Moray and Aberdeenshire Forest District

### Ittingstone

Land Management Plan



Plan Reference No: LMP 48

Plan Approval Date:

Plan Expiry Date:

#### FOREST ENTERPRISE - Application for Forest Design Plan Approvals in Scotland

#### Forest Enterprise - Property

Forest District:	Moray & Aberdeenshire FD
Woodland or property name:	Ittingstone
Nearest town, village or locality:	Huntly
OS Grid reference:	NJ513390

Areas for approval

	Conifer	Broadleaf
Clear felling		
Selective felling		
Restocking		
New planting (complete appendix 4)		115ha

- 1. I apply for Forest Design Plan approval\*/amendment approval\* for the property described above and in the enclosed Forest Design Plan.
- 2. \* I apply for an opinion under the terms of the Environmental Impact Assessment (Forestry) (Scotland) Regulations 1999 for afforestation\* /deforestation\*/ roads\*/ quarries\* as detailed in my application.

3.	I confirm that the initial scoping of the plan was carried out with FC staff on

- 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.

<ol><li>I undertake to obtain any permissions necessary for the implementation of the approved Pla</li></ol>
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		Date approval ends:
Date		Date of Approval
District	Moray & Aberdeenshire	Conservancy Grampian
Signed	Forest District Manager	Conservator

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#### 1.0 Introduction

Refer to Map 1: Location.

#### 1.1 Location

Ittingstone is 132.2ha of rough grazing, pasture and arable land 1km to the SW of Huntly and was purchased by Forestry Commission Scotland (FCS) in 2011. Upper Tullochbeg is 85.6ha of rough grazing and pasture land adjacent to Ittingstone and was purchased in 2012. As the two acquisitions are adjacent each other they are being combined into one land management plan (LMP) called Ittingstone.

#### 1.2 Setting and Context

Ittingstone lies within an extensive area of rolling land form that supports a variety of land uses. These include arable farmland on the more fertile lower lying land, improved grazing, conifer and broadleaved woodland on the low hills and steeper slopes while moorland and open rough grazing pasture covers some of the higher hill land.

The site itself is mostly made up of sloping land that faces north east and the confluence of the rivers Bogie and Deveron, the latter being a SEPA designated priority catchment and both popular fishing rivers. There is some public access along a track that runs through the site to the top of a local hill that overlooks the town of Huntly.

In terms of the Moray & Aberdeenshire Forest District Strategic Plan<sup>1</sup> Ittingstone is located in a key area identified with potential for:

- The production of high quality timber.
- The growing of productive broadleaves as the site is in an area where conditions are suitable.
- The development and maintenance of a starter farm. (Already up and running)
- To be well used by the community as the site is located close to a centre of population.

A more detailed analysis of the national and local context for how this site might best support the integrated land management objectives of the Scottish Government can be found in Appendix 1.

<sup>1</sup> Moray & Aberdeenshire Forest District Strategic Plan - http://www.forestry.gov.uk/fesplans

#### 1.3 Land Management Objectives

The purpose and objectives for managing this land have been identified following a review of:

- the physical context and existing land use;
- a review of the land management objectives already established by statutory bodies;
- the physical capability of the land;
- the locational objectives identified in the draft Moray & Aberdeenshire Forest District Strategic Plan;
- the views expressed by the public and statutory stakeholders.

Analysis of the available information has lead to the **primary objective** for this land being the introduction of a starter farm of a size and quality that will be attractive to a new, part-time entrant into the agriculture sector, which will help support and diversify farming interests in the area. (The starter farm on this site has been successfully established and running since April 2013).

Additional secondary objectives for the future management of Ittingstone have been identified as:

- Establishing new woodlands, both productive broadleaved and conifers, to benefit income diversity for this landholding, to extend habitat networks and to sequester carbon as part of the national climate change mitigation efforts;
- Create a resource that has the potential to be used by, and managed in partnership with, the local community.

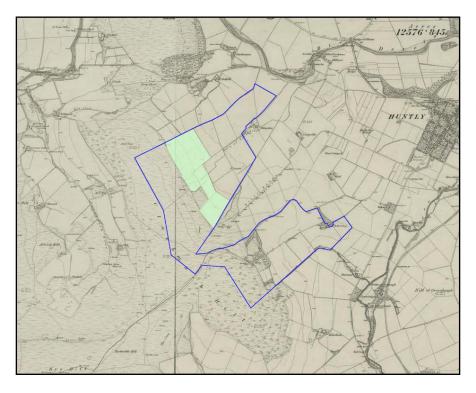
The information and analysis which follows explains the reasons why these objectives have been identified and prioritised.

### 2.0 Background information

#### 2.1 History of the site

Prior to FCS's acquisition of Upper Tullochbeg and Ittingstone in 2011/12 they were managed as two seperate single farm units. The Upper Tullochbeg aguisition contained a farmhouse and associated buildings. These buildings along with 47 ha of land have now been leased out as a starter farm.

