

# Cowal and Trossachs Forest District

# Land Management Plan

# Shannochill



Cowal and Trossachs Forest District

SHANNOCHILL

Land Management Plan

We manage Scalland's National Forest Estate to the United Kingdom Woodland Assurance Standard – the standard endorsed in the UK by the international Forest Stewardship Council® and the Programme for the Endorsement of Forest Certification. We are independently audited.

Our land management plans bring together key information, enable us to evaluate options and plan responsibly for the tuture. We welcome comments on these plans at any time.





Approval date:  $|l_{e}|_{3}|_{b}$ Plan Reference No: 04-2015Plan Approval Date:  $|l_{6}|_{3}|_{b}$ Plan Expiry Date:  $|l_{6}|_{3}|_{2026}$ 

STEPHEN MURPHY

9th October 2015

#### CSM 6 Appendix 1b

# FOREST ENTERPRISE - Application for Land Management Plan Approvals in Scotland

#### **Forest Enterprise - Property**

Forest District:	Cowal & Trossachs
Woodland or property name:	Shannochill
Nearest town, village or locality:	Aberfoyle
OS Grid reference:	NS 540991
Local Authority district/unitary Authority:	Stirling Council

#### Areas for approval

	Conifer	Broadleaf
Clear felling	0ha	0ha
Selective felling	n/a	n/a
Restocking	0ha	0ha
New planting (complete appendix 4)	0ha	15.6ha

1. I apply for Land Management Plan approval for the property described above and in the enclosed Land Management Plan.

2. I apply for an opinion under the terms of the Environmental Impact Assessment (Forestry) (Scotland) Regulations 1999 for afforestation as detailed below.

- 3. I confirm that the initial scoping of the plan was carried out with FC staff on 20<sup>th</sup> October 2011.
- 4. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.
- 5. I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders which the FC agreed must be included.
- 6. I confirm that consultation and scoping has been carried out with all relevant stakeholders over the content of the of the design plan. Consideration of all of the issues raised by stakeholders has been included in the process of plan preparation and the outcome recorded on the attached consultation record. I confirm that we have informed all stakeholders about the extent to which we have been able to address their concerns and, where it has not been possible to fully address their concerns, we have reminded them of the opportunity to make further comment during the public consultation process.
- 7. I undertake to obtain any permissions necessary for the intelementation of the approved Plan.

Signed		Signed
	Forest District Manager	P conservator
District	Cowal & Trossachs FD	Conservancy (evth Othyll
Date	09/10/15	Date of Approval 1.6. MAR 2016
		Date approval ends 16 Murch 1014

#### CSM 6 Appendix 4

### FOREST ENTERPRISE - Application for Approval of New Planting

#### 1. Forest Enterprise – Property

Forest District:	Cowal & Trossachs	
Woodland or property name:	Shannochill	
Nearest town, village or locality:	Aberfoyle	
OS Grid reference:	NS 540991	
Local Authority district/unitary	Stirling Council	

#### 2. Proposed areas to nearest tenth of a hectare

New Planting	15.6
Open Ground	21.1
Existing woodland	6.5
Total	43.2

#### 3. Special areas and protected land

Designation	Area Name or Number	Comments

#### 4. Proposal details of new planting

Area Name or number	Gross Area (Ha)	P Year	Spp	Area (Ha)	Open Ground (Ha)	Comments
Shannochill	43.2	2017/18	MB	15.6	21.1	See Table 5.1 in main text for species breakdown

### Shannochill Land Management Plan 2015-2024

I apply for Authority to plant as above and as shown on the attached map.

I undertake to obtain the necessary permissions from the appropriate statutory body before commencing work under any approval which is granted.

١

Signed		Signed	The	
	Forest District Manager		PConservator	
District	Cowal & Trossachs FD			
Date	9 <sup>th</sup> October 2015		16 MAR 2016	
	roval ends:		16 March	2026

#### **Environmental Impact Assessment**

# **Determination Enquiry Form**

Complete this form to find out if you need consent, from the Forestry Commission (under the EIA Regulations 1999). to carry out your proposed work.

#### Section 1

Please tick the box to indicate the type of work you are proposing to carry out. Give the area in hectares and where appropriate the percentage of conifers and broad leaves.

Proposed work:	Afforestation	15.6	ha	BL (	Con	Forest Roads	Μ
	Deforestation		ha	BL% Co	on 100%	Forest Quarry	ha
Location and d	listrict <sup>.</sup>						

Please attach map(s) showing the boundary of the proposed work and also give details of the operations.

Section 2		
Property Details		
Property Name: Shannochill		
Grid Ref: (eg AB 123/789)	IS 540 991	
Local Authority: LLTNPA		
Nearest Town: Aberfoyle		
Contra o		
Section 3 Applicant's category: (please pu	it a cross in one box)	
PE Personal occupier	PU Public ownership	x
BU Business occupier	OT Other	
VO Voluntary organisation	CT Crofting tenant	
Section 4		
Applicant's type: (please put a cro	oss in one)	
LS Lessee TE Ter	OW Owner x	TR Trust
Section 5		
Your agent or woodland manager	's dotails	
rour agent or woodiand manager		
Title (Mr, Mrs, Ms, etc) Initials:	J Surname: Hair	
Organisation: Forestry Comm	ission Scotland	
Address: Cowal & Trossachs Fores Aberfoyle Stirling	t District Postcode: FK8 3UX	
Tel: 0300 067 6600 Mo	bile	
Fax: Email:	john.hair@f <u>orestry.gsi.gov.uk</u>	
Is this the address for corresponden	ce? YES	NO
	x	



Scheme No



### Section 6

4	Applican	t's details:							
٦	Fitle (Mr,	Mrs, Ms, etc):	Mr	Initial	S	Surname: Murphy			
C	Organisation: Forestry Commission Scotland								
F	Position (	eg partner, direc	tor etc):	Plannin	g Forester				
A	Address:	Cowal & Trossa Aberfoyle Stirling	chs Fore	st Distri	ict				
				I	Postcode: F	(8 3UX			
٦	ſel:	0300 067 6600		I	Mobile:				
F	ax:				E-Mail: step	hen.murphy@forestry.gsi	.gov.uk		
l	s this the	address for corr	esponde	nce?	x	YES	NO		
-									

Sensitive Areas: Give the area of the proposal that is covered by any of the following designations.

<u>Sei</u>	nsitive Area as listed in "Schedule 2" of the 1999 EIA Regulation	<u>Area (ha)</u>
a.	Sites of Special Scientific Interest (SSSI) or Proposed Sites of Special Scientific Interest (PSSSI)	
b.	SSSI's with a Nature Conservation Order (Section 29 of the Wildlife and Countryside Act 1981)	
c.	National Park	15.6
d.	The Broads	
e.	World Heritage Site	
f.	Scheduled Ancient Monument (SAM)	
g.	Area of Outstanding Natural Beauty (AONB)	
h.	"Natura 2000" site – (European network of special areas of conservation andspecial protection areas under the Wild Birds Directive	

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### Summary of Proposals

The Shannochill Land Management Plan (LMP) is a strategic plan, which reflects the key themes of the Scottish Forestry Strategy (SFS) (2006), and Cowal & Trossachs Forest District's strategic plan. Shannochill is a new acquisition and this plan describes proposals, and seeks approval, for afforestation of about 17ha of previously agricultural ground. The overall objectives of the plan are to plant broadleaved species in order to contribute to Scottish Government targets on carbon sequestration and woodland expansion. In addition the bulk of the broadleaves are to be for productive purposes and the site should also demonstrate the best principles of integrated landuse management.

The key objectives are as follows:

- 1. Expand the area of broadleaved woodland on the National Forest Estate.
- 2. Contribute to targets for carbon sequestration.
- 3. Grow broadleaved timber for production.
- 4. Demonstrate best practice in integrated land use management.
- 5. Maintain and enhance those parts of the site described as designed agricultural landscape.
- 6. Maintain and enhance areas of existing ancient semi-natural woodland.
- 7. Maintain those parts of the site identified as UKBAP<sup>1</sup> priority habitats.

<sup>&</sup>lt;sup>1</sup> United Kingdom Biodiversity Action Plan

### 1.0 Introduction:

#### 1.1 Setting and context

Shannochill Land Management Plan area lies approximately two kilometres south-east of Aberfoyle in the County of Stirling (Figure 1.1). It is close to the A81 Glasgow to Callander road and is accessed via a track near Cobleland. It lies immediately south of the Highland Boundary Fault, occupying a low ridge overlooking the River Forth and is within the Loch Lomond and The Trossachs National Park. The immediate surroundings consist mainly of grazing land but to the north, south and west are extensive commercial plantations.

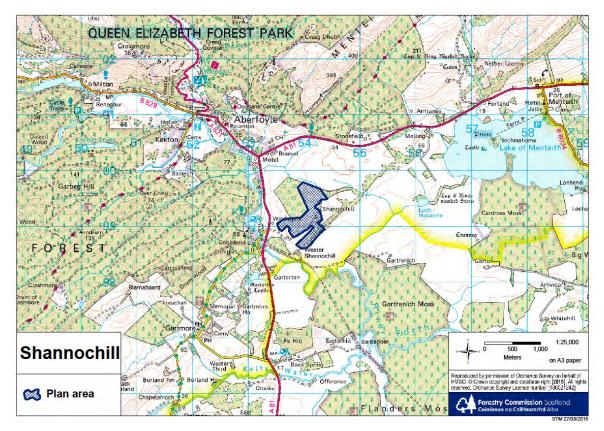


Figure 1.1 Shannochill: location

### 2.0 Analysis of previous plan

This is a new acquisition and therefore this is the first design plan for the site.

