



Urban Woodland Management Plan (UWMP) Details			
UWMP Name:	CCDT Polmaise Wood		
Business Reference Number:	255717	Main Location Code:	95/808/0035
Grid Reference: (e.g. NH 234 567)	NS776918	Nearest town or locality:	Cambusbarron
Local Authority:	Stirling		
Management Plan area (hectares):	64.71 ha		

Owner's Details			
Title:		Forename:	
Surname:			
Organisation:	Cambusbarron Community Development Trust	Position:	Director
Primary Contact Number:		Alternative Contact Number:	
Email:			
Address:			
Postcode:		Country:	Scotland

Agent's Details			
Title:		Forename:	
Surname:			
Organisation:		Position:	
Primary Contact Number:		Alternative Contact Number:	
Email:			
Address:			
Postcode:		Country:	

Access Consent – Complete if applying for thinning
<p>You are not obliged to give us consent to enter your land, however if we are denied access to your land, and cannot carry out an assessment because of this, we may reject your application. This consent is for access to assess this application as well as monitor compliance with any subsequent approval, where applicable.</p>

Do you give consent for Scottish Forestry to access your property?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
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Town and Country Planning – Complete if applying for thinning

Are any of the trees to be felled subject to a Tree Preservation Order?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
If YES please provide details:		
Are any of the trees to be felled within a Conservation Area?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
If YES please provide details:		

Declarations – Complete if applying for thinning

I hereby apply for a permission to fell the trees described in this application and I certify that:

- I am the landowner or an occupier of the land with written permission of the landowner;
- Where the landowner is a business, I am authorised to sign legal contracts on behalf of that business;
- If I am acting on behalf of the landowner or occupier, I have been mandated to do so;
- Any necessary consents from any other person(s) if required, have been obtained;
- I have made the necessary checks with the local planning authorities regarding Tree Preservation Orders and Conservation Areas;
- I have notified all stakeholders that may be affected by the felling in this application and sought their views prior to submitting this application;
- I hereby acknowledge that Scottish Ministers may process any of my personal data contained in or relating to this application in accordance with the terms of Scottish Forestry's Privacy Notice, a copy of which is available at www.forestry.gov.scot;
- I have read and understand this application fully and, to the best of my knowledge and belief, the information given in this application is complete, true, and accurate;
- I accept that any false or misleading information provided in this application constitutes an offence and may result in any felling permission based on this application being revoked at any time.

[This application may only be signed by the owner of the land or the occupier of that land where they have written permission to do so. For land owned by a business it must be signed by someone with the authority to sign legal contracts on behalf of that business. If you are an agent signing this on behalf of the



aforementioned you must append a copy of your mandate.]

Signed:

Print:

Date:

Approval - to be completed by Scottish Forestry staff:

Management Plan Reference Number:			
Plan Period: (ten years) (month/year)	From:	To:	
Operations Manager Signature:		Approval Date: (dd/mm/yyyy)	

List the maps contained in the management plan

Map Reference	Title	Location (page / appendix)
1	Location	P6
2	Long established woodland of plantation origin	P7
3	Local Nature Conservation Site	P8
4	Constraints and opportunities	Appendix 3
5	Compartments and sub-compartments	Appendix 3
6	Felling & restocking	Appendix 3
7	Path works and access improvements	Appendix 3

Summary of key outputs at end of plan period

Area of woodland accessible to the public (ha)	64.71ha
Length of footpaths : new or upgrade (m)	1200m
Area of Felling and restructuring (ha)	2.88ha
Area of thinning (ha)	19.53ha
Other (specify) Coppicing Rhododendron control	~5ha (12.32ha over 25 years) ~5ha

1 Introduction

2 Woodland Description

- 2.1 Provide details of any current or previous grants
- 2.2 Description of the woodland in the landscape
- 2.3 History of Management:
- 2.4 Physical site characteristics
- 2.5 Woodland Composition, Structure and Condition
- 2.6 Greenspace and Green Network Context
- 2.7 Recreation Features
- 2.8 Cultural Features
- 2.9 Landscape Features
- 2.10 Biodiversity Features
- 2.11 Water Features
- 2.12 Threats

3 Vision and Objectives

- 3.1 Vision
- 3.2 Management objectives

4 Stakeholder Engagement

5 Analysis and Management Strategy

- 5.1 Constraints and Opportunities Analysis
- 5.2 Management strategy to address with key issues and objectives

6 Management Proposals

- 6.1 Thinning and Felling
- 6.2 Planting / Restocking
- 6.3 Access Improvements
- 6.4 Other Recreational Facilities
- 6.5 Community Perception
- 6.6 Safety and Security
- 6.7 Maintenance

7 Monitoring and Review

Appendix 1 – Work Programme

1 Introduction

This ten-year management plan template is designed for woodlands that are being funded under the Forestry Grant Scheme (FGS) Woodland Improvement Grant (WIG) Woods In and Around Towns (WIAT) Urban Woodland Management Plan Grant. The plan is subject to review after five years. This plan template should also be used for all sites where you will be applying for WIG – WIAT or Sustainable Management of Forests (SMF) - WIAT grant options. However, for planned new woodlands or woodlands less than 10 years old some sections of this plan will not be applicable.

The submission of this plan will be considered as an application for permission to thin the woodland over the 10 year plan period, subject to the completion of the thinning table in Appendix 2 and the submission of appropriate maps. If you intend to carry out other types of felling you must apply for permission separately.

You should consult with your local Woodland Officer on the plan. When we are happy that the plan meets our requirements we normally consult on the document more widely and place any linked Felling Permission applications, except thinning, on our Public Register for 28 days.

The plan detail will be approved for the first five years (along with a Felling Permission for thinning if appropriate). The second five years will be approved in outline with an expectation that full approval will be sought at the five-year review.

