

Plan Aims and Objectives

Issues

- Run-off from forests leads directly into a system of public drinking water reservoirs
- The current forest structure lacks species diversity
- Deer browsing is affecting our ability to restock with broadleaves and soft conifer species
- Prolific regeneration of Sitka spruce is impacting our ability to establish crops of other species and encroaching onto neighbouring property
- Run-off during peak flow periods has caused damage to infrastructure within the blocks and also to a section of public road in Glen Devon
- Flooding issues have occurred in communities on the River Devon downstream of the forest blocks
- Windblow has caused significant damage in Littlerig and Glen Devon
- Large scale woodland expansion is underway on the currently open hillsides surrounding Glen Devon and Littlerig
- Glen Sherup is a wedge of commercial conifer separating two native woodland restoration sites
- Parts of the road network, particularly in Glen Devon, are in a poor state of repair and some are surplus to requirement
- Steep ground, predominantly in Glen Sherup, presents a challenge for harvesting
- The forests are popular with visitors which has led to an increase in antisocial behaviour
- There is a potential conflict between the main timber transport route in Glen Sherup, and mountain biking
- There are a number of residential properties keyed into the periphery of the blocks
- Larch in the forests is often in intimate mixtures with other species, or isolated from the road network, presenting a challenge to felling in the event of infection by *P. ramorum*
- Glen Sherup particularly is predominantly brown earths and close to the A823, so is ideal for a diversity of productive conifers/broadleaves
- Soils are friable, and prone to damage, limiting type of harvesting machinery to smaller lighter machines. This has a knock on effect on the timing for harvesting.
- Black Grouse have been present at the top of Glen Sherup.
- Access for fuel deliveries to the telecoms mast in Glen Devon must be maintained

Management Aims

Aim 1

Plan management of the forests and land for the benefit of improved water quality and reduction of flood risk - The forest blocks sit almost entirely within a designated public drinking water catchment and upstream of flood prone OTA's on the river Devon. Management of diffuse pollution and peak flows will be of great benefit to local populations and national budgets.

Aim 2

Produce sustainable source of timber supporting local markets – Glen Devon and Glen Sherup are good sites for growing short rotation commercial conifer crops and are well placed to supply material to the Norbord plant at Cowie and the RWE biomass plant at Glenrothes as well as other local mills. Glen Sherup and the lower slopes of Glen Devon are predominantly brown earths and close to the A823 and A9. A diverse range of productive conifers/broadleaves would have easy access to markets.

Aim 3

Improve health and wellbeing of local residents and visitors through recreational use of the site - The forests provide access via the core path network to wider recreational opportunities across the Ochil hills. The forests are also increasingly popular for mountain biking.

Plan Objectives

- Look for opportunities to diversify current species mix
- Design shape and sequence of current and future coupes to minimise further risk of wind damage
- Design future forest structure that is not at odds with neighbouring land use when viewed at a wider landscape scale
- Link native woodland creation projects through Glen Sherup
- Plan fell and restock to reduce self-seeding where we don't want it but encourage it where it will help reduce restock costs
- Plan coupe shape and sequencing in steep ground areas
- Plan for operational access to larch crops to be in place in the event of *P.ramorum* infection being identified
- Ensure timely access is in place for forest operations
- Plan management operations to protect delicate soils
- Plan management operations taking account of possible adjacent residential properties
- Manage for Black grouse around Glen Sherup

Objective	Opportunity	Constraint	Concept	Zone
<p>Plan management of the forests and land for the benefit of reducing flood risk</p>	<ul style="list-style-type: none"> • Many currently open water courses could be planted to improve water retention and soil binding. • Glen Devon has WWF funded 'Slow the Flow' demonstration site. 	<ul style="list-style-type: none"> • Felling coupes in Glen Sherup sit directly above a drinking water reservoir. • Sections of forest road have been washed out during heavy peak flows, also a section of public road adjacent to Glen Devon has been damaged. • Flooding issues have occurred in communities on the river Devon downstream of the forest blocks. 	<ul style="list-style-type: none"> • Buffer all water courses and reservoir with permanent BLs with a mixture of rooting depths/types to prevent wash out of friable easily damaged soils. • Install 'leaky dams' at key locations to control run-off during peak flow events. 	<p>Whole Plan Area</p>
<p>Plan management of the forests and land for the benefit of improved water quality</p>	<ul style="list-style-type: none"> • The forests contain a number of currently open riparian areas that could be planted immediately. 	<ul style="list-style-type: none"> • Almost the entire plan area sits within a public drinking water catchment. • Felling coupes in Glen Sherup sit directly above a drinking water reservoir. 	<ul style="list-style-type: none"> • Create a robust buffer of permanent broadleaf woodland adjacent to the reservoir in Glen Sherup. • Buffer watercourses with broadleaf planting to aid soil binding and reduce silt run-off. 	<p>Whole Plan Area</p>
<p>Establish a permanent area of protection for the Glen Sherup Reservoir</p>	<ul style="list-style-type: none"> • In Glen Sherup the area between the forest road and reservoir/burn already has some BLs. Establishment of BL species in this area and along tributary watercourses would provide a permanent buffer for the water supplies. 	<ul style="list-style-type: none"> • SS grows prolifically and it will be hard to establish BL species if they are not managed out. • Deer have prevented the growth of BLs to date 	<ul style="list-style-type: none"> • In Glen Sherup, establish a BL buffer between the forest road and reservoir/burn, and along tributary watercourses. • Actively manage SS regeneration to not compromise the integrity of the buffer. 	<p>Glen Sherup</p>

