

# High Stand Forest Design Plan



## Text & Graphs

## Summer 2009



## Contents

The plan is presented in four separate sections:-

- Text
- Viewpoint Photos
- General Photo Survey
- Maps

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

- 1) Understanding High Stand
- 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 High Stand	<p><b><i>Text</i></b></p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Survey</li> <li>• Achievements during last plan period</li> </ul>
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Implementing the Vision	<p><b>Text</b></p> <ul style="list-style-type: none"> <li>• Objectives of the Plan</li> <li>• Delivery of the North West England Forest District Strategic Plan</li> <li>• Delivery against National Policy “ A Strategy for England’s Trees, Woods and Forests”</li> <li>• Objectives of the Plan</li> <li>• Graphs</li> </ul>
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Summer 2009

### **Introduction**

High Stand lies in the Eden Valley six miles south west of Carlisle between the villages of Armathwaite & Cotehill. Acquired freehold and extending to 250 hectares, the woodland originally formed part of the old Inglewood Forest and was already partially afforested when purchased by the Forestry Commission in 1954. The first Forest Design Plan was approved in 2002.

The woodland is relatively flat having few features of topographical interest and so does not form a major landscape feature. It is mainly visible from the surrounding villages and network of connecting B roads.

### **Survey**

High Stand is well used by both the local community for informal recreation such as dog walking and horse riding and also by visitors of Englethwaite Hall Caravan Park. The forest roads and rides are supplemented by permissive paths or 'desire lines' that together form an extensive network covering most of the woodland. A circular walk around the fishing ponds links in with the public footpath that leads into the woodland from the vicinity of the Caravan Park. There are no waymarking facilities and formal provision for recreation is not considered appropriate although High Stand is one of several local woodland walks featured in 'Woodland Welcome' and produced by the former East Cumbria Countryside Project ([www.eccp.org.uk](http://www.eccp.org.uk)). A public car park is provided which is fairly well used but unfortunately is also subject to anti-social activities such as fly tipping, general littering and occasional arson attacks on abandoned cars. Cars regularly use the Blackmoss Pool woodland entrance and there is also some roadside parking.

Much of the conservation interest lies around the woodland's network of ponds and its function as a wildlife corridor to the adjoining ancient woodland and the River Eden candidate Special Area of Conservation (cSAC) via High Stand Gill. The surrounding overmature crop of broadleaves and mixed conifer species adds to the value of the habitat which has the potential to support several notable European Protected Species and UK Priority Species. The series of ponds formed from flooded gypsum mining sites and located in the north of the forest are let to a fishing club for coarse fishing. High Stand comprises a wide variety of species of both conifers and broadleaves and although most crops were planted 1950-1960 the retention of over mature trees as well as recent felling and restocking has led to a wide and varied age class distribution. Broadleaves are also regenerating freely across the whole of the woodland with birch being particularly prolific and including rowan, oak, ash, holly and hawthorn. The age and species diversity attracts a wide variety of bird species and a series of bird boxes are monitored on a regular basis. A number of bat boxes are also situated within the woodland. Forest road edges are regularly cleared to provide a graded forest margin which supports a healthy butterfly population. An annual monitoring programme has been carried out for some years and provides a fascinating historical and ongoing record into species and population trends.

There are several active badger setts, deer and foxes are present and the forest supports a healthy red squirrel population.

The woodland occupies very gentle slopes either side of High Stand Gill with an altitude of 100 to 170 metres above sea level and a full range of aspects. Southern and eastern sections of the woodland are more sheltered with better soils compared with the western half of the forest where soils are wetter peaty gleys and the forest edge is more exposed to the prevailing south westerly winds.

There are no known designated archaeological features other than an old stone dam associated with High Stand Gill in the north of the woodland and an enclosure cropway partway over the north east

boundary. As crops grow and felling proceeds other features of interest may be uncovered and will be protected as they are found.

The most direct timber haulage route onto the A6 is the B road to Low Hesket avoiding the villages of Armathwaite, Cotehill, Cumwhinton and Wetheral. Forest road and terrain classification is good throughout and generally poses no problems for mechanised harvesting. The main CAT1A forest road passes through the middle of the forest serving most of the woodland area. Additional access to crops programmed for clearfell is required on the western edge and there are wetter areas that are susceptible to ground damage.