### 3.0 Background information

#### 3.1 Physical site factors

#### 3.1.1 Geology, soils and landform

Shannochill occupies a low ridge to the south of the Highland Boundary Fault and is underlain by Old Red Sandstone sedimentary rocks of the Devonian Period. The solid geology is covered with a thin layer of glacial material and the bedrock is close to the surface in places, often appearing as linear features parallel to the ridge. The southern slopes of the ridge are much steeper than those on the north and the latter exhibit an uneven character with low mounds of well drained soils separated by narrow flush lines. Elevation ranges from 20m to 70m.

The plan area is not covered by any detailed soil survey but field investigations have revealed the pre-dominance of brown earths (Figure 3.1) with less well drained soils in flush lines and hollows. The soils are occasionally shallow and sometimes quite stony, as evidenced by the presence of several clearance cairns. Agricultural activity may mask a tendency towards podzolisation. Peaty gley and flushed peats have developed in places.



Figure 3.1 Freely drained brown earth

Table 3.1 summarises the nutrient and moisture regimes of the main soil types. Past agricultural activity will possibly have improved the nutrient status of the soils, at least in the short to medium term. In general podzolised brown earths will be poorer than typical and slightly gleyed brown earths. Shallower and stonier sites will be towards the drier end of the moisture regime spectrum.

Soil type	Soil moisture	Soil nutrient
Typical/podzolic Brown earth	Slightly dry to moist	Poor to medium
Upland brown earth	Fresh to moist	Poor
Intergrade	Moist	Poor to very poor
Iron pan soil	Very moist	Very poor
Surface water gley	Very moist to wet	Poor to medium
Peaty gley	Wet to very wet	Very poor to poor
Flushed peat	Very wet	Poor to medium
Unflushed peat	Very wet	Very poor

Table 3.1 Shannochill: basic soil properties

#### 3.1.2 Water

No permanent water courses are marked on 1:10000 Ordnance Survey maps. There is, however a spring line on the southern slope of the ridge with several permanent or ephemeral streams draining towards the river Forth. There is a permanently wet area on the ridge which drains to both north and south. A pond is marked on the early OS maps in this area and a second pond to the south west still retains open water, except in very dry conditions. Some of the flush lines on the northern slopes may also have running water during rain events. Two wells are marked on the early OS maps, the sites of which also appear to be permanently wet.

#### 3.1.3 Climate

Using the measures of warmth and wetness defined in the Ecological Site Classification (ESC, see Forestry Commission Bulletin 124) Shannochill, is considered to be warm and moist. The annual temperature range is relatively small and about 60% of the annual precipitation, of about 1600mm, occurs in winter. Although the site is open to the south west the lower south western parts of Shannochill are classed as being sheltered becoming slightly exposed at the highest elevations and to the north east.

In practical terms these conditions suggest that a range of tree species are suitable for use in the design plan area.

#### 3.1.4 Future climate

Predicting the impact of future climate change presents one of the biggest challenges in forest planning. Analysis carried out by Forest Research indicates an overall increase in average temperatures with warmer summers and milder winters (Figure 3.1 top). There will be regional variation in the future rainfall pattern and distribution, with a decrease in summer rainfall in the east but an increase in the west of the country. This will lead to more frequent drought in the east but a reduction in moisture deficit in the west (Figure 3.1 bottom).

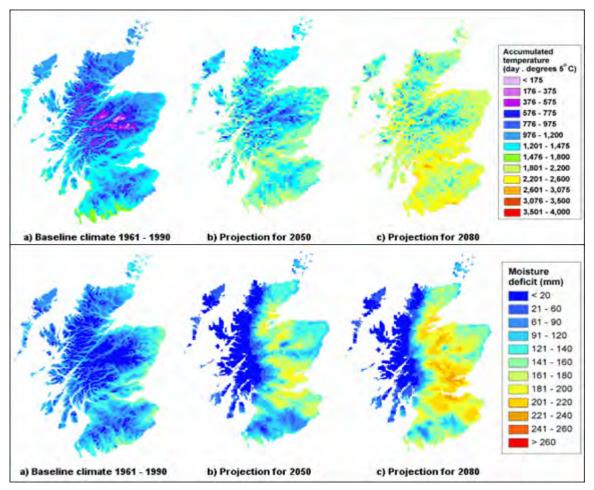


Figure 3.1 Predicted future warmth (top) and moisture deficit (bottom) – high emissions scenario

There is less confidence in predicting changes in other climatic parameters such as windiness and extreme winter cold or summer heat. However there is a general belief that the number of frost days will decrease but that the incidence and severity of extreme events (e.g. gales and heavy rain) will increase.

Data for the surrounding area suggest an increase in warmth of about 25% by 2050, compared to baseline 1960 – 1990 data. However for high emission scenarios the increase could be as much as 70% by 2080. Up to a 30% decrease in summer rainfall is predicted but this is compensated by a predicted rise of about 10% in winter precipitation and an overall slight decrease in annual precipitation is indicated. Moisture deficit is predicted to have fallen by 2050 but then rise by up to 120% of baseline in 2080. Potentially there could be an increase in growth rate in all tree species and a wider range of species become suitable, where exposure is not the limiting factor. On stony, shallow soils, however, there may be problems with species prone to summer drought.

#### 3.2 Biodiversity and environmental designations

Much of the site is dominated by improved and semi-improved grassland with limited species diversity. However two areas of UKBAP priority open habitat have been identified, one in the north of the site, the second on the southern fringe. The first site consists of low mounds of lowland dry acid grassland interspersed with a network of lowland fen (Figure 3.2). The second is a narrow strip of partially wooded purple moor grass and rush pasture (Figure 3.3). In addition the unimproved meadows on the steeper south facing slopes have been identified as important and endangered butterfly habitat (Figure 3.4). There are several areas of woodland and individual trees. Older maps indicate the presence of two ponds on the ridge. One of these is still present though may disappear during longer dry spells, the other is now enclosed by trees and, though the ground is very wet, there is little evidence of open water.

There are no statutory environmental designations on the site.



Figure 3.2 Lowland acid grassland priority open habitat below semiimproved grassland.



Figure 3.3 Purple moor grass and rush pasture on the southern fringe of the site.



Figure 3.4 Unimproved meadow on south facing slopes – important butterfly habitat.

#### 3.3 Existing woodland

#### 3.3.1 Species, age structure and yield class

There is a strip of ancient semi natural woodland on the southern slopes of the site, dominated by oak with a few ash and sycamore (Figure 3.5). There is a little natural regeneration in places and the understory includes a few hazel. A more degraded oak woodland (Figure 3.6), which shows evidence of previous coppice management, occurs on the ridge and may once have been contiguous with the ancient woodland. There are other smaller stands of trees of variable character. Individual specimen trees, mainly of oak, but including sycamore, ash and hawthorn, are to be found in the fields, especially to the west of Over Shannochill. There are several hedgerows consisting of hawthorn, hazel and other species and these also include larger trees.



Figure 3.5 Ancient semi-natural woodland on the southern slopes of the plan area





#### 3.3.2 Access

There is a track leading to Over Shannochill which leaves the main A81 near to Cobleland. This has recently been upgraded and will be the main access to the site. A second track, leading to Nether Shannochill, passes through the southern part of the plan area.

#### 3.3.3 LISS potential

Deeper well drained mineral soils combined with a sheltered situation offer good potential for the use of low impact silvicultural systems (LISS). Stands will be assessed approximately 15 to 20 years after planting as they approach age of first thinning to determine possible options.

#### 3.3.4 Current and potential markets

The site is close to the A81 Glasgow to Callander road with access to a wide range of potential markets for both coniferous and broadleaved timber.

#### 3.4 Landscape and landuse

#### 3.4.1 Visibility, landscape character and value

Shannochill is at the junction of lowlands and uplands, at a point where large, commercial plantations give way to mixed agriculture, forestry and mosses of the Forth Valley (Figure 3.7). The low ridge on which Shannochill sits, although not prominent, is visible from a number of viewpoints. It can be seen from the A81, east of its junction with the A821 and from higher elevations at the southern end of the Menteith Hills. It is integral to the mixed landscape seen from the terrace at the Lodge, above Aberfoyle. From the south, the southern slopes are prominent from the old railway line, now a popular walking, cycling and riding route. From within the site there are views of the Menteith Hills, Ben Lomond (Figure 3.8) and south across the low lying ground of the Forth Valley to the Campsie Fells.



Figure 3.7 Shannochill (middle distance) in its landscape setting



Figure 3.8 Loch Ard Forest and Ben Lomond from the central ridge

Settlements at Shannochill are depicted on 17<sup>th</sup> century maps and by the time the first OS maps were published in the mid 19<sup>th</sup> century the open grazing land had been enclosed with hedgerows and planted with individual specimen trees. This pattern has been little changed since that time and the National Park describe the site as of high significance at a local level in a survey of designed landscapes and gardens. The Park consider the pattern of woods, tree groups and individual trees, set in open woodland or pasture worth conserving (Figure 3.9). The full report describing the site is given in Appendix VII.



Figure 3.9 Designed agricultural landscape

#### 3.4.2 Neighbouring land use

Shannochill itself is largely improved grazing and the woodlands are currently open to pasture. There is grazing land, of varying quality to the south, north and east. Further south is the large plantation of Flanders Moss and both west and north of the A81 are the extensive commercial spruce and larch forests of the Queen Elizabeth Forest Park (Figure 3.10). Aberfoyle and the surrounding area is an important tourist destination.



Figure 3.10 Upland forestry to the north of Shannochill.

