

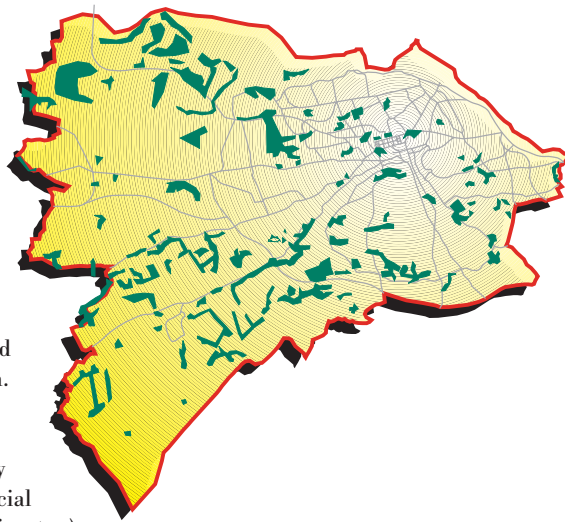
Woodland



STATUS & ECOLOGY

Woodland, which can be defined as land where the ecological condition is, or will be, strongly influenced by tree canopy, extends over 1,500 hectares (6%) of Edinburgh. It compares poorly with the Scottish average of about 15% woodland cover, making Edinburgh one of the most sparsely wooded districts in Britain. However, there are many different types of woodland habitat in Edinburgh. Notably the semi-natural broadleaved riverside woodlands along the Water of Leith and River Almond, the historic policy woodlands of the Dalmeny, Edmonstone, Mallyen, Dundas and Newliston Estates, the urban woodlands at Corstorphine Hill, Craiglockhart and the Hermitage of Braid, the farmland shelterbelts in the green belt and wider countryside, and the largely coniferous plantations at Dreghorn. Although small and fragmented, many of Edinburgh's woodlands are linked by wildlife corridors, many of which are tree lined.

In addition to their biodiversity value, woodlands and trees provide many benefits to the environment and people of Edinburgh: attractive landscapes, screening, shelter, pollution reduction, sustainable raw materials, jobs, opportunities for recreation, education and community participation.



A number of these woodlands are statutorily protected as Sites of Special Scientific Interest (Duddingston),

Local Nature Reserves (Corstorphine Hill, Hermitage of Braid) or covered by one of Edinburgh's 142 Tree Preservation Orders or 38 Conservation Areas. In addition, a whole series of woodlands across the capital are protected from development as non-statutory Urban Wildlife Sites, Sites of Importance for Nature Conservation (SINCs) and/or Community Woodlands.

The Inventory of Ancient, Long-Established & Semi-Natural Woodland lists 887 hectares of Edinburgh woodland in these categories, most of which is classed as long-established plantation (wooded for at least 130 years). Only 82 hectares are classed as ancient (wooded for at least 240 years) of which only 32 hectares are thought to be semi-natural remnants of Scotland's original forest. The Inventory only covers woodlands over 2 hectares and it is likely that smaller fragments of ancient semi-natural woodland survive, often along watercourses and within more recent woodlands.

"Evolution did not intend trees to grow singly. Far more than ourselves they are social creatures, and no more natural as isolated specimens than man is as a marooned sailor or hermit"

John Fowles



The biodiversity of each woodland varies greatly, depending on its age, size, species composition, location and use, but on the whole woodlands are noted for the wide variety of plant and animal species they support. In particular, they provide ideal conditions for the growth of mosses, liverworts, lichens, ferns and fungi and are home to a considerable number of invertebrates, small mammals and birds. Recently planted woodlands tend to have a simple structure, whereas ancient and long-established woodland is richer. Edinburgh's broadleaved woods comprise a mixture of species, with a predominance of oak, ash, sycamore, birch, elm, hazel and beech, whilst its few conifer woods are dominated by larch and pine.

Although the UK Biodiversity Action Plan identifies six different woodland types as priority habitats, only Wet Woodland (includes alder, willow and some birchwoods), Upland Oakwood, Upland Mixed Ashwoods and Lowland Wood Pasture & Parkland types are thought to be represented in Edinburgh. Further UK Plans are likely to follow for Lowland Mixed Broadleaves and Upland Birchwoods both of which are thought to be represented in Edinburgh.

The following Edinburgh Biodiversity Action Plan species can be found in woodland: **Animals:** hedgehog, badger, weasel, pipistrelle bat, Daubenton's bat, song thrush, spotted flycatcher, great spotted woodpecker, bullfinch, black grouse, sparrowhawk, tree sparrow, barn owl, *Ampedus balteatus* (click beetle), small pearl-bordered fritillary, *Pipiza luteitarsis* (a hoverfly), *Lampronia fuscata* (a micromoth), *Stegana coleoprata* (fruitfly). **Plants:** juniper, giant bellflower, heath cudweed, bluebell, wood millet, adder's tongue, golden sock and porcelain fungus.

FACTORS CAUSING LOSS OR DECLINE

Impacts

Many of Edinburgh's woodlands have been cleared or fragmented as a consequence of development. Woodland has relatively low land value and so residential, commercial and transport developers have often located their activities in wooded areas. Properties also have a higher value if located within a tree or woodland setting.

Due to their small size and recreational pressure, the woods of Edinburgh do not represent a naturally robust ecosystem and therefore sensitive management is essential for their well being. Inappropriate or insufficient management has commonly resulted in a general reduction of natural ecological diversity. Few Edinburgh woodlands display adequate mixed age regeneration and most have a disproportionately high percentage of mature and over mature stock. Sycamore and ash are currently the dominant regenerating species.

