

COILHALLAN WOODS, CALLANDER

WOODLAND MANAGEMENT PLAN 2017- 2026



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The Native Woods Co-operative (Scotland) Ltd is a non profit distributing organisation dedicated to managing and expanding Scotland's native woodlands. We offer specialist advice and management services to landowners and agents throughout the country.



PART A PROPERTY DETAILS

Introduction	This plan has been commissioned by SKS Community Interest Company on behalf of the Callander Community Development Trust (CCDT) who are looking in to the feasibility of purchasing or leasing the wood from Forest Enterprise Scotland. The plan is designed to set out the priority management considerations, to scope out opportunities and potential problems, and to provide advice on how community aspirations for the area might best be delivered.
Name of Property	Coilhullan Wood
Location	The woodland area lies just to the west of Callander, which is the largest town within the Loch Lomond & Trossachs National Park area.
Area	Total area in this Management Plan is approx 83 ha.
OS Grid Ref.	Access to the site is either on foot at NN 627 075, just off the A81 at the western side of the town, or via the Forestry Commission carpark at NN 609 072.
Land Tenure	<p>The land is currently publicly owned and managed by Forest Enterprise Scotland (FES).</p> <p>The contact for SKS Community Interest Company is Kerrien Grant kerriengrant@sksscotland.co.uk .</p>
Description	<p>Coilhullen Wood extends westwards from Callander, and has long been a recreational asset for the town. FES recognize this value, and it has become the priority management consideration for the area over several decades, replacing timber production as the most important management consideration. The amenity value of the area is very high, with a number of different stand types, a wide range of tree species planted, and extensive evidence of good woodland ground vegetation and occasional veteran trees, including oak. In the last decade or so, almost half of the site has been felled and regenerated with birch, with this becoming established very evenly across the area. It has been aided by some more recent planting as well.</p> <p>The local community wish to purchase or lease the woodland so that they can develop and help make the most of recreational opportunities in the area.</p>
Designation Types	There are no designated sites on the property itself, although the River Teith SAC is an important consideration in the wider area. Very little of the woodland area can be considered as genuine ancient woodland, with the only current areas of semi natural ancient woodland lying on adjacent ground. However,

most of the site can be considered to be very long established plantation woodland, and the conservation and amenity value that comes along with this is very high. Most of the woodland area was surveyed on the Native Woods of Scotland Survey (NWSS).

Grant Schemes

As a public owned forest, the area is not subject to any grant schemes. The areas of woodland that have regenerated are very well established, and even the area planted in 2014 is very well established and indeed looks several years older than it actually is. There are therefore few outstanding obligations on the site.

2. SITE DESCRIPTION

Long term vision and Objectives	<p>Management objectives for the area are:</p> <ul style="list-style-type: none">• To develop a community woodland area which will be used to increase opportunities for both local people and visitors to the wider Callander area.• To undertake a good standard of woodland management, potentially producing timber products for the future• To avoid unnecessary costs associated with woodland management, but to make sure that the woodland area contributes fully to the biodiversity and amenity of the property.• To create opportunities for local people to get involved in woodland work and training
Compartments	<p>Fifteen compartments have been identified as part of this Management Plan process. A number of these areas are very small, but each is a distinct feature within the overall area. Cpt numbers reflect the varying tree species present on the site, and the history of management or opportunities going forwards. Two of the largest cpts have been sub divided.</p>
Access	<p>Most of the woodland area is relatively easy to access, with good quality forest roads running through the property, and easy access to the main road running south from Callander. The minor road running to the north of the property would not be suitable for large scale timber extraction over a period of time. This is not a major issue as most of the timber crop has already been removed in years, and no large timber operations are envisaged in the near future.</p>
Hydrology	<p>The woodland area is generally very dry, with no watercourses of note. There are a few minor unnamed watercourses and drainage ditches in the lower part of the site, with springs arising in 2-3 locations. The Eas Gobhain, a tributary of the River Teith SAC, forms the northern boundary of Cpt 1.</p>
Topography	<p>The site slopes gradually to the north.</p>
Wayleaves	<p>There are no obvious wayleaves affecting the woodland areas.</p>

- Footpaths** There is a good network of footpaths and trails within the forest and wider area, and this is one of the main reasons why visitors come to the area.
- Flora** Although not an ancient woodland site as such, there is a very good woodland ground flora over much of the site where canopy cover has been maintained, especially in Cpts 1, 3, 6 & 7. Where the previous crop was clearfelled, such vegetation is less conspicuous. The bluebells on the site are very impressive in the spring months, and a particular feature of the site.
- Fauna** Red and roe deer are both present in significant numbers in the surrounding forest area, although the growth of restocked trees suggests that good control measures are in place. It is recorded that red squirrels use the area, and black grouse are also reported to be present in the wider area.
- Livestock** No livestock use the area.
- Archaeology** There is no obvious archaeological interest on the site itself.
- Landscape** There is no formal landscape designation covering the area. The woods are however especially prominent in the local landscape, and they soften the edge of the conifer forest behind. Sensitive management of these is important.
- Public/Educational Interest** The area is potentially an excellent venue for educational visits, and the purchase is being organized with that end in mind. The MacLaren High School is situated adjacent to the woodland area.

3 SURVEY DATA

The following information is provided for the fifteen compartments identified during the survey process, set out on the Coilhallan Wood Compartment Map.

