Parkwood Bassenthwaite Forest Design Plan

Text & Graphs

Spring 2009

Forestry Commission England

Contents

The plan is presented in five separate sections:-

- Text
- Viewpoint Photos
- General Photo Survey
- Maps
- Computer Perspectives

This process by which this plan has been developed is characterised by three main stages:

1) Understanding Parkwood Bassenthwaite
2) Developing a vision
3) Implementing the vision

The Viewpoints and General Photo Survey principally reflect the first two stages in the process whilst the maps and text describe the full process. The table below illustrates the way that the various maps, photos and text fit into the stages in the process and helps guide the reader through the plan.

Understanding Parkwood Bassenthwaite	***Text*** • Introduction • Survey • Achievements during last plan period
	Maps • Location • Social & Economic • Current Forest Species • Recreation and Access • Community • Aerial Photo (not available on web site) • Water, Heritage and Nature Conservation • Wind Hazard Class and Soils • ESC Native Woodland • Landform Assessment • Achievements
	All Photos

Developing A Vision	***Text*** • Review and Appraisal

	Maps
	• Review Issues
	• Design Concept
	  • Eastern Slope
	  • Western Slope

	All Photos
Implementing the Vision	***Text*** • Objectives of the Plan • Delivery of the North West England Forest District Strategic Plan • Delivery against National Policy " A Strategy for England's Trees, Woods and Forests" • Objectives of the Plan • Graphs
	Maps • Future Woodland Management • Future Woodland Species • Future Access Community, Health and Wellbeing • Future Conservation and Heritage • Planning for Climate Change
	All Computer Perspectives

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Spring 2009

Introduction

Parkwood Bassenthwaite is situated approximately 2km east of Bassenthwaite Village and lies entirely within the Lake District National Park. Known locally as Parkwood, the addition of Bassenthwaite is to differentiate it from a similar sized wood with the same name situated near Isel.

Acquired freehold and extending to 53ha, the woodland was planted with mainly mixed conifers species in the period 1951 to 1961. However, the eastern end of Parkwood Bassenthwaite also known as Whitefield Wood and small areas associated with Halls Beck have remnants of ancient semi-natural woodland and the majority of the wood is now designated as a Plantation on Ancient Woodland Site (PAWS). The first Forest Design Plan was approved in 2001.

Survey

The woodland can be seen from the A66 as it runs alongside Bassenthwaite Lake, the A591 west and south of Bassenthwaite village and the minor roads that network the surrounding area through to Orthwaite. In addition, it is visible on the landscape from the north west slopes of the Skiddaw massif, including for those who walk the popular Cumbria Way and as far as Sale Fell, Whinlatter and associated ridges to the south west.

Parkwood Bassenthwaite is subject to low level use by both the local community for informal recreation such as dog walking and horse riding and also by visitors of Highclose Holiday Park. Visitors can gain entry to the forest from several access points around the boundary although in keeping with informal recreation usage none of these provides formal parking facilities. The woodland is dedicated under the Countryside Rights of Way Act. The Cumbria Way runs north/south through the eastern end of the woodland. Access for forestry machinery throughout the woodland is made difficult because of a ‘light usage’ and limited forest road network.

Much of the conservation interest lies around the woodland’s ancient-semi-natural origins and its potential for restoration to a valuable wildlife habitat by removal of largely unthinned densely shading conifers. The current designation for the woodland is Plantation on Ancient Woodland Site (PAWS). There are several red squirrel dreys and raptor nests and the woodland is home to deer, badgers, a small range of birds and other wildlife such as butterflies. The woodland is located within Bassenthwaite Lake catchment and since 2002 has been included in the Bassenthwaite Lake Restoration Programme, set up to protect and improve the water quality of both the lake and the watercourses that flow into it including Halls Beck and its tributaries. Brown trout, sea trout and salmon are to be found in the beck and the main tributary that runs alongside the Cumbria Way has several notable floral species including Beech Fern.

Situated on the south facing slope of an east-west ridge, altitude ranges from 130 to 250 metres above sea level. Soils are mainly good with well-drained brown earths on the slopes and surface water gleys resulting in some wetter areas along the valley bottom where growing conditions are less stable.

According to Historic Environment Records, Parkwood Bassenthwaite is possibly the site of a Medieval Deer Park owned by Adam de Bassenthwaite in 1342. The only other notable archaeological features are two disused quarries and a possible charcoal platform. Removal of densely shading conifers may uncover other features of interest which will be protected as they are found.