### **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.
- Manage forest operations in sympathy with the environment with coupes that improve the age diversity of the woodland and reflect the scale and shape of the landform.  
No felling has taken place since the Forest Design Plan approval in 2002 due to extensive windblow clearance operations in this woodland and other parts of the district taking priority. Coupe shape and scale and subsequent impact on age diversity over this period has been dictated by the wind damage inflicted from the storm of January 2005 and continued losses from exposed edges that are not windfirm.
- Maintain and enhance the conservation value of the forest by managing sensitive areas as continuous cover and accepting natural regeneration of birch and other native broadleaves  
No continuous cover thinning management has taken place due to the extensive clearance operation resulting from the storm damage of January 2005 taking priority. Prolific natural regeneration of birch and other broadleaves has occurred and been accepted.
- Bring to the market all the parcels of timber identified in the felling plan with the aim of maximising the financial return. Maximise all opportunities for thinning in conjunction with the district strategy for thinning  
All windblown timber has been brought to the market except very small isolated pockets and any windblow that has occurred since. No thinning has taken place due to the extensive clearance operation resulting from the storm damage of January 2005 taking priority.

### **Other Achievements**

- Areas around the conservation ponds have been opened up creating glades and a more open riparian environment by removal of excessive woody growth and other vegetation.
- The majority of restocked areas of Sitka spruce and Douglas fir have been cleared of broadleaved intrusion to control competition.
- Areas of previously cleared windblow which were gradually infilling with broadleaved regeneration, and identified as having potential for restocking with conifer species, have been mulched in preparation for mounding and then replanting.

- Forest road edges have been flailed annually resulting in an increasingly diverse floral and invertebrate population.

### **Appraisal**

Due to the surrounding topography, High Stand does not form a major landscape feature externally. Existing broadleaves on the outside edges of the woodland mimic the hedgerows and fragmented woodlands in the wider environment. Internal aspects are an important consideration with the network of rides forming an important feature and broadleaves already present alongside forest roads and paths will be retained and encouraged to fringe the planted conifer areas and enhance the visitor experience. It is anticipated that the level of usage will continue as before and recreation will remain low-key and informal. It is proposed that options for the main car parking be reviewed in light of the anti-social activities that take place there.

The forest is already varied in terms of species and age class. Management proposals should aim to protect and enhance these aspects particularly in light of the significant area cleared by the recent windblow and which has been restocked through planting of conifers and natural regeneration of native broadleaves resulting in a fairly even aged crop.

It is proposed to reclaim and restock some naturally regenerated areas with a mixture of larch and Douglas fir where it is possible to do so and this has been scheduled for spring 2010. High Stand is a highly productive forest capable of producing high quality softwood timber. Both these species grow well on the site and areas planted following the last windblow episode in 1998 display vigorous growth. Where broadleaved regeneration is established, these will be left to grow on and one option is to harvest the crop at around 20 years for the woodfuel market.

Felling proposals take into consideration the areas already cleared by past storm damage but it is necessary to extend a south-westerly felling coupe to include overmature and unstable crops and also work to a windfirm boundary. This coupe also includes overmature and unstable trees left standing from past storm damage along the southern boundary. It is considered appropriate to include some broadleaved edge trees in this clearfell as although they are visually pleasing, they will be left exposed and vulnerable to windblow once the conifer crop behind is removed and pose a risk to road users. A remaining seed bank should ensure that this broadleaved edge quickly regenerates and some trees will coppice.

There is an opportunity to extend this clearfell into the conservation pond area, removing the conifer crop while retaining the broadleaves and coppicing the alder to the benefit of the butterfly population particularly fritillary species.

It is not advisable to retain Corsican pine and Scots pine crops too far into the future, as Corsican pine is affected by Red Band Needle Blight meaning future growth will be increasingly poor. Additionally, Scots pine growth has not responded vigorously to past thinning and the understorey has become dominated by birch.

Areas designated for continuous cover management are considered appropriate. It is proposed to extend this area further to include crops both sides of the forest road leaving the main car park through to the conservation ponds area and on to the northern part of the woodland adjacent to the Caravan Park. This will improve the visitor experience by always having a woodland presence and reducing the visual impact of clearfelled areas.

Access options for harvesting operations into the proposed south-westerly felling coupe are being considered with advice from our civil engineers.