Cpt 1 4.0 ha

This cpt is mostly comprised of birch regeneration interspersed with mature oak trees. The birch regeneration is very uniformly distributed through the site, occupying almost all the open ground, and it has been recently respaced to give what looks like a very well managed woodland cpt. Growth of the birch is very good. There are occasional oak regenerated within the birch area, and these should be managed to ensure their continuation, removing competing birch as required. There are many signs of good woodland flora within the area. A small area of non native broadleaves is present along the roadside. The lower lying parts of the cpt are potentially relatively wet, although the drought conditions on survey day made it difficult to get a proper feel for this. In summary, this area has the feel of an ancient woodland site that has been successfully restored, although, technically, it is not an ancient woodland site but a long established wood of plantation origin.

Cpt 2 0.4 ha

This is the car park area, which has space for a considerable number of vehicles, including buses if necessary. It is therefore a potentially very useful facility for management of the woods as a whole, providing a safe and sizeable area for visitors to access the area. If any future commercial activities were to be based in the

woodland, then this area will become a useful focus and access point for those, and there is probably potential for buildings or other infra structure on ground adjoining the carpark.

Cpt 3 3.2 ha

This cpt is bounded by the road and an internal footpath within the wood. Much of the cpt is very similar to cpt 1, with mature oak trees interspersed with well distributed and grown birch regeneration. The birch is particularly fast growing here. Part of the site consists of mature larch trees with no birch or shrub growth underneath. The amenity value of this area is very high, with the diversity between the two woodland types adding to this.

Cpt 4 0.7 ha

This small knoll within the woodland area carries a mixture of non native broadleaves interspersed with a proportion of conifers and approx 25 mature larch trees, some of which appear to be unstable. The sycamore and beech could be thinned out to ensure longer term stability of the area, although the priority to do this is probably low.

Cpt 5 4.7 ha

As with cpts 1 & 3, this is a clearfelled area with is regenerating with birch. Much of the middle area of this cpt is low lying and wet, and the regeneration is not as dense as the other areas. Around the periphery of the cpt, ground conditions are drier, and regeneration is very prolific. Unlike the other areas, it has not yet been respaced. A significant proportion of larch regeneration is mixed through the birch, often dominating it. If this matures, it will occupy a considerable proportion of the site, at least around the periphery. There is some rowan regeneration, and also oak growing amongst the birch regeneration. While some of this is still relatively small, there are some oak trees that have become established. Although the interior of the site is less densely stocked with some open areas, there is still more than enough trees to produce a well stocked and productive woodland.

Cpt 6 7.0 ha

Cpt 6 is perhaps the most important within the whole woodland area. It is dominated by mature Japanese larch, with a proportion of spruce and old veteran oak and beech trees scattered through much of the area. There is scattered windblow through much of the area, making access difficult and dangerous in some locations. Underneath the canopy is a well established layer of larch/ spruce regeneration, up to 12-15 feet high in places, and extending to perhaps 50-70% of the cpt at varying densities. The amenity value of the area is very high, and it is very prominent in the landscape. It is also the most visible area when visitors come in to the parking area.

Cpt 6b 5.8 ha

This cpt is broadly similar to Cpt 6, but has been scheduled for felling by FES in the near future.

Cpt 6c 3.3 ha

As cpt 6 extends eastwards, the proportion of mature trees becomes less, the wood becomes dominated more by advanced conifer regeneration, and eventually in to birch regeneration. Cpt 6c is largely comprised of advanced conifer regen, with a relatively small proportion of mature timber. The boundary between Cpts 6c and Cpt 12 may not be accurately depicted.

Cpt 7 11.7 ha

This cpt carries a wide range of mature species of trees, from a mixture of arboretum- type conifers, to larch / spruce and oak/ sycamore/ beech/ hazel. There is mixed regeneration in gaps in the canopy, and the whole area, like Cpt 6, has a very high amenity and conservation value. The ground vegetation is good, with bluebells prominent. There is a proportion of windblow through the area, although not dominant for the most part.

Cpt 7a 9.4 ha

This part of Cpt 7 has the same approx mixture of species, but it has been subject to much more windblow, to the point where it is difficult/ dangerous to walk through in many areas. A high proportion of the timber is now on the ground. This opening up of the canopy has however created ideal conditions for regeneration of a range of species, and birch regeneration as well as beech and mixed conifers is present. FES have scheduled this area for felling in the near future.

Cpt 8 9.1 ha

This is one of the bigger cpts within the woodland area. It has been felled and is now regenerated with birch. The restocking is very uniform, and growth is good, and much of the area has been respaced to good effect. An informal footpath runs through this area.

Cpt 9 3.9 ha

As cpt 8. Well distributed and stocked birch regeneration, respaced to good effect. Some evidence of oak through this area. It is not known the extent of this, or if some of them have been planted. The birch trees around them could be thinned out to ensure that the oak survive.

Cpt 10 1.2 ha

The area of this cpt may be over-estimated, but the cpt consists of a mixture of mature, mostly non- native conifers and broadleaves, including valuable amenity species such as beech. The trees appear from quick inspection to be fairly stable, with little obvious work being required to keep this area stable and healthy for the foreseeable future. Future workings in here are likely to only involve individual trees.

Cpt 11 2.8 ha

As cpts 8 & 9 above.

