FORESTRY COMMISSION
NATIONAL OFFICE FOR SCOTLAND
GUIDANCE NOTE NO 12

MANAGEMENT PLANS FOR SEMI-NATURAL WOODLANDS UNDER WGS

1 Introduction

Why produce a management plan?

For any woodland to receive grant aid from the Forestry Commission, management objectives and a programme of work must be agreed for a five year period. In the case of semi-natural woodland, additional information is required regarding the nature of the wood and the impact of proposed management activities. The benefits of such a management plan are:-

- to serve the needs of the woodland manager;

- to set management in the context of the nature and condition of the woodland itself;

- to meet the needs of the Forestry Commission.

Woodland management is a long term commitment. Semi-natural woodlands are complex ecosystems which change - sometimes very slowly - as a result of management activities although not necessarily in a predictable manner. A management plan is a practical, flexible tool devised by (or with) and for the woodland manager. It sets out a programme of work over a set period, including mechanisms to record changes. Without a plan it is difficult to keep track of intentions or to follow the impact of management undertaken. Thus the opportunity to refine working practices in the light of experience, can be lost. Given the existence of a plan, the departure of a woodland manager or even a change of ownership need not alter the course of management. Response to natural 'events' can be accommodated, as can changes in resources available.

What is a Management Plan?

Essentially, a management plan should provide a rationale for management with detailed prescriptions for a set period of at least five years. The length and detail required will be dependent both on the size and complexity of the wood and the scope for management envisaged. This guidance note provides a template for a management plan for semi-natural woodland which is designed to satisfy the requirement of the Woodland Grant Scheme. Although detail may not be required against every item mentioned in all circumstances, each main topic should be addressed. The end result need not be a lengthy document.

The Management Planning Process

The process of producing a management plan follows a number of steps which define the woodland and identify the opportunities for - and constraints to - management. Following this, the management policies (aim and objectives) are formulated and prescriptions written. The overall plan should provide a vision for the future and allow for adaptation as circumstances change. The following sets out how to undertake the main process of producing a plan. Appendix 1 provides more guidance under specific headings as to the information required; in the form of a template. Appendix 2 shows an example of a management plan.

The start of the process is a survey. This will normally be the Caledonian Partnership level 2 condition survey as described in the FC National Office for Scotland guidance note on 'Native Woodland Condition Surveys'. This will provide information on the state of the woodland, identifying where management opportunities exist, such as where the most appropriate areas for regeneration are, or whether there is a prospect of extracting timber for fuel or sawmilling. Information from the survey will inform sections 1 (summary) and 2 (description) of the attached template. Section 3 should be devised by or with the agreement of the woodland owner, the manager and the Forestry Commission. The main aim should encompass the aspirations of the woodland owner for the longer term. One way to approach this issue is to look forward twenty years and consider how you wish the woodland to appear at that time.

It is important that from the proposals for woodland management and aspirations of the land manager are realistic and take account of any constraints that apply to the area. This section five should be used to inform the setting of the objectives (section four). Normally the land manager will know what constraints and obligations apply, but discussions with either Forestry Commission, Scottish Natural Heritage, or the Regional Archaeologist may be required, if doubt exists.

Setting the objectives for management is perhaps the most tortuous aspect of the planning process. The key to objectives is to make sure they are SMART *specified, measurable, achievable, relevant* and *time limited.* The priority one objectives should be those which deliver against the main aim (section three). Assessment of the current condition of the wood, including the 'evaluation' in Section Tow, and the main aim (Section Three) will determine which are of highest priority.

