Section 3

Habitat Action Plan 3:

Woodland

Woodland

Dunbartonshire's woodlands and hedgerows are vital parts of the physical landscape that help complement the wide variety of habitats found within the region. Not only do trees and hedges provide shelter and food for an array of animals, they promote the natural growth of under-storey vegetation and plants (such as wildflowers and fungi), produce oxygen for us to breathe and increase the attractiveness of rural and urban areas.

Woodlands form a vital part of many towns and cities, allowing both locals and visitors alike the opportunity to escape to a tranquil setting. Indeed, many urban woodlands either have a good established footpath network, or a series of desire lines, allowing access to those wishing to maintain or improve their health and to enjoy nature's beauty. In turn, urban woodlands provide a refuge for a range of animals and plant life that would otherwise not exist within the urban expanses of Dunbartonshire.

The variety, condition and location of trees, woodlands and hedges have a significant impact on the landscape and their biodiversity value. Ancient woodland (that is, areas that have been a forest since at least 1750) are the most valuable woodland habitat type for biodiversity, as they tend to support the greatest diversity of wildlife. Not only are the ages of the trees in the woodland important for biodiversity, but the species and management regime also play a role in determining the range of wildlife the woodland contains. In their natural state, and also combined with wetland features, woodlands can provide habitats for a range of animal and plant species. Deadwood is another important habitat for a huge number of species - mainly invertebrates and fungi - and it is vital in good woodland management to retain both dead standing timber (where safe to do so) along with fallen branches, logs and trunks.

The Scottish landscape has undergone a dramatic transformation over the last Millennia. Scotland was once primarily covered by forest, but has suffered a major loss of native woods and associated vegetation through deforestation for agricultural expansion. Latterly woodlands were cut down to provide fuel and materials for the industrial revolution and the First and Second World War. More recently further loss can be blamed on development and urban expansion. This unprecedented loss of woodland, accompanied by the intensive grazing of the land with livestock, has resulted in the dramatic change and biodiversity value of our forests.

Scotland's rural landscape is now one of a mosaic-like patchwork, in which intensively cultivated areas are separated by variably sized tree stands (that are themselves exposed to different management regimes), wetlands, upland heaths/moorlands and other habitats of varying quantity and quality. This fragmentation can isolate species even further by reducing opportunities to move through the landscape, and even lead to the extinction of local populations. Wildlife corridors, such as riparian woodlands, rivers and hedgerows that have helped to keep some fragmented habitats connected by functioning as a migratory route for species should therefore be protected and enhanced as much as possible.

Forestry Commission

After the First World War, the Forestry Commission was set up in 1919 with the sole aim of increasing our country's woodland cover. During the Second World War, the ever-increasing need for timber saw the remaining woodlands planted in the 1800's cut down. In 1945 a new Forestry Act was passed and the Government accepted the principle that there should be five million acres of productive woodland in Britain. To achieve this, intensive establishment regimes were implemented and the predominant species chosen to achieve this was *Sitka spruce*. In Scotland, the widespread use of this species instead of natural mixed-species stands has had wide implications for biodiversity. The Forestry Commission has, for some time been looking at the effects on biodiversity of planting uniform stands of non-native species such as *Sitka spruce*. Although the harvesting of timber remains important to Scotland's economy, additional focus has been placed on implementing Forest Design Plans to help alleviate the loss of biodiversity in plantations. These plans include the planting of additional areas of broadleaved trees, improving riparian corridors, pond creation and the removal of fast growing species such as Rhododendron and Bracken that out-compete slower growing native plants.

Forests are also being promoted as being important in terms of health, recreation and education, and in the last decade or so there has been a rise in visitor numbers to wooded areas. The creation of community woodlands and other forestry initiatives, in part also due to the work of charities such as Central Scotland Forest Trust and The Woodland Trust Scotland, and funded primarily by the Forestry Commission's Woodlands In and Around Town (WIAT) Grant Scheme, has greatly increased rural stewardship values and environmental responsibility within communities.