2 Woodland Description

This section is about collecting information relating to your woodland's location and character. This should include details about:

- current species and ages
- structure
- statutory and non-statutory constraints (e.g. designations, archaeological interest)
- existing or potential public access

The [Scotland's Environment website](https://www.scotland.gov.uk/topics/environment) can aid you in completing this section. For more detailed information on the Native Woodland Survey of Scotland use the Scottish Forestry Map Viewer found on our website: forestry.gov.scot

Please provide a 1:50,000 location map and a 1:10,000 or 1:2,500 scale OS map that shows the boundary of the woodland and compartments and/or sub-compartments. You can include other maps to show the location of woodland attributes listed in the tables below. Please list all maps on page 2.

You may also wish to include a photo record as an appendix to illustrate the character of the woodland and its key features.



2.1 Provide details of any current or previous grants

Grant Type	Contract Ref	Expiry Date
Forestry Commission/Scottish Forestry:		
WGS	6100056	1995
SFGS		
Forestry Challenge Fund		
SRDP Rural Priorities		
Other grant bodies		

2.2 Description of the woodland in the landscape

Briefly describe the woodland in the context of the local environment (eg settlements, communications routes, land use & industrial heritage, landscape character).

Outline the unique characteristics of the woodland and visitor experience that will be built upon as part of this plan.

Location



Map 1: Polmaise Wood location map



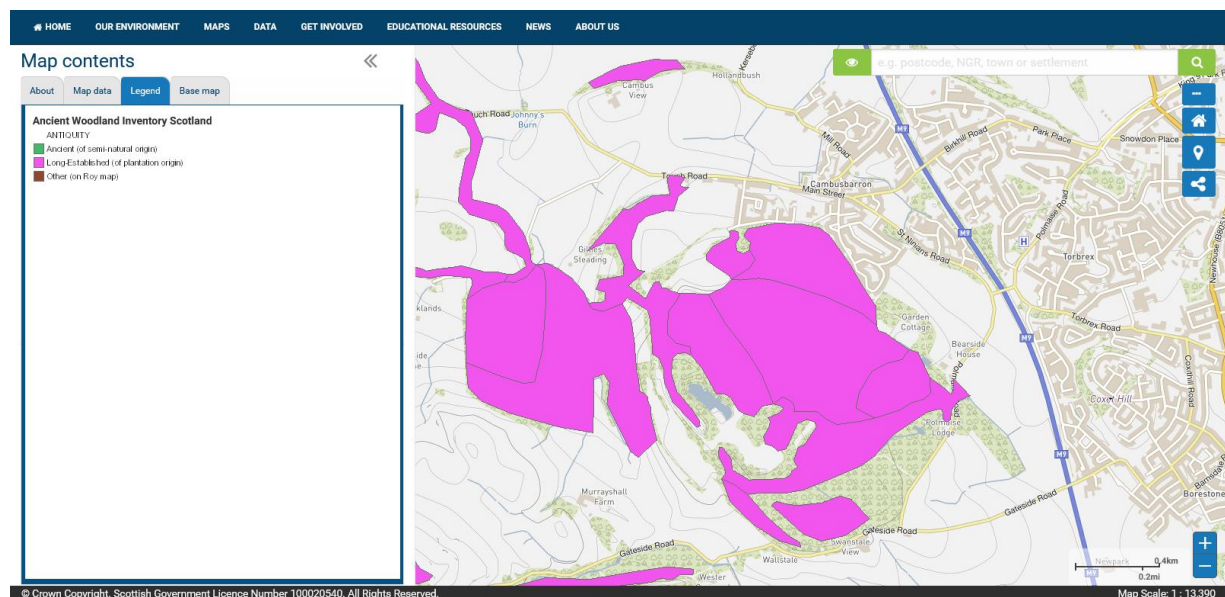
Polmaise Wood occupies the northern and eastern slopes of Gillies Hill, which lies to the south of the village of Cambusbarron, on the west side of the M9 motorway.

History

Polmaise Wood covers much of Gillies Hill, which is traditionally the place where the camp followers of Robert the Bruce massed before making a decisive appearance during the Battle of Bannockburn. It is included within the Historic Environment Scotland Inventory Area for the Battle.

The woodland has long been used for quarrying of both whinstone and limestone. The site contains small pre-industrial pits, and is bounded by larger scale quarries. An air shaft from the lime quarrying that took place under Gillies Hill lies within the wood.

The great majority of the site is recorded as Long established woodland of plantation origin (LEPO) on the Ancient Woodland Inventory (see screenshot below)



Map 2: Long established woodland of plantation origin (from Ancient Woodland Inventory)

The wood contains the remains of Polmaise Castle, and associated mausoleum, garden features, curling rings, and policies, including some notable 19th century conifer plantings. The castle was built for £30,000 by Col. John Murray, 23rd Laird of Touchadam and Polmaise, Murray commissioned David Burn to design the Scots Baronial mansion in 1865. The building was demolished in 1966.

The woods were owned for a period during the second half of the twentieth century by a timber merchant, and the remains of a sawmill are still evident to the NW of the walled garden.



Topography & Landscape

Gillies Hill is a craggy ridge, rising to 162m ASL and oriented generally north-west - south-east. The CCDT portion of the woodland lies on the shallower, north-eastern facing slopes. The western side of the hill has very steep slopes, although much of this side of the hill has been removed by quarrying.

Gillies Hill forms part of the Southern Hills Local Landscape Area, in which it is identified as part of an "important network of functionally connected habitats". In landscape terms it is described as part of a "rolling and diverse hill fringe area.... Relatively well settled and accessible, served with minor roads, tracks and paths especially at lower levels. Popular recreation area for local people."