#### 3.5 Social factors

#### 3.5.1 Recreation

Although there are no formal facilities at present, the site offers good potential for future public access. It is within the National Park and close to the town of Aberfoyle. National Cycle Route 7 uses part of the track to Nether Shannochill between the A81 and the River Forth. The old road between Cobleland and Port of Menteith is still visible running along the north west boundary and centre of the plan area (Figure 3.11).

#### 3.5.2 Community

There is no formal community involvement with the site.



Figure 3.11 Remnant woodland near Over Shannochill; the old, walled track is to the right.

#### 3.5.3 Heritage

As noted above there have been settlements at Shannochill since at least the 17<sup>th</sup> century and several features are noted on early maps. Forestry Commission Scotland, commissioned a walkover archaeological survey which noted 13 sites of some archaeological or historical significance. These include the visible remains of a roofed structure marked on 1<sup>st</sup> edition OS maps, two wells and several clearance cairns, one of which may be over the site of other features (Figure 3.12) and another may be the site of a pet burial (Figure 3.13).

The sites of both wells remain permanently wet. One of these is close to Over Shannochill and is surrounded on three sides by a low wall. On the northern side there is a short, overgrown flight of steps down to where water would have been drawn (Figures 3.14 and 3.15). The line of the march fence encloses this site onto Forestry Commission Scotland ground though strictly speaking it belongs to the neighbouring property.

Features are indicated on the heritage map and a full report is to be found in Appendix VI).



Figure 3.12 Clearance cairn (site 11), possibly overlying older features. The site of an old well (site 1) is to the left of the cairn.

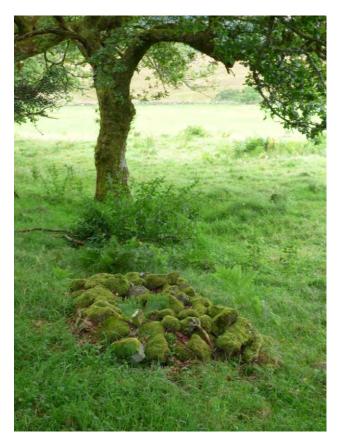


Figure 3.13 Sub-rectangular cairn (site 7), possibly a Victorian pet burial.



Figure 3.14 Site of well to the south of Over Shannochill (site 5)



Figure 3.15 Northern wall of well (site 5) showing steps down to water.

#### 3.6 Statutory requirements and key external policies

The key policy documents influencing the LMP are the UK Woodland Assurance Standard, the UK Forestry Standard (3<sup>rd</sup> Edition), and the Scottish Forestry Strategy. Stirling Council refer to Proposed Supplementary Guidance SG28 Landscape Character Assessments, of their Local Development Plan. In particular guidelines for Forests and Water and Forests and Historic Environment will be adhered to.

### 4.0 Analysis and Concept

The analysis and concept map summarises the main constraints and aspirations for the LMP area.

#### 4.1 Analysis

- Gross area 43ha, about half of which is available for planting.
- Climate suitable for a range of productive and non productive tree species.
- Part of a designed agricultural landscape with parkland features.
- Moderate grazing land associated with designed agricultural landscape.
- Visible from The Lodge, Menteith Hills and A81 Glasgow to Callander road.
- Two areas of UKBAP priority open habitat.
- Opportunity to improve biodiversity.
- Several archaeological or historical features of local significance.
- Good access to A81.

#### 4.2 Concepts of the plan

- Plant up to half the site with productive broadleaved species, both native and non-native, taking into account site conditions and potential climate change.
- Maintain the character of the designed landscape.
- Conserve and enhance existing woodland.
- Conserve priority open habitat.
- Conserve important archaeological features.
- Demonstrate best practice principles in integrated land use management.

### 5.0 Land Management Plan Proposals

#### 5.1 Management

Initial management will be the establishment, over a five year period, of a broadleaved woodland as indicated in the Future Habitats map. Oak and sycamore will be the main species planted at up to 5000 stems per hectare. Planting pattern will vary depending on species and ground conditions. Several other species may be used in addition to the two main ones, including Norway maple, birch, aspen, and hazel. Individual specimen trees may be planted in parkland areas and there is potential for small scale underplanting of the woodlands on the ridge.

Cultivation techniques, drainage and weed control will be implemented as appropriate. However there will be no deep forest ploughing.

Future management of stands will be assessed as the time of first thinning approaches.

There are no formal plans for a recreation infrastructure; however planting will be carried out in such a way to allow for this.

All forestry operations will be carried out in accordance with the UK Forestry Standard Guidelines, Forests and Water (5<sup>th</sup> edition).

#### 5.2 Future habitats and species

The Future Habitat and Species map shows the distribution of habitat types that will be found at Shannochill, including open space. Table 5.1 provides a summary of preferred species and percentage cover in the newly planted areas. Although there is unlikely to be much variation in the overall planting scheme, alternative species are listed, providing some flexibility in the overall framework.

### Shannochill Land Management Plan 2015-2024

Main	Woodland Type	Species	Mixture Information	Gross	Comments
species				Area	
Oak	Productive	Oak	5*5 groups of oak	13.6ha	Infill should not out compete Oak
	broadleaves	Silver birch	with infill of other		Option to use other broadleaved species for
		Hazel	species; or more		example hornbeam, red oak.
		Aspen	extensive pure		Use only native species adjacent to semi-natural
		Wild cherry	stands of oak.		woodland.
					Shrubby and flowering species can be used to
				break up edges and add to diversity.	
					Wild cherry in groups or intimate with main
					species.
Sycamore	Productive	Sycamore	Groups	2.0ha	
	broadleaves	Norway maple	Groups		
Oak	Existing	Oak		6.5	Option to plant small groups of native species to
	woodland	Birch			aid restoration of woodlands; management
		Hazel			appropriate to stand condition.
Open	Priority open			5.9ha	No planting
	habitat				
	Grazing	Oak	Individual specimens	15.2	Individual trees to enhance parkland; open
		Sycamore.			areas to be maintained by cattle grazing.

Table 5.1Species choice

#### 5.3 Restructuring

The existing woodlands will be retained.

#### 5.4 Future management

In the five years following first planting, productive species will be established at appropriate spacing. During that period beating up with the same or other suitable and appropriate species from the species table, will be allowed. Productive stands will be assessed towards time of first thinning (approximately 15 - 20 years, depending on species and yield class), and decisions taken on future management.

#### 5.5 Species tables

Table 5.2 indicates expected species percentages following establishment. Other broadleaves includes the old established woodlands, the majority of which is oak.

Species	2021
Oak	15.9
Sycamore	2.8
Other broadleaves	' &"(
Open ground	(""
	100

Table 5.2Expected species diversity in Shannochill (percentage of<br/>total area)

#### 5.6 Age structure

The new planting will result in a two tiered age structure, of new and established woodland. The combination of species and their different management will provide the opportunity to create greater diversity in the future.

#### 5.7 Management of open land

In those areas designated as priority open habitat the open character will be maintained. Grazing will be the main management technique (following the recommendations contained within the report in Appendix V). The grazing of these areas and the open parkland/woodland pasture will initially be by FC stock (Figure 5.1) or by let. Open space will also be maintained in agreed wayleaves and appropriate buffers established around historical features, as recommended in the archaeological survey report. Other areas are being retained as they provide important butterfly habitat. The area around the existing pond, and a viewpoint on the ridge will be incorporated into the grazing areas and kept free of trees. The pond itself may be restored.





#### 5.8 Deer management

During the establishment period deer management will be the responsibility of the planting contractor. Both fencing and culling can be considered as options. A management plan will be developed following establishment.

#### 5.9 Access

During the establishment phase the track to Over Shannochill will be used to access all parts of the site. The track to nether Shannochill may be used to access the southern sections.

Future access for silvicultural management and timber haulage will be from the Over Shannochill track.

### Appendix I: Land Management Plan Consultation Record

A record of those invited to comment on the proposals, and the issues raised is contained in the scoping meeting minutes in Appendix IV.

### Appendix II: Tolerance Table

	Change to species (including boundaries)
FC Approval not	Change within species group i.e. diverse conifers; broadleaves.
normally required	Non native conifers in native woodland areas and designated open space up to 400 stems/ha.
Approval by exchange of letters and map	
Approval by	Change from specified native species to non- native species.
formal plan amendment	Change between species groups as defined above

### Appendix III. Design Plan Brief

The Shannochill Land Management Plan (LMP) is a strategic plan, which reflects the key themes of the Scottish Forestry Strategy (SFS) (2006), and Cowal & Trossachs Forest District's strategic plan. The overall objectives of the plan are to plant broadleaved species in order to meet Scottish Government targets on carbon sequestration and woodland expansion. In addition the bulk of the broadleaves are to be for productive purposes and the site should also demonstrate the best principles of integrated landuse management. The key objectives are given below:

- 1. Expand the area of broadleaved woodland on the National Forest Estate.
- 2. Contribute to targets for carbon sequestration.
- 3. Grow broadleaved timber for production.
- 4. Demonstrate best practice in integrated land use management.
- 5. Maintain and enhance those parts of the site designated as agricultural landscape.
- 6. Maintain and enhance areas of existing ancient semi-natural woodland.
- 7. Maintain those parts of the site identified as UKBAP priority habitats.

### Appendix IV. Scoping Meeting Minutes

#### Shannochill Land Management Plan

#### Record of scoping meeting held on Tuesday 24<sup>th</sup> November 2010

The purpose of the meeting was to discuss the issues and constraints present at Shannochill, and how these might impact on proposed tree planting.

