Parson's Park Forest Design Plan. February 2013









Planning context

This plan sets out the Forestry Commission's plans for Parson's Park, near Caldbeck. It replaces the previous plan approved in June 2003 and covers the period 2013 to 2023.

Introduction

Parson's Park is 37.8 ha in size and lies one kilometre to the east of Caldbeck village, just outside the northern boundary of the Lake District National Park. The land was originally acquired leasehold from the Church Commissioners and the majority of planting took place in 1956. In 2000, the lease was purchased and the land is now entirely owned freehold.

Analysis of previous plan

The previous plan included four main objectives. These are summarised in the table below, together with an assessment of how well these objectives were achieved

Objective

1. Complete all work in accordance with the UKWAS, the England Forest Strategy and the Forest District Strategic Plan

All the work specified in the plan has been completed to a good standard.

2. Aim to revert the woodland back to Ancient Semi-Natural Woodland through the implementation of phased clear-felling of the mature crops. Wherever possible, re-establish broadleaved species which are native to the site through natural regeneration.

The area felled and left in 2000 is now 100% stocked with native woodland, and the area felled in 2004 is 70% stocked, with every indication that regeneration is still progressing. The 2011/2012 felling is being left to regenerate naturally. There is a good seed source surrounding the site, so it is highly likely that regeneration will be successful here too.

3. Plan and implement all forest operations in sympathy with the environment, taking into account the sensitive nature of the site and especially the proximity of the river Cald Beck.

The large felling operation on the lower slopes was carried out successfully, with no run-off into the river.

4. Improve the recreational value of the forest by widening out paths and accepting a mosaic of natural regeneration of birch and other native broadleaves along with open space.

The path running from the south west corner up through the wood has recently been widened and cleared, in consultation with the countryside rangers. The first section now runs through an attractive mosaic of young birch, gorse and open ground. The steep section of path (part of the Cumbria Way) running up from the river has been upgraded to a high standard although the rest of this route remains wet and muddy.

Part 1. Background Information

Characteristics of the site

Parson's Park is a fertile and productive site. It occupies a south facing slope, rising from 150m at the Cald Beck to a maximum elevation of 250m on the northern boundary. The soils are mostly free draining brown earths, apart from the upper slopes in the north-western corner where surface water gleys predominate. The risk of windthrow is low to medium over most of the area (windthrow hazard classes 2 to 3), but in the wetter gleyed areas this rises to WHC 4.

Slopes are moderate to steep, with some particularly steep sections above the river.

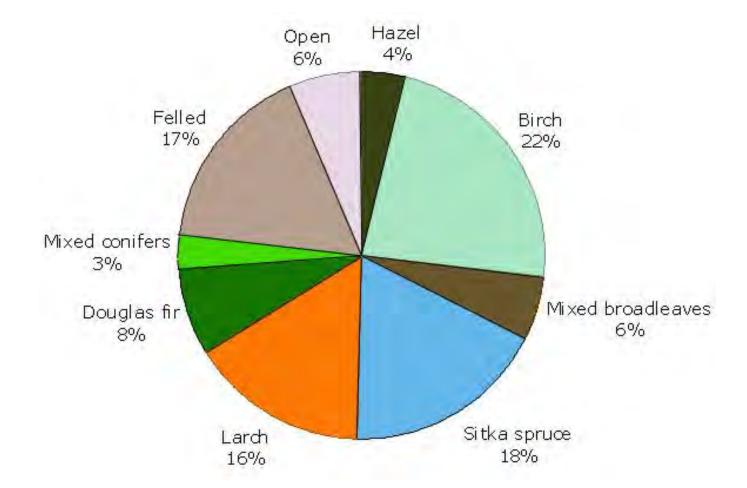


Recently felled area on the steep slope above the river, with mature fir and larch above.

Current Woodland composition

Present species.

45% of the woodland area is occupied by conifers, principally Sitka spruce, Japanese and hybrid larch and Douglas fir. This compares with 77% in 2003. 6% of the woodland is currently open ground, some of which is expected to regenerate naturally with broadleaves over the next few years. The large area (17%) of felled woodland awaiting regeneration represents the recent felling coupe on the lower slopes leading down to the river.