### 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 forest
- Monitor levels of natural regeneration and manage accordingly
- Take into account developing advice on adapting to and mitigating against the impacts of climate change

#### The next 5 years

- Maintain and enhance the conservation area
- Achieve the proposed felling and restocking plan
- Control broadleaved regrowth along permitted paths
- Control broadleaved regrowth in restocked areas
- Establish access to the south western felling coupe
- Address anti-social issues at the main car park

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**

High Stand lies within the Eden Valley 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.

- Presumption to thin all areas
- Maintain as quiet, appropriate and low key recreation for locals
- Create permanent network of open space and broadleaves. Through the FDP restructure even aged woods by phased felling

Detailed below are the objectives of the Eden Valley management zone (highlighted in blue), and how the implementation of the revised High Stand FDP will deliver against the objectives.

#### ***Forestry for rural development***

Concentrate on growing high yielding Scots pine as the main species. Presumption to thin all areas.

Implemented through

- On this site Scots pine is not particularly high yielding. It has not demonstrated significant growth since its last thinning intervention. Restocking will be with larch, and Douglas fir where suited. Both of these species are suited to the site and both are displaying excellent growth rates since their planting post 1999
- Timely thinning operations will be carried out on post 1999 conifer crops to encourage stability as well as yield
- Thinning is a pre requisite to successful continuous cover management and will aim to deliver hardwood timber probably for woodfuel but opportunity should be taken to identify other markets

#### ***Forestry for recreation, access and tourism***

Maintain as quiet, appropriate and low key recreation area for locals

Implemented through

- Improvement of the visitor experience by encouraging growth of broadleaved species along paths and external boundaries to soften the harsher effects of planted conifer crops
- 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 through the more heavily recreated section of the woodland



### ***Forestry for conservation and environment***

Create permanent network of open space and broadleaves especially oakwoods which are a feature of the Eden Valley.

Through the FDP restructure even aged woods by phased felling and improve forest boundaries so that they fit better to the landscape.

#### Implemented Through

- Maintaining wide forest road verges through flailing of ground vegetation and excessive woody regrowth
- Accepting open spaces within areas of natural regeneration and maintaining glades within the conservation area and other riparian zones
- Targeting oak as a main species within the continuous cover areas by removing competition from other species such as birch
- 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
- Five year felling periods aim to restructure the woodland taking into account the windblow damage and future susceptibility, over mature unstable crops and RBNB

### **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 High Stand 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 FDP in adobe acrobat format through a website page dedicated to this forest
- Facilitating events such as Forest School

### ***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 invasive exotics such as conifers
- FDP process based around understanding the importance of sense of the place
- Protecting and enhancing the existing minimal intervention areas and safeguarding veteran trees
- Creating wildlife corridors that link in 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