- Attendees: Lisa Duggan (Loch Lomond & the Trossachs National Park) Iona Hyde (Loch Lomond & the Trossachs National Park) Kenny Auld (Loch Lomond & the Trossachs National Park) David Anderson (Forestry Commission Scotland, P&A Cons) John Hair (Forestry Commission Scotland, C&T FD)
- Apologies: Karen Phillip (SNH) Colin McNicol (Stirling Council) Francis Hayes (SEPA) Yvonne Boles (RSPB)
- Invited: Wayne Glass-Davies (Gartmore Community Council) John Raven (Historic Scotland) Lorna Main (Stirling Council)

#### Site description

44ha approximately two miles south east of Aberfoyle, accessed from the A81, with 6.2 ha of broadleaved woodland (2.7 ha of which is Ancient Semi Natural Woodland). The open ground has been grazed by livestock for many years.

A survey of the open ground habitats was undertaken in August 2010 by Jeff Waddell (FES Open Habitats Ecologist), whose report is given in appendix III. Two UKBAP priority habitats were identified – Lowland dry acid grassland and Purple moor grass and rush pasture.

#### **Proposals**

A draft planting plan was presented, designed to aid discussion (see below). Approximately 15.5 ha of broadleaved planting is proposed, to be planted and managed as productive hardwoods. Three main species are proposed – oak, ash and sycamore, however smaller areas of other native broadleaved species may be included to further increase the diversity of the planned woodland. This planting will be protected by deer fencing.

The central higher area of the site, running south west to north east, has been identified as a "designed agricultural landscape", which extends outwith the site to the north and south. Mature broadleaved trees are already present in this area (mostly oak) in two large groups and as individual specimens. The proposal is to retain the open woodland structure of this area, mange as a wood pasture, and enhance the designation by planting individual specimen trees. These would be protected within small enclosures, as cattle will be used to manage the ground vegetation between the deer fenced areas.

#### Discussion

Two main viewpoints were agreed which would be used to show the appearance of the forest in the wider landscape – these were at the Braeval car park entrance and from a viewpoint higher up in Achray forest.

The right of way through the site towards Nether Shannochill was identified.

The plan would contain details of how the wood pasture area would be managed.

The management of Area 6 (as identified in the Open Habitat assessment) would be detailed in the plan.

It was acknowledged that recreation was not a current priority, however the plan would retain the potential for future potential recreation developments.

Concerns were raised at the possibility of seed dispersal from the sycamore area into the open land on the north eastern boundary – the location of the sycamore area has now been changed (as shown on the draft planting plan).

There were some concerns that the proposed planting was too close to the pond – this has been moved back (as shown on the draft planting plan).

The intention is to retain all existing mature broadleaves, with any supplementary planting in the two large groups being undertaken with traditional species.

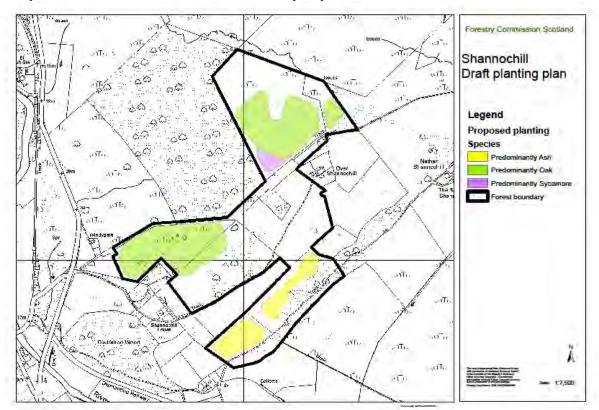
The plan would include details on cattle management within the site.

The following neighbours were consulted following the scoping meeting:

Mr Nicholson	Over Shannochill
Mr Willis	The Barns of Shannochill
Mrs Workman	Nether Shannochill
Mr MacKenzie	Shannochill House
Rev Hargreaves	Owner, Ken Meribah (adjacent woodland)
All expressed support for	the draft proposals with no areas of concern.

J Hair Planning Manager

NB: All forests managed by FCS are certified under the UK Woodland Assurance Scheme (UKWAS), which requires forests to be managed sustainably. The UKWAS is part of the Forest Stewardship Council (FSC) scheme, which allows timber sourced from certified forests to carry the FSC label. The Shannochill plan will incorporate the various requirements of UKWAS within its proposals.



### Appendix V: Environmental Surveys

FES Head Office Advisory Site Report. Shannochill: Ecology and Open Habitats Jeff Waddell, 19th October 2010.

#### **Present**

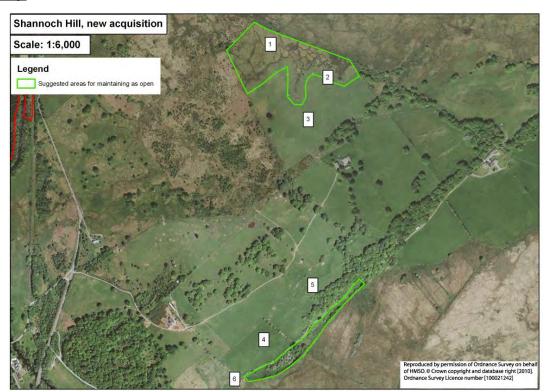
Jeff Waddell	Open Habitats Ecologist, Forest Enterprise Scotland HO.
Jane Jones	Conservation Officer, Cowal & Trossachs FD.

#### Site Description

The purpose of this visit was to asses the recent acquisition at Shannoch Hill to define and map any important UKBAP priority habitats that should be avoided in tree planting and preserved as open ground. This site visit was one of three visits in a single day so there wasn't enough time to get around the whole site, but much of the site was covered and the areas, which looked most important on the aerial photography were visited.

Only a relatively small proportion (<7ha) of the site was found to have important UKBAP priority open habitats and these are detailed below and marked in a green outline on the site map:

#### Site Map



<u>Area 1</u> in the north was an area of slightly sloping ground, draining to the north which consisted of low mounds of the UKBAP priority habitat Lowland Dry Acid Grassland, interspersed with a drainage network of flushes, i.e. Lowland Fen UKBAP priority habitat.

<u>Area 6</u> in the south was a low lying flat area on the edge of the floodplain of the River Forth. This area is partially wooded already, mainly with mature Hawthorn (*Crataegus monogyna*) trees. There were some open areas here, the western most one was visited and found to be Purple Moor-grass and Rush Pasture UKBAP priority habitat. The texture of the open areas in area 6 to the east, which were not visited appeared to indicate more of the same priority habitat.

Apart from the above important UKBAP priority habitats, no other open habitat constraints were found on the site. The remainder of the site in the areas viewed, i.e. all of the southern and eastern two thirds of the site was found to be either improved grassland or species poor semi-improved grassland. One other notable habitat feature was the presence of open grown mature, parkland trees, most of which were Oak (*Quercus* species) trees throughout large areas of the site. The north-western third of the site wasn't viewed as part of this visit, so open priority habitat constraints were not assessed there.

# Suggested Management

I would recommend Area 1 should be left unplanted and that the open ground in Area 6 should also be left unplanted, because both of these areas are predominantly UKBAP priority habitats. I would also suggest a small unplanted buffer is left around area 1, so as not to affect the hydrology of the flush system in that area.

Area 1 has perhaps been overgrazed in recent times and the release from grazing as the adjacent area is planted will be beneficial, at least in the short term, allowing the vegetation to recover, flower and set seed. In the long term, if this area is left ungrazed, the condition of the vegetation there will decline as the more competitive grasses, e.g. Purple Moor-grass (*Molinia caerulea*) will thrive and dominate at the expense of the less competitive species and the vegetation will become species poor. The continuation of light grazing in this area would therefore be recommended if possible.

The open habitat in area 6 would also benefit from light grazing, but the small size of the open ground there may make this difficult. If grazing these areas fencing would presumably be required, to keep the stock out of the establishing tree crop.

As the north western third of the site wasn't visited, I would recommend that the district conservation staff check this area for open priority habitats before the planting plan is drawn up. My hunch, from looking at the aerial photo is that the ground there will be species poor semi-improved grassland and so not represent important open habitat constraints to planting, but this will need to be checked.

# Site Notes

<u>Area 1:</u> The bulk of this area is unimproved acid grassland with wet flushes, i.e. Lowland Dry Acid Grassland and Lowland Fen UKBAP priority habitat.



Area 1: Close up of one of the wet flushes, Lowland Fen UKBAP priority habitat.



Area 1: Flush with Sphagnum and Devil's-bit Scabious (Succisa pratensis).



<u>Area 1:</u> The bulk of this area is unimproved acid grassland with wet flushes, i.e. Lowland Dry Acid Grassland and Lowland Fen UKBAP priority habitat.



Area 1: Close up of one of the wet flushes, Lowland Fen UKBAP priority habitat.



<u>Area 1:</u> Close up of one of the wet flushes, Lowland Fen UKBAP priority habitat. The vegetation is dominated by the Common Yellow-sedge (*Carex demissa*). The grey-green leaf is either Glaucous Sedge (*Carex flacca*) or Carnation Sedge (*Carex panicea*). Grazing has been heavy recently as indicated by the poached ground.



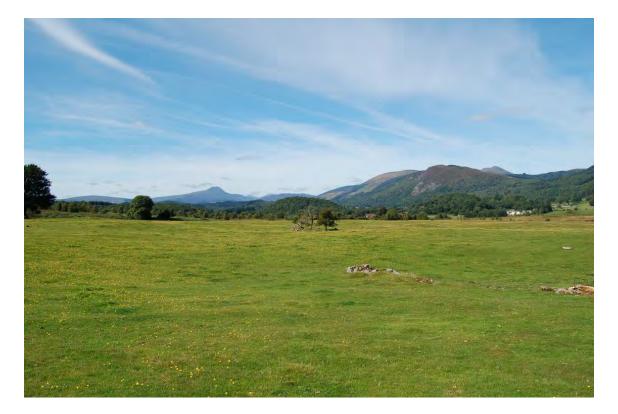
<u>Area 2:</u> The darker area on the aerial photo in the eastern corner of this area is dominated by Bottle Sedge (*Carex rostrata*) with patches of Sharp-flowered Rush (*Juncus acutiflorus*). The ground was swampy i.e. floating fen peat, a rarer type of lowland fen.