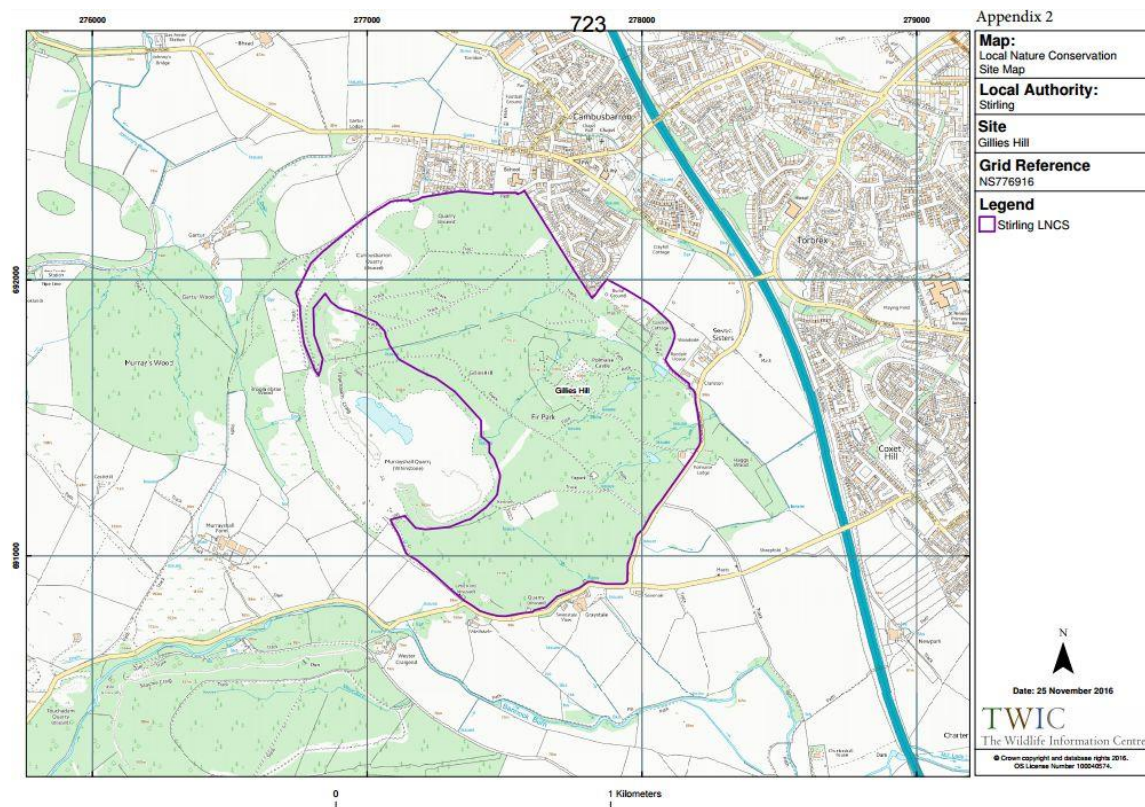
Stirling Council Local Development Plan

<https://stirling.gov.uk/planning-building-the-environment/planning/development-planning/local-development-plan-2018/>

Stirling Council supplementary guidance (SG-27) at:

<https://my.stirling.gov.uk/planning-building-the-environment/planning/development-planning/supplementary-guidance/supplementary-guidance-2014/>

Gillies Hill was designated as a Local Nature Conservation Site (LNCS) by Stirling Council in 2016.



Map 3: Gillies Hill Local Nature Conservation Site

Surrounding settlements and communications

The wood is immediately adjacent to Cambusbarron which is partly identified as a Conservation Area by Stirling Council. Cambusbarron is on the edge of the city of Stirling – separated from it only by the M9 motorway. (Stirling settlement population estimate 49,830 NRoS 2016 – Cambusbarron is not identified as a separate settlement or locality by NRoS).

Stirling's Open Space Strategy identifies Cambusbarron as having good open space provision (including Gillies Hill) Minor public roads abut the woodland to the south east and north east, and the woods contain a selection of paths in variable condition, including a number which are included in the Core Path Network.

2.3 History of Management:

Provide a brief statement on ownership and recent management.

Cambusbarron Community Development Trust acquired 64.71ha of Polmaise Woods from Drygrange Estate in 2019. CCDT had previously leased the area for two years.

Prior to this the woodlands had not been formally managed for some time, although there the Scottish Forestry map viewer records an old Woodland Grant Scheme project for the site, and a lapsed felling licence (case reference: CB280569) for the small Sitka stand.

It is probable that the last significant land management was undertaken by the timber merchant who owned the site during the middle of the 20th century.

CCDT has been engaged in volunteer work in the woodland, focussing on some rhododendron clearance where this has helped to clear access and liberate mature trees. Some interpretation and leaflets have also been provided.

There has also been some informal activity associated with mountain bike use of the site.

CCDT has submitted applications for felling permission for two small areas: these have been granted but work has not yet started due to bird nesting.

- Felling permission FPA-8091 granted earlier this year covers felling within the walled garden.
- Felling permission FPA-8168 granted 29/7/2021 covers the felling and restocking of 0.62ha in a narrow strip along the residential boundary with the Gillies Hill estate.

2.4 Physical site characteristics

Describe the soils, climate and terrain of the site referring to site or climatic constraints on the growth of tree species (e.g. wind, waterlogging).

Climate

Gillies Hill is predominantly influenced by air currents from the Atlantic Ocean with a prevailing south-westerly wind. Winters are wet and windy. The area has an annual average rainfall amount of 1060 mm (41.73 inches) and an annual average mean temperature of 8.8-9.3 °C (48-49 °F). (1971 to 2000: Met Office, UK)

Hydrology

The wood contains a number of minor watercourses which mostly drain to the north-east, flowing eventually into the River Forth.

Geology

The underlying geology is a layer of quartzite-dolerite of the late Carboniferous tholeiitic Midland Valley Sill Complex. The hill is one of a series of crag and tail formations which were created during the last ice age.

Soils

Brown forest soils with gleying

2.5 Woodland Composition, Structure and Condition

Provide a summary of the woodland composition by grouping areas of similar stands or habitats that will be managed in the same way together. Grouping can be based on:

- Whether the area is composed of broadleaf, conifer or mixed species
- The type of woodland or habitat in the area (e.g. open ground/scrub/plantation/coppice)
- The development stage or age of the area (eg. establishment, thicket, pole-stage, mature, over-mature). Plantations with similar planting years can be grouped together.
- Location or natural boundaries

The group should be given a number or a descriptive name (e.g. 'ancient woodland', 'new plantation', 'playground'). The table should also include some brief notes to describe the common features of the group.