For example, if all the trees are at least 100 years old, and the main aim encompasses the maintenance of a semi-natural character and structure, it is critical within the first five year period to achieve a new generation of trees. There would need to be at least one objective to deliver this. It may also be desirable to continue existing informal use of the wood for recreation. Action may thus be needed t allow for this (such as creating styles on new fence lines) under the changed management regime. An objective should set this out, but it will be a lower (priority two) objective than the need to establish young trees. In practice this means that if there is competition for resources priority one objectives would take precedence. There are two objectives which will be fairly standard across most management plans. They are:- i) to fulfil all legal or contractual obligations within the plan period, and ii) To detect changes resulting from management over the plan period.
Having set objectives, the prescriptions that make up the work programme for the five year period will be relatively straightforward to determine. Each objective should have a

prescription(s) or an explanation of how progress towards achieving it is to be made, although the latter may not be a specific prescription. Where no action is intended during the plan period this should also be stated. Prescription should be accompanied by maps where considered useful.

Whether carrying out the work themselves or arranging for contractors, most woodland managers are busy and will have work demands additional to those of the plan. Time spent setting out a readily accessible timetable of activities to fit with other commitments may be valuable later in the year.

Acknowledgement

Grateful acknowledgement is due to Highland Birchwoods who provided the first draft of this guidance note.

Appendix 1

MANAGEMENT PLAN TEMPLATE FOR SEMI-NATURAL WOODLAND

SECTION ONE: Introduction

Name of Wood (Use a name which is unique and will be constant throughout WGS applications etc).

Ref: (This may be an existing WGS reference number or any other appropriate reference).

Date of Plan Production: (This should be the date the plan was agreed and finalised and by whom).

Contract Name and Address: (owner or agent)

Summary (Details of sources of information for the plan such as surveys; what the plan covers (eg relationship to any WGS or other commitment); and the length of time covered by the plan, both with regard to longer term and shorter term prescriptions).

SECTION TWO: Description

Area: (hectares)

Woodland type: (NVC, if known, and Forest Practice Guide no)

Altitudinal limits: (metres a.s.l.)

Status: (any designations)

Legal Details: (tenancies or other legal aspects)

General Description: (Brief description of the wood, covering: dominant species; condition including ground flora; structure; age classes; brief history of management; habitats; position within the water catchment; range of species present. For details of trees present and other plants or animals, refer to survey cards which should be appended to the plan).

Physical Aspects: (climate, soils, hydrology)

Key Features: (Identify any significant features; unusual plant or animal species, archaeological features, etc, which need to be taken into account when management decisions are taken and prescriptions set.)

Land Use: (Information about past and surrounding land use which is relevant in the context of setting management objectives. Include all aspects which will influence the proposed management operations, particularly threats *eg close proximity and continuity with an area of ASNW may indicate that the habitat value of the wood is higher than might otherwise be expected. Alternatively if wood runs along* a *burn which is surrounded by intensive agriculture or productive exotic conifers its value to the quality of water in the bum*

will be exaggerated. An example of a threat might be the proximity of a plantation or arable crop which may be subject to herbicide spray from time to time.)

Evaluation: *(Assess* the importance of the wood in national and local terms, considering the following in natural qualities; rare or unusual species; landscape significance; historical or archaeological features; other features of particular interest; potential value after management. Bear in mind operations likely to damage these interests. It may be helpful to list the special qualities and features of the wood and identify the relevant importance of these.)

Compartments: (With reference to a map, identify and describe briefly any sub-divisions established for management purposes.)

SECTION THREE: Management Aim (note that Sections 3 and 4 can be combined)

(This should be the overall long term aim for the wood which should not alter over time, unless there is a total change in the circumstance of the woodland).

SECTION FOUR: Management Objectives

(All objectives should be SMART (specific, measurable, achievable, relevant, time limited), and set for as long as is realistic (normally five to twenty years). They should be divided into two categories (see below). Where the wood has been divided into compartments the secondary objectives should be set out by compartment.)

Primary Objectives: (These objectives are those of highest priority for the wood in its current state and which will also progress the aim. They should be set to cover at least a ten year time period. There is one additional priority objective which will be constant across most management plans: "To fulfil all legal or contractual obligations committed to within the plan period".)

