of the vegetation within a specified period. Refer to the Council's *Tree FAQ (Frequently Asked Questions)* for further information.

C.2.

Tree Preservation

The Council will prioritise Tree Preservation Orders (TPO's) based on contribution to amenity or the environment and will explore the allocation of additional resources to prepare, serve and manage them.

C.2.1. Tree Protection

- C.2.1.1. Important Trees – Where possible the Council will seek to preserve trees, groups of trees or woodlands which form a significant feature in the

dIr TREES Section 2 – Policy Statements

landscape or are important in setting the character or ecology of an area.

- C.2.1.2. Development Plan – The Council's *Development Plan* will identify trees, groups of trees or woodlands that form a significant feature in the landscape, or are important in setting the character or ecology of an area, as objectives for preservation wherever possible.
 - C.2.1.3. Tree Preservation Order (TPO) procedure – The Council will explore the development of a TPO procedure that includes the allocation of resources, preparation, serving and ongoing management of TPO's. The first stage in a procedure would involve reviewing the current legislation (Section 205 of the Planning and Development Act 2000).
- C.2.2. Records of protected trees**
- C.2.2.1. Existing Tree Preservation Orders and the trees covered by them will be surveyed and updated on a periodic basis.



Non-native trees are often important and significant features in the landscape

dlr TREES *Section 2 – Policy Statements*



Urban tree cover in Luxembourg



Avenue trees at Griffith Avenue, Dublin. Road verges of sufficient width can accommodate trees of stature

D. TREES AND DEVELOPMENT

This section is to be read in conjunction with the following County Development Plan Policies:

- *LHB11 Trees and Urban Woodlands;*
- *LHB12 Hedgerows;*
- *OSR6 Trees and Woodland;*
- *16.7.4 Tree and Hedgerow Preservation.*

Mature trees are an asset to new developments; they add a sense of character, maturity and provide valuable screening, shelter and privacy. Existing trees will often have a useful life expectancy beyond the life of new buildings. Although retention of trees is desirable, and in many cases essential, many are lost each year because of development; some because of their condition or inappropriate location, others because of a lack of suitable protection and inadequate consideration of integration and retention.

Often, trees are retained within new developments but decline over time as a result of problems during the construction phase or inadequate space for roots and crowns to develop. Activities that kill or harm trees on construction sites include: root severance, compaction of soil around roots, flooding, altering water table, changing soil levels, damage by machinery, and harmful substances such as petrol or cement. It is of great importance that none of these activities occurs within the main root spread of the tree as defined in *BS5837(2005) Trees in Relation to Construction - Recommendations*. A detailed overview of the correct approach to trees and development is available in *Amenity Trees and Woodlands, A Guide to their Management in Ireland (2010)*, published by the Tree Council of Ireland.

D.1.

Tree retention and aftercare on development sites

The Council recognises the importance of existing trees and requires that they be given adequate consideration at all stages of the development process, from feasibility stage to post completion management. Where consistent with planning objectives, the Council will use its powers to ensure maximum retention, preservation and management of important trees, groups of trees and hedges.

D.1.1. Existing trees

The Council requires consideration of existing trees on public and private development sites, roads and public realm schemes and the submission of a tree survey, tree constraints plan, arboricultural implications assessment, method statements and tree protection plan, in accordance with *BS 5837* and the Council's *Guidelines for the Development and Taking-in-charge of Public Open Space*. Adequate provision shall be made for the protection

dlr TREES Section 2 – Policy Statements

and retention of important trees. Where existing trees are removed, an area of comparable size is to be identified to facilitate new tree planting. Where trees and hedgerows are to be retained the Council will require a developer to lodge a tree bond to ensure the correct retention and protection of trees. Refer to the Council's *Guidelines for the Development and Taking-in-charge of Public Open Space*.

D.1.2. Aftercare

The Council requires the submission and implementation of a comprehensive maintenance programme for all newly planted and existing trees on development sites in accordance with the Council's *Guidelines for the Development and Taking-in-charge of Public Open Space and Tree Planting and Management Guidelines*.

D.1.3. Road building and maintenance - Regard shall be had for the provisions of the *NRA Guidelines for the protection and preservation of trees, hedgerows and scrub prior to, during and post construction of national road schemes*.

D.2.

Tree planting and development

The Council considers tree planting an integral part of urban design and requires that provision of sustainable tree pits be given equal consideration to other infrastructure. The Council recognises that trees are an organic living part of the streetscape and contribute in many ways to humanising the space, enhancing the environment and minimising the impacts of climate change (*Development Plan policy LHB11*).

D.2.1. Tree Planting

Where opportunities exist, provision of tree pits and adequate space (above and below ground) for new tree planting must be incorporated into public and private developments, roads and public realm schemes in agreement with Parks and Landscape Services at initial design stage. Where appropriate this shall include the provision of open space to accommodate large canopy trees. Tree planting shall be planned and carried out in accordance with the Council's *Tree Planting and Management Guidelines*. Service corridors shall normally be located separately to landscape corridors to ensure there is adequate capacity for tree planting.

D.2.2. Urban Tree Planting

The Council will promote Urban Tree Planting in the planning and development of urban spaces, streets, roads and infrastructure projects.

dIrr TREES Section 2 – Policy Statements

D.2.3. Replacement Tree Planting

The Council will promote the replacement of trees removed to facilitate the planning and development of urban spaces, buildings, streets, roads and infrastructure projects.