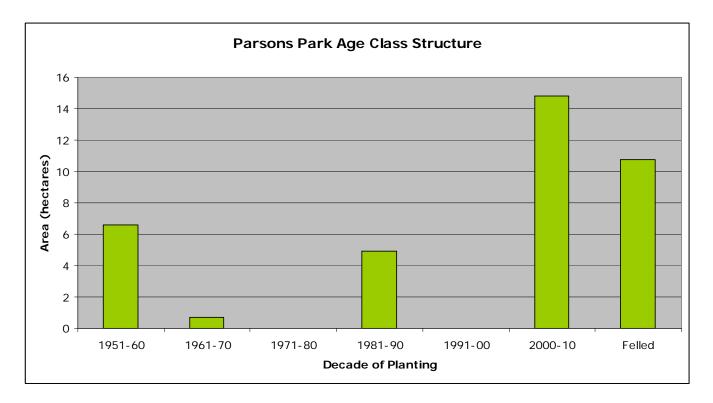




Remnant of Ancient Semi-Natural Woodland with well developed ground flora



Sitka spruce, planted in 2000 with extensive natural regeneration of native broadleaves.



Much of the 1956 planting has now been felled, with approximately 7 hectares of mature conifer remaining.

Timber potential

In the short term, there are around seven hectares of larch and spruce that could either be felled or thinned. Once these have been removed, conifer production on the site will be low for several decades. In addition to this mature timber, there are about five hectares that could be thinned now and a further fourteen hectares of spruce and Douglas fir will reach the thinning stage in around ten years time.

In the longer term, production will switch to broadleaved timber. Depending on future management of the woodland, this could be mainly firewood but there is the potential to develop a higher quality broadleaved resource on some parts of the site.

Access and roading

Access is via Low Parkhead farm, to the north of the wood. The reserved access road crosses 700 metres of farmland and extends a further 400 metres into the wood. Beyond this there a further 700 metres of track, used for the recent felling, that could potentially be upgraded to road standard if required. The road system is adequate for the site.

The section of public road leading from Low Parkhead Farm to the junction with the B5299 is classified as a Consultative Route by the Cumbria Timber Transport Group. This means that the local authority has to be notified before harvesting operations take place, so that working methods can be agreed with them.

Although there is a reserved access route into the bottom of the wood, this is not usable and no road has been constructed here. There is no prospect of building such a road, due to the narrow gaps and tight bends in Caldbeck village.

Landscape

Parson's Park lies just outside the Lake District National Park but, due to the topography, is mostly viewed from within the park The wood lies on the lower slope of Warnell Fell, just inside the Natural England "Cumbria High Fells" Landscape Character Area. The landscape in this part of Cumbria is shaped by the Skiddaw Slates which have been eroded to form smooth, steep-sided rounded humps such as Blencathra, Skiddaw, Carrock Uldale and Caldbeck Fells. Woodland in the immediate area tends to be small in scale, with a mixture of broadleaved and conifer plantations, native broadleaved woodlands and farm shelterbelts. Previous landscape issues in Parson's Park relating to the dominance of the conifer plantations have now been resolved due to a series of fellings and the wood fits much more comfortably into the landscape. This will further improve as the relatively large felling area above the river starts to green over and regenerate.

Biodiversity

The main areas of interest in the wood are the ancient woodland sites and the slopes leading down to the river.

The ancient woodland areas include mixed birch and ash woodland and hazel coppice with well developed woodland ground flora. The PAWS sites, particularly those planted with larch contain good remnant vegetation, including naturally regenerated broadleaved trees. Externally, the wood has good linkages to other ancient woodland sites and forms part of a habitat network.

The lower slopes are of particular importance with regard to the SSSI and SAC. The previous plan identified the potential negative effects of the conifers on these slopes and they have been removed in two felling phases. The area immediately adjoining the river has recovered well and now comprises a mix of open space and broadleaved woodland, while the more recent felling on the steeper slopes has yet to re-vegetate.