Over-grazing of both mature and young woodlands by animals, particularly stock, rabbits and deer, has prevented the regeneration of some woodlands. Grey squirrel damage is also prevalent within key urban woodlands such as Corstorphine Hill and Cammo. Many trees have also suffered from insensitive maintenance, particularly from lawnmowers and strimmers. Most trees in parks, golf courses, streets and playing fields have damage which if not immediately fatal, usually results in wound decay which will in time render the tree unstable.

Urban expectations of tidiness (e.g. mowing and removal of deadwood) often reduce natural biodiversity, and vandalism is a constant management issue in urban woodlands, usually through firestarting; the uprooting of newly planted trees, dumping and litter accumulation.

Even with the existence of a "Sanitation Zone", Dutch elm disease has claimed over 1000 elm trees every year since the mid-1970's, greatly altering the habitat and composition of many of Edinburgh's woodlands.

Air pollution is likely to have had a significant impact on the capital's woodlands, especially lichen and bryophyte communities. Run-off of road salt is another frequent cause of tree fatality.

Invasion by non-native species such as rhododendron, Himalayan balsam, giant hogweed, Japanese knotweed and to a lesser extent sycamore have reduced the biodiversity of many woodlands.

Threats

All of the identified impacts continue as very real threats to woodlands. New threats could include the possible spread, either directly or through cross-fertilisation, of genetically modified plants; and diseases such as *Phytophthora* of riverside alders, which is increasing in southern Britain but is not yet a problem in Scotland.





CURRENT ACTION

The Council has been implementing the Edinburgh Urban Forest Strategy since 1992. Over this period a number of woodlands have been brought into public ownership, woodland protective measures have been strengthened, management plans have been written for the key recreational woodlands and over 50 new Community Woodlands have been established and adopted.

New planting under the Forestry Commission's Woodland Grant Scheme (WGS) has been averaging about 12 hectares per year throughout the 90s. Existing woodlands have been coming into active management under WGS at the rate of about 5 hectares per year.

The Pentland Hills Regional Park is working with landowners and farmers to encourage multi-purpose woodland management in the Pentlands.

ACTION PLAN OBJECTIVES & TARGETS

Objectives

To prevent the loss of existing woodland and extend woodland cover by 1000 hectares to 2500 hectares in total (10% of Edinburgh). To enhance the social and environmental value of Edinburgh's woodland.

Targets

To protect woodland from unsympathetic development through the robust use of statutory instruments and the development control process.

To establish new woodlands that respect the ecological, landscape, cultural and timber potential of the site, ensuring rapid establishment through good management practice.

To manage woods in accordance with the UK Forest Standard; Management aiming to enhance the diversity of sub-habitats within the woodland, such as woodland edges, rides, open ground, deadwood and hollows.

To develop public appreciation and understanding of woodlands, woodland management and wood products, and encourage people to participate in the management of the woodlands in their area.



Actions

1
Continue, from Spring 1999, to protect woodlands and trees through the robust use of local plans, design briefs, development control policies and the use of Tree Preservation Orders.
(Actioned by: City of Edinburgh Council City Development Department)

2
Consider special protection measures for key “remarkable” trees across the city by Autumn 2001.
(Actioned by: City of Edinburgh Council City Development Department)

3
Establish 75ha of new woodland, by Autumn 2004, linking these with existing woodlands and wildlife corridors where possible.
(Actioned by: City of Edinburgh Council Department’s of City Development & Recreation, Forestry Commission, Edinburgh Green Belt Trust, Farming & Wildlife Advisory Group, Ministry of Defence, Pentland Hills Regional Park & Scottish Wildlife Trust)

4
Explore funding opportunities for the long-term creation of 1000ha of new woodland across Edinburgh, by Spring 2000.
(Actioned by: Forestry Commission)

5
Undertake detailed surveys and draft management plans for all Edinburgh’s publicly accessible woodlands registered in the “Inventory of Ancient, Long-Established & Semi-Natural Woodlands”, by Autumn 2003.
(Actioned by: City of Edinburgh Council Recreation Department, Ministry of Defence, Scottish Wildlife Trust & Forestry Commission)

6
Complete the level 1 (remote) semi-natural woodland inventory for Edinburgh by Summer 2000.
(Actioned by: Caledonian Partnership)

7
Establish a Community Woodland Action Group to develop community involvement in woodland management and use, by Spring 1999.
(Actioned by: Four Winds Inspiration Centre, Edinburgh Green Belt Trust, Woodland Trust & Reforesting Scotland)

8
Undertake a survey to determine which schools would like more woodland in their grounds or better access to other woodland, by Spring 1999, and seek means to meet these needs, by Spring 2001.
(Actioned by: City of Edinburgh Council Education Department)

9
Undertake research into public perceptions of new woodlands around Edinburgh, by Winter 2004.
(Actioned by: Forestry Commission Research Agency)

10
Organise, by Summer 2002, an educational event for local authority members and officers, landowners and developers highlighting the value of trees and how they should be protected.
(Actioned by: Association for the Protection of Rural Scotland & Four Winds Inspiration Centre)

Key Contacts

Association for the Protection of Rural Scotland
Caledonian Partnership
City of Edinburgh Council (City Development)
City of Edinburgh Council (Recreation)
City of Edinburgh Council (Education)
Edinburgh Green Belt Trust
Farming & Wildlife Advisory Group
Forestry Commission
Forestry Commission Research Agency
Four Winds Inspiration Centre
Ministry of Defence Lands Service
Pentland Hills Regional Park
Reforesting Scotland
Scottish Wildlife Trust
Woodland Trust

Diane Holman
Caroline Younger
David Jamieson
Iain Park
Hilary Kirkland
Tess Darwin
Tony Seymour
Iain Laidlaw/Jim Affleck
Max Hislop
Carole Fraser
David Reynolds
Susan Falconer
Mark Ballard
Colin Melean
Meriel Young

CHAMPIONS