Achievements during last plan period.

The previous plan objectives are listed below with achievements highlighted for each objective.

- Complete all work in accordance with UKWAS, England Forestry Strategy and the District Strategic Plan.
  This has been achieved. Whilst this forest plan has not been specifically audited under UKWAS, North West England was audited in 2005 and judged to have passed.

- Market all timber parcels identified in the felling plan to generate revenue.
  No felling has taken place since the Forest Design Plan approval in 2001 due to extensive windblow clearance operations in other parts of the district taking priority and the designation of PAWS requiring a change of design plan and subsequent management.

- Record and protect any archaeological features that are discovered during harvesting work.
  A site of a possible charcoal platform has been recorded as a result of survey work carried out at the time of the Forest Design Plan review.

- Improve the environment of Halls Beck through accepting native broadleaf regeneration within young crops and removing heavy seeding conifer such as Western hemlock.
  Native broadleaves have regenerated and are establishing within the young larch crop and alongside Halls Beck. No heavy seeding conifers have been removed.

- Maintain the present nature and scale of recreational use. Take every opportunity to thin crops adjacent to rights of way.
  The level and nature of recreational use remains at roughly the same level. There has been no management of ride sides or of path edges. The forest roads and public road are heavily shaded by the dense conifer cover and other paths remain open and passable through public usage.

- Continue to improve the visual landscape of the woodland through implementation of felling and restocking plans.
  There has been no felling or restocking since Forest Design Plan approval in 2001 as detailed above and therefore the significant visual landscape issues still need to be addressed.

Review and Appraisal

There has been no work carried out since the last Forest Design Plan (FDP) review in 2001 due to the woodland being designated a PAWS and also due to district commitment to dealing with the aftermath of the 2005 storms which caused extensive windblow damage. As a PAWS site with small remnants of ancient semi-natural woodland, Parkwood Bassenthwaite has great potential to be restored to native broadleaved woodland having both mature and regenerating broadleaved species throughout. Containing elements of both Upland Mixed Ash (W8) and Upland Mixed Oak (W11 &17) as defined by Cumbria BAP this is an opportunity to safeguard and enhance this valuable and scarce resource both as a haven for certain wildlife species and as a part of our cultural heritage. A vital part of this restoration is removal of densely spaced conifers particularly Western hemlock, in one felling operation. The high regenerative capacity and shade tolerant character of this species poses a threat to regrowth and establishment of broadleaves. This crop is also under thinned and increasingly unstable as can be seen in the wetter areas where windblow is already occurring. To attempt to

respace at this late stage risks opening up the site to further wind damage. While it is anticipated that existing broadleaves will provide the seed source for regeneration, some replanting on the cleared site is advisable in order to help outcompete conifer regrowth.

Removing the dark conifer species provides an ideal opportunity to reshape the stark boundaries obvious on the landscape enabling a visual improvement, linking in with the character of neighbouring broadleaved woodlands and hedgerows and improving the visitor experience as they walk through the woodland.

The mature conifers located in-between the public road and the holiday home site will be removed as a matter of priority. They are becoming increasingly unstable as can be seen from the pockets of windblow.

The forest road at the main access point up to and including the T junction will require upgrading for harvesting and extraction and then reinstatement following operations. Access for operations into the narrow eastern end of the woodland will need to be considered and there are several options available. This will enable thinning of this area gradually removing conifer species to favour the native broadleaves both within the next five-year period and for future thinning operations.

Continued thinning in the remaining mature larch and Douglas fir at the western end of the woodland and first thinning in the young larch are vital to the restoration programme increasing light levels to encourage continued growth and regeneration of broadleaves.

Objectives of the Plan

Ongoing

- Manage all work in accordance with the District Strategic Plan, The Regional Forestry Framework, A Strategy for England's Trees, Woods and Forests and the UK Woodland Assurance Scheme.
- Consult and inform stakeholders, visitors and the local community about the ongoing and future management of the forest through local meetings, regional website and temporary information signing where appropriate.
- Take every opportunity to regularly thin the remaining conifer crop.
- Monitor levels of regeneration and manage accordingly.
- Take into account developing advice on adapting to and mitigating against the impacts of climate change.

The next 5 years

- Achieve the proposed felling and restocking plan
- Improve harsh external and species boundaries.
- Establish a sustainable access route to the eastern section.
- Thinning of remaining conifers to encourage broadleaved growth.

