



## Text annotation within management maps

### Map 6 woodland management in visitor zones:

FLS Visitor Zones have been identified in areas where FLS encourage and manage access or where the woodland managed by FLS interacts with popular visitor sites or access routes.

Visitor Zones are shown on this map:

Welcome Zones are key arrival or destination points.

Interactive Zones are buffers around managed trails.

Passive Zones are key views or backdrops from trails.

In these all these areas, single trees or small groups of trees will be removed when necessary to protect facilities, infrastructure and trails, or to enhance the setting of features, or to maintain existing views. Woodland in these zones will also be thinned, or trees re-spaced, for safety reasons (including to increase visibility to ensure that sites are welcoming and feel safe) and where it is necessary to enhance the experience of the forest setting, through the development of large trees, or preferential removal of trees to favour a particular species.

FLS identified Visitor Zones are focused within WIAT priority areas and around FLS access infrastructure (surfaced paths & car park). They are located where visitor usage is highest and also where educational & well-being events are focused.

The visitor zones contain numerous picturesque walking trails associated with this area's designed landscaped & industrial heritage. The 'glen trail' along Kelty burn includes some of the oldest & most stable conifer stands in the forest.

Outside of visitor zones, demand is lower & comprises longer distance walking, running & horse riding. These activities are facilitated by the internal forest road network & hundreds of evolving desire lines throughout the forest.

A private fisheries is based at Loch Glow with access rights along the northern forest road.

A restored open-cast area has recently come into FLS management. Visitor footfall is still low but gradually increasing. It has some potential to provide longer distance circular walking, cycling & horse riding routes. It has Core path linkage to Kelty, Loch Fitty & Dunfermline.



Western half of forest is quieter with lower visitor footfall. This has benefitted sensitive wildlife species. Main recreation activities are long distance walking, running, cycling. This is restricted to the forest road network.

### Map 9 future concept design:

The forest is split into concept zones:

1. To provide a clear management direction in each part of the forest and, where necessary, prioritise specific management objectives;
2. To ensure sensitivities, assets and user groups are properly considered/accommodated;
3. To geographically link the delivery of management objectives to existing forest resources (e.g. open habitat restoration on deep peats, woodland creation on restored opencast, lower impact woodland management in visitor zones).

#### Concept Zones:

LISS principally broadleaved zone: Where low intensity management will be used in mainly broadleaved stands. They are generally proposed on good forest soils where low intensity management is more compatible with other key objectives:

Recreation & visitor zones.

Designed landscape.

Residential/commercial usage.

Conservation.

They do not exclusively contain native broadleaved woodlands - as the latter is proposed in all zones to ensure a more connective native woodland network (e.g. riparian & peat fringe native broadleaves).

LISS principally conifer zone: Where low impact silvicultural systems will be used in mainly conifer stands. These areas are focused on core visitor zones with good forest soils & relatively low wind risk. There is good potential to grow alternative conifers to large sizes (beyond economic felling age) without significantly conflicting with other objectives.

A key priority in this zone is to prolong & regenerate the 100 year old spruce stands along the 'Glen Trail' on Kelty burn. The intention is to lightly thin these stands & underplant with alternative shade bearing conifers such as Pacific silver fir & Coastal redwood.

Transition to larger scale upland forest zone: Higher wind exposure &/or wetter gley soils are prevalent in these zones. They form a transition to the larger scale upland landscape in the west & have lower visitor footfall than zones to the east. Production of core timber species is a key objective but also important is protection of riparian zones & associated heritage infrastructure.

Diverse productive forest zone: These zones often form a backdrop to LISS and Visitor Zones.



In these zones a greater range of productive species & localised thinning operations will be used. Clearfell management is the most achievable forest regeneration strategy. A key constraint has been the lack of windfirm boundaries in tree stands. This resulted in larger coupe sizes, loss of control over felling time & reduced stand retention opportunities. The future species & habitats plan aims to improve resilience to wind, reduce coupe size & increase opportunities for stand retention. Some key mechanisms to achieve this:

Strategic planting of slow growing 'wind break' crops.

Increasing no. of tree species & intimate crop mixtures.

Thinning of 2nd rotation crops where conditions suitable.

Upland productive forest & wetland zones: Larger coupe sizes reflect the more expansive landscape of upland hills. A wetter, more exposed climate & poorer soils restricts options for alternative tree species. The west, however, provides many important services - key strategic objectives:

Peatland restoration & expansion of open habitats, native woodland expansion in riparian zones & fringing open habitats, timber production using core species (Spruce & Pines), production of stone to service access requirements in local forests, retaining or creating internal viewpoints & improving forest visual design from surrounding locations.

Woodland creation zone: Over next 10 years establish new woodland, with aim of creating 'diverse productive forest' in the long-term. Main desire lines will be left unplanted as will key viewpoints from the central bing/spoil heap. Existing broadleaved woodland will be enhanced by expanding new broadleaved areas alongside.

### **Map 12 LISS management:**

Coupes 06008, 06018 & 06044: These are mature beech stands with scattered windblow. Aim is to regenerate stands using uniform shelterwood.

Next intervention:

SELECT FINAL CROP TREES then Light SELECTIVE THINNING & clearance of windblow.

FINAL CROP TREES: Healthy trees with longest, clean, unforked bole (stem) & freedom from defects.

Coupe 06006 (Irregular Shelterwood): Mature beech with larger groups of windblow.

Next intervention: SELECT FINAL CROP TREES then Light SELECTIVE THINNING & clearance of windblown groups. Underplant groups with Beech & Oak (1.24ha).



**Coupe 06039 (Irregular Shelterwood):** Next intervention SELECTIVE THINNING. Thin individual species groups as per their specific growth characteristics: Spruce, Firs, Oak, Birch, Beech, Sycamore.

SELECT FINAL CROP BROADLEAVED TREES.

Remove unstable trees. Operation could be tied in with clearfell of 06037.

**Coupe 06035:** 51 year old Grand fir stand (Irregular Shelterwood).

Next intervention: regeneration felling & restock. Clear windblow within stand (0.63ha) & restock with Pacific silver fir & Coastal redwood. Tie in with thinning/felling of surrounding mature conifer stands.

**Coupes 06051 & 06057:** Pre-commercial thinning of broadleaves to 3m centres.

Remove spruce natural regeneration. Favour oak and cherry for retention.

**Coupe 06049 (Irregular Shelterwood):** Thin to remove spruce & retain other conifers & broadleaves. Operation could be tied in with clearfell of 06050.

**Coupe 06038 (Irregular Shelterwood):** 100 year old conifer stands along the Glen Trai & Kelty burn.

10 year programme of operations:

1. Light crown thinning.
2. Underplant up to 20% with Silver firs & Coast redwood (2.35ha).

Package crown thinning with thinning/harvesting operations in surrounding coupes.

**Coupe 06010:** Pre-commercial clearance of spruce regeneration. Remove tubex guards on oak groups. Monitor birch natural regeneration & precommercial thin as required.

**Coupe 06011 (Irregular Shelterwood):** Next intervention - regeneration felling & restock 3.73 hectares. Harvest groups of Larch & Sitka spruce. Clear & restock windblow in mature beech north of forest road. Thin remaining broadleaves, Pine & alternative conifers. Restock with native broadleaves & scattered ornamental conifers such as coast redwood.