

Letham Hill West Wood

Management Plan 2010




The Letham Woodland Group has expressed the wish to acquire 'Letham Hill West Wood' and maintain it as a community woodland.

On behalf of the Community Woodland Association, our work was to help with an assessment of the current state of the woodland, as a first step of the future group's management plan.

We surveyed the woods in April 2010, and our results form the basis of this report.

The ideas about the potential management, to be led by the group, are linked with the principal activities taking place in the area: the presence of children of The Secret Garden Outdoor Nursery, recreational use and dog walking by the community and potential future community activities and events.

This report was also inspired by the valuation work carried out by Eamonn Wall, chartered forester, in 2009. 

Woodland Description

History

Very little information available. Cathy from The Secret Garden Outdoor Nursery has been told that someone bought the wood in the 1950's, harvested the trees and then gave it to the Forestry Commission who sold it to the present owner.

No date of the plantation of the current trees is available. Trying to gather some more precise information would be worthwhile (to be worked on with the Letham population).

Topography

The woodland is located on a small hill, 'Letham Hill' on OS map. But the area is almost flat, the average slope is less than 4° (very few

steep areas, in particular the banks along the tracks). It is nevertheless exposed to high winds (dominantly from the West).



Access

The woodland is accessible by foot and motorised vehicles (4WD), as there are two paths around it, which go from Letham to the fields of the surroundings.

The principal track is oriented NNW, on the eastern edge of the wood, and a second one is NNE on the western edge. Inside the wood, there are several little tracks, visible and used regularly, and in a good state: future work on them will depend on the group's will and priorities.

Boundaries

The boundaries are drawn on the OS map. The area had been evaluated to be around 2.95 ha in Eamon Wall's study of the wood

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for its valuation. This measurement was confirmed by our work on MapMaker map software.


Geology and Soil conditions

According to the BGS Bedrock geology map, the bedrock of this area would be formed by 'late Silurian & mid Devonian mafic lava and tuff, basaltic and andesitic'.

The stones extracted in the quarry were effectively this kind of stones.

The soil, identified from our 'investigation' is a type of brown earth. Near the surface are organic horizons (O) composed of fresh litter, and decomposed litter from previous years. Under them are brown –more or less dark minero-organic horizons (A).

The deeper horizons have not been observed, because at around 25cm deep the soil becomes very stony!

The texture of the 'A' horizon is of silt loam. This type of soil good for the establishment of forest stands: there is no drainage limitation, and the nutrients regime is relatively good. 

Tree Species

The principal species are **European Larch** (*Larix decidua*) and **Sycamore** (*Acer pseudoplatanus*). These trees were planted. But in less important quantities, there are also: **Wych elm**, **Scots pine**, **Sessile oak**, **Beech**, and **Ash**.

Condition

The trees are in general in a good health state. But some larches are strongly bent and twisted, so a few of them might be dangerous.

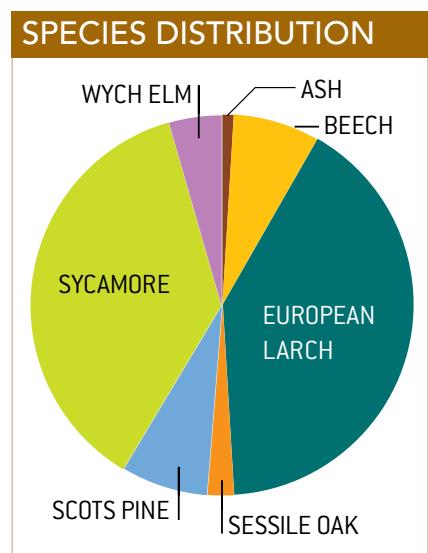


The coniferous trees are in general of poor timber quality. Some poles of sycamore could be worth to work on for timber production.

Stock

The density in this wood is of about 1370 stems per hectare, which is a high density for an adult stand. The basal area is the

area occupied by tree stems, in m² per hectare; it helps foresters to evaluate the standing capital in volume, using measured basal area and tree height. It is also one



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of the major tools to drive their silvicultural operations in order to balance the number of trees regarding their diameters.

In this stand, the basal area is around 45m²/ha, which is very high, due to high density of trees for their age (i.e. there are too many trees to allow them to grow in diameter).