Secondary Objectives: (These have lower priority than Primary Objectives and may not necessarily make progress towards achieving the aim but are nonetheless achievable in the plan period. These objectives may cover a short time period).

SECTION FIVE: Constraints (List any natural or man-made features or access agreements across the wood which impact on the ability to deliver the aim or objectives, such as wayleaves, archaeological features; impediments to vehicular access; public use of the site.)

Obligations: (Any factor which may require attention during the life of the plan due to legal or formal arrangements should be listed many with relevant details, eg responsibility for maintenance of boundary fences.)

Resources: (Provide information as to how work is to be undertaken, both financially and physically ie which grants are being applied for, work to be contracted out.)

SECTION SIX: Prescriptions

(These should be divided into primary and secondary to correspond to the division in objectives. Each objective should have at least one prescription to deliver it. These should be itemised as the tasks to be undertaken during a minimum five year period. Included in the prescriptions should be measures to monitor the impact of the work undertaken. It is important that at appropriate intervals provision is made to feed the results of monitoring into the management decision process, eg monitoring deer cull against level of damage can provide for the results of one year's records to be used to determine the level of cull for the following year.)

SECTION SEVEN: Plan Review

Provision for review of the plan should be made by setting the date and stating those parties involved in the review, (eg review during the last year of WGS contract, through discussion with FA).

SECTION EIGHT: Work Plan

(The prescriptions should be set out in a timetable covering the plan period, providing an "at a glance" table of the tasks committed to.)

SECTION NINE: Maps (Adequate maps should be produced at the smallest appropriate scale to illustrate the zonations and proposed works (1:10,000 or 1:25,000). Normally, maps produced for the WGS application will be acceptable. Map(s) to set out the main management zones, detailing the size and planned activity in each zone. Map based action plans are often a useful reference for planning an overall work plan. To achieve this a set of three maps would cover: 1. the existing state and important features; 2. the desired state, identifying what will have changed following management; 3. the required management. This last would be an elaboration of the WGS map which provides more detail on the action to be taken in each zone.)

SECTION TEN: Appendices (include any important additional information or references).

Appendix 2

SAMPLE MANAGEMENT PLAN
SOUTH CLUNES FARM
30th January 1994

SECTION ONE: Introduction

The information contained in this plan is based on data gathered during a survey of the site (by J Bloggs and D Smith) on 23 September 1994 and data provided by the owner. It describes the woodland and the operations planned to fulfil the management objectives as set out in the woodland grant scheme (WGS) proposal approved by the Forestry Authority.

The plan sets out the long term aim and objectives for the woodland while prescribing management operations for the five year period 1994 to 1999. Management operations are designed to fulfil the overall aim of the woodland owner through the objectives set out.

A complete set of the survey cards is appended, along with the survey report.

SECTION TWO: Description Area: 18 ha

National Vegetation Classification: W11 (80%), W17 (20%)

FPG: 6, 5

Altitude limits: 160m-229m

Status: none

Legal details: freehold

General Description: This is a reasonably stocked (average 205 stems per hectare) upland rich woodland which has colonised heather moorland over the last eighty years. In that time a well structured woodland has developed with a wide range of higher plants supporting a variety of animals including schedule 1 breeding birds, roe and sika deer. Silver birch is the dominant tree but downy birch, rowan, whitebeam, juniper, alder, Scots pine, goat and eared willow and common sallow are also present on the site. Ash, elm and, holly are present in the adjoining woodland to the north east. The ground flora varies from acidic to neutral with Lady's mantle, valerian, wild strawberry present in the richest areas.

The woodland clothes both slopes of a glen running towards the north east with two burns meeting in the glen bottom at a lochan, Loch Grant. There are four open areas within the wood the largest around the lochan is grassland with willow and alder lining the two burns. The smaller open spaces tend to be characterised by impeded drainage and supporting mire communities. The area is contiguous with similar dense woodland to the south west, but separated by a deer fence and in different ownership. The woodland thins out as it continues along the glen sides to the north east.