These objectives are further explored in the following maps: -

- Future Woodland Management,
- Future Woodland Species,
- Future Community Health and Well Being ,
- Future Conservation and Heritage
- Planning for Climate Change

Delivery against the North West England Forest District Strategic Plan

Parkwood Bassenthwaite lies within the Cumbria High Fells management zone of the North West England Forest District Strategic Plan (NWEFDSP) (2005 to 2009). Within the general description for this zone the Strategic Plan makes the statements below which are relevant to this plan.

- At Forest Design Plan revision, felling will target the early removal of Western hemlock where this does not significantly compromise other objectives to minimise the problem of vigorous natural regeneration.

- Presumption to thin all areas of WHC 3 and below (and more sheltered WHC 4). If necessary thin steep areas at zero surplus for both aesthetic and timber quality benefits.

- At Forest Design Plan review consider further boundary improvements to forests in zone including land swap deals to improve most visually intrusive edges where appropriate.

- Manage and extend Upland Oakwoods according to HAP. In these areas nature conservation will be the prime objective.

Detailed below are the objectives of the Cumbria High Fells management zone (highlighted in blue), and how the implementation of the revised Parkwood Bassenthwaite FDP will deliver against the objectives.

Forestry for rural development

Main conifer species will be Sitka spruce, Larch, Douglas fir and Scots pine which grow fast and yield high quality timber when planted on appropriate sites. Do not replant with Western hemlock, Western Red Cedar or Grand fir, as there is poor demand from saw millers, and replace with other species. At FDP revision felling will target the early removal of Western hemlock where this does not significantly compromise other objectives to minimise problem of vigorous natural regeneration. The only exception to the above will be the retention of feature trees around the main visitor facilities.

Presumption to thin all areas of WHC 3 and below (and more sheltered WHC 4). If necessary thin steep areas at zero surplus for both aesthetic and timber quality benefits.

Implemented through

- Clearfelling of Western hemlock and other dense shading species such as Western Red Cedar.
- Restocking through natural regeneration of broadleaved species with planting over some of the clearfelled area.
- Thinning although primarily for conservation purposes to stimulate broadleaved regeneration will yield some high quality larch and Douglas fir. On the steeper slopes at the eastern end where access is difficult it may be necessary to thin at zero surplus.

Forestry for recreation, access and tourism

Main focus of formal recreation provision and future development will be at Whinlatter Forest Park which is now managed as a single entity with Dodd Wood.

Apply continuous cover management systems to stands of Douglas fir on lower elevation sites, particularly near recreational facilities. Preference to regenerate naturally with planting as last resort. Retain some big conifers indefinitely at Whinlatter.

Thin to improve visual amenity around main recreational facilities and at net cost if required.

In timber marketing and operations management aim to minimise disruption to recreational facilities, particularly forest walks at Whinlatter/Dodd. Market timber from Whinlatter as a long term contract to achieve greater control.

Implemented through

- Improvement of the visitor experience by removal of heavily shading conifer species and encouraging growth of broadleaved species.
- Maintenance of access points, rights of way and permissive paths for visitors using thinning opportunities to improve visual amenity.
- Application of continuous cover management systems for the future native woodland.

Forestry for conservation and environment

At FDP review consider further boundary improvements to forests in zone including landswap deals to improve most visually intrusive edges where appropriate.

Consider re-aligning top boundary fences at FDP review to improve visual appearance of top margins e.g. Ennerdale, Dodd.

Manage and extend Upland Oakwoods according to HAP. In these areas nature conservation will be the prime objective.

At Matterdale and Blengdale create permanent network of open space/broadleaves at restocking so that average coupe size can be reduced in next rotation.

Work in partnership with tenant farmers to improve conservation and landscape value of farmland and open fell. In general, reduce grazing pressure from sheep to improve heathland condition.

Through a partnership with the National Trust and United Utilities develop a long term vision for the whole Ennerdale Valley based on the principle of utilizing natural processes and reflect this in the FDP, activities and operations on the FC landholding. This is a very long term, pilot scheme which has the working title “Wild Ennerdale”. There will be considerable consultation with stakeholders.

Particularly high archaeological interest at Ennerdale to be protected.

Implemented Through

- Improvement of harsh boundaries through felling and restocking.
- Protection of veteran trees.

- Development of new native woodland.
- Enhancement of riparian habitats.
- Longer term retention of some conifers e.g. larch and Scots pine as a stable woodland habitat which will benefit a range of woodland species including red squirrels.
- Protection of archaeological features.