Native Woodland Action Plans

In 2004, the Forestry Commission produced a guidance note on Native Woodland Action Plans in Scotland, in which overall targets were discussed for native woodland creation and expansion in Scotland. These targets were split into Council (or LBAP) areas, to give appropriate types, and levels of woodland expansion given land cover, land use, topography and climate. For Dunbartonshire, the targets are listed below:

Forest Commission Indicative Local Targets (ha) for native woodland expansion

	Upland Oakwood		Upland Ashwood		Lowland Mixed Deciduous Wood	
	Expand	Restore	Expand	Restore	Expand	Restore
East Dunbartonshire	10		10			10
West Dunbartonshire	20			10		10
Total	**30**		**10**	**10**		**20**

Hedgerows
Ancient hedgerows are defined as those that were in existence before the Enclosure Acts, passed between 1720 and 1840 in Britain. Species-rich hedgerows in Scotland may be classified as those that contain, on average, 4 or more native woody species along a 30m length. Hedges that contain fewer woody species, but a rich basal flora of herbaceous plants should also be included in this criterion. The thin, straight hawthorn hedges that characterise later parliamentary enclosures, as well as most hedges that consist mainly of beech, privet or yew or non-native trees, are classed as species-poor hedges.

Hedgerows are important habitats in their own right. They are a primary habitat for at least 47 extant species of conservation concern in the UK, including 13 globally threatened or rapidly declining species - more than for most other key habitats. They are especially important for butterflies and moths, farmland birds, bats and small mammals. Indeed, hedgerows are the most significant wildlife habitat over large stretches of lowland UK, acting as an essential refuge for a great many woodland and farmland plants and animals.

Over 600 plant species, 1500 insects, 65 birds and 20 mammals have been recorded at some time living or foraging in hedgerows. As they also act as wildlife corridors for many species (including reptiles and amphibians) they allow the dispersal and movement between other habitats, thus being intrinsic to the development of habitat networks across the landscape.

Hedge facts:
- *A well-managed 200m length of farm hedge can contain over 20 bird nests.*
- *A poorly managed 200m length of farm hedge often has one or no nests.*
- *Most farmland breeding birds (other than waders) rely heavily on hedges for cover, nesting and roosting sites, and for food.*
- *A well-laid hedge will not need further management for at least 10-15 years*

In 1990 it was estimated that Scotland had 33,000 km of hedgerows, resulting from a net loss of hedgerow length by 27% in the period between 1984 and 1990. This loss was due in part to direct removal by land managers, and to abandonment of individual hedge plants and fragmentation.

Legal status:
National forestry policy includes a presumption against clearance of any woodland for conversion to other land uses, and in particular seeks to maintain the special interest of ancient and semi-natural woodland. Felling licenses from the Forestry Commission are normally required if the woods are not already managed under plans approved by them. Some woods and trees may receive additional protection through policies and strategies within development plans, or by being subject to Tree Preservation Orders (TPOs) through the Local Authority. It is illegal to fell, top, lop or uproot trees covered by TPOs without permission from the planning authority, and all felling licences will be sent to the Local Authority for permission.

Hedgerows are protected by the Hedgerows Regulations 1997. This means that it is against the law to remove or destroy hedgerows that are at least 20m in length, over 30 years old and that contain certain species of plant, without permission from the local planning authority. Hedgerows in areas covered by Historic Landscape Characterisation plans are also often protected under the regulations on the basis of historic importance and wildlife value.

Forestry in Dunbartonshire

In Dunbartonshire, there are approximately 4890 hectares of woodland (1866 ha in East Dunbartonshire, covering 11% of the local authority area, and 3024 hectares in West Dunbartonshire, covering 17% - figures given by Forestry Commission Scotland). Both percentages are above the national average of 10%. 234.43ha (12%) of the woodlands within East Dunbartonshire are classed as Ancient, while one site in Dalmuir (along the Duntocher Burn) is ancient in West Dunbartonshire. A general breakdown of forest type in Dunbartonshire is given below (due to be updated in 2009).

	East Dunbartonshire (ha)	West Dunbartonshire (ha)
Broadleaf	44.6	292.8
Conifer	357.6	166.5
Mixed	672.2	924.3
Young	692.1	1505.4

The Forestry Commission owns 1614 ha of land in East Dunbartonshire of which 444 ha is woodland. In West Dunbartonshire, the Commission own 1905 ha of land which 1412 ha is wooded.