Young trees are present in several open areas but their development is being restricted by browsing. The canopy cover is about 70% complete and decreasing in several areas where mature trees have suffered wind break, creating small gaps. The height of the canopy varies from 9 to 20 m, composed of mature trees, but of uneven age.

Key Features: Range of tree species present including: Silver birch (dominant), Downy birch, Common alder, Juniper, Whitebeam *(Sorbus aria),* Scots' pine, Goat willow, Eared willow, Aspen, Rowan. Range of habitats including lochan. Schedule one breeding birds.

Land use: The main land use on this ground during the last century was sporting grouse moor. Since the first war woodland has re-colonised and the area has been part of South Clunes farm. The adjoining area of woodland to the north west, in Forest Enterprise ownership, is ancient woodland suggesting that the habitat is older than the present tree cover.

Evaluation: The woodland is one of only two significant areas of broad leaf woodland in the watershed of the Moniack river. The area under management is approximately half of a remnant of mixed broad leaf woodland and a significant contributor to the remaining resource of genuinely native woodland in the highlands.

SECTION THREE: Management Aim

To perpetuate the birch woodland and associated open habitats while encouraging their dependent wildlife.

SECTION FOUR: Management Objectives

Primary in order of priority

1. To fulfil all legal and contractual obligations committed to within the plan period.

2. To achieve better woodland structure through a) encouraging a minimum of 1 ha of natural regeneration before the end of 1997; b) allowing 1 ha of existing regeneration to establish.

3. To maintain a dynamic balance between natural open areas and woodland by grazing open areas.

4. To maintain a healthy body of open water by a) ensuring feeder burns are not blocked; b) recording changes in level of water and spread of vegetation in lochan; c) recording breeding birds annually.

5. To provide some grazing for Highland cattle, where this does not compromise 1 and 2.

6. To set up recording systems which track:

    a. regeneration establishment;
    b. the level of browsing by cattle and deer.

7. To increase the contribution of the wood to the income of the farm where this does not compromise the management aim.

Secondary, in order of priority

1. To provide sport through roe or sika deer stalking.

2. To provide informal, low impact public recreation.

3. To provide employment during agricultural quiet periods.

3. To provide firewood and marketable timber, in the long term.

SECTION FIVE: Constraints

There are no wayleaves across the woodland or scheduled archaeological features. No formal designations cover the woodland. The north facing slope is steep and characterised by poorly draining soils, access by vehicles is difficult. The south facing slope is stepped with well drained slopes and poorly drained level areas, permitting limited vehicular access. Public access to the site is informal.

Obligations: Maintenance of deer/stock proof boundary with Forest Enterprise land is shared. Maintenance of all other stock fences bounding the wood is covered by the WGS contract.

Resources: WGS grant is the principal mechanism for carrying out agreed works. Farm staff at off peak times will provide direct labour.

SECTION SIX: Prescriptions (to be carried out by the owner, unless otherwise stated)

Primary Activities:

1. Legal commitments relate to the WGS which will be covered by the remaining prescriptions.

- *.Check boundary fences regularly, at least once every three months and undertake: maintenance* as *required to ensure they are deer and cattle proof.*

2, 3. & 5. Structure and Stock grazing (see map for identification of areas referred to). No ground intervention will be undertaken in this plan period to encourage regeneration.

- *Highland cows, calves and followers will be grazed periodically from spring onwards over* a *seven month period. Grass in open areas will be checked daily and the stock removed when grass has been cropped, to be returned when it has recovered.*

  Should new regeneration not establish in open areas young cattle will be used to poach the ground and create a *seed bed. Should deer browsing prove too high to allow existing*

regeneration to establish (ie if up to 90% of *young trees are browsed in anyone year) culling* of *roe and sika will be increased.*

- *Feeder bums to the loch will be walked at least annually in early summer to check for serious impedinement to the flow.*

- *Annual visual assessment swill be made* of *the levels in the lochan, particularly with regard to an overall drop in level.*

- *A list* of *breeding birds will be drawn up annually, with* a *record* of *the breeding success.*

Should adverse changes be noted on successive years advice will be sought from appropriate sources and action identified for the next plan period.