D.2.4. Verges – Where there is sufficient space, new roads and streets shall have verges at least 2.4m width to facilitate the planting of large trees of stature.

D.2.5. Public infrastructure – The Council recognizes the benefits of trees and considers them an integral feature of public infrastructure such as cycle-ways, roads, footpaths and the space around buildings.

D.3.

Trees and Wildlife

The Council will require that developers have regard for protected species legislation when dealing with trees on development sites.

D.4.

Enforcement

The Council will proceed, where practicable, with appropriate action to ensure compliance with planning conditions applicable to trees.



Urban tree cover in Durham City

E. TREE PLANTING, DESIGN AND ESTABLISHMENT

E.1.

Planting procedure and species selection

When planting trees, consideration will be given to the suitability of the location, suitability of the species, tree planting specification and post planting maintenance, with regard to the likely ultimate size, form and rooting habit of the tree when mature. All new trees will be selected and planted in accordance with the Council's *Tree Planting and Management Guidelines*, which aim to achieve a balance between amenity, wildlife and the environment.

E.1.1. Location for tree planting

E.1.1.1. The suitability of the location for all new tree planting shall be assessed with regard to the scale of the site, existing tree spacing, presence of public lighting, road signage, sightlines, overhead cables, doors, walls, gates, entrances, width of verges, underground utilities and the potential for excessive shading, footpath



damage or nuisance in accordance with the Council's *Tree Planting and Management Guidelines*. Planting on open spaces should take precedence over road margins where space exists. The use of proprietary planting systems may enable tree planting in confined locations that would not otherwise be able to accommodate trees.

E.1.1.2. Where there is sufficient above ground space but insufficient tree pit or verge provision, the Council may explore retrospective options for tree planting, subject to resources.

E.1.2. Tree species for planting

E.1.2.1. **Plant large trees** – Large-growing tree species confer much greater benefits to urban areas. Plant as large a tree as is appropriate for the location. Where space allows, there is a preference for large canopy trees except where smaller trees are more appropriate for biodiversity reasons.

E.1.2.2. **Plant remarkable trees** – In local residential areas, consideration will be given to planting trees with remarkable features e.g. leaves, colours, flowers, scent, bark, tree shape and wildlife value.

dIrr TREES Section 2 – Policy Statements

Remarkable Trees



Betula nigra (River Birch)



New tree planting outside County Hall.

dIr TREES *Section 2 – Policy Statements*

E.1.2.3. **Suitability of tree species** – It is not practicable or desirable to prescribe 'suitable' species, as these may be appropriate for some areas but not others. All tree species for planting in built-up areas or along streets will be selected in accordance with the Council's *Tree Planting and Management Guidelines* and with regard to the ultimate size, form and rooting habit of the tree.

E.1.2.4. **Problem species** – Avoid planting known problem trees along streets or above public roads, paths and cycleways. It is acceptable to plant these trees in open spaces and parks away from paths, gardens and buildings. Problem species include:

- Trees with invasive or shallow root systems (such as Willow, Poplar, some Cherries) that damage footpaths.
- Trees with prolific, sticky or excessively large fruits and/or seeds.
- Trees that suffer honeydew drip (some Tilia, Acer etc.).
- Trees with poisonous fruit, bark or wood (e.g. Laburnum).
- Hazardous trees, e.g. trees with large spines on the trunk (such as Gleditsia).
- Trees known to have brittle limbs or that shed branches easily (e.g. Poplar, Robinia, Raywood Ash, Willow).
- Trees with prolific epicormic growth ('twiggy' growth at the base of trees or growing from the trunk, which can cause obstruction e.g. some Tilia, some Acer).

E.1.3. Tree planting method

All trees shall be planted in compliance with the Council's *Tree Planting and Management Guidelines*, which outline the Council's requirements for tree-pits and ground conditions, tree size and specification, planting methods, staking and guarding, post planting maintenance and formative pruning.

E.1.4. Tree Planting by the Council

E.1.4.1. **Approval** – The approval of the Council's *Parks and Landscape Services* section must be obtained in advance of all new tree planting on Council owned land.

E.1.4.2. **Frequency and timing** – The Council will undertake tree planting annually during the tree-planting season, which usually runs from late November to late March. From time to time the Council may focus on maintaining existing tree

dIr TREES Section 2 – Policy Statements

stock instead of planting new trees. Where this is the case, the relevant Local Area Committee (Environment, Culture & Community, Water & Waste Services and Housing) will be informed in advance of the planting season.

- E.1.4.3. **Provenance** – The Council will, where appropriate, use native species of Irish provenance in tree planting programmes as per Action 34 of the *National Biodiversity Plan*.
- E.1.4.4. **Tree Labels** – The Council will label street trees and specimen trees on Council land, with particular emphasis on those that are of particular significance or importance, so that they can be fully appreciated by the public.
- E.1.4.5. **Priority** – Resources for tree planting will be allocated in the order set out below, giving regard to policies E.1.1 - E.1.4:
- **Replacement trees** – Replacement of dead trees and existing tree stock that has been recently removed.
 - **Priority areas for tree planting** – Where these are designated by the Council.
 - **Requests from residents** – Individual requests will be prioritised taking into account the number of trees already in the locality, including front gardens and land adjacent to roads.



Recently planted trees at Kilbogget Park, adjacent to the new wetland.

