It is easy to think of woodland as an asset to a farm business in terms of the income from timber upon felling. Something which is discussed less is the financial benefit to the farm in terms of shelter.

Shelter in the lee of a woodland can cover a significant area and can help transform exposed areas of grazing into a calm, less harsh environment for livestock during more vulnerable times (i.e. lambing and following shearing).

The same shelter can help reduce wind speed and give benefits to arable land such as reduced soil erosion following ploughing and reduced run off. Prior to harvest the presence of shelter can reduce the chance of lodging which will directly impact the net value of the crop.

This Practical Guide looks at opportunities for improving shelter on the farm by the presence of woodlands.

How can shelter woodlands benefit your farm?

As well as locking up carbon in the growing trees, there are a number of other benefits which can make woodlands an attractive source of income as well as a means to make significant savings. The key areas as follows:

- Income through the Forestry Grant Scheme or via the Woodland Carbon Code.
- Winter feed savings due to lower exposure.
- Increased livestock weight gain through lower exposure.
- Reduced mortality during lambing/calving.
- Shelter woodlands can increase pollinator activity.
- Physical barrier to reduce diffuse pollution risks such as chemical drift and soil erosion.

Our Practical Guides cover five useful topics:

1. Use energy and fuels efficiently
2. Renewable energy
3. Lock carbon into soils and vegetation
4. Making the best use of nutrients
5. Optimise livestock management

For more Practical Guides, Case Studies, information on our Focus Farms and ideas to benefit your farm, visit www.farmingforabetterclimate.org

Websites

- www.farmingforabetterclimate.org
- www.fas.scot/topic/farm-woodlands/
- https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/forestry-grant-scheme/
- www.forestry.gov.uk/forestry/infd-863ibl
- www.forestry.gov.uk/carboncode
- www.forestry.gov.uk
- www.scotland.gov.uk
- www.carbontrust.co.uk
- www.agrecalc.com
Farm Woodlands for Shelter

Woodland creation considerations?

When creating a woodland in order to increase sheltered areas on your farm it is important to consider the following:

Access - If the woodland has a commercial element (i.e. conifer) then access for harvesting is crucial.

Design - If access through the woodland is required this must be considered at the planning stage.

Shape - Although landscape design must be taken into account with larger, more visible woodlands, it is possible to create woods which will produce a range of sheltered areas, see diagram.

Cost - Particularly with smaller schemes there can be a significant net cost outlay in order to establish a woodland, these costs are reduced when larger areas are planted due to economies of scale. This is also true of returns from harvesting in commercial woodland situations.

Fell or fill?

In situations where you have existing woodlands which have areas of open space it can worth planting in the gaps rather than clear felling the wood.

Clear fell and restock costs can be high, particularly for smaller areas. It may be possible to fell some of the area and allow natural regeneration to fill in the gaps rather than clearing the whole area. Ensure felling license requirements are met.

Commercial conifer or Native broadleaf?

In general terms a commercial woodland would consist of conifers (spruce, larch, pine, fir etc.) and a native scheme would be composed of broadleaves (birch, oak, rowan, hazel, willow etc.) with the exception of Scots Pine which falls into both of the above categories.

Commercial woodlands are managed with the intention of removing timber through thinning and clear felling whereas native schemes, although they would produce firewood, would generally not be a commercial venture.

If you have a site in mind which has poor access it may suit a native broadleaf scheme rather than commercial conifer as access for harvesting machinery and timber lorries would not be necessary. A possible solution to this would be the sheep and trees scheme through the Forestry grant scheme (web link overleaf) which provides grant funding for track creation leading to new commercial woodland.

In either of the above cases shelter will be provided as the crop matures.

Composition of woodland?

In order to be eligible for funding through the forestry grant scheme the proposed woodland must meet certain stocking densities as well as a certain composition.

By visiting the forestry grant scheme website (link overleaf) the composition for each type of woodland can be found as well as the funding available for each option. For an example of these areas (using the conifer option) see the table below.

It is possible to use the open space element of the woodland to create sheltered paddocks that can be used during lambing or calving giving an entirely sheltered area for vulnerable young.

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum percent</th>
<th>Maximum percent</th>
<th>Minimum stocking density at year 5/Ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitka Spruce</td>
<td>65</td>
<td>75</td>
<td>2500</td>
</tr>
<tr>
<td>Other Conifers</td>
<td>10</td>
<td>15</td>
<td>2500</td>
</tr>
<tr>
<td>Native Broad-leaves or shrubs</td>
<td>5</td>
<td>15</td>
<td>1100</td>
</tr>
<tr>
<td>Designed open ground</td>
<td>0</td>
<td>10</td>
<td>n/a</td>
</tr>
</tbody>
</table>