Objective	Opportunity	Constraint	Concept	Zone
<p>Produce sustainable source of timber supporting local markets</p>	<ul style="list-style-type: none"> • The forests are good sites for growing commercial timber crops. • Prolific Sitka spruce natural regen presents an opportunity for reducing restock costs. • High local demand for lower value timber products. • Glen Sherup and lower slopes of Glen Devon are predominantly brown earths and close to the A823 and A9. A diverse range of productive crops would have easy access to markets. 	<ul style="list-style-type: none"> • Elevation, exposure, steep slopes and wet soils mean much of the plan area is not suitable for long rotations or thinning interventions. • Wind damage presents a significant risk to commercial crops through much of the plan area. • Haulage access route to Glen Devon is a Timber Transport consultation route. 	<ul style="list-style-type: none"> • Develop crops of alternative commercial species on good soils at lower elevations. • Continue with second rotation Sitka spruce crops at higher elevations. • Evaluate realistic upper margin for commercial forestry and consider alternative upland forest cover at higher elevations where windblow presents a significant risk. 	<p>Whole Plan Area</p>
<p>Improve health and wellbeing of local residents and visitors through recreational use of the site</p>	<ul style="list-style-type: none"> • Shared carpark with Woodland Trust in Glen Sherup is popular with visitors. • Core path network provides links through plan area to wider recreational opportunities within the Ochil hills. • Glen Sherup increasingly popular with mountain biking. 	<ul style="list-style-type: none"> • Unauthorised use of quad and motorbikes a problem. • Littlerig carpark requires resurfacing. • There are problems of overnight camping and antisocial behaviour at Glen Sherup car park • The exit for the informal biking routes is onto the main and only timber haulage route out of Glen Sherup • Requirement for new fencing presents access issues across higher ground. 	<ul style="list-style-type: none"> • Work with local groups when there is live harvesting. • Ensure open access is maintained when constructing or repairing fence lines, taking account of likely walking/cycling routes as well as potential emergency escape routes from high ground. 	<p>Whole Plan Area</p>

Objective	Opportunity	Constraint	Concept	Zone
<p>Look for opportunities to diversify current species mix</p>	<ul style="list-style-type: none"> Glen Sherup is predominantly brown earths and is close to the A823 and A9. The lower slopes of Glen Devon also have a high proportion of brown earths. A diverse range of productive conifers/broadleaves would have easy access to markets. 	<ul style="list-style-type: none"> Both blocks are heavily dominated by SS. SS grows prolifically and it will be hard to establish other conifer or BL species. Local deer populations are high. Block boundary fencing is inadequate to prevent deer entering from neighbouring properties. There is no local deer management group. 	<ul style="list-style-type: none"> Introduce a range of suitable productive conifers and BLs, with a tolerance of SS regeneration. Actively manage the SS regeneration within the mix to prevent dominance. Construct 1,750m of new deer fence in Glen Sherup to fully enclose the block. Plan restock and CCF coupes to provide adequate opportunities for deer management. Plan ranger access, site lines and deer lawns to maximize the efficacy of stalking as a means of population control. 	<p>Whole Plan Area</p>
<p>Design shape and sequence of current and future coupes to minimise further risk of wind damage</p>	<ul style="list-style-type: none"> A number of crop breaks are already present that will allow stable coupe shapes for the current felling programme. 	<ul style="list-style-type: none"> Current even age structure of mature crops presents limited opportunities for coupe shapes. 	<ul style="list-style-type: none"> Sequence mature crops based on priority for exceeding terminal height. When restocking plan a network of rides and crop breaks to give greater range of options for future coupe shapes. 	<p>Whole Plan Area</p>