Express the area of the each group as a percentage of the total woodland area (including open space)

Section 2.5

Group (no. or name)	Conifer/ Broadleaf/ Mixed/	Habitat type	Development stage/Age	Description	% of woodland area
A: Birchwood	Predominantly broadleaf	Upland birchwood	Mature/semi mature	Subcompartments 1a, 1c, 1d & 2b, occupying much of the southern portion of the site Birch dominated secondary woodland, with occasional willow, rowan, oak, spruce and Scots pine. Considerable areas of <i>R. ponticum</i>	39%
B: Larch	Predominantly conifer	Planted larch stands on brown forest soils	Mature	Subcompartment 2a, occupying much of the western part of the site. Larch dominated subcompartment, with occasional oak, beech, sycamore, Scots pine, Norway spruce, Douglas fir, birch, rowan and willow. Larch has been thinned in the past, and appears to be a good timber crop (there are unidentified issues with the lower stems of a proportion of the crop).	27%
C: Mixed Broadleaves	Predominantly broadleaf	Lowland Mixed Broadleaves	Semi mature/ Mature	Subcompartments 3a, 3b & 3d, occupying the lower part of the site along the north and east boundary. Largely mature lowland mixed broadleaves, with smaller areas of pole- stage trees. Areas dominated by oak, sycamore, birch and willow, with occasional Norway spruce, Scots pine and larch	18%
D: Policies	Mixed	Lowland Mixed Broadleaf,	Semi mature/	Subcompartment 1b, around the ruins of Polmaise Castle.	8%

		specimen conifers	Mature	This subcompartment contains a number of large conifer trees, including Wellingtonia, coast redwood, Douglas fir, larch, yew and monkey puzzle, as well as sycamore, willow, beech and rowan set in secondary birchwood, with open space, and a range of ornamental Rhododendron species in addition to R. ponticum	
E: Sitka spruce	Conifer	Sitka spruce on brown forest soils	Mature	Subcompartment 1e, occupying a thin strip along a steep slope at the eastern end of the wood. Dense and largely unthinned mature Sitka spruce stand. Considerable mortality and wind damage.	3%
F: Mixed conifer	Predominantly conifer	mixed conifer on brown forest soils	Mature/ semi mature	Subcompartment 2c, towards the NW of the site. Unthinned, single age stand dominated by Scot pine (~70%), much of which is poor quality, with ~20% Douglas fir and 10% Norway spruce / larch.	3%
G: Open ground	n/a			Subcompartments 1f & 3c. Interior of a walled garden where trees will be felled to facilitate restoration and ensure safety of the walls; and a small meadow area with no tree cover (this area was formerly a quarry).	2%

For larger or more diverse woodlands a full sub-compartment schedule may be required. This can be provided as an appendix and should include the following fields : 'compartment', 'sub-compartment', 'Area (ha)', 'Main species', 'Age', 'Stand structure', 'Stand condition' and 'management prescriptions' . This will be read in conjunction with the sub-compartment map that you will provide.

2.6 Greenspace and Green Network Context

Gather together strategic information on the woodland i.e. - looking beyond the site.

Strategy or policy	Document Title	Page or section
Stirling & Clackmannanshire Council Forest & Woodland Strategy	Downloadable from: https://stirling.gov.uk/planning-building-the-environment/planning/development-planning/supplementary-guidance/	All
Local Access Strategy	Stirling Council Core Paths Plan: https://stirling.gov.uk/planning-building-the-environment/the-environment/core-paths/	

Provide information on any relevant developments planned within or in the vicinity of the woodland			
	Within wood	Adjacent to wood	Details
planned development	✓	✓	<p>Within wood: CCTD are working with Cambusbarron Village Nursery to develop a nursery facility adjacent to the Walled Garden</p> <p>Adjacent to wood: there is a proposed new housing development (194 units) in Seven Sisters Field to the north of Subcompartment 3b</p> <p>Adjacent to wood: proposed additional quarrying on the western side of Gillies Hill.</p>
growth area	<input type="checkbox"/>	<input type="checkbox"/>	

Provide information on any relevant developments planned within or in the vicinity of the woodland			
other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	
Additional detail (if required)			

Provide information on the context of the site with regard to recreational and transport infrastructure in the local community				
Feature	Within wood	Adjacent to wood	Details	Map Ref
Country Park	<input type="checkbox"/>	<input type="checkbox"/>		
Core Path Network route	✓	✓	Core Path Network within and adjacent to wood. 1,800m within site	
National Cycle Route	<input type="checkbox"/>	<input type="checkbox"/>		
Long distance footpath	<input type="checkbox"/>	<input type="checkbox"/>		
Public transport links (bus, train, tram)	<input type="checkbox"/>	✓	C11 bus stops at Wallace Place, adjacent to wood	
Public facilities (schools, leisure centres, community centres)	<input type="checkbox"/>	✓	Cambusbarron Primary School is adjacent to the northern edge of the wood	
Additional detail (if required)				

2.7 Recreation Features				
Feature	Within wood	Adjacent to wood	Details	Map Ref
Clearly defined and accessible entrance	<input type="checkbox"/>	✓	There is an unsurfaced car parking and interpretation adjacent to the wood (on land which is not in CCDT's ownership), however the entrances to the wood	

			are not clearly defined	
Public footpath	✓	✓	There are a range of paths through the wood, including part of the core path network. CCDT have produced maps showing routes. However there is no internal signage, and paths are in mixed condition.	
All abilities trail	<input type="checkbox"/>	<input type="checkbox"/>		
Public bridleway	<input type="checkbox"/>	<input type="checkbox"/>		
Public cycle path	<input type="checkbox"/>	<input type="checkbox"/>		
Core path network	✓	✓		
Other footpaths	✓	✓		
Car park	<input type="checkbox"/>	✓	Unsurfaced car park adjacent to the wood	
Play/sport facilities	<input type="checkbox"/>	<input type="checkbox"/>	No formal provision although there is some informal mountain bike activity. The area is mapped for orienteering and used by the local club (Forth Valley Orienteers) on a regular basis.	
Site threshold signage	<input type="checkbox"/>	<input type="checkbox"/>		
Visitor information (on-site or other e.g. leaflet, website)	<input type="checkbox"/>	✓	Leaflets available at panel by car park	
Toilets	✓	<input type="checkbox"/>	Compost toilet at Walled garden	
Provision of learning opportunities	✓	✓	Regular use of the wood by Cambusbarron Primary School.	
Occurrence of Anti-social behaviour	✓	✓	Limited use of the wood for fires, gatherings and alcohol consumption	
Occurrence of Fly-tipping	✓	<input type="checkbox"/>	Limited litter issue	
Occurrence of personal security issues	<input type="checkbox"/>	<input type="checkbox"/>		