Cpt 12 8.2 ha

This area is surrounded by a deer fence, and it looks as though the cpt was replanted in 2014. The area is exceptionally well grown for its age, and is almost established already. Most of the site has been planted with birch, but pockets of aspen are also evident within the area, and there may be other species as well. It is likely that in a few years, it will be possible to remove the deer fence. This area will then become another part of a wider swath of birch regeneration/ planting that can be managed to

a similar objective. As with the other cpts like this, some effort should be made to ensure that the minor species survive to provide for diversity of habitat.

Cpt 13 1.7 ha

This cpt is mostly open ground, with scattered regenerated trees covering only a proportion of the area, interspersed with gorse and areas of grass and heather.

Cpt 14 4.0 ha

This cpt carries mature Sitka Spruce, a significant proportion of which has been windblown. Local children have been using part of the windblown area as a camp. The area should be felled and restocked as soon as possible.

Cpt 15 1.6 ha

This cpt is similar to Cpt 14, and is also part windblown. It should be felled and restocked as soon as possible.

4 ANALYSIS

Fifteen areas of interest will now be discussed in relation to the community desire to take on and manage the site going forwards. This is a complicated site in many ways, and there are a lot of things to think about, more so than many other woodlands. Several of the issues overlap and are interrelated. The issues identified are:

- 1 Ensuring safe access to the woodlands
- 2 To clear fell existing mature timber or not?
- 3 Scope for continuous cover forestry management
- 4 The Larch disease, *Phytophthora ramorum* and its implications for the woodland
- 5 The birch regeneration
- 6 The ancient woodland interest
- 7 Rhododendrons
- 8 Deer management
- 9 Access management
- 10 Mountain biking potential
- 11 Potential for a Go- Ape type facility
- 12 Natural burial options
- 13 Community added value
- 14 Ongoing management costs
- 15 To buy or lease?

Ensuring safe access to the woodlands

Although there are safe and obvious pathways through the woods, and these are clear of debris or other obstacles, Cpts 6 & 7, which are very attractive in many ways, do have a significant amount of windblown timber, a proportion of which is caught up in other trees. It would be natural if people wanted to explore these areas, with lots of potential for children in particular to play on and around upturned root plates and leaning or caught-up trees. Any risk assessment of the woods is certain to identify Cpts 6 & 7 as dangerous in their current state, and

this needs to be addressed. The issue is compounded by the fact that a proportion of the standing trees will be vulnerable to windthrow in the future.

This could be addressed by felling the mature trees of vulnerable species, but such an approach would be at odds with the amenity value of the site. In addition, the site would be best managed as an ancient woodland site, and that would suggest retaining the current standing trees and thinning them gradually over a period of time.

Cpts 14 & 15 are also partially windblown, and a children's/youth camp/ den is evident within Cpt 14, right in the middle of one such area. A community group would have to consider very carefully if they were happy to be responsible for such an area. In this case, these two cpts should be clearfelled and restocked as soon as possible, but one outcome of this is that such a camp/ den is then likely to move elsewhere, probably to Cpt 7, which shares many of the same hazards.

Ongoing checking/ risk assessment of the woodland area would need to be undertaken, and the cost of that might be considerable. In another location, such issues might be easier to manage, but with a considerable population within a short distance of the woodland, including many youths and school children, safe access to the woodland would be a particular issue at Coilhallan.

To clear fell existing mature timber or not?

Forest Enterprise have scheduled cpts 6b, 7a, 14 & 15 for felling in 2016, although that work has not been implemented.

There is a strong rationale for clear felling Cpts 14 & 15, which are mature Sitka Spruce and partly windblown and dangerous. There is no advantage in not felling them asap.

The other two areas are different however.

Cpt 6b consists of mature larch/ spruce over a part of the site, with considerable larch/ spruce regeneration underneath. While it may be advantageous to remove some of the mature timber, it might be better to remove this on a little and often basis, maintain the mature tree canopy for longer, and avoid any restocking obligations that would arise from complete clear cutting. The issue to address would be how to do this, and this is discussed below in the next section.

Cpt 7a should ideally be managed as an ancient woodland site, retaining the current canopy and species mixture, and thinning this gradually over a period of time. However, there is a great deal of timber lying on the ground after windblow in this area, with some trees caught up in the canopy of others, and some trees looking as if they might be vulnerable to windthrow in the future.

The ideal scenario would be if Cpts 14/15 were sufficient to justify a felling operation and get machinery on site, could they then move through cpt 7a removing the fallen timber plus any other trees which might be vulnerable to coming down in the near future? Essentially, the site would not be clear felled but tidied up. There is a considerable volume of timber lying on the ground, although it is not known how long it has been lying there for or if it has deteriorated in this time. Such an approach would remove the current hazards from this area, but avoid any restocking obligations, and retain the existing standing trees which

would be a better prescription for management of the ancient woodland interest in the site.

If such an operation is possible, then it would be worth asking if it is possible for the machinery on site to clear up any other fallen timber from within cpts 6 & 7.

It would be much easier for FES to undertake these operations than for a community group to do so. Even if clearing up the fallen timber could only be done at a deficit, such an operation is likely to significantly reduce the ongoing need for inspections and maintenance.