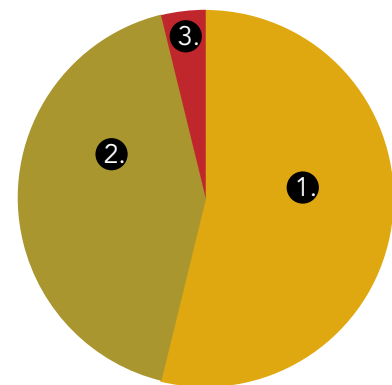
The average tree height is around 15 meters, which represents for the coniferous around 160m³/ha

(130m³/ha of larches and 30m³/ha of scots pines), and for the sycamores a bit less than 80m³/ha.

Size class

We don't know exactly the age of the stand, but we have measured the diameters of surveyed trees, which allow us to illustrate the structure of the stand (the distribution of small and relatively big trees). 🌿

SIZE CLASS DISTRIBUTION



1 = < 20 CM DIAMETER
 2 = 20 CM < DIAMETER < 30 CM
 3 = > 30CM

Objectives of Management Plan

- For the children and the recreational function of this forest for the community.
- Monthly workshop for school-aged children, investigating wild life ie. bats, squirrels, birds, etc, possibly making bird/bat boxes.
- For use by The Secret Garden Outdoor Nursery - daily use but in varied areas throughout east and west woods, creating dens, possible rope works, making use of fallen trees for physical play, tree climbing, etc.
- For use by the children of Letham Primary School, a short distance from the woods.
- Camping by fire pit; local children play space.
- As activities of the Wood Group with a forestry purpose: chain-sawing training and then planned felling, particularly of unsafe trees (although good to leave some as standing deadwood); tree planting.

But this list is at the moment non-exhaustive and should be completed after the consultancy work in the whole community. 🌿



Short-term Management Interventions

A first selective thinning to lower the density while favouring the nicest poles. But be aware that a thinning operation makes the stand more unstable, especially if the stand is exposed.

To improve the structure and allow a better growth of the trees,

we advise to cut trees of the size classes 1 and 2 (diameters < 30 cm). You could first focus on thinning the densest patch of the stand composed of mainly larches (light-yellow strip on the map). This operation can be done during a chain-sawing training course.


The wood could be used to build a shelter in the woodland or used as fuelwood, larch being suitable for both. This kind of activity would require a special coordination with SG activities. 🌿

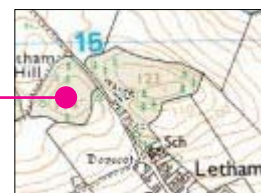
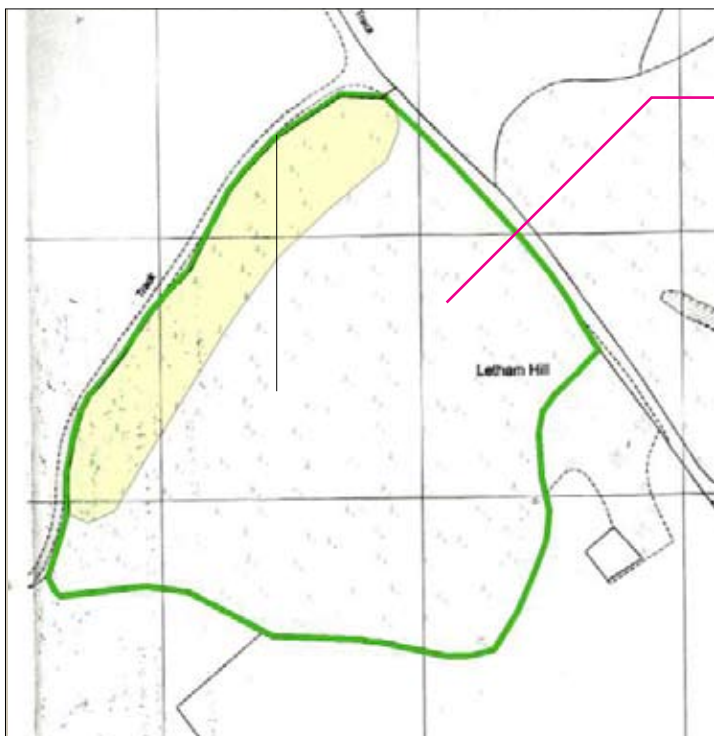
Short-term Management Interventions

The successive thinning operations should allow a better natural regeneration. And if the seedling number is not sufficient, you can plan to plant trees.

To ensure the presence of regeneration is capital to the sustainability of the forest in a continuous-cover approach.

The idea of this approach is basically to have trees representing

all size classes, and in your case to have more big trees (size classes 3 or more) and lower the number of small poles to achieve this goal by bringing more light and space. 



In green: the forest boundaries as drawn on the OS map.
In yellow: the densest area (of larch mostly).