Population within 2km of the woodland	12,500 – 15,000
<p><i>Estimate the population that lives within 2km of the woodland. Use the space below to comment on your estimate. Population statistics are available from the National Records of Scotland.</i></p> <p>Population of Stirling is 49,830 (NRS estimate for 2016) - it is estimated that between 25% and 30% of these live within 2km of the woodland.</p>	

2.8 Cultural Features				
Feature	Within wood	Adjacent to wood	Details	Map Ref
Scheduled monument	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Gillies Hill Fort lies to the north west of the wood at NS 769 918	
Conservation Area	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cambusbarron Conservation Area	
Listed Buildings	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Endrick Lodge, Polmaise Road, Category B listed	
Other archaeological site	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ruin of Polmaise Castle	
Other cultural features of interest	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Historic Environment Scotland Inventory of Historic Battlefields	
Additional Detail (if required):				

2.9 Landscape Feature				
Feature	Within wood	Adjacent to wood	Details	Map Ref

National Park	<input type="checkbox"/>	<input type="checkbox"/>		
National Scenic Area	<input type="checkbox"/>	<input type="checkbox"/>		
Special Landscape Area	<input type="checkbox"/>	<input type="checkbox"/>		
Registered Parks and Gardens	<input type="checkbox"/>	<input type="checkbox"/>		
Other designed landscape	✓	<input type="checkbox"/>	19th century policies and gardens of Polmaise Castle	
Attributes which contribute to sense of place	✓	✓	The whole hill is part of the Stirling Southern Hills Local Landscape Area	
Additional detail (if required):				

2.10 Biodiversity Features				
Feature	Within wood	Adjacent to wood	Details	Map Ref
SSSI	<input type="checkbox"/>	<input type="checkbox"/>		
SPA	<input type="checkbox"/>	<input type="checkbox"/>		
SAC	<input type="checkbox"/>	<input type="checkbox"/>		
Ancient Woodland (State which category applies: ASNW/PAWS/LEPO)	✓	✓	LEPO (>50ha of site) – see map in section 2.2 above	
Other (local) nature conservation site (LNCS/SINC/LBS)	✓	✓	Local Nature Conservation Site designated in 2016 (see map 3 above for extent of area)	
European Protected Species	✓	<input type="checkbox"/>	Bats	

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Badgers	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
BAP species (state whether local or national)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Red squirrel	
BAP habitats (state whether local or national)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	National habitats include mixed broadleaved woodland and upland birch wood.	
Other species of note	<input type="checkbox"/>	<input type="checkbox"/>		
Veteran Trees	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The wood contains four large Scots pines on the lower regions of Gillies Hill. These range from 3.03m to 5.69m in circumference. The "Big Pine" may be the fifth largest in the United Kingdom and the largest in Stirlingshire. It is an enormous multi-trunked tree located along a footpath just north of ruined Polmaise Castle.</p> <p>There are also several c19th exotic conifers with some veteran features – these are very prominent in the landscape.</p>	
Deadwood	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Some deadwood, but scope to create additional quantities.	
Additional detail (if required):				

2.11 Water Features				
Features	Within Wood	Adjacent to Wood	Details	Map Ref
Waterbodies	✓	☐	Two old curling ponds and three other small ponds	
Watercourses	✓	☐	Various small watercourses	
Additional detail (if required)				

2.12 Threats

Describe any threats facing your woodland(s) and where relevant, under the following headings, detail the likelihood of presence and the potential impact as high (H), medium (M) or low (L).

Threat	Description	Likelihood (H/M/L)	Impact (H/M/L)
Invasive/Noxious species (e.g. Rhododendron, giant hogweed, Japanese knotweed)	Invasive rhododendron is present across much of the site, control measures are proposed. Piri piri burr has also been reported in the wood	HIGH	HIGH
Tree Health	Ash dieback is present in the wood. P ramorum has not been recorded but is considered a significant future threat to the larch stand.	HIGH	HIGH
Mammal damage: deer, rabbits, hares	Roe deer and rabbits (and possibly hare) are present: measures will be needed to protect restocking and enrichment planting.	HIGH	LOW
Water & Soil (soil erosion,	Limited bare soils and	LOW	LOW

acidification of water, pollution, contaminated land)	slopes, especially under subcpt 1e and after rhododendron clearance		
Environment (flooding, wind damage etc.)	DAMS wind scores across the site range from 11-13. Windthrow risks are generally low, although there is increasing windthrow associated with mortality in the unthinned spruce sub-cpt 1e	LOW	MED
Climate Change (eg. unsuitable species/provenance, lack of diversity, uniform structure)	No specific threats.	LOW	LOW
Anti-social behaviour (eg, arson, fly-tipping, unauthorised vehicle access, vandalism)	Current levels of anti-social behaviour are relatively low and should be reduced by increased management efforts.	LOW	LOW
Dangerous trees	There is considerable mortality and windblow in the unthinned Sitka spruce sub-cpt. Ash dieback is present in the wood and may bring an increasing threat.	MEDIUM	MEDIUM
Other (specify)			
Additional Detail (if required):			

3 Vision and Objectives

To develop your long term vision, you need to express as clearly as possible the overall direction of management for the woodland and how you envisage it will be in the future.

3.1 Vision

Describe your long term vision for the woodland(s).

To manage the woodland to create a safe, vibrant and productive environment for users and wildlife.