It is recommended that CCDT liaise with FES in advance of any sale to determine whether they can fell cpts 14/15 before any sale (or afterwards under contract), and whether cpt 7a can have the fallen timber only removed. Such discussions would need to consider how restocking of Cpts 14/15 was to be implemented/ paid for. One idea for this is suggested below under *Community added value*.

UPDATE TO DRAFT REPORT- JULY 2017

FES have indicated that they would be willing to clear fell cpts 14/15, but that they could not contemplate tidying up cpts 6/7a. They would only consider clear felling these areas. The recommendation would be that FES are asked to fell cpts 14/15, but not to touch Cpts 6/7a. The responsibility for restocking cpts 14/15 need to be clarified, with any adjustments made to selling price as required. This would give community buyers the opportunity to restock this area with their own objectives in mind. Not tidying up cpts 6/7a would leave some potentially dangerous timber to be addressed by the community group on purchase.

Scope for continuous cover forestry management

Cpts 6, 6b, 7 & 7a have a mixture of mature mixed conifer and broadleaved species. There is already a significant amount of regeneration underneath, and although there is significant wind damage in areas, it should be possible to manage these areas as Continuous Cover Forestry (CCF): removing individual trees or small groups of trees and allowing regeneration to gradually develop without deforesting the site as a whole. As mentioned above, it would be useful if FES could clear up the windblown trees within these areas and make them safe to walk through. The advantages of continuous cover forestry (CCF) are that it avoids the need for expensive replanting, it is sympathetic to the ancient woodland nature of the site, it preserves the mixture of species present, and maximizes amenity and conservation value.

However, to make this work, there needs to be capacity/ a business locally to thin small volumes of timber on a regular basis. This could only work financially if they were adding value to harvested timber. There is a significant volume of high quality timber within the woodland area, of a range of species, so this is possible. If such a capacity were available, then managing these cpts as CCF would be the best strategy for these areas.

The larch disease, *Phytophthora ramorum* and its implications for the woodland

This disease, present only in the south west of Scotland until recently, has now moved to Perthshire. Japanese larch is particularly vulnerable, and if the disease is present in an area, then larch needs to be removed in a sanitation felling.

The consequences of this happening need to be carefully evaluated at Coilhallan. The risk is certainly present, although unlike ash dieback, there is no inevitability about the disease arriving in the area.

Larch is particularly prominent in the landscape at Coilhallan, and is central to the overall amenity value of the area. Much of the regeneration that is present throughout the woodland is larch. Much of the value within the woodland on the site is locked up in the larch crop. The species of larch present is the one that is most vulnerable.

Removing the larch would remove much of the amenity value from the site, and also much of the value in the trees. This may create a restocking obligation over part of the site, although it is difficult to quantify this. Destroying the larch regeneration would incur a cost which would have to be paid for by income generated from sale of the mature larch timber and SRDP tree health grants. The cost of this may well be significant, as larch regeneration is dense and well spread in the western cpts of the site. At this point, it would be impossible to say what the balance between timber income and possible costs might be.

This disease therefore has, potentially, very serious implications for Coilhallan Wood, and while it should be possible to manage the situation if it occurs, it will reduce the amenity value of the area very considerably, degrade the value of the standing timber, and possibly become a cost operation. A sanitation felling may have to be undertaken at short notice with no discretion being applied by the authorities.

On the site survey, it was also noticed that chalara ash dieback is present within the site on young regeneration. While ash trees are not present within Coilhallan to any significant extent, there is at least one mature tree standing by the entrance to the carpark which might have to be felled if it becomes infected. There is a much higher inevitability of getting ash dieback in this area. It is likely that the mature ash tree could be felled as firewood in that location without net cost.

UPDATE TO DRAFT REPORT- JULY 2017

FES have confirmed that disease is present a short distance from Coilhallan, and therefore, this is a serious threat. If trees were to become infected, then an area of 250 m radius around the infection needs to be cleared of larch, both mature trees and regeneration. This would effectively remove all the larch from the wood.

The Forestry Grant Scheme does provide grant assistance for felling and restocking affected stands so, in theory, a mechanism for dealing with this scenario does exist. However, much depends upon the actual site, and the balance between mature timber which might be felled at a profit and regeneration that would have to be destroyed at cost, albeit with grant assistance to do this. In some cases, the grant assistance might not cover this cost. Restocking grants are also available, but any restocking will then need to be maintained, protected from deer etc.

There is a list of recommended agents who can be engaged to advise on such sites. As an insurance policy, it is recommended that the prospective buyer engage such an agent to properly risk assess this situation, and provide a draft

income/ expenditure estimate. There is no other way of properly evaluating what is a very significant risk, especially if an infection were to occur very shortly after ownership was secured.

Although the main risk is financial, proper consideration should also be given to what loss of amenity would occur if the larch was to be lost from the area.

The birch regeneration

One of the obvious features of Coilhullan is the extensive birch regeneration present on the site, in addition to the planted birch in cpt 12. The regeneration is well distributed, growing well and much of it has been respaced to allow for better options for timber production in the future. Such respacing has potentially added considerable value to these birch areas. The planted trees within the fenceline in Cpt 12 are extremely well grown, to the extent that the fences could come down within a few years and the whole area of birch managed as one.

All of this birch regeneration is safely established, and therefore, there are no outstanding restocking obligations on these areas. But considerable thought needs to be given as to how this regeneration is managed in the future.