Delivery against National Policy " A Strategy for England's Trees, Woods and Forests"

The Strategy for England's Trees, Woods and Forests (ETWFS) replaced the England Forestry Strategy as the core policy for forestry in England in 2008. The strategy has three themes - Communities and Places, Land and Natural Environment and Working Woodlands.

Detailed below are the objectives of the ETWFS (highlighted in blue) grouped under its three themes and how the implementation of the revised Parkwood Bassenthwaite FDP will deliver against the objectives.

Communities and Places

- involving local people in planning, managing and using local woodlands and the trees in streets and green spaces, to help achieve more cohesive communities and to show how individuals can contribute to environmental sustainability;
- making it easier for people to use and enjoy woodlands particularly in ways that benefit their physical and mental health, learning and personal development;
- creating liveable neighbourhoods, towns and cities by using trees and woodlands as part of the green infrastructure which frames and connects urban and rural areas, improves the quality of a place, and regenerates brown field and derelict land;
- using trees and woodlands to help minimise the impacts of climate change in built-up area

Implemented through

- Continuing to use temporary signing as ways of updating the local community of operations and activities.
- Providing the Forest Design Plan in adobe acrobat format through a website page dedicated to this forest.
- Local community involvement through 'Woody Workdays' a project run by the Bassenthwaite Reflections Community Woodlands programme will help to control Western hemlock regrowth.

Land and Natural Environment

To create, expand and maintain a network of sustainably managed trees, woods and forests that are resilient to climate change and make a full contribution to:

• protecting and enhancing our woodland habitats and associated species and facilitating their resilience and adaptation to climate change;

• safeguarding, enhancing and celebrating the characteristic elements of rural and urban landscapes and their cultural and historic values;

• maximising the full range of ecosystem services provided by trees, woods and forests, including the protection of soil and water resources now and in the future, as needs change.

Implemented through

- Ecological site classification used to plan choice of future woodland species.
- Enhanced riparian habitats by removal of conifer species.
- Forest Design Plan process based around understanding the importance of sense of the place
- Protecting and enhancing the existing ancient semi-natural woodland forming wildlife corridors with neighbouring woodlands.
- Future management by continuous cover systems reduces ground disturbance and therefore carbon emissions, and provides a more stable woodland environment.

Working Woodlands

The Government's objectives for this Strategy can only be delivered by a healthy woodland and forestry sector with viable businesses actively engaged in sustainable management and processing at national, regional, sub-regional and local level. This will require:

• the whole sector to have the expertise and capacity to ensure that sustainable management of woodlands delivers public benefits alongside business profitability. To achieve this, partnership programmes will involve the forestry, arboricultural, silvicultural, recreation, timber processing industries and related business sectors;

• innovation to develop new markets and modernise supply chains and infrastructure;

• Government resources targeted at the provision of public goods and at developing the capacity of the sector to adapt to future needs and diversify, creating a flexible industry run by well-trained people;

• substituting wood products for fossil fuels and other materials, as a contribution to UK targets for reducing greenhouse gas emissions