3.2 Management objectives

State the objectives of management. Objectives are a set of specific statements that represent what needs to happen to achieve the long term vision.

No.	Objectives (including environmental, economic and social considerations)
1	Encourage responsible and safe public access by upgrading key paths, maintaining others and providing appropriate signage, interpretation and waymarking
2	Manage the woodland to control invasive species, preserve and extend native habitats and encourage native species.
3	Ensure economic sustainability by generating income from activities in the woodland (both silvicultural and other activities), and by making use of appropriate grant aid
4	Enhance community engagement and education by engaging with local educational providers and others to develop facilities, organise events and educational activities in the wood.
5	Manage Polmaise Castle gardens and other heritage assets to provide an attractive and welcoming environment for people to explore.
6	
7	

4 Stakeholder Engagement

Stakeholder engagement, especially with the local community is a crucial part of WIAT woodland management. We will not approve a plan which does not provide evidence of adequate community engagement.

The [Community Engagement Toolkit](#) provides guidance on types of community engagement that may be appropriate. Identify people or organisations with an interest in your woodland and record any engagement in the table below.

Ensure constraints/opportunities and other issues raised by the stakeholders are also recorded on the constraints and opportunities map and table (see section 5.1).

This section will be completed once stakeholder and community consultation on the draft plan has been carried out.

Organisation or individual	Type of involvement (refer to Toolkit categories)	Date feedback /input received (DD/MM/YY)	Issue or Opportunity

5 Analysis and Management Strategy

Analysing the Stakeholder Engagement in section 4 will allow you to identify how to make best use of the site and its resources to achieve your objectives.

The key tasks are:

- Take into account the expectations set out in the WIAT management standard (insert link).
- Explore options for designing the woodland, its spaces, views, habitats and access points to create an attractive resource with a distinct character.
- Explore how the trees and woodland can be actively managed using good silvicultural practice to ensure that the woodland is sustained and enhanced for the long-term.
- Analyse the context of the site and identify options for increasing the use of the woodland
- Explore how the recreational facilities, access opportunities and activities of the site can best be developed to support and encourage greater use.
- Take into account community perceptions and expectations – this must be demonstrated by referring to the issues raised during community engagement recorded in section 4.1
- Consider the management responses to each threat given in section 4.8

5.1 Constraints and Opportunities Analysis

Analyse the constraints and opportunities and record the results on an annotated map and in the table below. The key tasks in Section 5 above must be taken into account.

Feature/Issue	Constraint	Opportunity
Conifer stands	<p>Sitka stand has high mortality and increasing windthrow.</p> <p>Larch subcompartments are a prominent landscape feature and have high amenity value.</p> <p>Small stand of mixed conifer (Scots pine, Douglas fir, Norway spruce and larch)</p>	<p>Opportunity to clearfell and restock with a more appropriate mix of species to improve amenity and long term stability.</p> <p>Potential to use Low Impact Silviculture methods (single tree selection) to manage Larch</p> <p>Potential to thin to improve stand quality and favour Norway spruce for red squirrel.</p>
Broadleaved stands	Lack of management, lack of regeneration, extensive rhododendron	Potential for coppicing
Rhododendron	Significant areas of the site are covered with rhododendron, limiting natural regeneration and with possible loss of public amenity unless controlled.	<p>Potential to establish rhododendron control programme using volunteers</p> <p>Potential for collaborative project with neighbouring landowners</p>
Public use of the wood	Existing path network is largely unsurfaced, and muddy and eroded,	<p>High public use of wood</p> <p>Potential to enhance inclusive access by</p>

	<p>especially on lower slopes adjacent to village</p> <p>Limited access to Polmaise Castle site</p> <p>Lack of interpretation / threshold signage</p> <p>Existing routes are not well signposted.</p> <p>Mountain bikers use the wood, including building structures, but not always with full awareness of the impact of their activities</p>	<p>creating new surfaced routes to link village with Polmaise Castle site</p> <p>Potential to enhance inclusive access by improving waymarking and signage</p> <p>Potential for increased community engagement with mountain bikers to encourage their involvement with future activities</p>
Herbivore impacts, largely roe deer and rabbit, possibly hare	Herbivore numbers are unclear but may be at level which will limit effective woodland regeneration.	Potential for collaborative project with neighbouring landowners
Red Squirrels	Red squirrel are present but local population is under threat from greys	
Plant Health	<p>Potential mortality from Ash dieback</p> <p>Potential mortality of larch from Phytophthora ramorum</p>	
Heritage value of the wood, including role in Bannockburn, Polmaise Castle landscape, Walled Garden	Heritage assets have been largely neglected and are undervalued / underrecognised	<p>Potential to create heritage trails based on the cultural and natural history assets of Gillies Hill</p> <p>Opportunity to restore elements of the designed landscape by, for example, planting another generation of specimen trees, and clearing invasive R. ponticum.</p> <p>Opportunity to develop walled garden area for</p>

		community use (eg community food growing & workshops).
Additional detail (if required)		

The Management Strategy (section 5.2) should address the key issues and objectives identified within the stakeholder engagement (section 4) and the Constraints & Opportunities Analysis (section 5.1)

The key management issues to be addressed, which have arisen from the constraints and opportunities analysis, should be recorded below and on a design concept map (refer to the WIAT management standard).

Each issue should relate to one or more of the management objectives stated in section 3.2.

Give a concise statement of the strategy to achieve the desired outcome e.g.:

- link paths to community centre
- create mountain bike facility for young people
- upgrade paths for all-abilities
- create a more open woodland

Prescriptions for the operations to be carried out should be given in section 7 (Management proposals)

Opportunities for silvicultural improvements should be taken over the short, medium and long- term.

Outline silvicultural policy and management objectives.

Describe the silvicultural improvement to be employed for each woodland type summarised in the woodland improvement.