E.2.

Life-stage tree care: young, semi-mature, mature

All Council owned trees are cared for in accordance with the Council's *Tree Planting and Management Guidelines* and private tree owners are encouraged to do the same.

E.3.

Priority areas for tree planting

The Council will identify priority areas for tree planting, with the aim of increasing the quantum of tree cover throughout the county. Priority areas for new tree planting will be ranked in order of importance and programmes and targets for tree planting will be set in these areas.

E.3.1. Identifying priority areas for tree and hedge planting

In identifying priority areas, regard shall be had for the following, and the Council's *Tree Planting and Management Guidelines*:

- Existing tree cover;
- Public amenity;
- Noise mitigation;
- Biodiversity;
- Air quality;
- Memorial policy;
- Climate-change amelioration.

E.4.

Potential areas for woodland creation and hedgerows

The Council will identify potential areas for new woodland creation and hedgerows in consultation with the Biodiversity Officer. Potential areas for woodland planting will be ranked in order of importance and programmes and targets will be developed for woodland creation in those areas. Woodland will not be planted in place of existing Local Biodiversity Plan Habitats outlined in Appendix 4 of the *Dún Laoghaire-Rathdown Biodiversity Plan*.



Woodland in Killiney Hill Park

E.5.

Tree replacement

The Council will, on its own land, carry out adequate tree replacement to ensure long-term continuity of tree cover and will encourage private landowners to do the same.

E.5.1. Tree replacement

Where a tree on Council land is removed, the Council will endeavour, subject to available resources, to plant at least one replacement tree of a suitable size and species, at the most appropriate site in the locality, having regard to the Council's *Tree Planting and Management Guidelines*. In some situations more than one replacement tree may be appropriate for immediate effect and three-for-one planting will be considered where there is sufficient space.



Recently removed tree on an open space



New tree planting on public open space at Royal Terrace

F. ENGAGEMENT, AWARENESS AND COOPERATION

F.1.

Engage with interest groups

Where practicable the Council will engage with the general public, schools, resident groups and environmental Non-Governmental Organisations (NGO's) in the planning, design and management of trees and woodlands.

F.1.1. Stakeholders

F.1.1.1. Where practicable the Council will encourage and facilitate the involvement of local communities, schools and other stakeholders in tree planting, management and educational activities.

F.1.2. Volunteers

F.1.2.1. Tree Volunteers - The Council will examine opportunities to encourage and facilitate the work of volunteers with the aim of raising local tree awareness.

F.1.2.2. Tree Wardens - The Council will consider a tree warden scheme to empower members of the community to become voluntary tree wardens who would gather information about their local trees, get involved in local tree matters and encourage local projects involving trees and woods.

F.1.2.3. The Council will have regard to the provisions of the *White Paper on a Framework for Supporting Voluntary Activity and for Developing the Relationship between the State and the Community and Voluntary sector.*



The Friends of Fitzsimons Wood

F.2.

Education, Promotion and awareness

The Council, through education and promotion, will aim to raise the awareness and appreciation of trees.

F.2.1. Education

F.2.1.1. The Council will support tree-related educational initiatives in communities, schools and third level institutions.

F.2.2. Awareness: Trees and their benefits

F.2.2.1. The Council will promote awareness of trees and their benefits. This might include producing information, publications, exhibitions, interpretation and organising events.

F.2.2.2. The Council will publish a *Tree FAQ (frequently asked questions)* on its website.

F.2.2.3. The Council will consider tree reference notes so important information can be found quickly.

F.2.2.4. The Council will organise tree related events during *National Tree Week* in Spring, and on *Tree Day* in the Autumn.

F.2.2.5. The Council will consider providing public information about its own *Champion and Heritage Trees*.

F.2.3. Public awareness: Trees on private land

F.2.3.1. The Council will promote the awareness of good management practice in relation to trees and woodland on private land through cooperation and the production of best practise guidelines.

F.3.

Communication and cooperation

The Council will foster good communication and cooperation on tree-related issues between all relevant stakeholders.

F.3.1. Cooperation within the Council

All Council departments that impact on trees will engage and cooperate on tree-related issues.

F.3.1.1. The Council will set up an interdepartmental tree focus group.

F.3.1.2. Internal consultation - Council departments making tree-related decisions, or designing or implementing works that affect trees, will consult with *Parks and Landscape Services* at an early stage. *Parks and Landscape Services* will provide a reasonable level of advice or assistance where appropriate.

dIr TREES *Section 2 – Policy Statements*

F.3.2. Cooperation with external stakeholders

The Council will foster cooperation between external stakeholders on tree-related issues.

F.3.2.1. The Council will participate in the *Parks Professional Network* to cooperate and share best practise.

F.3.2.2. The Council will participate in a County Council *Tree Focus Group* covering the greater Dublin area.

F.3.2.3. Where relevant, the Council will cooperate with other stakeholders as outlined in *Appendix A*.

F.3.2.4. The Council will continue to be a member organisation of the Tree Council of Ireland, which promotes the planting, care and conservation of trees in both rural and urban areas.

F.3.3. Tree Sponsorship

F.3.3.1. The Council will explore the feasibility of a system for enabling donation or sponsorship of Council-owned trees or woodlands.