Essentially, there are two options for this. One is to manage the birch as a future timber crop. The other is to manage it as a fuelwood coppice, perhaps felling 2-3 ha a year on a 12-15 year rotation, perhaps generating 200 tonnes per annum.

Managing the birch as a timber crop will require some thinning in the early years. It is possible that this could be achieved by issuing firewood licences to local people, but there would be an administrative cost associated with this.

Respacing the regeneration will allow for the option of growing the birch as timber trees in the future. If this is the desired outcome, then those areas that are not respaced should be respaced without delay. It is possible for the cost of this to be covered through the Forestry Grant Scheme.

Within the matrix of birch trees are a proportion of minor species, including oak, some of which risk getting overtopped by the more vigorous birch at close spacing. There is a clear argument, in the next few years, for identifying these trees and thinning back the birch from around them so that they can become properly established. It is not obvious how frequent such trees are, but while the birch trees are still relatively small, it might be a useful community/ volunteer exercise to do this. This would provide for an oak seed source in the future, pushing the site gradually towards an oak woodland which would be the natural climax woodland type here. Within cpt 12, there are obvious planted aspen trees which could have some of the birch thinned back from around them to ensure that they survive and become established.

The ancient woodland interest

The mapping evidence suggests that very little of the woodland area is genuine ancient woodland, and it would be more accurately described as long established woodland of plantation origin (LEPO). Forestry Commission background documents illustrate a range of different histories, but the detail of this is relatively unimportant. Much of the site has the *feel* of an ancient woodland, and it should be managed as such. There is relatively little genuine ancient woodland

in the wider area, but Coilhallan is one of a number of sites with this LEPO background. As such, it is one of the woodlands with the higher biodiversity interest in the area. There is a good general woodland flora, a range of native species are present, and some older trees that while not strictly veteran trees, at least provide some of the structure that we might wish to see from veteran trees. The ancient woodland **nature** of the site is most pronounced in Cpts 1,3,6, 7 and 7a. It is less obvious in the areas that have been clear felled and regenerated. In many ways, this illustrates the central point for recommended future management. The priority with such sites is to maintain the woodland canopy, and gradually increase the proportion of native species over a period of several decades. In practice, this means removing individual trees or small groups of trees only, on a little and often basis, and encouraging natural regeneration in the gaps created. A suitable CCF structure is already developing within the main woodland area, especially Cpts 7 & 7a, and regeneration occurring, of both native and non native species. Encouragement should be taken from this.

From a practical and cash flow viewpoint, one significant advantage of CCF is that it avoids the need for restocking by planting, and the costs that go along with that. However, there is an administrative time commitment required to oversee a programme of gradually removing small amounts of timber. This suggests that a culture of added quality needs to be in place from the outset.

The sitka spruce plantations in Cpts 14/15 are outwith the LEPO area, and there is no particular issue with clear felling those. However, this should then be viewed as the last clearfelling required within Coilhallan, unless phytopthera ramorum becomes an issue. If the birch is managed as a fuelwood coppice in future, then that would involve removing small felling coupes of perhaps 1 ha or so.

Rhododendrons

There are rhododendrons within the woodland area, mostly within Cpt 7/ 7a, but scattered at a low level elsewhere as well. They are really only getting started, and are not dominant anywhere yet. It should be a priority in the first five years to target all rhododendrons and remove them. Given that almost all the bushes are relatively small, this might be suitable work for volunteer work parties. The gradual opening up of the woodlands is probably allowing the rhododendrons to spread.

Deer management

The widespread regeneration present on site suggests that deer management has been effective in the recent past, but approx 40% of the woodland area will now be moving towards a pre-thicket and thicket stage, and will be potentially capable of holding significant numbers of deer if active management is not continued. While there is a range of regeneration becoming established in Cpts 7/ 7a, there is obvious browsing damage to some of this, so the dynamic within the area might be that deer pressure is getting focused on a smaller area, with higher deer densities present in the established areas adjacent to these. When it comes to deer management, being aware of the changing dynamic as stands progress is very important.

Coilhallan is not adjacent to other FES property, so asking FES to continue deer management activity would not be an option. CCDT need to ensure adequate deer management in this woodland area. Given the public access pressure on the

site, especially from children, the level of professionalism required will be high. It may not be necessary to pay for this, and the woodland may well be suitable for a local recreational stalker or small group of stalkers who have experience and carry the necessary qualifications and insurance usually required by FES. Ideally, the preferred candidate would have some sort of professional background in deer management, and live relatively close to the site. It would be important that they are not motivated by sporting considerations, and that they are not using the opportunity to earn money by taking in guests. The over riding priority on this site must be management culling only, by people who understand fully the potential recreational pressure on the site and can work discretely and efficiently.

It would however be a good opportunity for the right sort of person, and if such a person can be sourced, then the priority should be to retain them and ensure a continuity of deer management on the area, with locals then being aware of who is operating there and why.

Deer management input will be required from the outset, although all areas of regeneration are now secure. The area vulnerable going forwards will be the mixed regeneration within cpts 7/ 7a, a proportion of which currently shows browsing damage.

Access management

Informal access to the woodland for walking is obviously a significant consideration, the site being such a short distance from Callander. There is a very good carpark, and a good forest road running right the way through the site, joining on to a good pathway that emerges back out nearer the town.

