

**CASE STUDY: Small and Farm Woodlands**

**Sawrey Ground Plantation,  
Hawkshead, Cumbria**

**Owners:** Gary Primrose, D. A. Hook  
**Manager:** Gary Primrose  
**Gold Award:** Excellence in Forestry 2016

**The Woodland**

Sawrey Ground Plantation is a small (20ha), ex-Forestry Commission (FC) woodland which has been under management by the current owners since 2010.

The woodland is located in the Lake District National Park on high ground close to the village of Hawkshead. The soils are a mix of brown earths and gleys. Annual rainfall is high and windthrow risk is moderate.

The species are mostly conifers planted in the mid-20<sup>th</sup> century. Some areas of the woodland are designated as plantations on ancient woodland sites (PAWS). There are also some areas with older broadleaves that pre-date the FC plantings, and the woodland has patches of woodland flowers such as bluebell under the ancient trees and orchids and unusual sedges in the wet areas.

From around 2000 there has been a move towards managing the site on the principles of Continuous Cover Forestry (CCF).

**Management**

The wood produced at Sawrey Ground Plantation is mostly sent for chipping and drying, and is used as fuel for the biomass boilers in local guesthouses, one of which is Yewfield.

An initial survey of the plantation suggested a harvest volume that could be sustainably removed for fuel each year. This figure informed the purchase of the boiler system, which means that woodfuel does not need to be bought-in while at the same time minimising the need for additional harvesting at Sawrey Ground Plantation.

The money saved by chipping for heating, along with the removal of firewood for the 8 wood stoves on the Yewfield property, means that the woodland breaks even, and reduces the commercial pressure to turn a profit from other activities. As a result, the owner has considerable freedom to pursue his



*Thinned larch shows good regeneration in canopy gaps*

interests in ecology and educate himself about CCF by a series of trials and experiments.

The move to CCF began while the woodland was still owned by the Forestry Commission. Gary Primrose has continued and expanded his approach by applying close-to-nature principles.

There are now stands of mature (around 40 yrs), well-spaced, wind-firm hybrid larch which show excellent form. Line thinning and rack-clearing are less important than before, and Gary lets the wind lead the thinning – trees damaged or knocked over in storms form the nuclei of patches removed to encourage natural regeneration.

Thinning has the added benefit of opening up the canopy to airflow. This discourages the fungal diseases *Phytophthora ramorum* in larch and *Dothistroma* Needle Blight (DNB, also known as Red Band Needle Blight) in pine, both of which are present locally. In addition, it gradually increases the exposure of individual trees to wind which fosters better wind-firmness.

***Continued overleaf***



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## Horse Logging

Once areas for thinning have been identified, a local horse-logger is employed to remove wood to the extraction tracks, where it is forwarded to the roadside by small tractor. The horse is able to deal with the steep valley sides of the site without damaging the soil structure. The horse-logger is fully versed with Gary's vision for the site and is able to select appropriate trees to thin while working within the capabilities of his horse. The low impact approach is important for site and soil conservation.

## Deer and squirrel control

Once pockets of windblown trees have been cleared, they are fenced in temporary exclosures to protect regeneration from browsing animals. This fencing is removed after several years once trees are tall enough to escape the attention of deer and re-positioned in new areas.

Deer are controlled by a local ranger to numbers where they do not impact heavily on woodland regeneration – this figure is dynamic and is re-assessed regularly. Grey squirrels are also kept under close control to the point that they have had no significant impact on the broadleaves at Sawrey Ground.

## Public access

There is a very positive and pro-active approach to public access at Sawrey Ground Plantation.

The wood lies on open access land and a permissive path is maintained by the owners. Local school groups have visited the site and Duke of Edinburgh expeditions have made use of a wild campsite within the PAWS compartment. Visitors pass through the wood en route to Tarn Hows (National Trust) and guests at Yewfield (the owners' guesthouse) are provided with a map and trail to explore the site.



*Horse logging is a good option on sensitive sites.*



*Setting up a temporary exclosure around a new area of planting and regeneration.*

## Challenges/Successes

The majority of the site was planted in the 1960s on former upland grazing pasture. As a result the grass species that formed the meadows are still active in the soil and respond more quickly to light than tree regeneration. They must be controlled (along with bracken) by mechanical or chemical means until the tree seedlings are large enough and shade them out once more.

A major success at Sawrey Ground is the integration of the woodland with the local people. Visitors are welcomed and encouraged. Thinning operations and horse-logging pique curiosity and generate interested discussion about sustainable woodland management and conservation.

The move to CCF is well underway and large areas of the site have the appearance of textbook illustrations of irregular-structure woodland. As thinning continues (along with the attendant natural regeneration) the site will become an even more attractive place to visit and spend time.

## Conclusion

An interest in practical forestry allied with a passion for silviculture, woodland ecology and conservation have been the driving forces behind Sawrey Ground Plantation. A willingness by the owners to embrace modern techniques and species mixes, without discounting older methods, is rapidly turning a relatively unremarkable conifer plantation into a dynamic, exciting, working forest where visitors to the Lake District are encouraged.

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