Trees contribute to the setting of Marlay House, Marlay Demesne



Sycamore trees on Marine Road, Dún Laoghaire

3. Action Plan 2011 – 2015

The action plan outlines the Key Actions that are necessary, over the next 5 years, for the Council to move towards maintaining its trees on a pro-active basis and in compliance with our duty of care as a responsible tree owner.

The actions of the 2011-2015 strategy mainly involve setting out the principles of how we deal with trees, gathering accurate information on our trees, raising their profile and improving the level of communication with local communities and stakeholders. Once this has been achieved, we will be in a position to develop a more specific and longer-term approach to our trees from 2015 onwards.

In 2010 we had a budget of €190k for tree-related works. Current resource allocation covers the reactive tree pruning/planting requirements and some of the pro-active and strategic planting or management work that is necessary to safeguard long-term tree cover and comply with best practice. It is our intention to move from a reactive to a proactive system of tree management from 2011 onwards.

In order to address the Key Actions of *dlr TREES*, it will be necessary to identify and allocate sufficient resources for tree management. The strategy will ensure that this can be done in a focused and efficient manner, making best use of available resources.

An Annual Schedule will be developed each year to focus annual resources, streamline and improve the efficiency and consistency of tree management in the county. Where possible, the Annual Schedule will be developed with a shared approach involving the various stakeholders involved with or affected by trees and tree management. It is proposed to set up a *dlr TREES* focus group, chaired by *Parks and Landscape Services*, to guide and steer this process.



Good quality trees in an Irish nursery

dlr TREES: Key Actions 2011 – 2015

Ref	OBJECTIVE 1: Protect and Care for our trees	Policy	Who?	When?
1a	Calculate approximate percentage tree cover and woodland cover in the county	A.1	Parks	2011
1b	Evaluate electronic Tree Management System with view to procurement	B.1.1.4	Parks / IT	2011
1c	Appoint in-house <i>Arboricultural Officer</i> to drive forward strategic approach to trees	B.1	Parks	2011
1d	Set priorities and survey, map and log Council owned trees on a phased basis	B.1	Parks	by 2015
1e	Work with NGO's (Non-Governmental Organisations) and Government to review current TPO (Tree Preservation Order) legislation	B.1	Parks	Ongoing
1f	Move from reactive to proactive tree mgt	B.1	Parks	2011

Ref	OBJECTIVE 2: Plant more trees, in the right place	Policy No.	Who?	When?
2a	Identify opportunities for strategic tree planting	E.3	Parks Env	2012
2b	Plant 5,000 trees by 2015	E.1	DLRCC	By 2015

Ref	OBJECTIVE 3: Promote education and awareness of trees	Policy No.	Who?	When?
3a	Develop a Tree FAQ (Frequently Asked Questions)	F.2.2.2	Parks	2011
3b	Develop Tree Planting and Management Guidelines	E.1	Parks	2011
3c	Promote the <i>Heritage Tree Hunt</i> scheme	E.1	DLRCC	2011

Ref	OBJECTIVE 4: Engage with Interest Groups	Policy No.	Who?	When?
4a	Explore the development of a dlr <i>Tree Focus Group</i>	F.3.1.1	All	2011
4b	Explore a Volunteer Tree Warden scheme in conjunction with the <i>Tree Council of Ireland</i>	F.1.2	Parks	2012
4c	Explore the feasibility of a system for enabling donation or sponsorship of Council-owned trees or woodlands	F.3.3	Parks	By 2013



Specimen trees and mixed age-structure in Deer Park, Mount Merrion

APPENDIX A. CONTEXT AND TERMS OF REFERENCE

Council Policies and Documents:

- *Corporate Plan 2010 – 2016*
- *County Development Plan 2010-2016* (Policies: LHB11, Trees and Urban Woodlands; LHB12, Hedgerows; OSR6, Trees and Woodland)
- *Directions for Roadworks Control 2008*
- *dlr Heritage Plan*
- *dlr Open Space Strategy 2011*
- *dlr Parklife, A Policy for Enhancing Biodiversity in Parks and Green Spaces, 2010*
- *Guidelines for Open Space, Development and Taking in Charge 2010*
- *Guidelines for Sustainable Development 1999*
- *Parks Byelaws*
- *Parks and Landscape Services Business Plan*
- *Treasuring our Wildlife, Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013*

National or Regional Policies:

- *Dublin Agglomeration Action Plan Relating to the Assessment and Management of Environmental Noise 2008* (4.5.2; 4.10.2; 4.11; 5.1; 6.2.8).
- *Dublin Air Quality Management Plan 2008-2012* (1.4; 1.5).
- *Greater Dublin Regional Code of Practice for Drainage Works V6.0* (4.1.9).
- *White Paper on a Framework for Supporting Voluntary Activity and for Developing the Relationship between the State and the Community and Voluntary sector* (3.13 – 3.14, The role of the Community and Voluntary sector; 4.28 – 4.30, Fostering of volunteering; 4.31 – 4.33, Supporting volunteering).
- *Sustainable Development – A strategy for Ireland* (Section 6, Forestry).
- *National Climate Change Strategy 2007 – 2012*
- *National Biodiversity Plan 2002* (Actions: 34; 70; 77).
- *Regional Planning Guidelines for the Greater Dublin Area 2004 – 2016* (Strategic Policy GIP2; Strategic recommendation GIR14; Box 11, Actions for Green Infrastructure Development).