6. Monitoring will be set up to provide the following information:

- *Annual assessment* of *regeneration in open areas by photography. If no young trees are evident after two years, consideration will be given to running young cattle through the open areas to poach the ground,* or *enlarging open areas by selective felling* of *trees bounding the space.*

- *Twice annual (spring and autumn) assessment* of *browsing damage to young trees through transects. The percentage damage to young trees will be recorded. Damage to 90%* of *the trees will trigger an increase in the deer cull and/or* a *change in the grazing regime, which ever is deemed most appropriate.*

- *Records will be kept* of *dates when stock are in the wood, stating exact numbers* of *animals.*

- *Annual assessment* of *each permanent open space will* e *made with photographs. Should encroachment* of *trees onto the areas be identified at the end* of *the plan period their potential impact will be assessed and any desirable action taken in the next plan period.*

The precise method of *monitoring will be developed according to standard systems. All photographic monitoring will be from fixed points. Two copies* of *each photograph will be taken, one set retained by the owner, the other by the Forestry Authority.*

7. *Income*

- *Through entering the woodland into* a *WGS it is already beginning to contribute to the income* of *the farm.* As *areas establish with young trees this will increase.*

- *Through Secondary Priority* 4, *the woodland contributes usefully to the viability* of *the farm unit.*

Secondary Activities

1. Sporting

The level of roe and sika stalking will be governed by monitoring carried out through 6.

2. Recreation

- *No action is required during the present plan period.*

- *The impact* of *two visits by Inverness Orienteering Club will continue to be monitored visually. The casual use* of *the wood in respect* of *disturbance* of *breeding birds will be monitored through* 6.

3. Employment

- *Agricultural staff will be used to carry out most* of *the management work required during slack period on the farm. Much* of *the work, such* as *coup felling, will be carried out in the autumn or early spring. Monitoring* of *browsing damage also needs to be carried out before bud burst in the spring. Cattle grazing control will be built into the normal agricultural management* of *the farm.*

4. Timber

- *Timber will be generated in this plan period if it is considered desirable in relation to providing space for regeneration. Trees would then be felled in association with coupe felling, assessed and an appropriate end product identified, either dead wood habitat, firewood or timber.*

SECTION SEVEN: Plan review

The plan will be reviewed during the last year of each WGS contract, with revision to prescriptions made in agreement between the Forestry Authority and the owner.

HIGHLAND BIRCHWOODS
Sample Management Plan

SECTION EIGHT: Work Plan/Timetable

Prescription	1996/97				1997/98				1998/99				1999/00			
	Spr	Sum	Aut	Win	Spr	Sum	Aut	Win	Spr	Sum	Aut	Win	Spr	Sum	Aut	Win
Check boundary fences required maintenance	+	+ *	+	+	+	+ *	+	+	+	+ *	+	+	+	+ *	+	+
Controlled cattle grazing		+	+			+	+			+	+			+	+	
Walk loch feeder burns	+				+					+	+			+	+	
Photograph loch vegetation		+				+										
Record number & type of birds		+				+										
Photograph open areas for regen.		+				+				+				+		
Browsing damage recording	+		+		+		+		+		+		+		+	
Record dates when cattle in wood		+	+			+	+			+	+			+	+	
Photograph permanent open space		+				+				+				+		
Roe & Sika cull			+	+			+	+			+	+			+	+
Visual assessment of visitor damage			+				+				+				+	
Remove trees to increase RN areas											*					

Spr = Spring = 16 February to 15 June
Sum = Summer = 16 June to 15 September
Aut = Autumn = 16 September to 15 December
Win = Winter = 16 December to 15 February

\+ = required action
* = action triggered by monitoring