Implemented through

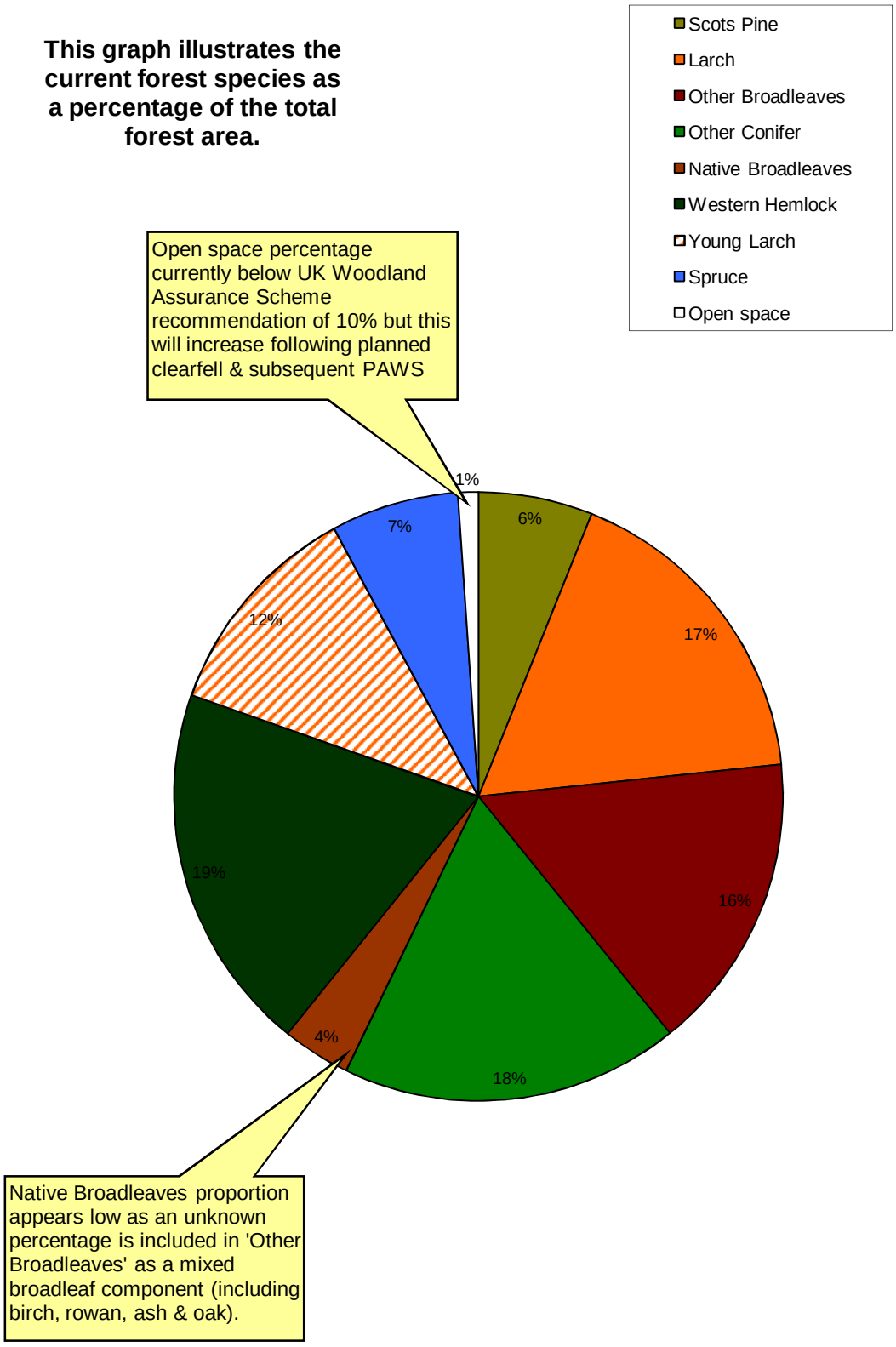
- Exploring opportunities of working with the local community to increase the use of woodfuel.
- Preference for employing local contractors where possible.

Graphs

The following graphs illustrate the percentage split of current woodland species and land use, future felling phases and future woodland species and land use. These help to assess the plan against the UK Woodland Assurance Scheme guidance and ensure that the plan is balanced and will deliver the objectives set out earlier.

Current Species Area as a Percentage of the Total Forest

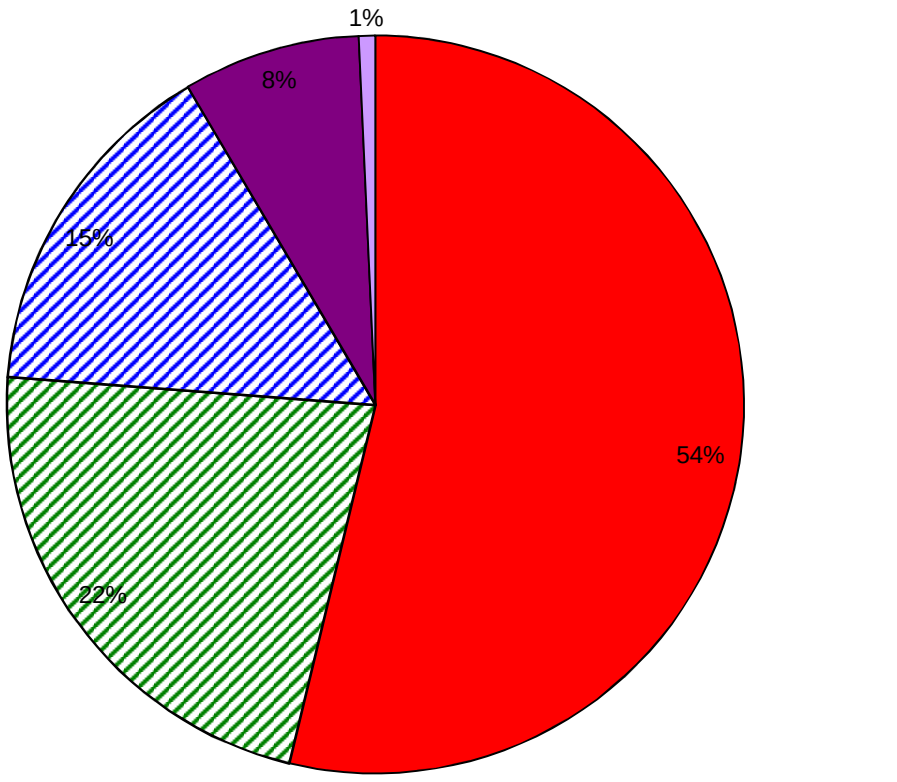
This graph illustrates the current forest species as a percentage of the total forest area.