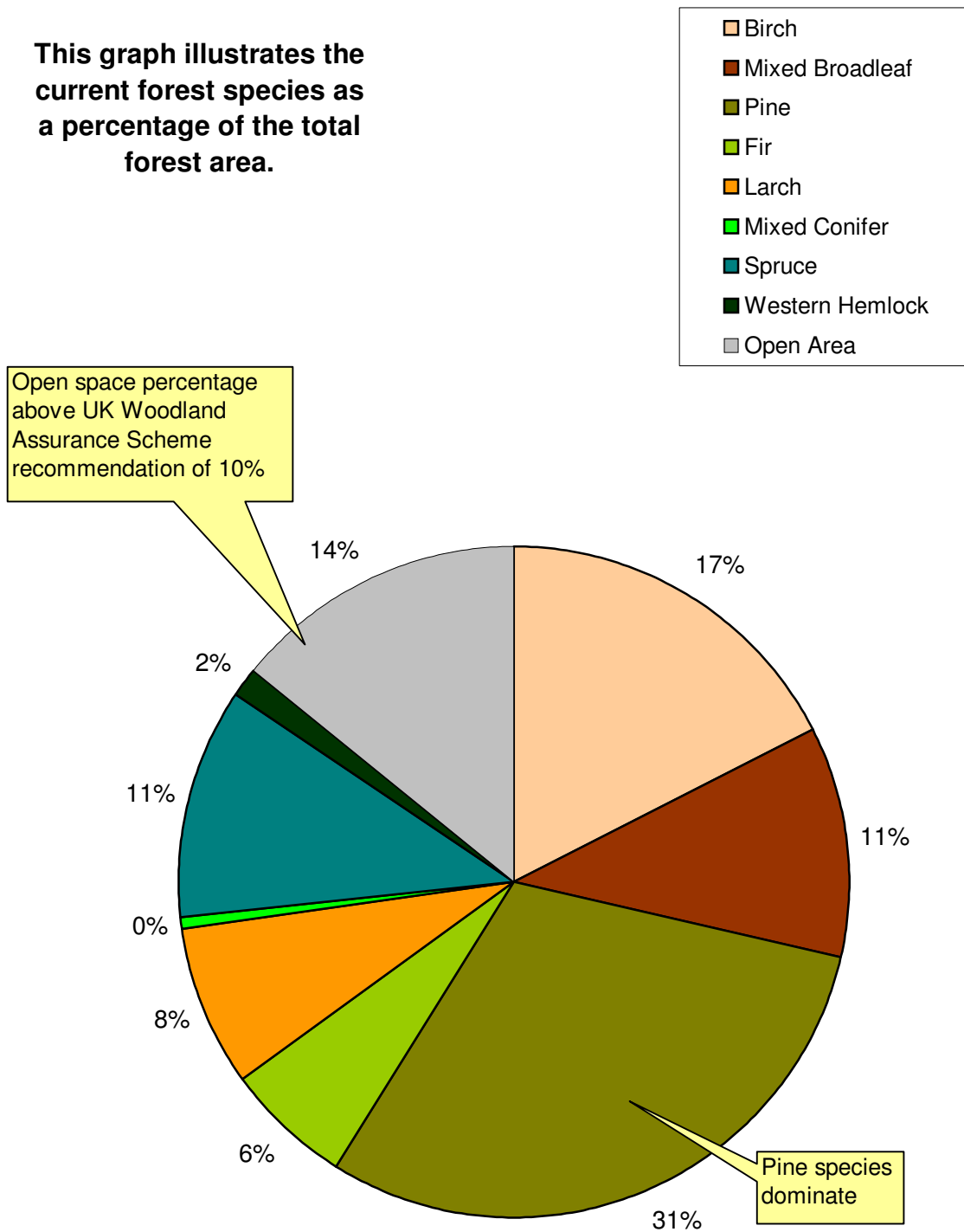
- Exploring opportunities of working with the local community to increase the use of woodfuel
- Preference for employing local contractors where possible

### **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

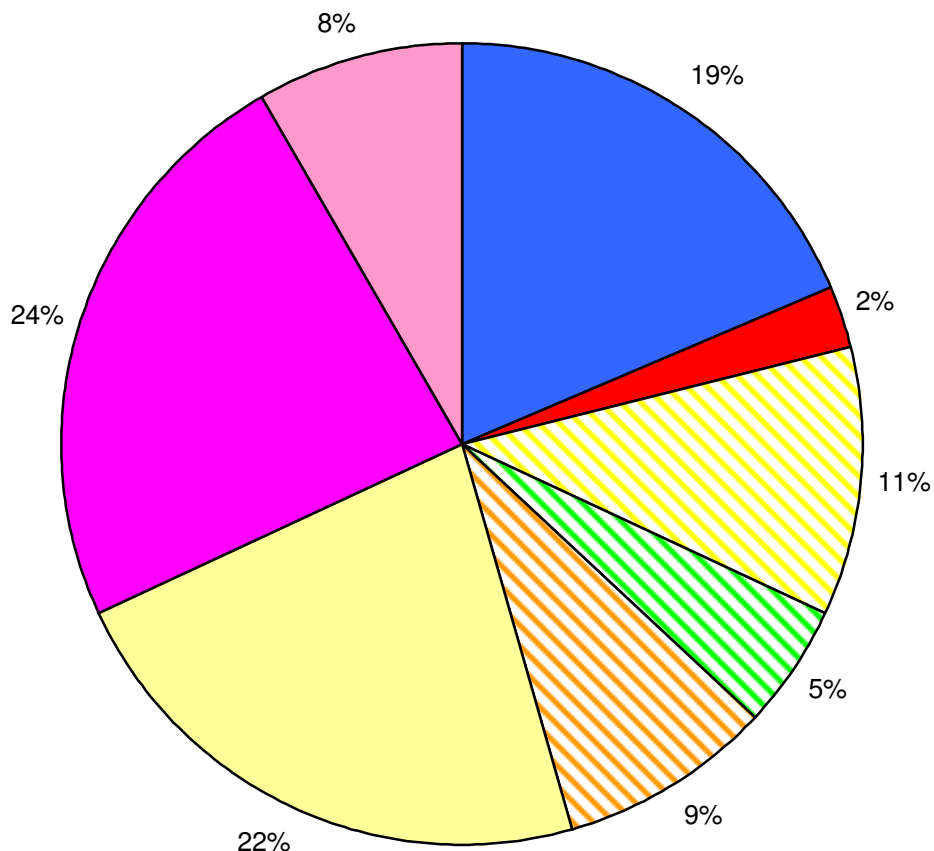
This graph illustrates the current forest species as a percentage of the total forest area.



