WOODLAND CROFTS: INFORMATION PAPER

KEY ISSUES FOR WOODLAND MANAGEMENT

Woodland Crofts may differ from other woodland holdings in four important respects:

- Tenure arrangements
- Importance to the supply of affordable rural housing
- The relative importance of national and local benefits
- Greater reliance on small scale and collaborative approaches to forest management and utilisation

These factors raise several key forest management issues that must be addressed in the establishment and management of woodland crofts.

1) What do you want to do?

Clear aims and objectives are essential to successful woodland management and may include maintaining and improving landscape and biodiversity, increasing local use of woodlands and timber, and involvement in large scale timber supply.

It is important that these aims and objectives reflect local stakeholder interests who are best determined through an independently facilitated stakeholder analysis and participatory planning process. Once agreed they should be formalised in a 10 year forest management plan. There may already be an existing management plan in place. If so it will either be a useful source of information, require modification to meet your needs, or be suitable for adoption as it is.

The Scottish Forestry Strategy is a useful guide to current policy and to the range of benefits that woodlands can provide. It is available from:
http://www.forestry.gov.uk/pdf/SFS2006fcfc101.pdf/$FILE/SFS2006fcfc101.pdf

Whatever management objectives you decide to pursue it is important that they meet the UK Woodland Assurance Standard (UKWAS). Details can be found at www.ukwas.org.uk . Above all it is important to realise that continued forest management is required, and that although restructuring to create up to 20% open space is desirable, large scale forest clearance for other purposes is unacceptable.

2) Is the resource compatible with the aims and objectives?

It is equally important that the aims and objectives are realistic: there may be a number of constraints on the available resource, which could affect their achievement. Balancing these constraints with stakeholder aspirations is complex and professional advice should be sought.

a) Location and access

If the aim is to extract timber or carry out any mechanised operations to improve recreational biodiversity or landscape values it is important that the woodland is either readily accessible by heavy vehicles, or that suitable access, both to it and within it, can be built at affordable cost.

If it is intended to produce larger volumes of timber than required by local markets cost effective access to wider markets is essential as haulage costs from peripheral areas can cause timber harvests to return losses to owners. Also, there are restrictions on the load weights of most bridges and on timber haulage on many public roads in the Highlands. Detailed maps of timber transport restrictions are available at Forestry Commission Scotland Conservancy offices.

b) Woodland size and type

Is the woodland large enough to accommodate the aims and objectives both in the short term and the longer term? Is there enough area to accommodate landscape and biodiversity interests, recreational interests, and, meet anticipated timber requirements?

Is the available timber suitable for the intended uses? Are there potential shortfalls in the volume and quality of available timber and if so, are alternative local sources accessible in the short and medium term? Even a small chainsaw driven mill using only 1 m^3 of conifer roundwood a day could require as much as 50ha of woodland to be sustainable in the long term.

c) Ecological constraints

Longer term plans to change species or restructure the woodland must take account of prevailing conditions. For instance in areas of high windthrow risk it may be difficult to restructure an even aged plantation to provide a sustainable timber yield in the long term. Similarly other soil and climate factors may restrict the species available to create diverse range of economic and biodiversity outputs

d) Statutory constraints

Many areas of woodland and neighbouring land are subject to national and international designations. A constraints check by the local Forestry Commission Scotland Conservancy Office will indicate which, if any, apply.

In the case of species and habitat designations further details will be available from either www.snh.gov.uk or www.jncc.gov.uk . These designations frequently cover large areas and could impose significant constraints on woodland management but if they involve charismatic species they may in turn provide opportunities for eco-tourism. If the woodland is in a National Scenic Area there may also be significant landscape issues to manage

Further advice on archaeological and historical constraints is available from www.**highland**.gov.uk/yourenvironment/conservation/archaeology and www.historic-scotland.gov.uk respectively. These are usually more localized than biodiversity and landscape constraints.

Forest management also has a duty to ensure that utilities wayleaves are managed as open ground.