Future Management Prescriptions as a Percentage of the Total Forest

This graph illustrates the future management proposals as a percentage by area of the total forest

At 53% the clearfell area proposed for 2012-2016 is outside the UK Woodland Assurance standards of not felling more than 25% of the forest area in any 5 year period.
This is deemed necessary in order to remove the vigorously self seeding Western Hemlock. Additionally, most of this area is overstocked & unstable. Attempts to thin the crop would leave the remaining stand vulnerable to windblow.



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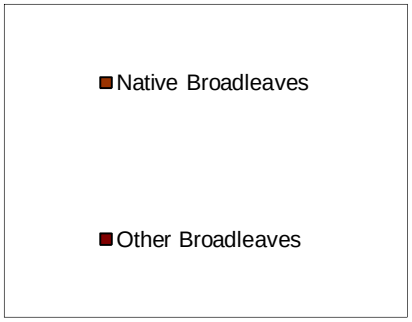
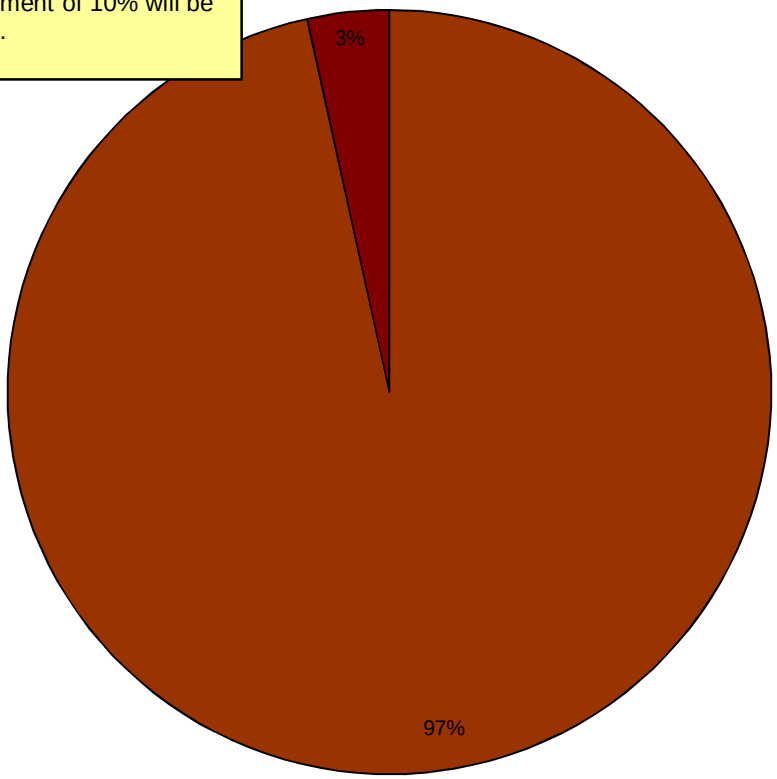
Restocking Species as a Percentage of Total Area

This graph illustrates the future species percentages as a total of the plan area



A component of non-native broadleaved species & conifer species of no more than 10% may be accepted unless they pose a threat to the native species. It is difficult to assess the proportion of open space in this woodland for the future but the UKWAS requirement of 10% will be the target figure.



Restocking proposals reflect PAWS restoration management in accordance with UK Woodland Assurance (UKWAS) requirements. Native woodland makes up the majority of the site & this will be achieved through natural regeneration utilising the existing seed source & planting where necessary.

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