5.2 Management strategy to address with key issues and objectives			
Key Issue or Opportunity (from section 5.1)	Associated Management Objective (from section 3.2)	Strategy to achieve desired outcome	Priority (H/M/L)
Conifer stands	Ensure economic sustainability by generating income from activities in the woodland (both silvicultural and other activities), and by	Sitka spruce stand is too vulnerable to windblow to permit thinning so will be clear-felled. Restock with Douglas fir / Mixed broadleaves	H

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	<p>making use of appropriate grant aid</p> <p>Manage the woodland to preserve existing habitats, and encourage more native species</p>	<p>Larch stands managed by Low Impact Silvicultural Systems (single tree selection) & small scale harvesting to maintain amenity value</p> <p>Thin mixed conifer stand to favour Norway spruce & Douglas fir</p>	
Broadleaved stands	<p>Ensure economic sustainability by generating income from activities in the woodland (both silvicultural and other activities), and by making use of appropriate grant aid</p> <p>Manage the woodland to control invasive species, preserve and extend native habitats and encourage native species.</p>	<p>Establish coppicing regime in selected sub-compartments to increase structural diversity and generate small volumes of firewood for local use</p>	H
Rhododendron	<p>Manage the woodland to control invasive species, preserve and extend native habitats and encourage native species.</p>	<p>Establish rhododendron control programme using volunteers</p> <p>Investigate potential for collaborative project with neighbouring landowners</p>	H
Public use of the wood	<p>Encourage responsible and safe public access by upgrading key paths, maintaining others and providing appropriate signage, interpretation and waymarking</p>	<p>Create 1200m new surfaced path to link School & Gillies Hill entrances with Polmaise Castle</p> <p>Maintain other paths</p> <p>Install threshold sign, interpretation and waymarking</p>	H

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	Enhance community engagement and education by engaging with local educational providers and others to develop facilities, organise events and educational activities in the wood.	Work with school and other stakeholders to increase responsible recreational use Work with community groups and businesses to develop community facilities focused on the walled garden area	
Herbivore impacts, largely roe deer, but also probably rabbit or hare	Manage the woodland to preserve existing habitats, and encourage more native species Ensure economic sustainability by generating income from activities in the woodland (both silvicultural and other activities), and by making use of appropriate grant aid	Survey to establish numbers and assess likely damage. Agree necessary mitigation methods (e.g. herbivore control, fencing, shelters) prior to restocking. Seek to work collaboratively with neighbours to reduce herbivore numbers.	M
Heritage value of the wood, including Polmaise Castle landscape and role in Bannockburn,	Manage Polmaise Castle gardens and other heritage assets to provide an attractive and welcoming environment for people to explore.	Develop a Landscape Restoration Plan for Polmaise Castle Policies	M
Red squirrels	Manage the woodland to preserve existing habitats, and encourage more native species	Thin mixed conifer stand to favour Norway spruce	M
Plant Health	Manage the woodland to preserve existing habitats, and encourage more native species	Monitor for Ash dieback and Phytophthora. ramorum and take appropriate action (guided by Scottish	M

		Forestry and Forest Research) if required	
Describe your strategy for silvicultural improvement below			
Additional detail (if required)			

6 Management Proposals

Describe the operations that you will be undertaking in the woods in the relevant sections below. You may also wish to include a work programme as an appendix. You may use your own format or the suggested template given at Appendix 1. The approved plan may be made available to the public so any commercially sensitive financial information should be redacted from the document that you provide us.

6.1 Thinning and Felling

Where felling or thinning is proposed, you must provide a felling map indicating timing of felling, the areas to be thinned and areas to be managed under Low Impact Silvicultural Systems (LISS). Describe the thinning prescriptions to be employed in the woods including thinning type and intensity.

Show any areas of permanent woodland removal (eg for landscape reasons or to create space for play areas or other facilities, annotated with their area in hectares). Woodland removal may require an EIA determination from us depending on the area and whether the site is considered sensitive.

If applying for thinning approval with this plan, please complete Appendix 2 fully in accordance with your thinning map. Other types of felling must be applied for separately.

Show any areas of permanent woodland removal (eg for landscape reasons or to create space for play areas or other facilities, annotated with their area in hectares). Woodland removal may require an EIA determination from us depending on the area and whether the site is considered sensitive.

Wherever possible, CCDT seeks to manage the wood using Low Impact Silvicultural Systems (LISS). The felling map shows the following planned operations

Clearfell (and restock) subcompmt 1e (2.26ha Sitka spruce)

This subcompartment is a thin strip along a steep slope at the eastern end

of the wood, occupied by a dense and unthinned mature Sitka spruce stand. There has been considerable mortality and wind damage.

Produce will be extracted and stacked in the small meadow area at the east end of the subcompartment, and new lorry access formed either directly onto Polmaise Road at NS782915 or via the existing access point at NS781915 (further discussion and consultation with stakeholders and Stirling Council is required).

Without intervention it is expected that there will be further windthrow, with consequent loss of public amenity. Clearfelling is the only option as it is considered that thinning will only promote and hasten windthrow.

Felling permission has not yet been sought for this work.

See 6.2 below for restocking details.

Fell (and restock) part of subcmpt 3a (0.62ha mixed broadleaves)

Felling permission has been sought and granted to fell broadleaves along a narrow strip adjacent to housing on the Gillies Hill estate for safety / liability reasons. See 6.2 below for restocking details.

Fell part of subcmpt 3c

Felling permission has been sought and granted to fell broadleaves within and immediately adjacent to the walled garden to facilitate restoration and for safety / liability reasons.

Thin subcmpt 2a (17.58ha Larch)

This large subcompartment is dominated by single age, mature larch, with a range of other broadleaf and conifer species. The larch has been thinned in the distant past, and appears to be a good timber crop.

Thinning will be by single tree selection, at a low intensity: approx. 10% of total volume over 10 years (= ~500m³).

CCDT will investigate options for local processing and use of timber where possible to optimise returns.

Thin subcmpt 2c (1.97ha Mixed Conifers)

This small stand of mixed conifers will be thinned to improve stand quality, removing poor quality Scots pine and favouring Douglas fir and Norway spruce. Total volume removed ~150m³, expected to be mostly small diameter and poor quality material, primarily for local firewood markets.