3) Is the tenure system appropriate to long term forest management?

The size, distribution and tenure of woodland crofts have yet to be determined but there may be three main types: scattered individual woodland holdings; larger areas of woodland divided into smaller coterminous holdings; and, larger woodland holdings managed in common.

In practice, if forestry is to be a significant contributor to a community, tenancy of larger woodland blocks will be important to generating the required scale and continuity of operations.

Where larger woodlands are divided into coterminous holdings there is a risk that fragmentation will adversely affect coherent approaches to forest management. For instance if only one woodland holder declines to undertake pest control, it may well nullify the efforts of others. Similarly, harvesting on one holding may lead to windthrow on another.

There is also a risk that a change in tenure of an individual holding results in neglect, loss of value and exacerbation of management problems for neighbouring tenants.

One option for minimising these risks is to include an agreed forest management plan as an annex to the tenure documents. This should be reviewed regularly and at each change of tenure to help ensure retention of active forest management.

4) How will you create the skills and equipment base?

If local employment is an important objective a strong local skills and equipment base is essential. Crofting communities will have some advantages as, particularly at the small scale, there are options to use tractor and quad based equipment for felling and extracting timber, and also for converting it to firewood, woodchip and even sawn wood.

Small scale equipment often has less adverse impacts on a site, but it is often much less efficient, increasing operational costs significantly. Good second hand larger scale equipment is often available and may have merits, particularly if a machinery ring is established.

Many of the basic forest management skills such as fencing and road building may already be in place, but others such as chainsaw and other specialist equipment operation may not. Even in circumstances where they are, it is important that refresher courses are regularly available to ensure compliance with health and safety regulation.

5) Is co-operation and collaboration required?

Small scale working will be commonplace on individual woodland holdings, and on larger woodlands held in common, particularly if they are restructured to provide a continuous output. Machinery rings could have a significant role in making forestry equipment available to tenants and contractors working at these scales.

Depending on circumstance, co-operation and collaboration could be invaluable in many other areas. For example, co-operation will be essential to the management of many climatic and biological constraints, particularly windthrow, flooding, deer control and other plant health issues, which all reinforce the need for management plans annexed to tenancy agreements.

Collaboration can also bring benefits, particularly in managing landscape and biodiversity, planning shelterbelts and in the development of timber processing and marketing. The latter will be particularly important to local enterprises as few woodland crofters will have sufficient timber available on a continuous basis to sustain a business at any scale other than the handcraft level.

Advice on co-operative approaches is available from www.**saos**.co.uk .

6) How will you balance rural development and wider economic benefit?

Large scale commercial timber utilisation is often based on large scale operations, which supply roundwood to distant large scale enterprises. As a result supply to wider markets often passes added value potential out of the local area.

Conversely, small scale approaches to forest management allow a greater diversity of timber and non timber forest products (NTFPs) which will meet the needs of a wide range of potential stakeholders and support a greater diversity of local economic activity. Moreover, increasing the diversity of a forest, its outputs and their markets will enhance the potential for improving biodiversity and reduce the vulnerability to ecological or economic change.

In many cases Woodland Crofts will be one component of the income stream for a community or household. This will encourage small scale approaches to forest management and to the local utilisation of timber and NTFPs.

NTFPs can comprise a significant seasonal income stream, and often have significant local added value potential as well as cultural significance. Traditionally these resources have been largely unvalued and unharvested in Scotland, whereas in much of central and eastern Europe formal and informal harvests are a major component of forest outputs.

Interest in NTFPs in Scotland is now developing rapidly. Approximately 200 different products have been identified, ranging from fungi, nuts and berries to herbs, plant extracts and foliage (including Christmas Trees). Legally these are the property of the land owner, and where woodland is held in common control of harvesting will be the responsibility of the community. Further advice on sustainable management and exploitation of NTFPs is available from www.forestharvest.org.uk

Large woodlands will often comprise two or three commercial conifer species, and conversion to a more diverse resource will need to planned and implemented over one or more decades. Therefore, in many cases there will be a need to participate in wider markets, particularly in the initial stages, but often on a longer term basis in the case of large holdings. Wherever possible these supplies should have value added locally prior to shipment to distant markets.