There is a red squirrel population in the woodland, which makes use both of the mature conifers and the broadleaved woodland. The wood does not fall into any of the red squirrel reserves or buffer zones.



The River Caldbeck SSSI/SAC and associated riparian habitats

Sporting and deer

The sporting rights, other than for deer and vermin, are retained by the Church Commissioners but have not been exercised for many years. Deer control is carried out by FC rangers. Control is difficult, due to Parson's Park being part of a network of small woodlands, and roe deer populations are consequently relatively high.

Heritage

There are no recorded historic features in the wood. The presence of historically worked coppice and a small quarry with associated track indicates former land uses. There are suggestions that a feature exposed in the recent clear fell may be the remains of an old lime kiln but this has yet to be confirmed.

Communities and recreation

The woodland is mainly used by local people for quiet recreation, such as dog walking and horse riding. The bridleway that runs through the wood forms part of the Cumbria Way and the steeper section of this has recently been upgraded to a high standard. Some paths are prone to poor drainage and to becoming overgrown with gorse and bramble.

The access to the woodland passes through gated fields, and care needs to be taken when taking vehicles in and out of the site.



The improved section of the Cumbria Way.

Part 2. Analysis and Concept

The factors outlined in Part 1 present some opportunities and issues. These are summarised below.

Factor	Opportunities	Issues
Landscape	PAWS restoration will increase the broadleaved component of the wood. Now that the area above the river has been felled, smaller scale working will be possible in future.	The recent felling has left a very straight internal edge in the wood, but this will soften in time.
Timber	The site is fertile and would be capable of producing good quality broadleaved timber, given the correct management	The production of coniferous timber will reduce greatly, reducing the economic potential of the wood.
Ancient Woodlands	There are good opportunities for full restoration of the PAWS areas. There is good linkage to neighbouring woodlands, some of which are ASNW	
Deer		High deer numbers mean that good protection, either fencing or tubes, will be necessary to protect any planted broadleaves.
SSSI/SAC	Now that the conifers have been removed from the steep slope above the river, a native woodland buffer can be established.	Care will be needed when harvesting near the small water-course on the western boundary
Red squirrels	Thinning rather than felling the remaining conifers will maintain a seed supply in the short to medium term	Further replacement of conifers with broadleaves will reduce the supply of small seeds, making the wood more suitable for grey squirrels at the expense of red.

Consideration of these opportunities and constraints has led to the development of the following broad principles for the design plan.

- 1. The previous policy of long term conversion to native woodland, both within and outside the PAWS areas, is still appropriate, and should be continued
- 2. The steep slope above the river Cald Beck should be managed primarily for water quality
- 3. Retaining a red squirrel population in the medium term and following national guidance on PAWS restoration means that continued thinning of the mature conifers rather than clear-felling (as in the old plan) is a more suitable option
- 4. The young plantations of Sitka spruce and Douglas fir outside the PAWS areas can continue to be managed for timber production over the course of the next rotation, but incorporating naturally regenerated broadleaves into the canopy wherever possible. As these plantations mature, managing them on a continuous cover basis rather than clear-felling will be appropriate.
- 5. The current low key informal access and recreation arrangements continue to be appropriate
- 6. As the wood becomes more broadleaved in nature, timber production will switch towards these species. In the next rotation, harvesting will be on a smaller scale than previously, with "little and often" being preferred to the relatively large operations of recent years.

Part 3. Objectives

The principle above can be expressed as a series of long term objectives for Parson's Park.

- 1. Continue restoration of the PAWS areas through thinning and natural regeneration
- 2. Production of conifer timber in the medium term through regular thinning
- 3. Protection of the Caldbeck SSSI and SAC through restoration of native woodland
- 4. Conversion of all conifer stands to native broadleaves over a long timescale
- 5. Maintenance of a conifer seed source for red squirrels in the short to medium term

Part 4. Proposals

Harvesting and restocking.

The previous plan included a series of clear-felling operations to remove conifers from the site. The analyses of factors above, and the revised objectives for the wood, have led to a revision of this policy and a move towards a continuous cover policy for the whole wood. Due to the variety of stand types present, this policy will include a series of different operations in different parts of the wood, and these are outlined below.