The windblown timber in several of the cpts obviously deters people from wandering in to the woods too far. The result of this is that the majority of walkers are probably constrained to the main path and road. Cpts 7/ 7a in particular would provide a diversity of interest if the windblow timber was tidied up and the area made safe. The amenity/ conservation value of these areas is very strong.

Mountain bike tracks are probably most easily accommodated in the young regenerating birch cpts (Cpts 6c, 8, 9, 11, 12). If these are heavily used, then it would be appropriate and almost certainly necessary to try to zone the woodland, with priority for bikers in these areas, and priority for walkers in Cpts 6, 7, 7a,3,4).

As already mentioned, dealing with windblow and unsafe trees would be the major consideration in setting out a series of short walks through the woodland cpts. Until this is achieved, then access to the main road/ path only should be encouraged.

If the stands could be made safe, then the Forestry Grant Scheme (FGS) could potentially fund footpaths through the woods, but funding has recently been diverted more towards woodland creation than management of existing woods, so such funding is competitive and may be difficult to access. It would be important to be aware of this from the outset.

Mountain biking potential

If organized mountain biking is to take place within the woodland area, then it will be important to try and zone the woodland cpts so that biking and informal recreation/ walking opportunities are separated. The upper regenerated cpts are ideal for a network of new tracks, with the relatively young trees making it easier to cut tracks where required.

Cpt 13 which is relatively open might be important in relation to mountain biking considerations. This area is big enough for a mountain bike skills park, where a series of obstacles and tracks can be set up within a relatively concentrated area, with the area being supervised if required for organized events. It could be the start/ end point for any events using the wider path network. Something like this may be required to give the trails here a unique selling point. A mountain biking venue at this location needs some unique feature to market it to a wider audience. A series of trails through the woodland may suffice for local kids, but if it is to attract visitors, then some consideration would need to be given to what actually might encourage people to travel to Callander.

Potential for a Go- Ape type facility

Specific mention has been made of some sort of tree top adventure course within the woodland. Such ventures are usually to be found within well thinned and very stable stands of trees on dry soils where windblow is unlikely. The concern at Coilhullan would be that many of the mature trees are tall, and the evidence is that recent storms have felled many of them. Tall trees with a small crown are also likely to move around to a considerable extent in the wind.

It is suggested that Coilhullan Woods would be very high risk for such a venture. The risk of damage to infra- structure would be high, and the potential for diseased larch could require the removal of a high proportion of the mature trees, putting the facility at real risk.

Natural burial options

A query has been made as to whether part or parts of the woodland would be suitable for natural burials.

When considering this, thought was given to areas of high amenity value, where the woodland was relatively natural and stable, and where it was very unlikely that timber operations would be required for the foreseeable future. It was also important not to choose sites that might be developed in some way.

Two options were identified, each with slightly different characteristics.

The first option lies within Cpt 7. It is dominated by mature oak, but also has a range of other native species, and has beech and non- native conifers around the periphery. The area is quiet and discreet, and has a very strong ancient woodland character, and a good woodland ground flora vegetation of bluebells in the spring time. It would take a few minutes' walk from the main path to reach this area, or 10-15 minutes from the main car park. It would suit some-one who was looking for a quiet location in the heart of the woods, well back from the roads and other people, and where the current woodland could be maintained for many decades to come without any interventions. A scattering of conifers around the periphery gives some seclusion, and are probably also a habitat for red squirrels.

The second option lies within Cpt 3, between the road and one of the internal footpaths. The stretch is dominated by mature larch with mature oaks and birch beyond. Like Option 1, it has good spring ground flora. It is much easier to reach than Option 1, which might be important for some people in visiting the area. There are few ground shrubs or younger trees in this area, so it may be suitable for people who wanted to plant a tree in memory of their loved one. The overall amenity value is very high. The one drawback may arise if the larch trees become diseased and have to be removed. Although it would detract from the immediate amenity of the area, it could be that these trees are felled in advance, and the area retained for those who wanted a very accessible site and the option to plant a tree or small group of trees.

Over the rest of Coilhullan Woods, it is likely that future woodland operations might be required, and this would be inappropriate for a burial site.

It is assumed here that such a site would involve the scattering of ashes only. The site may be suitable for interring bodies, but greater survey and scrutiny would be required to determine that. Both sites are naturally dry, and there are unlikely to be issues with groundwater.

Community added value

This is a difficult one to judge. Forest Enterprise have already invested in limited recreational provision and have respaced the extensive birch regeneration areas to improve the prospects of having good timber crops in the longer term. It is difficult to point to activities that the local community could deliver that FES could not, but there are some options:

- 1 Developing mountain bike trails and additional footpaths will require a level of investment that FES would find difficult to justify by themselves. A community group could source external funding to deliver these, and FES have teamed up with third party organizations to do this in other areas.
- 2 Much of the regeneration area is dominated by birch to an over whelming degree, and it would be better if some diversity could be added to this. Scattered oak saplings do exist, and it would be good if these could be located, birch removed from around them, and a better opportunity given to them to grow on and develop. These would then provide for a good seed source for the future, and become an important stepping stone in the woodland becoming an oak forest again. This would be the natural climax woodland in this area. Locating and freeing up such seedlings would be time consuming, but it would not be technically difficult, and would be a perfect exercise for local volunteers to undertake. It is the type of intervention that FES would find it difficult to justify, but the sort of intervention required to add diversity in to the existing regeneration areas.
- 3 Managing the main woodland areas as continuous cover forestry would require removing small numbers of trees on a little and often basis, and the key to making this viable would be to add value to the timber, probably by on-site milling and then local use. If there is a demand for such woodland products within Callander, and the capacity locally to do this, then it is likely that a local community group could deliver a standard of small scale forestry that FES might struggle to justify.
- 4 Finally, some thought should be given to how to restock cpts 14 & 15 if they are felled. There would be little advantage to simply planting another area

dominated by birch, as so much of that exists already. One option might be to plant an educational woodland with sample areas of all the main tree and shrub species to be found in Scotland. With the High School only a few minutes' walk away, this could turn out to be a very useful educational resource, potentially attracting students and children from other areas as well. Again, local community management is likely to deliver a better overall result in an area like this.

Ongoing management costs

A very useful report on the woodlands has been produced by SAC Consulting, covering a number of FES woodlands in the area.

The following costs have been suggested as being appropriate for the annual maintenance of Coilhallan.

Coilhallan	
Estimated Annual Woodland Budget	
Expenditure	
<i>Path Maintenance</i>	£3,000.00
<i>Woodland Maintenance</i>	£10,000.00
<i>Annual tree Safety Survey</i>	£2,500.00
<i>Public Liability and Woodland Insurance</i>	£1,500.00
<i>Management fee</i>	£4,000.00
Total	£21,000.00

Although different lines of this assessment could be disputed, depending on how the site is actually managed, it is difficult to imagine how the annual running costs of the site would be any less than this, especially if mountain biking and recreational use were to be developed, volunteer parties used to respace regeneration and get involved in conservation projects, educational visits to be made, and the whole lot to be overseen and managed. There would need to be a structure in place to over see the site. It is not known what management capacity CCDT already have or are likely to have in the near future. There will certainly be overheads to be covered, over and above any investment required to develop activities within the area.

Ongoing management costs could certainly be reduced by tidying up all the windblown timber, and it should be possible to do this at no or little net cost if Cpts 14 & 15 are clearfelled at the same time. But, as the SAC Consulting report suggests, the above figure of approx £21,000 should be used for planning purposes if CCDT are to purchase the woodland.

To buy or lease?

Coilhullan Woods are undoubtedly attractive. Their location on the outskirts of Callander makes them ideal for public recreation, and if the opportunity to purchase them arose, then it would be natural for a community group to want to do that.

In many ways, the woodland structure is ideal. All the regenerated area is secured, and there would be no restocking obligations. The size of the wood and the size of the timber resource is probably in keeping with likely community requirements. The young regenerating birch areas are a perfect location for developing mountain bike trails, and there are opportunities for educational visits.

There are two risks.

One is the amount of windblown timber on site. This could be tidied up as part of a wider harvesting operation centred on Cpts 14 & 15. FES need to be approached to see if this would be possible and what the financial implications would be, either while the wood remains in their ownership, or under contract afterwards. Dealing with this issue remove a very significant risk/ hazard, and would allow for much easier forward planning. Parts of the site would still be liable to windthrow, but it is likely that this could be managed.

The greater unknown is the possible infection by *phytophthora ramorum* which kills larch trees. If it arrived in this area, the larch would need to be removed in a sanitation felling. This would take away much of the amenity value within the site, and also much of the potential value in the mature timber. This could be required at short notice, and it is very difficult to tell at this stage whether a cost implication is relevant or not. To be caught out by this in the early stages of a fresh community purchase could be very challenging, although it is likely that the Forestry Commission would allow some breathing space before any restocking was required.

Finally, as noted above, a likely ongoing management cost of possibly £20k plus would have to be covered, and almost certainly, this could only be achieved through external sources or resources. While there is value within Cpts 14 & 15, and in some of the other mature timber on the site, it is unlikely that they could cover this ongoing expense.

Leasing part of the woodland area, or entering in to some sort of management agreement with FES would certainly avoid these risks, and also the need for ongoing overheads. The risks would stay with FES. It is difficult to envisage what actual advantage ownership would bring, unless the value of the woodland was required to help lever funding for other projects in the town.

Although grant funding is available to help develop footpaths and mountain bike trails, this is increasingly competitive, and not assured. So if income from projected activities is envisaged as helping cover overheads, then there is a risk at the outset as well.

It may be that there are local sources of community development funds, or the presence of the school could be used to lever resources to cover the cost of what could effectively be an outdoor classroom right on their doorstep.

The site is unlikely to be suitable for canopy based infra-structure for adventure playgrounds or similar initiatives.

My inclination would be that if this woodland is to be the only property being owned and managed by CCDT, and income from other sources is not available to cover overheads, then it may be best simply to enter in to a management agreement with FES if suitable projects can be identified and shown to be viable. If CCDT have a variety of other assets, then the context would be different, tilting the balance in favour of ownership. The identified risks may prove to be manageable, but ongoing overheads are likely to be the most significant consideration.

Planning Ahead

Based on the above assessments, it is suggested that the following operations be contemplated to secure the woodland areas referred to in this plan if community ownership is undertaken.

0- 5 years

Put in place an appropriate management structure for overseeing the site.

Ensure continuity of deer control across the site.

Remove rhododendrons with volunteer work parties.