British Standards:

- *BS 3882:2007 – Specification for Topsoil and Requirements for Use.*
- *BS 3936-1:1992 – Nursery Stock.*
- *BS 3998:1989 – Recommendations for Tree Work.*
- *BS 4043:1989 – Recommendations for Transplanting Root-balled Trees.*
- *BS 4428:1989 – Code of Practice for General Landscape Operations (excluding hard surfaces).*
- *BS 5837:2005 – Trees in Relation to Construction. Recommendations.*
- *BS 7370-4:1993 – Grounds maintenance. Recommendations for maintenance of soft landscape (other than amenity turf).*

External Stakeholders:

- *Arboricultural Association, Irish Branch*
- *An Taisce*
- *Coillte*
- *Department of Agriculture, Fisheries and Food (DAFF), Forestry Service*
- *Tree Council of Ireland*
- *Irish Farmers Association*
- *National Parks and Wildlife Services (NPWS)*
- *Parks Professional Network*
- *Resident associations and community groups (estate management)*
- *Tidy Districts*
- *Utility companies (Bord Gais, BT, Eircom, ESB, NTL)*

Internal Stakeholders:

- *Architects; Biodiversity; Environment; Finance (claims); Heritage; Housing; Legal; Planning (development control); Planning (forward planning); Transportation; Water & Waste.*

Process & Consultation:

- *Jan – March 2010 – **Discussions** with internal stakeholders.*
- *2nd June 2010 – **Strategic Policy Committee** (Environment, Culture & Community) – approval to proceed to public consultation.*
- *21st June – 20th August 2010 – **Public consultation.***
- *4th October 2010 – **Local Area Committee** (Environment, Culture & Community, Water & Waste and Housing) Dundrum – noted.*
- *27th October 2010 – **Local Area Committee** (Environment, Culture & Community, Water & Waste and Housing) Dún Laoghaire – noted.*
- *1st December 2010 – **Strategic Policy Committee** (Environment, Culture & Community) – Approval to proceed to Council.*
- *14th December 2010 – **DLRCC Management Team Meeting***
- *10th January 2011 – **Full Council** – dlr TREES adopted.*
- *19th January 2011 – **Strategic Policy Committee** (Planning) – Info.*

Respondents to Public Consultation (June – August 2010):

- *An Taisce*
- *Arboricultural Association, Irish Branch*
- *Ballybrack Tidy Towns Committee*
- *Cllr. Naoimh Breathnach*
- *Mr. Buckley*
- *Cabinteely Tidy Towns Committee*
- *Churchtown Residents' Association*
- *Senator Maria Corrigan*
- *Department of Agriculture, Fisheries and Food, Forest Service*
- *DLRCC: Architects, Claims, Environment, Housing, Legal, Planning, Parks & Landscape Services, Transportation, Water & Waste*
- *Dún Laoghaire and Dublin South Green Party*
- *Cllr. Stephen Fitzpatrick*
- *Ms. Greene*
- *Ms. Jennings, Dún Laoghaire*
- *Dr. Mark Johnston, UK*
- *Mr. Kelly, Churchtown*
- *Leopardstown & Brewery Road Residents' Association*
- *Llewellyn Residents' Association*
- *National Parks & Wildlife Services*
- *Sandyford Environmental Planning and Road Safety Group*
- *Cllr. Barry Ward*
- *Ms. Wynne, Blackrock*

APPENDIX B. REFERENCES & SOURCES OF INFORMATION

REFERENCES OUTLINING THE BENEFITS OF TREES

- 1 McManus, Damian (1988) *Ogam: Archaizing, Orthography and the Authenticity of the Manuscript Key to the Alphabet*, Ériu 37, 1988, 1-31. Dublin.
- 2 Anderson LM and Cordel HK (1988) *Influence of Trees on Residential Property Values in Athens, Georgia: A Survey Based on Actual Sales Prices*, Landscape and Urban Planning 15: 153-164.
- 3 Morales DJ (1980) *The Contribution of Trees to Residential Property Value*, Journal of Arboriculture 6 (11): 305-308.
- 4 CABE Space (2005) *Does Money Grow on Trees?* Commission for Architecture and the Built Environment, London.
- 5 Huang YJ, Akbari H, Taha H and Rosenfeld AH (1987) *The Potential of Vegetation in Reducing Summer Cooling Loads in Residential Buildings*, Journal of Climate and Applied Meteorology 26(9): 1103-1116.
- 6 Heisler GM (1986) *Energy Savings with Trees*, Journal of Arboriculture 12(5):113-125
- 7 Michigan State University Extension, *Benefits of Urban Trees*, Urban Forestry #07269501.
- 8 Wolf K (1998) *Trees in Business Districts – Positive Effects on Consumer Behaviour*, University of Washington College of Forest Resources, Factsheet #30.
- 9 Wolf K (1999) *Grow for the Gold*, Treelink 14, Washington State Department of Natural Resources.
- 10 Wolf K (2003) *Public Response to the Urban Forest in Inner-city Business Districts*, Journal of Arboriculture 29(3): 117-126.
- 11 Coder Dr RD (1996) *Identified Benefits of Community Trees and Forests*, University of Georgia.
- 12 Forest Research (2007) *Particulate Pollution*.
- 13 Stewart H, Owen S, Donovan R, Mackenzie R, Hewitt N, Skiba U, Fowler D (2003) *Trees and Sustainable Urban Air Quality: Using Trees to Improve Air Quality in Cities*, Lancaster University, Lancaster.
- 14 Broadmeadow MSJ, Freer-Smith PH (1996) *Urban Woodland and the Benefits for Local Air Quality, Research for Amenity Trees No.5*, HMSO, London.
- 15 Nowak DJ, *The Effects of Urban Trees on Air Quality*, USDA Forest Service, Syracuse, New York.
- 16 Soltis D (1997), *Loss of Trees increases Stormwater Runoff in Atlanta* Water Engineering and Management 144:6.
- 17 American Forests Magazine (1999) *How Trees Fight Climate Change*.