<u>Area 2:</u> The darker area on the aerial photo in the eastern corner of this area is dominated by Bottle Sedge (*Carex rostrata*) with patches of Sharp-flowered Rush (*Juncus acutiflorus*). The ground was swampy i.e. floating fen peat, a rarer type of lowland fen.

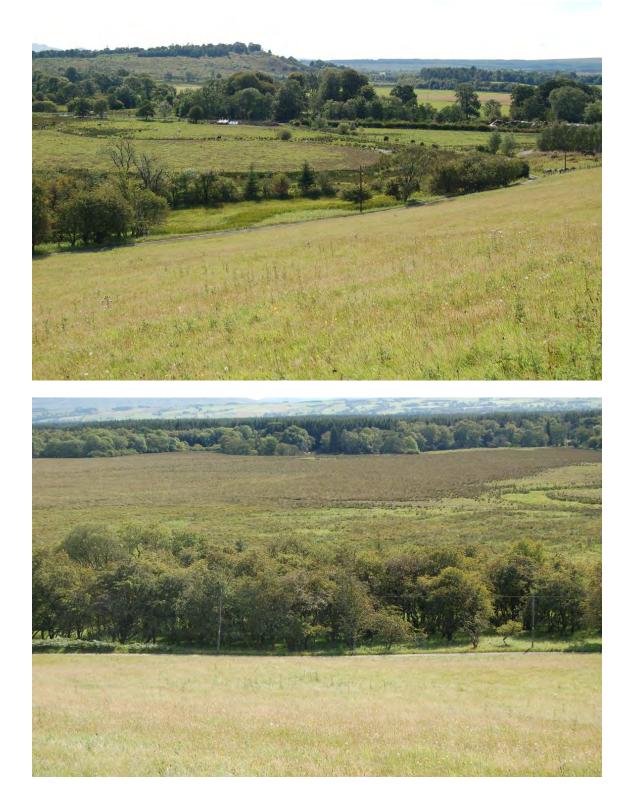


<u>Area 3:</u> Upslope from area 2, the bulk of this field was species poor semi-improved grassland, i.e. not a UKBAP priority habitat type and suitable for planting with any type of woodland, in terms of lack of open habitat constraints.





<u>Area 4:</u> The fields here were species poor semi-improved grassland, i.e. not a UKBAP priority habitat type and suitable for planting with any type of woodland, in terms of lack of open habitat constraints. This photo also looks down into <u>Area 6</u>, showing Purple Moor-grass and Rush Pasture UKBAP priority habitat in the open area.



<u>Area 6:</u> (looking west) Open area here has example of Purple Moor-grass and Rush Pasture UKBAP Priority habitat type.



Area 6: (looking east)



Appendix VI. Archaeological Report

# SCHANNOCHILL ARCHAEOLOGICAL SURVEY

Client: Forestry Commission Scotland Prepared by: Clare Ellis, Argyll Archaeology August 2015



# 0. NON TECHNICAL SUMMARY

- 0.1 An archaeological survey, comprising a rapid desk-based assessment and predictive prospective walkover was conducted over a parcel of land at Schannochill, Stirlingshire. The programme of archaeological work was commissioned by Forestry Commission Scotland (FCS). Thirteen individual structures or features of archaeological or historical significance were recorded within the Design Plan boundary and included a structure and associated enclosure, two wells, a possible later medieval bank and field clearance cairns. The recommendations of this report follow the Forestry Commission Scotland Archaeological Survey Guidelines (Ritchie 2012).
- 0.2 It is the recommendation of this report that seven of the sites within the area to be afforested should be preserved *in situ* and protected from damage by a 5m buffer zone of no physical disturbance. The field clearance cairns and the concrete pad require no mitigation.

# 1. INTRODUCTION

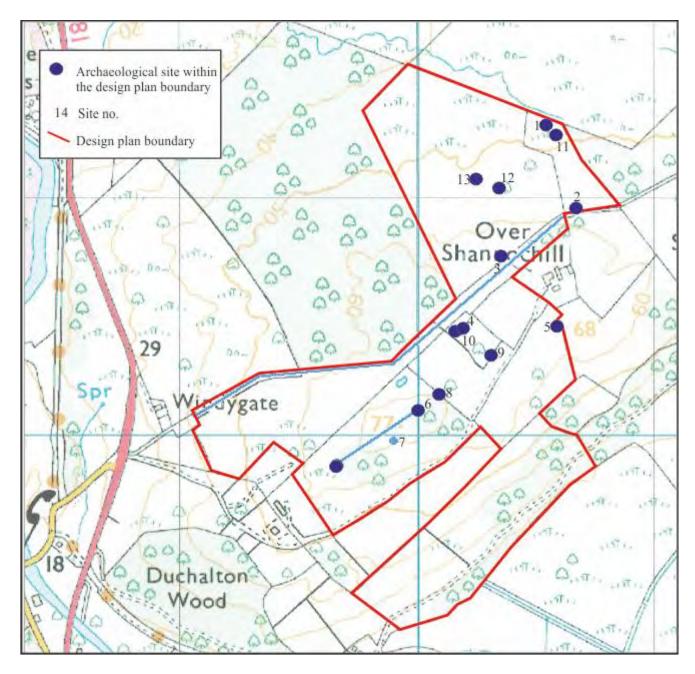
- 1.1 The site (Fig. 1) lies within the Loch Lomond and Trossach National Park. The proposed scheme is roughly centred on NGR: NS 54039 99088 and lies within the parish of Port of Menteith. The archaeological walkover survey was undertaken in the week beginning 10<sup>th</sup> July 2015.
- 1.2 The well, Site 1, had previously been recorded on the SMR (WoSAS pin: 64534).

# 2. OBJECTIVES

- 2.1 The archaeological objectives were to:
  - a. determine the presence or absence of surface archaeological features within the confines of the proposed scheme;
  - b. propose further stages of archaeological work as required;
  - c. propose suitable mitigation.

# 3. METHOD

- 3.1 A rapid desk-based assessment was undertaken prior to the walkover survey. This comprised the online consultation of historical maps, aerial photographs, Pastmap, Canmore, The OS Name Book, Old and New Statistical Accounts and the Site and Monuments Record (SMR).
- 3.2 The brief issued by FCS required a predictive prospective walkover based upon the results of the desk-based assessment. Consequently only those sites identified during the desk-based assessment were visited and recorded, although any other archaeological features encountered during this process were recorded. In addition the existing native woodland on the north side of the track leading to Over Shannochill was walked. All site locations were recorded using a handheld gps and photographed and where appropriate a sketch plan made.



*Fig. 1. Map of Shannochill with archaeological sites and associated site number as identified during the desk-based assessment and walkover, Stirlingshire.* 

3.2 The geology comprises glacial till (low lying areas) while the higher ground comprises Ruchill flagstone formation, Shannochill sandstone and Cromlix mudstone formation. The weather was fine.

Site No.	Place name	Roy 1747-52	James Stobie 1783	1st Edition OS	2nd Edition OS	Name book 1859-1862	NMRS No.	National archives	Aerial photo
1	Shannochill			Well marked at the end of a track	Well not marked				Not visible
2	Shannochill			Rectangular roofed building adjacent to an enclosure with unroofed square structure in centre.	Enclosure no longer depicted and structure unroofed.				Just discernible
3	Shannochill		Shown as a main road running from E and W Bridgend up to Loch Meneith	Track running past Over Shannochill	No significant change No longer depicted				Visible as wall line Not visible
5	Shannochill			Well, located on eastern boundary below Over Shannochill	No longer depicted				Not visible
6	Shannochill								Bank visible on northern side of woodland.
Outwith design boundary	Over Shannochill	Shennachal, north facing C shaped building with formal parallel row of trees leading from the house northwards and enclosed ground on the south side. Also on the south side strip of woodland which runs from the River Forth /ford at Gartortin - roughly location of current bridge over the Forth. Woodland in field NE of Ahanochill probably remnants of this wood.	Shanachoil, C shaped house orientation inverted with two rectangular structures on the north side and with main road running just to the north (3)	Main house on the south side, with roofed L shaped farm building on north side adjacent to a roofed rectangular building. A further roofed rectangular building to the NW.		A large steading, property of his Grace the Duke of Montrose		21 records, referring to Shannochill. Earliest record 1512-1622Bundle of unconnected writs of irredeemable rights granted to several persons by the Earl of Menteith of the lands of Shannochill and the boat at the head of Forth. GD 220/1/D/3/1	

Table 1.Summary of the Desk-Based Assessment information; the Site No. corresponds to the Site No. shown in the gazetteer (Appendix 2)