Objective	Opportunity	Constraint	Concept	Zone
Design future forest structure that is not at odds with neighbouring land use when viewed at a wider landscape scale	<ul style="list-style-type: none"> • Adjacent plantations present opportunities to plant right to the boundary fence and reduce productive land lost to landscaping at external edges. • Linking neighbouring native woodland creation projects through Glen Sherup will increase and join up habitat for priority species such as Black grouse. 	<ul style="list-style-type: none"> • The large increase in commercial conifer plantations around Glen Devon will detract from efforts at species diversification if the result is at odds with the wider landscape • Efforts to link the neighbouring native woodland creation sites through Glen Sherup will lead to loss of productive ground 	<ul style="list-style-type: none"> • Use the landform such as steep gullies to create native woodland and habitat links, and break up the productive conifer. • Design new planting/restock adjacent to neighbouring woodland blocks to create a seamless forest unit across all land holdings. 	Whole Plan Area
Link native woodland creation through Glen Sherup	<ul style="list-style-type: none"> • Two areas have been identified already and planted with BLs to help link across Glen Sherup. 	<ul style="list-style-type: none"> • BLs have not managed to establish due to deer pressure. • SS is regenerating into BL areas 	<ul style="list-style-type: none"> • Once deer fence is in place, and as felling progresses, strengthen BL links and actively manage SS regeneration to not compromise the integrity of the BL links. 	Glen Sherup
Plan fell and restock to reduce self-seeding where we don't want it but encourage it where it will help reduce restock costs	<ul style="list-style-type: none"> • Prolific natural regeneration of Sitka spruce will help reduce restock costs in areas where SS is planned. 	<ul style="list-style-type: none"> • Natural regen is problematic where a change of species is desired. • Crops adjacent to block boundaries are spreading seed onto neighbouring ground. 	<ul style="list-style-type: none"> • Plant alternative productive conifers next to more sensitive areas such as BLs, riparian areas or adjacent to neighbouring land. • Actively manage the SS regeneration in these areas in a timely manner to reduce the impact over time. 	Whole Plan Area

Objective	Opportunity	Constraint	Concept	Zone
<p>Plan coupe shape and sequencing in steep ground areas</p>	<ul style="list-style-type: none"> • A number of crop breaks are already present that will provide stable green edges to fell to. Coupes are at a manageable scale at present • The steepest areas up gullies are likely to be BLs in the future and not productive. 	<ul style="list-style-type: none"> • Roading restrictions in Glen Sherup mean coupes must go all the way up the hill which may result in a striped appearance if coupes are not planned carefully. • Mature first rotation crops in Glen Sherup are of a relatively uniform age which may present problems with sequencing. 	<ul style="list-style-type: none"> • Planting BLs in watercourses with steep gullies creates a natural break in the productive crop. 	<p>Glen Sherup</p>
<p>Plan for operational access to larch crops to be in place in the event of <i>P.ramorum</i> infection being identified</p>	<ul style="list-style-type: none"> • The road networks in the blocks are reasonably comprehensive. • Larch in line mixtures can be targeted for removal at the point of thinning. 	<ul style="list-style-type: none"> • Young crops in intimate mixtures may have to be clear-felled in the event of an infection. • There is an area of isolated larch in Glen Sherup with no direct road access. 	<ul style="list-style-type: none"> • Plan to remove larch from mixed crops during scheduled thinning operations. • Design larch coupe in Glen Sherup taking in neighbouring crops to provide suitable road frontage. Coupe can be brought forward in the programme by amendment in the event of an SPHN. 	<p>Whole Plan Area</p>
<p>Plan management operations to protect delicate soils</p>	<ul style="list-style-type: none"> • Soils are very fertile and can grow a diversity of species, that could be converted to CCF in the long term 	<ul style="list-style-type: none"> • Soils are friable, and prone to damage, limiting type of harvesting machinery to smaller lighter machines. This has a knock on effect on the timing for harvesting. 	<ul style="list-style-type: none"> • Use machinery appropriate to the soils, and split contracts over two years if needed. • Plant diversity of productive conifers and BL species and convert to CCF in the long term, to help protect soils. 	<p>Whole Plan Area</p>

Objective	Opportunity	Constraint	Concept	Zone
Ensure timely access is in place for forest operations	<ul style="list-style-type: none"> • Both blocks are well served with roads, with too many roads in Glen Devon. • Road to mast has an agreed access lease and is used regularly 	<ul style="list-style-type: none"> • Maintaining so many roads costs money 	<ul style="list-style-type: none"> • Identify felling/thinning programme and plan road upgrades in advance of works commencing. • Rationalise roads in Glen Devon. • Upgrade road to mast. Agree and upgrade core roads. 	Whole Plan Area
Plan management operations taking account of possible adjacent residential properties	<ul style="list-style-type: none"> • There are a number of properties forming part of the boundary line 	<ul style="list-style-type: none"> • From close range felling operations have a significant impact on the landscape. 	<ul style="list-style-type: none"> • Ensure any forestry work adjacent to dwellings is to a small scale and carried out sensitively 	Whole Plan Area
Manage for Black grouse around Glen Sherup	<ul style="list-style-type: none"> • Conditions are good on Woodland Trust side of boundary for Black grouse • Potential to produce the right habitat on FLS side of boundary 	<ul style="list-style-type: none"> • Black grouse has not been seen for a few years. • Fence needs to be made obvious for Black grouse. 	<ul style="list-style-type: none"> • Create open woodland and mark existing and proposed deer fence for Black grouse. 	Glen Sherup