- 18 American Forests Magazine (2000) *Trees Tackle Clean Water Regulations*.
- 19 Nowak DJ (1993) Atmospheric *carbon reduction by urban trees*. Journal of Environmental Management 37: 207-217.
- 20 McAliney M (1993) *Arguments for Land Conservation: Documentation and Information Sources for Land Resources Protection*, Trust for Public Land, Sacramento, CA.
- 21 Nowak DJ *Benefits of Community Trees*. Brooklyn Trees, USDA Forest Service General Technical Report, in review.
- 22 Prow T *The Power of Trees*, Human Environmental Research Laboratory, University of Illinois.
- 23 Gill, SE, Handley, J.F., Ennos, A.R., Pauleit, S. (2007) *Adapting Cities for Climate Change: the role of the green infrastructure*. Built Environment 33 (1):115-133.
- 24 National Urban Forestry Unit (1999) *Trees and Healthy Living, National Conference*, National Urban Forestry Unit, Wolverhampton.
- 25 Mudrak LY (1982) *In the Environmental Benefits of Vegetation at a Global Local and Personal Level: A Review of the Literature*, Green Releaf, Horticultural Trades Association and Royal Botanical Gardens, Kew.
- 26 Ulrich RS, Simmons RF, Losito BD, Fiority E, Miles MA, Zeison M (1991) *Stress Recovery During Exposure to Natural and Urban Environments*, Journal of Environmental Psychology 11: 201-230.
- 27 National Arbor Day Foundation Pamphlet #90980005, US.
- 28 Kuo FE, Sullivan WC (2001) *Environment and Crime in the Inner City – Does Vegetation reduce Crime?*, Environment and Behaviour 33(3): 343-367.
- 29 Kaplan, R. & S. Kaplan (1989) *The Experience of Nature: A Psychological Perspective*. Cambridge: Cambridge University Press
- 30 Kuo FE (2003) *The Role of Arboriculture in a Healthy Social Ecology, Social Aspects of Urban Forestry*, Journal of Arboriculture 29(3): 148-155.
- 31 Trees and Design Action Group, *No Trees No Future*, November 2008, London.
- 32 Mac Coitir N (2003) *Irish Trees: Myths, Legends and Folklore*, The Collins Press, Cork.
- 33 Zuchelli C (2009) *Trees of Inspiration: Sacred Trees and Bushes of Ireland*, The Collins Press.
- 34 www.noticenature.ie & www.projectforest.ie
- 35 Ulrich RS, *Effects of vegetation views on stress and health indicators*, College of Architecture, Texas A&M University, Texas.

ADDITIONAL REFERENCES & SOURCES OF USEFUL INFORMATION

Bat Conservation Trust, *Bats and trees, a guide to the management of trees*, Bat Conservation Trust, UK,

Britt, C., Johnston, M., (2008) *Trees in Towns II: A new survey of urban trees in England and their condition and management*. ADAS UK Ltd. And Myerscough College, Community and Local Government Publications.

Coll Marian, Ed. (2000) *Our Trees: A guide to growing Ireland's native trees in celebration of a new millennium*, The People's Millennium Forests

Davey Resource Group (2004) *Tree Inventory Management Plan, Cheyenne, Wyoming*, City of Cheyenne, Wyoming.

Forestry Commission for England and Wales (2005) *Woodland management for bats*, Forestry Commission Publications, W. Yorkshire, UK

Teagasc (2008) *Bats and their habitats*, Teagasc, Agriculture and Food Development Authority, Ireland.

Tree Council of Ireland (2005) *Champion Trees: A Selection of Ireland's Great Trees*. Tree Council of Ireland and the Tree Society. Dublin.

Tree Council of Ireland (2010) *Amenity Trees and Woodlands, A Guide to their Management in Ireland*, Tree Council of Ireland, Dublin.

WEBSITES

An Oige www.anoige.ie

An Taisce www.antaisce.org

Arboricultural Association (Irish Branch) www.trees.org.uk

Association of Landscape Contractors of Ireland www.alci.ie

Bat Conservation Ireland www.batconservationireland.org

Birdwatch www.birdwatchireland.ie

Bord Bia www.bordbia.ie/aboutgardening/trees

Coillte www.coillte.ie

Crann www.crann.ie

COFORD www.coford.ie

Department of the Environment www.environ.ie

Department of Agriculture, Fisheries and Food, Forest Service
<http://www.agriculture.gov.ie/forestservice>

ECO-UNESCO, Irish Environmental Youth Organisation www.ecounesco.ie

ENFO www.enfo.ie

Environmental Protection Agency www.epa.ie

Green Schools Ireland www.greenschoolsireland.org

Living Trees Educational Foundation www.livingtreeseducationalfoundation.org

NPWS (National Parks & Wildlife Services) www.npws.ie

People's Millennium Forests www.millenniumforests.com

Pro Silva www.prosilvairreland.org

Teagasc www.teagasc.ie

The Heritage Council www.heritagecouncil.ie

The Irish Farmers Association www.ifa.ie

The Tree Council of Ireland www.treecouncil.ie

The Tree Council (UK) www.treecouncil.org.uk



Young woodland trees at Shanganagh Park

APPENDIX C. dIr TREE COVER

Woodlands

Dún Laoghaire-Rathdown has woodland cover of approximately 17%. This includes woodland remnants in private grounds and gardens as well as public woodland and is based upon analysis of aerial photography to determine locations with closed canopy cover. This is a rough approximate figure and will be refined by 2015.