East Dunbartonshire Council owns over 40 woodland sites of which around 20% are classed as native in composition, 43% have some native component, whilst the remaining 37% are non-native. Five percent of the total woodland area is classed as amenity grasslands including scattered parkland trees. To reflect their valuable woodlands, East Dunbartonshire Council has developed an Urban Woodland Strategy that aims to maintain the existing tree resource, and to establish new urban and peri-urban woodlands and Greenspace. A fully funded 5 year WIAT management programme has been prepared for 31 Council owned sites. Further information on this can be found in the Appendix.

The woodland resource for West Dunbartonshire Council is as yet un-quantified. It would therefore be of importance to undertake a full audit of council woodland habitat and species so that management and targets within future plans can be prioritised. West Dunbartonshire Council will be applying for woodland management funding from the Forestry Commission's WIAT scheme in 2009. Sites include Auchentoshan Wood, Auchnacraig & Edinbarnet, Crosslet Wood, Lusset Glen, Overtoun Estate, Pappertwell Community Woodland and The Saltings.

Education and forestry
Activities such as Forest Schools and Eco-schools, which encourage children to use woodlands as an outdoor classroom to learn about nature and the importance of biodiversity to everyday life, have helped bridge the gap of knowledge about Nature and Conservation by linking fun, educational wildlife activities to the Curriculum for Excellence. By educating the public on why woodlands are important for wildlife, we can help address anti-social behaviour issues relating to such areas and keep up the momentum for sustainable forestry for generations to come.

Woodland
In Dunbartonshire, the main causes for concern are the loss of, and damage to ancient and semi-natural woodland including wildlife corridors and hedgerows.

Factors Causing Loss or Decline of Habitats and Species

- Agricultural activities and expansion leading to ripping up of hedgerows and tree removal
- Air pollution and acid deposition
- Climate change
- Damage to woodland through anthropogenic means, such as excessive grazing by sheep or cattle, or disturbance as a result of using woodland areas for shelter
- Development for transport, housing, business, industry and agriculture
- Drift from herbicides and pesticides
- Dutch Elm disease
- Excessive grazing of young shoots and understorey vegetation by voles, deer, rabbits and hares
- Felling without adequate regeneration or replanting/failure to repair gaps left in hedges and loss and non-replacement of mature hedgerow trees
- Fly tipping
- Fragmentation of the landscape
- Heavy recreational use
- Improper management leading to loss of foraging sites for birds, small mammals and insects
- Inappropriate cutting of hedges
- Inappropriate planting and management of Rhododendron, Sycamore and Beech.
- Lack of, or inappropriate woodland management
- Lack of deadwood (either standing or on the forest floor)
- Unfavourable changes in management regimes
- Ploughing too close to the base of hedges leading to root damage and ill health of the hedgerow itself

Action Plan Objectives & Targets

Objectives
This action plan covers all types of woodland found in Dunbartonshire, and has been written to promote the management of, and where appropriate, the expansion of woodlands in a way that will enhance the environment in accordance with the Scottish Forestry Strategy. The main points of this strategy in relation to biodiversity are to:

- Improve semi-natural woodlands and UK priority woodland habitat types through positive management
- Maintain the resource of ancient woodland in the area
- Extend and enhance woodlands by developing integrated forest habitat networks
- Increase the diversity of the farmed landscape
- Improve the riparian habitat
- Encourage alternatives to clear-felling (where appropriate)
- Improve the quality and setting of urban areas
- Encourage and support interested landowners and land managers to adopt simple cost saving changes in their hedgerow management operations that are beneficial to biodiversity
- Promote regeneration of native trees to replace loss of mature specimens
- Promote the addition of extra hedgerow species to existing hedges when gapping up

In addition, the *social* aspects of the Scottish Forestry Strategy that could be linked to delivery via this LBAP and funded through the new SRDP through:

- Support of rural diversification and sustaining fragile rural communities
- Added value to the Scottish tourism industry and associated increased benefits to woodland owners and local communities
- Increased opportunities for the acquisition of new skills in forestry, thereby adding to the forestry skills base in Scotland
- Help improving the quality of life to local residents across Scotland (for example 'Woods in and around towns' funding)
- Increased local engagement with forestry
- Enhanced role of forestry in education
- Provision of easier access to woodlands for all members of the general public
- Increased recreational potential of woodland

These objectives are not expected to stand alone, nor are they prioritised. It is intended that delivery of the Plan will, over time, contribute towards these objectives, the emphasis on each objective varying between projects.