# 4. RESULTS AND DISCUSSION

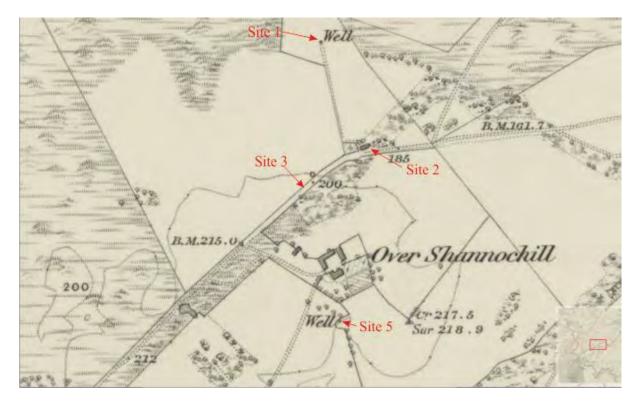
## 4.1 POST-MEDIEVAL

- 4.3.1 The results of the desk-based assessment are summarised in Table 1 while the field observations of the sites are given in the Gazetteer, Appendix 2. The majority of the structures and features as recorded probably date from the 18<sup>th</sup>, 19<sup>th</sup> or the 20<sup>th</sup> century and reflect the nature of the mixed farming during these periods.
- 4.3.2 Schannochill is identified on Roy's Military Map 1747-55 as Shennachal and is shown as a C shaped structure with an avenue of trees leading from the house north-westward and a faint trace of an enclosure on the southern side (Plate 1). There is now no surface trace of this enclosure. Roy's map also shows a curvilinear stretch of woodland on the south side of the house, the remains of which is still visible today and is bounded on the north side by an earthen and stone bank (Site 6); this bank may have its origins in the later medieval period. The land to the north and west of the house does not appear to have been under cultivation at this time and the presence of a couple of ponds (1<sup>st</sup> Edition OS Perthshire Sheet CXXX 1866) indicates that it was probably grazed by cattle. However, there is a reference to an 'obligation by John Monteith of Arnbeg to [blank] regarding payment of tack duty on half roume of Over Shenochyle and sowing of seed corn on said land 28/4/1674', (National Archives GD 22/3/53). This may refer to the clearly cultivated land located on the southern side of the linear strip of woodland.



Plate 1. Roy's Military Map 1747-55, showing Shennachal and the strip of native woodland. Stirlingshire.

4.3.2 A roofed rectangular structure and associated enclosure (Site 2) are shown on the 1<sup>st</sup> Edition Ordnance Survey map (Perthshire Sheet CXXX 1866) on the north side of the old coach road (Site 3) (Plate 2 & Fig. 2). There is no surface trace of the enclosure but the footprint of the structure is just visible; the structure appears to have been deliberately demolished and the majority of the stone removed. It is possible that the well (Site 1) was utilised by the inhabitants of this structure. The structure is located on the old road which ran from the crossing of the Forth at Bridgend north-eastwards to Port of Mentieth. In the 18<sup>th</sup> century there was no bridge across the Forth but there was a ford and this would have been one of the very few crossing points of the Forth River in this period. The only other structural remains are a concrete pad (Site 9) which is likely to be early 20<sup>th</sup> century in date.



*Plate 2. Annotated extract from 1<sup>st</sup> Edition Ordnance Survey Map Perthshire Sheet CXXX 1866. Stirlingshire.* 

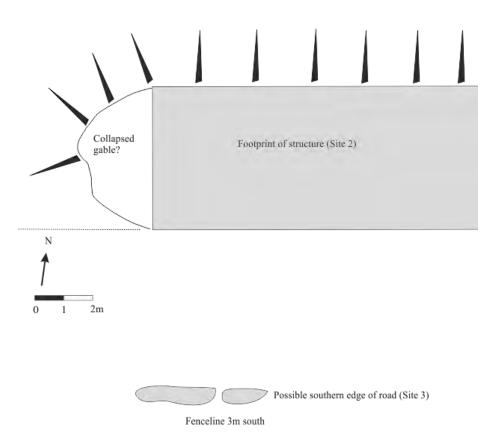


Fig. 2. Sketch plan of Structure 2, Over Shannochill. Stirlingshire.

4.3.3 The clearance cairns appear to be fairly recent in origin, probably reflecting increased and perhaps more intensive land use in the 19<sup>th</sup> and 20<sup>th</sup> century, certainly clearance cairns/banks 11, 12 and 13 are the product of stones being brought up by the plough and cleared to the side of the cultivated fields. Site 7 is a sub-rectangular cairn located within native woodland and it is thought likely that this is some form of late Victorian or early modern pet burial.

# 5.0 MITIGATION

5.1 In line with the guidance of the Forestry Commission Scotland Archaeological Survey Guidelines (Ritchie 2012) a 5m buffer zone of no physical disturbance should be left around those features identified and which occur in areas of proposed afforestation.

## Appendix 1: Photographic register

No.	Site	Description	Taken from
1	6	Bank	SW
2	7	Pet burial?	S
3	8	Clearance cairn	SE
4	8	Clearance cairn	SW
5	10	Clearance cairn	SE
6	4	Location of pond	W
7	5	Well/enclosure	S
8	3	Road	S
9	11	Clearance cairn	E
10	12	Clearance	E
11	13	Clearance	Е





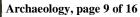












## Appendix 2: Gazetteer of archaeological and historical sites

The gazetteer has been compiled from a walkover survey. Each site No. is unique and corresponds to the numbered sites shown in Fig. 1.

### FORMAT

The format of each site entry in the gazetteer is in the order given:

Name Location - National grid reference (NGR) Site type Character Date State of preservation Significance Mitigation

Criteria used to quantify archaeological and historic sites

The description of *Character* and *Extent* of the sites is taken from documentary and cartographic records, where they exist, and/or from direct observation.

Determination of the *State of Preservation* of an archaeological site is often hard to ascertain without the aid of intrusive archaeological works. A site that has been previously attributed some regional or national significance is regarded as in a good state of preservation, unless there is documentary or visual evidence to the contrary. For a site of Local Importance/Significance the *State of Preservation* refers to the physical condition of the visual remains and the degree to which the original site appears to be intact and unaltered, Table 1. Where no assessment can be made as to the current condition then the *State of Preservation* is referred to as Unknown.

Table 1. The definition of the State of Preservation

State of Preservation	Criteria
Good	World Heritage Site; Scheduled Ancient Monument
	or Regionally Important site. Local site with good
	physical preservation.
Moderate	Local site with limited denudation/erosion etc
Poor	Local site with significant denudation/erosion etc
Unknown	No assessment can be made (cropmark etc)

Sites are assigned a level of *Significance* on a scale of 'less than local' to 'international' (Table 2). The level assigned is based upon statuary designation and/or assessed cultural heritage importance. Many sites of cultural heritage significance are not currently afforded any statutory protection through designation. For the purposes of this assessment, these undesignated sites were assigned a level of importance using professional judgment.

## Walkover survey, Schannochill, Stirlingshire- 339

Significance	Criteria
International	World Heritage Site
National	Scheduled Ancient Monument (SAM)
Regional	Some undesignated sites assessed as being of
	Regional Importance
Local	Some designated sites assessed as being of Local Importance
Less than local	Sites either already badly damaged destroyed or whose historic value is too slight for inclusion in a higher class.

Table 2: Definition of the Significance of an archaeological site

# Appendix 2: Gazetteer

Site No.	Place name	x	у	Туре	Character	Date	State of preservation	Significance	Mitigation
1	Over Shannochill	254273	699657	Well	Well marked at the end of a track. No discernible on the ground, low area within a field.	18th or 19th century?	Unknown	Less than local	None
2	Over Shannochill	254334	699482	Structure and enclosure	Rectangular roofed building adjacent to an enclosure with unroofed square structure in centre. The enclosure is no longer visible. The structure is 11.5m long and 5m wide and survives as a low wall 0.20m high and 0.70m wide. Possible collapsed gable at W end.	18th or 19th century with earlier origins?	Poor	Local	5m buffer zone of no physical disturbance
3	Shannochill	254181	699378	Road	Shown as a main road running from SW to NE on 1st Edition OS map, known locally as the old coach road. Each side of the road is now bounded by drystone walls, 6m apart.	18th or 19th century?	Moderate	Local	5m buffer zone of no physical disturbance
4	Shannochill	254100	699231	Pond	Damp area of ground, pond silted up.	18th or 19th century?	Poor	Less than local	None
5	Shannochill	254289	699249	Well and enclosure	Well, located on eastern boundary below Over Shannochill, well not visible on the ground but damp area surrounded by sub- rectangular drystone wall, 0.60m high and 0.70m wide.	18th or 19th century?	Poor	Less than local	5m buffer zone of no physical disturbance
6	Shannochill	253831	698935	Bank	Stone and earthen bank, 1.5m wide and up to 0.40m high. Runs along ridge of bedrock, and would appear to be boundary between the old wood and the grazed land to the west.	18th century or earlier?	Moderate	Less than local	5m buffer zone of no physical disturbance
7	Shannochill	253949	698988	Cairn	Sub-rectangular cairn, 2m x 1.9m and up to 0.60m high. Located on south facing slope within old woodland. Pet burial?	20th century?	Good	Less than local	5m buffer zone of no physical disturbance

Site No.	Place name	x	у	Туре	Character	Date	State of preservation	Significance	Mitigation
8	Shannochill	254039	699088	Clearance cairns	Two clearance cairns 1x2m and 1x4m and 0.20m high, the larger comprises very large bounders. Located at base of slope.	19th or 20th century?	Moderate	Less than local	None
9	Shannochill	254157	699173	Concrete base	Concrete base for former building? Located on edge of old woodland enclosure.	19th or 20th century?	Moderate	Less than local	None
10	Shannochill	254089	699217	Clearance cairn	1.5m x 1.5m cobbles placed against the base of a tree.	19th or 20th century?	Moderate	Less than local	None
11	Over Shannochill	254295	699635	Clearance cairn	4m x 4m and 0.40m high field clearance comprising rounded cobbles set on low knoll. Although unlikely the clearance cairn may conceal an earlier burial feature.	19th or 20th century?	Moderate	Less than local	None
12	Over Shannochill	254172	699523	Clearance	Line of clearance along base of slope	19th or 20th century?	Moderate	Less than local	5m buffer zone of no physical disturbance
13	Over Shannochill	254122	699541	Clearance	Line of clearance along top of slope overlooking damp ground.	19th or 20th century?	Moderate	Less than local	None