The average woodland and forest cover for Ireland is estimated at approximately 10% of the national land area by DAFF, Forest Service, *National Forest Inventory*. This compares to an EU average of 30%.

Heritage Trees and Champion Trees

"Heritage trees are interesting trees. They may be of interest because of their biology, ecology, historical uses, cultural connotations, or purely for their aesthetic value. They may be found anywhere: in native woodlands and historic parklands, along roadsides and inside hedgerows, in farmers' fields or even in the middle of housing estates.

Heritage trees are among the oldest living things in the country and are often all that remains of our historic landscapes. They have shaped our cultural legacy, having inspired artists, writers, poets and scientists, while also supporting an array of wildlife that cannot live anywhere else."

The *Heritage Tree Hunt* is a survey of heritage trees in Ireland, which aims to record and catalogue information about Ireland's heritage trees, their unique stories and images.

The website (www.heritagetreehunt.ie) offers everyone the opportunity to access the *Heritage Tree Hunt* records, see the photos and read the stories behind these magnificent trees. Joining in the hunt is easy... just log on to the website and follow the onscreen instructions - it will only take a minute!

Champion Trees are trees of exceptional girth, height or age; and those which are important to a community. You are encouraged to contact the *Tree Council of Ireland* if you are aware of any Champion Trees of special interest or significance.

For general information on Heritage Trees or the *Heritage Tree Hunt*, please contact the Tree Council of Ireland on 01 4931313, email trees@treecouncil.ie or check the website www.heritagetreehunt.ie.

The National Biodiversity Data Centre website contains mapping data for the Heritage Trees of Ireland. This information is available at www.biodiversityireland.ie and is updated periodically.

The publication *Champion Trees - a selection of Ireland's Great Trees* is available from the Tree Council of Ireland, who can provide further information about Champion Trees. Their website can be found at www.treecouncil.ie.



Pine woodland in Killiney Hill Park

APPENDIX D. dlr TREE PRESERVATION ORDERS (TPO'S)

Rathdown

1. SES/03/71
Corbawn Lane, Shanganagh, including Dorney Court (1980)
2. SES/12/7
Wilson Road, Mount Merrion (1984)
3. SES/11/6
Carysfort House, Stillorgan (1987)
4. SES/13/28
Kilmacud House, Kilmacud (1989)
5. SES/1/6
Palermo, Old Connaught (No.2) (1989)
6. SES/11/7
Talbot Lodge, Grove Avenue, Blackrock (1990)

Dún Laoghaire

7. Dún Laoghaire
St. Helen's Stillorgan (1988)
8. Dún Laoghaire
Carysfort College, Blackrock (1990)

Dún Laoghaire-Rathdown

9. SES/23/01
Belgrave Square, Monkstown (1998)

Locations of other significant trees and tree groups

Certain trees, groups of trees and woodlands have been identified on the Development Plan Maps. It is intended that these trees be protected and maintained. Robust and appropriate levels of protection should be provided for trees and tree groups identified, with a long-term aim of linking groups together to provide more robust tree assemblages.



Mixed tree cover at the pay-and-play Marlay Golf Course (Par 3), Marlay Park



View towards Rathmichael Wood from Killiney, highlighting the importance of mature tree cover to the local landscape character. Rathmichael wood, owned by Dún Laoghaire-Rathdown County Council, is publicly accessible.

APPENDIX E. **GLOSSARY**

<i>Age-profile</i>	Also 'age class structure'. The proportion of different age categories within a tree population.
<i>Amenity</i>	The attractiveness, pleasantness or value of a location, or something that contributes to physical or material comfort.
<i>Area Committee</i>	See 'Local Area Committee.'
<i>Biodiversity</i>	The variability among living organisms and the ecosystem of which they are part. Three levels are recognised: ecosystem, species and genetic.
<i>Branch union</i>	The joint between a branch and the trunk of the tree. A poor branch union means that the joint may be at risk of failure.
<i>Brashing</i>	To cut off side branches, usually from conifer trees.
<i>Broadleaved tree</i>	A broadleaf tree with broad leaves (rather than e.g. needles) such as Oak, Beech, and Birch.
<i>Bryophyte</i>	Collective term for the simplest land plants that lack vascular tissue and other parts. They do not have roots. Examples of bryophytes include mosses and liverworts.
<i>Canopy</i>	The upper crown of a tree, or the combined upper crowns of a group of trees.
<i>Canopy tree</i>	Trees with a full crown.
<i>Coppicing</i>	A traditional form of woodland management where trees are cut at or just above ground level to encourage the growth of several stems from one root system.
<i>Crown</i>	A collective term for the foliage-bearing portion of the tree (e.g. it's limbs, branches, and leaves).
<i>Crown-clean</i>	A type of pruning involving the removal of hazardous material such as dead, diseased, weak or broken branches and smaller crowded, crossing branches rubbing against better-formed branches. Climbing plants such as Ivy may also be removed.
<i>Crown-lifting</i>	Raising the canopy of the tree by removing or reducing the lower branches. This is often required for pedestrian or traffic clearance. This operation should be avoided where possible on mature specimens.