Thinning Phase 1.

<u>Mature larch stand.</u> (Planted 1956) This is part of the PAWS area and has well developed field and shrub layers. This includes natural regeneration of native tree species, including birch, ash and hazel. A series of gradual thinnings will open up this stand to continued regeneration.

<u>Mature spruce/fir stands.</u> (Planted 1956.1961). Also part of the PAWS area, these stands have much less well developed under-storeys due to the denser shade. They will be treated with a series of thinnings combined with small group fellings, to create opportunities for regeneration.

<u>Young larch/broadleaves stand.</u> (Planted 1989). This is also part of the PAWS area and is approximately 30% broadleaved already. The next thinning will increase the percentage cover to at least 50% broadleaves, and subsequent thinnings will remove the conifers altogether.

Thinning Phase 2.

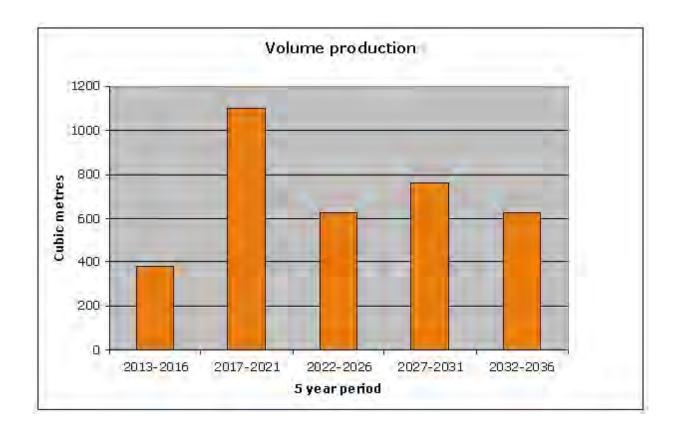
<u>Sitka spruce/birch and Douglas fir/birch stands.</u> (Planted 2000) These plantations all lie outside the PAWS areas. Some sections include significant amounts of naturally regenerated broadleaves, with others being pure conifer. The proposal is to start thinning here within the next ten years, with the aim of producing a mixed coniferous/broadleaved stand. This stand will then receive regular thinnings over the successive decades. As the stand matures, opportunities will be taken to open up gaps to allow natural regeneration. It is anticipated that a conifer element will remain for at least 40 or 50 years, but that the successor stand will be wholly or predominantly native broadleaves.

Thinning Phase 3.

The lower slopes, from which the mature conifers have been recently removed, are currently a mixture of young broadleaves and open ground awaiting regeneration. In the short term, no work is planned for these areas. It is fully expected that these areas will regenerate without the need for planting, but they will be monitored over the next few years and, if necessary, supplementary planting of locally native broadleaves will be carried out.

Thinning will not start in these areas until the new stand closes canopy, probably in around 20 years.

In the longer term, as the wood gradually becomes more broadleaved in nature, it is not intended that harvesting operations will stop. The site is fertile, with reasonable access and should be capable of producing regular supplies of broadleaved timber, either for firewood or for higher value markets.



Part 5. Monitoring plan

Objective	Criteria for success	Assessment	
Continue restoration of the PAWS areas through thinning and natural regeneration	The proportion of conifers in the PAWS areas is gradually reduced in each thinning, and native woodland flora develops in the bare areas.	SCDB assessment at the 5 year review and ten year resubmission	
Production of conifer timber in the medium term through regular thinning	All conifer areas are thinned at least once, preferably twice before the next resubmission	5 year review and 10 year resubmission	
3. Protection of the Caldbeck SSSI and SAC through restoration of native woodland	Native woodland re- establishes on the felled area above the river, reducing the risk of run-off.	5 year review of SCDB shows extensive regeneration taking place	
4. Conversion of all conifer stands to native broadleaves over a long timescale	Regeneration of felled and thinned areas is primarily with broadleaved species.	5 year review will determine whether regeneration is taking place and whether planting will be necessary	
5. Maintenance of a conifer seed source for red squirrels in the short to medium term	Mature stands are thinned rather than clear-felled.	5 year review.	