# Appendix 3: DES Entry

LOCAL AUTHORITY:	Loch Lo	mond and	Trossachs N	lational Park			
PROJECT TITLE/SITE NAME:	Shannoch	ill					
PROJECT CODE:	339						
PARISH:	Port of M	entieth					
NAME OF CONTRIBUTOR:	Clare Elli	S					
NAME OF ORGANISATION:	Argyll Ar	chaeology					
TYPE(S) OF PROJECT:	Archaeolo	ogical surve	у				
NMRS NO(S):							
SITE/MONUMENT TYPE(S):	Bank, stru	icture, clear	ance cairns, 1	oad			
SIGNIFICANT FINDS:	None						
NGR (2 letters, 8 or 10 figures)	NS 5403	9 99088					
START DATE (this season)	August 20	)15					
END DATE (this season)	August 2	015					
<b>PREVIOUS WORK</b> (incl. <i>DES</i> ref.)	None						
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological survey, comprising a rapid desk-based assessment and predictive prospective walkover was conducted over a parcel of land at Schannochill, Stirlingshire. Thirteen individual structures or features of archaeological or historical significance were recorded within the Design Plan boundary and included a structure and associated enclosure, two wells, a possible later medieval bank and field clearance cairns.						
	Site No.	Х	у	Туре	Character		
	1	254273	699657	Well	Well marked at the end of a track. No discernible on the ground, low area within a field. Rectangular roofed building adjacent to an enclosure with		
	2	254334	699482	Structure and enclosure	unroofed square structure in centre. The enclosure is no longer visible. The structure is 11.5m long and 5m wide and survives as a low wall 0.20m high and 0.70m wide. Possible collapsed gable at W end.		
	3	254181	699378	Road	Shown as a main road running from SW to NE on 1st Edition OS map, known locally as the old coach road. Each side of the road is bounded by drystone walls, 6m apart.		
	4	254100	699231	Pond	Damp area of ground, pond silted up.		

ADDRESS OF MAIN CONTRIBUTOR: EMAIL ADDRESS:	Davaar Cottage, Campbeltown, Argyll. PA28 6RE ellisclare@argyll-archaeology.co.uk						
SPONSOR OR FUNDING BODY:	Forestry (	Commission	Scotland				
PROPOSED FUTURE WORK: CAPTION(S) FOR ILLUSTRS:	None						
DDODOGED ELITUDE WORK	13	254122	699541	Clearance	Line of clearance along top of slope overlooking damp ground.		
	12	254172	699523	Clearance	burial feature. Line of clearance along base of slope		
	11	254295	699635	Clearance cairn	4m x 4m and 0.40m high field clearance comprising rounded cobbles set on low knoll. Although unlikely the clearance cairn may conceal an earlier		
	10	254089	699217	Clearance cairn	1.5m x 1.5m cobbles placed against the base of a tree.		
	9	254157	699173	Concrete base	Concrete base for former building? Located on edge of old woodland enclosure.		
	8	254039	699088	Clearance cairns	Two clearance cairns 1x2m and 1x4m and 0.20m high, the larger comprises very large bounders. Located at base of slope.		
	7	253949	698988	Cairn	grazed land to the west. Sub-rectangular cairn, 2m x 1.9m and up to 0.60m high. Located on south facing slope within old woodland. Pet burial?		
	6	253831	698935	Bank	0.70m wide. Stone and earthen bank, 1.5m wide and up to 0.40m high. Runs along ridge of bedrock, and would appear to be boundary between the old wood and the		
	5	254289	699249	Well and enclosure	Well, located on eastern boundary below Over Shannochill, well not visible on the ground but damp area surrounded by sub-rectangular drystone wall, 0.60m high and		

### Appendix 4: References

OS Name Book Vol 69. Perthshire.

Ritchie, M 2012 Archaeological Survey Guidelines for work to advance the Heritage module Statistical Accounts of Scotland, Account of 1791-90, Vol 7, pg 139 Moneith, County of Perth Statistical Accounts of Scotland, Account of 1834-54, Vol 10, pg 1097 Account of Menteith, county of Perth

Canmore.org.uk

Cartographic sources Pastmap.org.uk WoSAS.net/

Ordnance Survey Six-inches to the mile, First Edition Perthshire, Sheet CXXX 1866 Ordnance Survey Six-inches to the mile, Second Edition Perthshire, Sheet CXXXNW 1901

Roy Military Map survey of Scotland 1747-55 Stobie J 1783 The counties of Perth and Clackmannan

*Aerial photographs* Ncap.org.uk 1988 Gaartrenich; Port of Menteith; Perthshire; Scotland- Sortie ASS/51288/frame 0130 Appendix VII. Survey of Designed Agricultural Landscapes

Loch Lomond and the Trossachs National Park Authority

# Loch Lomond and the Trossachs National Park

Survey of Gardens and Designed Landscapes

## 39 Shannochill (Over, Nether & Wester)

# Consultants

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#### Shannochill (Over, Nether & Wester)

County	Perthshire
Parish	Port of Menteith
NGR	NS 543 994 - OS 1:25,000 Sheet 365
Designatio	ns

Listing Over Shannochill (HB No. 50418): C(S)

Duchalton Wood and trees along south-eastern edge noted as Ancient Woodland

Duchalton Wood and plantation to the north covered by WGS Mark 1 and WGS Mark 2 Agreements.

### **REASONS FOR INCLUSION**

Shannochill was not included in the initial selection of sites for the survey, but with clear designed landscape attributes, although not intensively laid out, it is under consideration by Forestry Commission Scotland, who own part of the area, for forestry planting. The site has been included to assess its designed landscape values and the importance of these within the setting of the National Park.

## LOCATION AND EXTENT

Shannochill is situated approximately 2km south-east of Aberfoyle and a similar distance west of the Lake of Menteith on a low hill or short ridge rising to 77m AOD on the north-east side of the river Forth, close to the south-east boundary of the National Park. Access is from the A81 road on its west side, although the site is also overlooked at distance from the A81 to the north, after its junction with the A82. Three drives or tracks lead to, firstly at the south, the low drive to Wester Shannochill and Nether Shannochill, then to the north, the high drive to Over Shannochill, and a little further north, a short access to Windygates. It is primarily an agricultural landscape of large fields set within a framework of long-established tree-belts and plantations related to the landform. Its elevated position gives it outstanding long views to the north and south

## LANDSCAPE HISTORY

### Maps and Documentary Evidence

Blaeu (1654) marks two separate settlements of 'Schenna' and 'Chaill' between the Lake of Menteith and the river Forth, though without associated planting, unlike nearby Achachyill (Auchyle, now disappeared) to the north which is depicted with a small impaled wood or park. Roy (c1750) shows [Over] 'Shennachal' and 'Meickle [or Nether] Shennachal', on either side of a belt of semi-natural woodland running eastwards from near Bridgend along the bluff





Roy (c. 1750)

Over Shannochill parkland and drive west of house

Blaeu (1654)

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Loch Lomond and the Trossachs Survey of Gardens and Designed Landscapes



slope which separates to two settlements. Compared to neighbouring fermtoun settlements [Over] 'Shennachal' appears to have been a house of some size and status, with a short axial avenue to the north, a small walled garden or enclosure to the south. To the south the wider landscape is characterised by unenclosed rig cultivation, to the north by unenclosed grazing, with the settlement of Auchyle still evident. Stobie (1783), too, shows woodland on the bluff slope, 'Shanachoil' to the north and west, and 'Lit[tle] Shanachoil' to the south and east. The road from Bridgend to 'Milling' (Malling) passes to the north, continuing to Port of Menteith, though this has long been disused as a public thoroughfare. Further to the south and west, close to Bridgend, on the east bank of the river Forth, is marked 'Offruns' possibly equivalent to present day Wester Shannochill.

By the 1st edition OS (1862) Over Shannochill is marked as a substantial farmstead with courtyard, and a small area of garden ground to the south. Nether Shannochill, too, shown as a group of farm buildings. Along with 'Carse of [now Wester] Shannochill' to the south west, these three settlements are seen to lie within a loosely structured landscape of tree-belts and clumps, shown as broadleaved woodland. Auchyle, to the north, has disappeared by this time. Building History and Ownership



Stobie (1783)

Ordnance Survey 6" map (1850s)



Over Shannochill from east hilltop at 68m AOD

Reference to the National Archives of Scotland and other sources indicate that the lands of Shannochill were in the ownership of the Graham family – of the Earls of Menteith during the 17th century, of a 'Robert Graham of Shanocil' c1755, and of the Duke of Montrose by the 19th century, all of them Grahams. The property is not listed separately by Timperley (1976), so is assumed to have been part of what was then the largest landholding in the parish c1770, by the Duke of Montrose. Over Shannochill, Nether Shannochill and Carse of Shannochill (now Wester Shannochill) are all noted in the OS Object Name Book (1862) as being in the duke's ownership at that time. Initial analysis of property valuation rolls for the Parish of Port of Menteith indicate that Shannochill, including three tenanted farms, was acquired by the Kippendavie Estate, owned by the Buchanan family, during the 1920s. Although the farm of Over Shannochill was tenanted, the associated farmhouse is noted as having been 'vacant' throughout the first half of the 20th century, and as being 'ruinous' by the 1940s, though this has been questioned by one long-standing resident.

#### COMPONENTS OF THE DESIGNED LANDSCAPE

### Architectural Features

The buildings of the site are dispersed with Over Shannochill the most notable building group and the focus of the landscape design.