<i>Crown-reduction</i>	A type of pruning treatment involving the shortening of limbs and branches back to suitable lateral branches, in order to reduce the size of certain sections of the crown or the entire upper and/or lateral crown. Correctly done, this work can prolong the life of a tree. If done incorrectly, it can cause a tree to decline.
<i>Crown-thinning</i>	A type of pruning treatment involving the selective removal of smaller lateral branches throughout the main outer crown, to thin the canopy, without reducing the extent of the crown. This is often done to increase air and light penetration.
<i>Cultivar</i>	A variety of tree that has been developed by cultivation.
<i>Deadwood</i>	Dead or diseased woody material (twigs, branches etc.) in the crown of the tree.
<i>Deciduous tree</i>	A tree that loses all of its leaves for part of the year. E.g. Oak, Ash, Larch.
<i>Detritivore</i>	An organism that feeds on dead or decaying matter.
<i>Ecosystem</i>	A community of living organisms that are functioning together and interacting with their physical environment.
<i>Epicormic growth</i>	New shoots sprouting from an adventitious or latent bud on a stem or branch. Epicormic growth often looks 'twiggy' and has poor branch unions. If not removed, epicormic growth can grow into dangerous branches with poor attachment to the trunk.
<i>Exotic tree</i>	A tree from another geographical area that has not made its way to Ireland naturally.
<i>Fastigate</i>	A tree with a tight, narrow, columnar growth habit.
<i>Flora</i>	The collective plant organisms of a given locality.
<i>Formative pruning</i>	The pruning of a young tree to establish good branch structure by removing problematic or potentially problematic branches, ensuring good tree development.
<i>Fungi</i>	A kingdom of plant-like organisms that grow without roots, stems, leaves and photosynthesis, such as mushroom and lichen. Some fungi can cause tree decay.

<i>Girth</i>	The circumference of the stem of nursery trees, measured at 1.0 metre height above ground level.
<i>Grafting</i>	Encouraging the stem of one plant to fuse with the stem or rootstock of another.
<i>Honeydew</i>	Honeydew is a sugar-rich sticky substance secreted by aphids and some scale insects as they feed on plant sap.
<i>Invertebrate</i>	An animal without a backbone, such as insects.
<i>Limb</i>	Any of the main branches arising from the trunk of the tree.
<i>Local Area Committee</i>	A Local Area Committee is comprised of the Members (elected representatives) of that electoral area. Each committee meets on a monthly basis. Dun Laoghaire-Rathdown County Council has Area Committees covering Dundrum and Dun Laoghaire. The primary function of the Area Committee is to consider local issues and to make recommendations with regard to local area issues.
<i>Microclimate</i>	Localised climate conditions as a result of e.g. different sun exposure, wind or temperature.
<i>Mycorrhizal</i>	A mutually beneficial (symbiotic) association between the roots of a woody (vascular) plant and soil fungi.
<i>Native Species</i>	Plants or animals that have made their way to Ireland naturally, without the aid of people, since the end of the last Ice Age.
<i>Naturalised</i>	Plants or animals that were introduced by people, but now reproduce without the help of people.
<i>Noise mitigation</i>	To lessen the extent of excessive noise.
<i>NGO (Non-Governmental Organisation)</i>	Various organizations which are not part of the government or state.
<i>Physiological</i>	The organic functions of a living organism.
<i>Pollarding</i>	A pruning regime in which new branch growth is cut back to an established framework of shortened lateral branches or main stem, in order to maintain a small crown. Correct pollarding begins with a young, small tree and should only involve the regular removal of branches (usually and ideally of small diameter) back

to the branch collar of the pollard point. Only certain species and ages of tree can tolerate this operation, which is usually repeated every few years.

<i>Provenance</i>	Place or source of origin. E.g. a tree of local provenance came from local seed.
<i>Roots</i>	The underground structure that absorbs water and mineral salts and anchors the tree to the ground.
<i>Rootstock</i>	The root system of a tree, onto which a different stem has been grafted. E.g. many ornamental Cherry trees are grafted onto a native, vigorous Cherry rootstock.
<i>Root plate</i>	The area around the trunk where there is a high concentration of thicker structural roots that hold and secure the tree in an upright position.
<i>Stake</i>	A strong wooden post driven into the ground to support a recently planted tree until its roots become sufficiently developed.
<i>Spread</i>	The extent of the crown measured horizontally (along the ground) from the trunk of the tree.
<i>Sustainability</i>	The capacity to sustain something for an indefinite period without damaging the environment or depleting the required resources.
<i>Taking-in-charge</i>	The process whereby the Local Authority becomes responsible for the ongoing maintenance of an open space, road or estate.
<i>Thinning-out</i>	Selectively removing weaker trees from dense tree stands to enable the remaining trees to develop properly.
<i>Tree guard</i>	A metal guard (e.g. weld-mesh etc.) that may be installed around newly planted trees in high-risk areas to protect them against vandalism.
<i>Trunk</i>	The main stem of a tree, which holds up the entire crown.