As a matter of priority, enter discussions with FES to see if cpts 14 & 15 could be felled, and at the same time with machinery on site, can the windblown timber be tidied up, especially in Cpt 7a?

Use volunteer work parties to identify and free up oak saplings within the wider matrix of birch regeneration.

Remove the deer fence around Cpt 12, retaining the part of this which could be used to fence cpts 14 & 15. The other fencing materials could be recycled to fence the rest of this area. Restock Cpts 14 & 15, potentially as an educational woodland.

Remain vigilant for phytopthera ramorum, and also monitor the mature ash tree at car park for chalarra dieback.

If mountain biking trails are being taken forward, zone the woodland area to separate this use from walkers and other recreational users.

Set up a schedule of regular woodland safety inspections.

5-10 years

Continue deer management.

Identify local businesses which have the capacity to fell and remove small quantities of timber on a little and often basis, adding value where possible.

Ensure public safety as an ongoing priority.

Ensure that restocking area is safely established.

10-20 years

As 5-10 years, but some areas of birch regeneration will require thinning, and firewood licences may be allocated to manage this.

Beyond 20 years

Continue removing small numbers of trees on a little and often basis from main woodland area.

Thin birch woodland areas as required, or clear fell to initiate a coppice fuelwood system, targeting 1-2 hectares annually.

Constraints

Overall, the standard of the woodlands is very good.

It is likely that grant funding is going to become increasingly difficult to source for sites like this, so an ethos focused on low input/ low output is required, but using community effort to deliver priority projects.

Obligations

There are no restocking obligations at the moment, other than Cpt 12 which is almost already secured.

There will be an obligation to restock cpts Cpts 14-15 if they are felled. Care should be taken so as not to create obligations elsewhere.

Resources

Resources for access projects in the short term via SRDP are likely to be constricted.

It is not known what felling/ restocking/ community development grants will look like in five years time.

Appendix 1 Photographs

Cpt 1



Like much of the woodland area, Cpt 1 is dominated by birch regeneration, 6- 10 years old. Much of this has been respaced in recent years, potentially allowing for a high value crop of birch in the future.

Cpts 3 & 4



Cpt 4, left is a little knoll dominated by non native broadleaves (beech/ sycamore) and scattered conifers. The area is table and should be retained as a feature within the woodland. It requires some small scale thinning. Right, part of Cpt 3 is dominated by

mature larch, with relatively open ground underneath. Otherwise, much of Cpt 3 is similar to Cpt 1.

Cpts 5 & 6



Cpt 5, left, is probably the wettest part of the whole site. It is a clearfell site that is gradually regenerating. Around the edges, larch is prominent within the regeneration. In the wetter, central part of the cpt, birch predominates, although not all the site is stocked, and there are open areas. The birch regeneration is lower in density than many other parts of the wood. Right, dense larch and spruce regeneration under Japanese larch in Cpt 6.

Diversity within Cpt 6



Much of Cpt 6 is dominated by larch, but with this well developed area of regeneration underneath, occupying a significant proportion of the area. There is a significant amount of standing deadwood, as well as old oak and beech trees, providing for significant diversity within the area.

Recreational potential



Coilhallan Wood is close to Callander, within a short walk, and it is already well laid out for recreational use. Right, this part of the wood in Cpt 14 is well used by local kids. Although it looks dangerous, the area appears to be relatively stable now, and in many ways, it is good to see such activity being concentrated in one area and not throughout the woodland.

Pathways and mountain bike routes



Left, this is the pathway leading eastwards towards Callander. It is well constructed and maintained. Right, mountain bike trails within cpt 8.

Cpt 7a



There is a considerable amount of windblown timber within this area. Parts of the site are regenerating over well, left, but in other areas, the cpt is genuinely difficult to access safely. This is a very significant consideration within a woodland where recreational use is so important and where the local community have plans to increase such use. The question is whether such timber is cleared gradually over a period of years, or in one operation at the outset.

Cpt 7a again



There is a tremendous variety of regeneration in this area, with native broadleaves alongside non native broadleaves and non native conifers. Occasional Scots pine seedlings are also present. Right, scattered rhododendron bushes occur within this area. They are not extensive, but early action should be taken to remove these before they get too established.

Cpt 6 again



In terms of overall amenity, Cpt 6 is potentially the most valuable part of the wood, with mixed regeneration growing underneath mature larch trees that are reasonably well spaced. However, right, there is a considerable amount of windblown lying on the ground, making parts of the site difficult to access.

Other views from Cpt 6



Obvious dangers from windblown trees without what is otherwise an area of very high amenity value.

Bluebells



Cpts, 1, 3, 6 & 7 show extensive areas of bluebells, an indicator of their long woodland history. The amenity value of this in the spring months is very high.

Possible natural burial sites



Two potential natural burial sites were identified within the woods. Left, this area is dominated by mature oak. It is quiet and secluded, and lies at the heart of Cpt 7. Right,

this area is more accessible and has potential for planting additional trees or shrubs. It lies within Cpt 3. Both areas extend up to a hectare or thereabouts, possibly larger depending on how adjacent trees are managed.

Native woodland regeneration



Although most of the regeneration at Coilhallan is dominated by birch, with larch, spruce and beech also prominent, there are signs of oak and hazel regeneration as well, and examples of both species were found that had become established.