Coppice subcompts 1c and 3b (12.32ha Birch / MB)

Coppice management will be reintroduced in these subcompartments to increase structural diversity and produce small volumes of woodfuel and other timber products (max 100m³ per annum) for local markets.

The annual area coppiced will be ~0.5ha, with a return period of ~25years.

Felling permission has not yet been sought for this work.

6.2 Planting / Restocking

Provide a map that shows proposed replanting after felling and new woodland creation and complete the schedule below. Species to be planted should be differentiated using colour coding. Small scale, intricate or complicated landscape planting should be further described by annotating the map with notes or referring to landscape design drawings in an appendix.

You should provide general prescriptions for the planting including ground preparation, tree and shrub species to be used, stocking density, protection and maintenance.

Restock subcomp 1e (2.26ha) with Mixed broadleaves and Douglas fir

This subcompartment will be restocked with

30% Oak at 3,000 stems / ha

30% Douglas fir at 3,000 stems / ha

40% Mixed broadleaves (Hazel, Birch, Hawthorn, Aspen) at 1,600 stems / ha

Fencing will be employed to protect trees from deer / rabbits

Restock part of subcomp 3a (0.62ha) with Mixed broadleaves

This area will be restocked with a mix of low-growing broadleaved species including gael, hazel, crab apple, rowan and hawthorn

6.3 Access Improvements

Map the location and provide a brief description and the proposed timescale for each individual project (e.g path/track construction, car park construction,). Detailed plans and specifications for grant-aided capital works will be required in your WIG application but are not required here. Give an estimate of work quantities.

A new surfaced path (~1200m) will be constructed linking the School and Gillies Hill estate entrances with the Polmaise Castle site. This will follow

the line of existing unsurfaced and often muddy eroded paths and desire lines through the wood and create a safe and accessible route.

The path will be constructed to WIAT grant standard for “unbound surface paths”. <https://www.ruralpayments.org/topics/all-schemes/forestry-grant-scheme/forestry-grant-scheme-capital-items/new-path-unbound-surface--fgs/>

CCDT will carry out general maintenance of other paths as required to ensure public access through the wood is maintained.

6.4 Other Recreational Facilities

Map the location and provide a brief description and the proposed timescale for each individual project (e.g. play/sport facilities installation, toilet construction). Give an estimate of work quantities.

6.5 Community Perception

State how the overall impression of site will be improved (e.g. threshold/access point improvements, signage and interpretation, provision of visitor information (on-site or other e.g. leaflet, website), provision of learning opportunities and provision of community involvement opportunities.

CCDT will install a threshold sign at the Gillies Hill estate entrance (NS776921) and an interpretation Board at the Polmaise Castle site (NS777916).

Waymarking will be installed on the new surfaced path and other core paths.

A site map showing path routes will be added to the CCDT website

CCDT will develop the use of the wood for volunteering, through both CCDT-led activities (e.g. monthly work party) and through facilitating volunteering by other organisations (e.g. Scouts, Camphill). Tasks to be undertaken include path maintenance, tree planting and rhododendron control.

In addition to the activities described within this plan, CCDT is seeking to bring the walled garden and its immediate surrounds back into use as a community growing space for trees, plants, fruit and vegetables, to enhance the health and welfare of the local community and beyond. This will involve sensitively restoring the walled garden and its access so that it is safe; engaging the local community to assess the demand for a sustainable mix of rented allotments and community growing initiatives; and developing areas for less able gardeners and children.

6.6 Safety and Security

Describe measures that will be taken to improve personal safety and reduce anti-social behaviour.

Provision of a new surfaced path to the Polmaise castle site will enhance inclusive access and reduce trip / fall hazards.

Greater use of the wood will discourage anti-social behaviour.

6.7 Rhododendron

Invasive rhododendron will be removed from subcompartment 1c (total area cleared ~5ha) and will be cut back across the site where it is impinging on paths or key features of interest.

6.8 Maintenance

Provide details of how the site and infrastructure will be maintained, including removal of litter and fly-tipping for example.

Site maintenance will be carried out by community forest manager and CCDT volunteers.

7 Monitoring and Review

We advise that you carry out an interim review of progress against the plan annually. You may need this information when you make a claim for Forestry Grant Scheme payments e.g. Sustainable Management of Forests (WIAT). A full review of the plan will be expected at the end of year five.

Appendix 1 – Work Programme			
Sub-Compartment	Operation	Year(s)	Description
3a	Felling	1	Clearfell boundary strip
3a	Restock	3	Restock with mixed broadleaves
3c	Felling	1	Fell trees in and adjacent to walled garden
1e	Felling	3	Clearfell small sitka spruce stand
1e	Restock	4	Restock with Broadleaves / Douglas fir
2a	Thinning	1-10	Thin Larch
2c	Thinning	4	Thin mixed conifers
1c & 3b	Coppicing	1-10	Small coupes bringing broadleaves into coppice management
1c	Rhododendron control	1-5	Eradication of rhododendron within sub-cmpt 1c
1b, 1c, 1d, 3a	Pathworks	2 & 4	New surfaced path to WIAT grant standard
3a	Signage	1	Threshold sign at Gillies Hill entrance
1b	Signage	3	Interpretation Board at Polmaise Castle site
All	Waymarking	1-4	Waymarking of new and core paths
All	Pathworks	1-5	Ongoing maintenance of existing paths

Appendix 2 – Thinning

This table shows the total management plan area as well as the thinning compartments proposed for management. The felling site/compartment in this table must be shown as the same on the thinning map(s). Please select method of displaying thinning regime:

☐ Pre/Post stocking density

☐ Pre/Post basal area

☒ Volume to be removed

Total Plan Area:		64.71	hectares							
Thinning Compartment	Area (ha)	%	Species to be felled (one per row)	Age (Years)	Marking of Trees	No of Trees	Volume (m ³)	Thinning Details (per ha)		
								Pre	Post	
								Total		
2a	17.56	27%	Larch	100			500	5000		4500
2c	1.97	3%	Scots pine	40			150	600		450
Total Area	19.53	30%				Total Volume m³	5600	Total to be removed:	650	