## Future Management Prescriptions as a Percentage of Total Forest

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

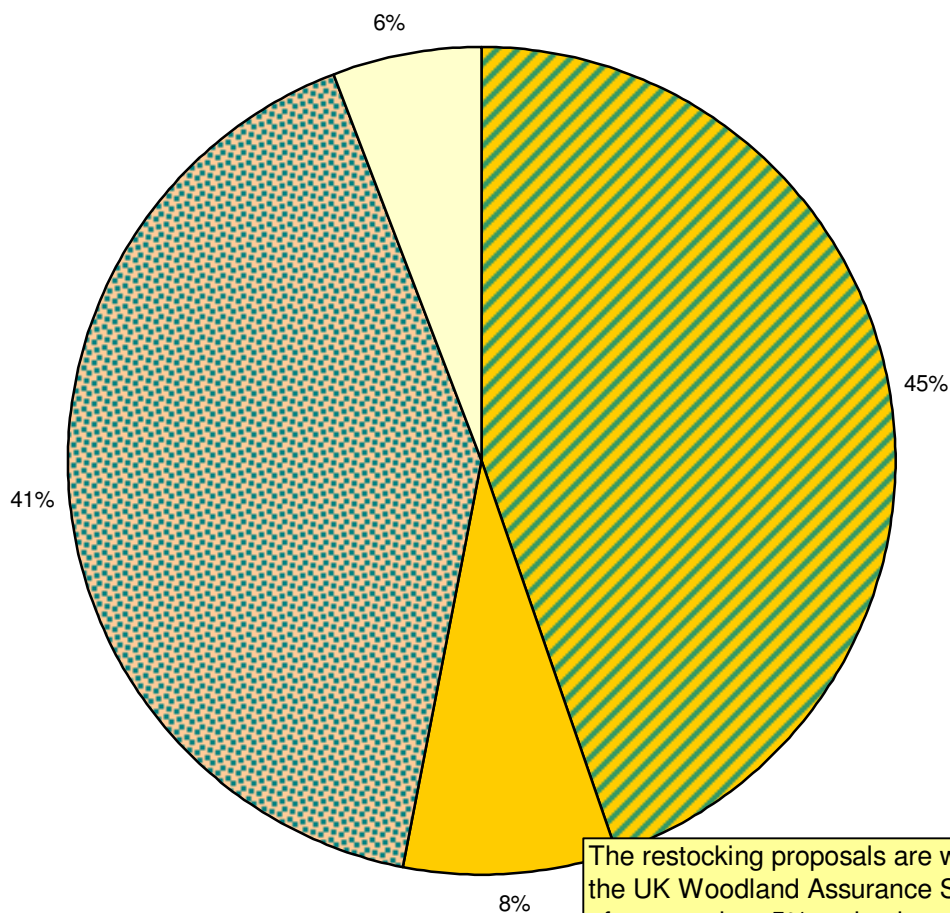
The harvesting proposals are within the UK Woodland Assurance Standards of not felling more than 25% of the forest area in any 5 year period.  
The area designated as continuous cover will increase by approximately 10% as some planned clearfell areas will be future continuous cover in the next rotation.



## Restocking Species as a Percentage of Total Area

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

-  Larch & Douglas fir
-  Larch
-  Mixed Broadleaves & Mixed Conifer
-  Open Area



NB. This graph shows primary species only. All restocking will include approx 10-20% broadleaves and other species, eg Sitka spruce & Scots pine

The restocking proposals are well within the UK Woodland Assurance Standards of greater than 5% native broadleaves, 20% secondary species and no more than 65% primary species. The dynamics of natural regeneration & also continuous cover management will ensure that open space will exceed 6% fulfilling UKWAS. Road & road edges account for 12 ha.