Woodland

O = ongoing, C = completed, S = short term (2007-2010), M = medium term (2007-1012), L = long term (2007-2017)

Target 1: Expansion of existing woodland and hedgerows as well as protecting the original forest resource		
Action required	Lead Partner(s)	Time-scale
Apply for, or increase number of WIAT funded projects in the area (6 in each area over 3 years)	EDC, WDC	O
Establish programme of work on biodiversity improvements in the Kilpatricks, Auchentorlie Glen, Lennox Forest and Campsie Glen	Forestry Commission	L
Encourage the formation of local community action groups to help carry out practical conservation work	EDC, WDC	O
Carry out a programme of works by Central Scotland Forest Trust to plant 3150 Scottish native bluebells in local woodlands	CSFT	C
Implement a programme of hedgerow and boundary feature improvements. Seek to implement at least 2 projects per year in Dunbartonshire	CSFT	O

Target 2: Through council strategies, ensure all ancient/semi-natural woodlands have LNCS status, or are protected by Tree Preservation Orders (TPOs). Review management operations to take into account biodiversity		
Action required	Lead Partners(s)	Time-scale
Carry out Local Nature Conservation Site Reviews of all semi-natural habitats in East and West Dunbartonshire	EDC, WDC	C
Review and increase (if possible) number of trees protected by Tree Preservation Orders	EDC, WDC	M
Review hedge cutting schedules in order to identify sites that could have a more natural maintenance regime	EDC, WDC	S

Target 3: Write and adopt an integrated habitat network that includes forests as a model habitat, with priorities in place for positive conservation management		
Action required	Lead Partner(s)	Time-scale
Develop an Integrated Habitat Network project for Dunbartonshire that includes woodland as a priority habitat for expansion and management	GCVGN, Forest Research, EDC, WDC	M

Target 4: Increase education and awareness of the forest resource in East and West Dunbartonshire		
Action required	Lead Partner(s)	Time-scale
Deliver a pilot Forest School in West Dunbartonshire, and train 2 members of Council staff to deliver Forest Schools. Investigate potential of delivering a Forest School Leader Training Course (Level 3) to schoolteachers in the Dunbartonshire area	WDC	S
Encourage practical conservation projects and formalised public access to woodlands through creation of new footpaths, and upgrading of existing ones. Specific projects include Auchentoshan Wood, Auchnacraig, Boghead Wood and The Saltings.	EDC, WDC	O

UKBAP priority species that will benefit from the above actions:

Group A (denotes species for which action plans were written in the original LBAP)

Mammals:
Brown Long-eared Bat
Daubenton's Bat
Natterer's Bat
Pipistrelle Bat

Birds:
Black Grouse
Linnet
Reed Bunting
Tree Sparrow
Yellowhammer

Invertebrates:
Small Pearl-Bordered Fritillary

Group B (denotes new LBAP priority species to East and West Dunbartonshire)

Mammals:
Badger

Birds:
Barn Owl

Invertebrates:
Common Blue

Plants:
Bluebell or Wild Hyacinth (not Spanish Bluebell)

Group C (denotes species of particular conservation concern, either at the UK or local level, or are known to be vulnerable)

Mammals:
Brown Hare, Common Shrew, Hedgehog, Weasel

Birds:
Bullfinch, Grasshopper Warbler, Great Spotted Woodpecker, Green Woodpecker, Hawfinch, House Martin, Kestrel, Lesser Redpoll, Lesser Whitethroat, Merlin, Redstart, Sedge Warbler, Short-eared Owl, Song Thrush, Sparrowhawk, Spotted Flycatcher, Swallow, Swift, Tree Pipit, House Sparrow, Willow Tit, Woodcock

Invertebrates:
Seven-spot Ladybird, Green Hairstreak, Six-spot Burnet, Small Tortoiseshell.

Plants:
Globe Flower, Oak, Spignel, Sweet Woodruff