### Over Shannochill

Attractive traditional whitewashed 2-storey, 3-bay farmhouse with U-shaped steading behind, set on a sloping site looking south-east near the hilltop. It is a good example of a relatively unaltered improvement period farmhouse and modest steading.

Symmetrical principal (S) elevation, with later central gabled porch flanked by single windows. Single windows on ground and 1st floors of east return. Ground and 1st floor windows to rear elevation of house. 2 additions to rear elevation: substantial single storey with attic gabled addition to left with door and single window overlooking farmyard. Single storey addition advanced to right, with single window and door accessing the farmyard.

Single storey U-shaped steading to north, whitewashed with various openings, some of which have been enlarged. Graded grey slates to roofs, all of which are pitched except for south-west gable, which is piended.

Substantial drystone walls enclose the garden area to the south and other enclosures in the vicinity.

#### Shannochill

Later 20th century bungalow on drive to Over Shannochill.





#### Wester Shannochill

Single storey plus dormers cottage, with two neat modern cottages added to north in matching scale and materials.

#### Nether Shannochill

Large house, single storey with rooflights, mostly modern but possible older core, with conservatory and ancillary buildings, at end of low drive.

### **Drives and Paths**

Low Drive runs through Duchalton wood to Wester Shannochill and continues along the foot of the ridge, climbing gradually, with the hillside rising to the north, to Nether Shannochill. Open ground east of Wester Shannochill gives way to scattered tree cover, with occasional rock outcrops planted with tree groups, (oaks) and then good mainly oak escarpment woodland on the north hillside, with exposures of conglomerate. Mainly open on south.

High Drive climbs steeply through parkland and possible wood pasture to Over Shannochill, passing Shannochill bungalow (Mackenzies) en route. On the ridge it enters well stocked parkland with veteran oak and sycamore, mixed with birch and hazel on the west hilltop ridge to the north to create denser tree cover.

Old Road – the route of the former public road, as shown on Stobie (1783) runs from near Windygates in the west, north of Over Shannochill steading and eastwards to Malling. At Over Shannochill the route runs between substantial drystone walls to each side.

### Tree Belts and Woodlands

Duchalton wood – predominantly oak, with much hazel, and some birch, rowan and occasional mature beech; a little restocking in places; located at south-west end of hill near main road.





Low drive in Duchalton wood

West end of Escarpment wood with Low drive

Old road route north of Over Shannochill, with Menteith hills



Wester Shannochill



Nether Shannochill

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Escarpment woodland – the main belt of woodland that runs along the south side of the hill parallel with the Low drive, unenclosed and semi-natural in character; predominantly oak, with some ash, sycamore, birch and hazel; some oak and hazel coppice locally, together with hawthorn.

Belt north of Over Shannochill – a small wooded belt lies north of the steading, again predominantly oak, with the old road to its north.

North woodland – land shown, on modern OS map, as woodland on the north of the site appears to be open scrub woodland (birch, willows etc).

#### Parkland

The main area of parkland is associated with Over Shannochill and its approach drive on the west. This includes veteran oaks and sycamores beside the drive, or associated with vestigial boundary features and on the hill ridge. On the ridge the parkland has more the character of open woodland with clearings at right angles to the ridge, mainly oak with a great deal of hazel, together with some birch and ash, all adding to the wooded character – probably best described as 'woods open to pasture' rather than 'wood pasture' as such.

Further open parkland with tree clumps lies to the south of the house, on and below the east hilltop (oak, ash, sycamore, Scots pine) and further west on the south side of drive. Wood pasture may be present in other areas, such as near the roadside in the north-west (not seen due to poor weather and bad light).

#### **Views and Vistas**

From both the slight elevation of the Low drive and the higher route of the High drive, the open land of Flanders Moss to south and the river valley and open moorland to the north allows outstanding long-distance views. All the residences benefit from the long southerly views, apart from those at Wester Shannochill.

Southerly views across Flanders Moss extend to the Campsie, Fintry and Gargunnock Fells, terminated at the west end by the prominent Dumgoyne above Strath Blane. North views are to the Menteith Hills, with Craig of Monievreckie prominent and Beinn Dearg and Letter Hill further east above Rednock, and to the north-west the wooded Forth valley, Aberfoyle and, on a clear day, Ben Venue.



View south from High drive



Oak group and rock outcrop beside Low drive

Tree group on east hilltop with Menteith hills and Beinn Dearg and Letter Hill

Westward views are over the designed landscape of Gartmore House while eastwards views extend to the plantations around the Lake of Menteith.

#### Archaeology

There are no Scheduled Monuments or National Monuments records for the site. Rig and furrow and other cultivation features occur on the ridge pasture and parkland, partially ploughed out but still clear, and in other locations. A burial ground is marked on OS maps east of Nether Shannochill (not seen). A ruined former chapel is present at Over Shannochill but not recorded on any maps. Evidence of former estate layouts, eg. that on Roy's map, may exist, which together with physical evidence of past uses, such as the old road line, give the site some archaeological interest.

### PUBLIC ACCESS

There is a mix of land within and outwith access rights; no formal planned access exists. National Cycle Network route 7 (Glasgow to Pitlochry) runs on the west side of the A81 with a Local Link cycle path along the former railway line on the south side of Duchalton wood, which is a core path.

#### FUTURE MANAGEMENT POTENTIAL

The site is prominent in the local landscape, particularly as seen from the A81 to the west and north, and while the high hills to the north catch the eye, the woods and parkland of the site are an important part of the local scenery. The balance of woods, open park and scattered trees or tree groups is particularly characteristic and is a feature to be conserved, both by restocking existing tree features and in the planning of new planting.

The site is also intervisible with the designed landscape of Gartmore on the west side of the A81, although this has not been visited to check.

#### ASSESSMENT OF SIGNIFICANCE

#### Overall

Although it has no outstanding features, its position in the highly scenic Forth valley east of Aberfoyle gives the site high significance at a local level, particularly visually, ie. aesthetically and scenically. As such, its pattern of woods, tree groups, individual trees and open parkland or pasture is worth conserving.

While the designed landscape at Shannochill is not related to a large mansion house, it would appear from Roy's Military Survey that there was a house of some significance at Over Shannochill before the mid-18th century, possibly a 'laird's house', smart enough to boast a walled garden and small axial avenue. Although the Military Survey indicates the presence of some seminatural woodland from an early date, it would seem that new and more extensive planting occurred during the 19th century, as part of a scheme of enclosure and agricultural improvement instigated by the Duke of Montrose. The existing pattern of tree-belts and plantations appears to be little changed from that seen on the 1st edition Ordnance Survey, by which time the Shannochill estate comprised the principal farms of Over, Nether and Wester Shannochill, along with former lands of Arnachly to the east. The associated landscape improvement and planting appears be both functional and ornamental, being in the form of large rectangular fields, belts of mature broadleaved planting and significant areas of parkland planting, which clearly reflect the local ground conditions and the local topography of the hill ridge. The landscape can be seen to have some parallels with primarily agricultural designed landscapes to be found in other parts of Scotland such as Ayrshire and the Borders, being primarily landscapes of enclosure and improvement, but which have an aesthetic element to them, ie. that they were intended to be seen not only as examples of good practice in agriculture, but also as making a positive contribution to the character of the wider landscape.

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View west towards Gartmore from High drive

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The following evaluations are given on a national basis.

Work of Art

Some

Historical

Some

Horticultural / Arboricultural / Sylvicultural

Little

Architectural Some

Scenic

Hiah

Nature Conservation

Some

Archaeological

Some

Recreational

Little

#### Appendix, Historical Notes on the Designed Landscape

OS Object Name Book (1862) (Perthshire Book 69 pp.51-53) record the several subdivisions of Shannochill as follows : both Over and Nether Shannochill as "...large farm steadings", Wester (or Carse of) Shannochill simply as "...a farm steading". Neighbouring Arnachly is noted as "...an old farm steading in ruins, now part of the farm of Nether Shannochill".

The Property Valuation Rolls for the County of Perth, Parish of Menteith for various dates from c.1900 to 1950 appear to show a change of ownership from the Duke of Montrose to the Buchanans of Kippendavie early in the 20th century.

#### Sources - Primary

#### Maps

- J. Blaeu, Atlas Novus (1654) Vol. V Levinia Vicecomitatus, [or] The Province of Lennox called the Shyre of Dun-Britton, NLS Ref. WD3B/34
- W. Roy, Military Survey of Scotland (1747-1755) BL Ref. 15/4b via SCRAN

J. Stobie, The Counties of Perth & Clackmannan (1783) - NLS Ref. EMS.b.2.30

J. Thomson, Perthshire with Clackmannan (1827) - NLS Ref. EMS.s.712(18)

Ordnance Survey, 6" to the Mile : First Edition (1862) - Perthshire Sheet CXXX

Ordnance Survey, 1" to the Mile : Popular Edition (1927) - Sheet 66, Loch Lomond

## Sources - other Primary

Ordnance Survey, Object Name Book for Parish of Menteith (1862) RCAHMS Ref. Perthshire Book 69

County of Perth, Property Valuation Roll (Various dates) Parish of Port of Menteith – A.K. Bell Library Perth

#### Sources - Secondary

F. Groome (Ed) Ordnance Gazetteer of Scotland - Vol. VI (1885)

Historic Scotland, Listed Building Report for Over Shannochill (2006) : HS Building No. 50418

L. Timperley, A Directory of Landownership in Scotland c. 1770 (1976) – Scottish Record Society

RCAHMS Pastmap website

Forestry Commission Scotland - GLADE : Land Information Search website

#### Additional sources not consulted

No search was made for estate papers of the Duke of Montrose, or Kippendavie Estate.