Managing woodland for a diverse range of outputs is complex and underlines the need for technical advice when drawing up management plans.

7) How will you develop housing?

a) layout

Where housing is intimately mixed with woodland it will impose several constraints on forest management.

Access roads, utility wayleaves and the house sites themselves will all involve opening the canopy, which will require careful planning in areas of high windthrow risk. It will also be important to plan fire breaks carefully, monitor fuel accumulation and organise controlled fires where necessary.

In addition maintaining safe access for residents during forestry operations will be an additional management constraint.

Use of part of the open space in woodland for development purposes may be acceptable. However, depending on the circumstances, an Environmental Impact Assessment may be required for further deforestation of any area for development. Further information on this, and on the EIA process, can be found at http://www.forestry.gov.uk/forestry/infd-5zgmp7

Alternatively housing can be clustered to minimise the impact of the issues outlined above.

b) choice of materials

Timber is a renewable building material with a low carbon footprint and timber housing provides opportunities for the self builder to take an active role and develop “sweat equity”. Timber buildings may also provide the all important initial market for local small scale timber processing enterprises.

Design and constructional detail are critical to durable timber framed and clad buildings and if local resources are used professional expertise should be sought to ensure that buildings are designed to match the technical specification of the timber available.

For example, at present architects and builders specify timber of grade C24 for most purposes. Once a building has been designed on this basis it is often difficult to supply mainstream Scottish commercial conifer timber because much of it will only reach C16, which means that it will need to be in a larger dimension than the C24 equivalent.

As with all timber processing it is important to identify any small parcels of better quality timber and match them to the most demanding and highest value end uses. Species such as Larch and Douglas fir have a higher value in construction and Larch is also of value in agriculture as it can be used untreated for grant aided fencing.

Scots Pine has timber strength properties that are broadly equivalent to, or better than, most conifers, and it also has the advantage of absorbing preservatives well, unlike spruces. For this reason it will often make a better, more durable product when treated.

Many broadleaved timbers are excellently suited to the manufacture of joinery components e.g. Beech (flooring) and Oak (doors and windows).

8) Renewable energy

Use of renewable energy derived from the woodland will reduce the cost of housing in areas where there are no existing utilities and will be particularly helpful in the establishment of new population centres in existing dispersed communities.

a) woodfuel

Wood fuel is a carbon neutral energy source. It is often the most cost effective use of small dimension and poor quality timber. Also, up to 50% of any roundwood processed locally is likely to be available as sawmill co-product for energy markets. Many sawmills and joinery manufacturers use their co-products to supply energy for kilning.

When housing is clustered woodfuel can be used to fuel district heating systems.

Before embarking on a wood fuel enterprise it is important to carry out a careful inventory of the available supply over the short, medium and long term, identifying any potential short falls and alternative sources of supply.

Timber harvesting residues are a potential source of woodfuel which can amount to at least 25% of the harvested timber volume in an average conifer stand, and much more in broadleaves and in poor quality crops. However residue recovery may damage the nutrient cycle, and expert advice should be sought on this subject.

When considering available biomass resources options for using straw and other agricultural crops should be considered as these can be used with woodfuel if they are pelletised. Also there may be scope to use Short Rotation Coppice/Forestry and agricultural energy crops on in-bye land to alleviate any short to medium term shortfalls in supply.

Advice on all aspects of woodfuel is available from Highlands & Islands Community Energy Company, Highland Birchwoods and www.northernwoodheat.net

b) Other renewables

Many woodland sites will either have exposed areas, or watercourses, and most will have both. These are potentially useful in generating electricity, and as such are compatible with woodfuel, which is most efficient when generating heat.

Co-ordinated use of renewables in this way has the potential to reduce energy costs for households and eliminate community dependence on mains energy utilities.

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MAY 2008