In the more distant past it is clear from the extracts of the Ordnance Survey (OS) map published in 1874 that more of the higher elevation ground (area highlighted in green) was under more intensive agricultural production than is currently the case.



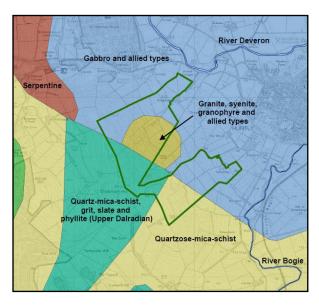
Extract of the 1874 Ordnance Survey map. Areas highlighted green shown as more intensive agriculture.

#### 2.2 Physical site factors

Refer to Map 2: Key Features.

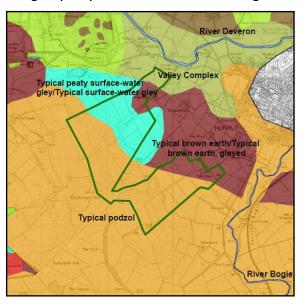
#### 2.2.1 Geology, Soils and topography

Geology - According to the British Geological Survey Geological Map of the UK Ittingstone is underlain by a number of different rock types mostly of the Dalradian Supergroup. These rocks give rise to overlying soils with high to medium nitrogen availability.



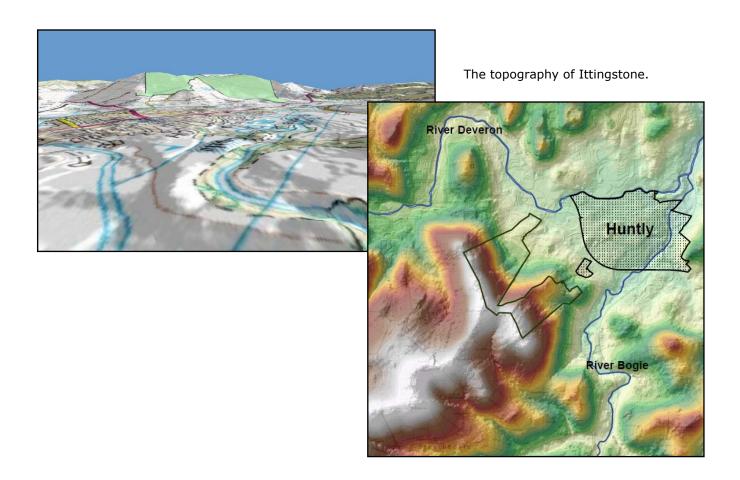
Extract from British Geological Survey 50k Geology map of the UK.

Soils - According to the soil survey maps of this land management plan the area is underlain with a mixture of soil types. Their moisture regime ranges from wet to slightly dry and their nutrient regime varies from very poor to rich.



Map based on an interpretation of the John Hutton Institute soil maps.

**Topography** – Ittingstone is situated on the north east facing slope at the confluence of the Deveron and Bogie river valleies. The height variation across the site is from 130 metres at the bottom of the slope to 370 metres near the top of Clashmach Hill.



#### 2.2.2 Water

Ittingstone is situated in the catchment of the river Deveron. SEPA has designated the Deveron as a priority catchment. "Priority catchments are river and costal catchments that are currently failing to meet water quality standards, and which will not achieve improved water quality without a focused management approach...The River Deveron catchment has several designations relating to the importance of its waters which, coupled with a range of diffuse pollution effects, make restoring and protecting it a high priority. The main pressures in the catchment include: agricultural pollution, sewage treatment works discharges, septic tanks, morphology and abstraction." The SEPA publication "Diffuse Pollution Priority Catchment: Technical Summary – River Deveron" is available from the

SEPA website and contains more details of the issues and how these are being addressed. The land management proposals in this plan (see section 4) will be designed to contribute to the alleviation of the issues raised.

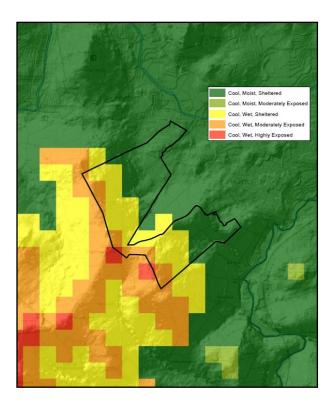


Ittingstone in the forground with the river Deveron in the middle distance.

#### 2.2.3 Climate

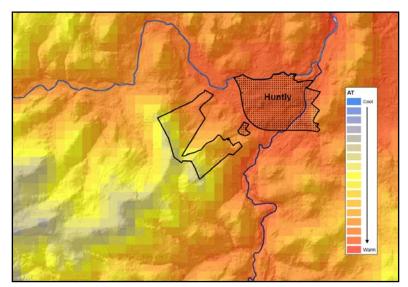
The area at the base of the slope at Ittingstone falls within the relatively benign climate zone of "cool, moist, sheltered" according to the Ecological Site Classification (ESC) protocol. Then runs through successively less favourable zonesuntil it reaches "cool, wet, highly exposed" at the tops of the hill. (See the map below) These climate zones have an impact on the type of land management that would be successful on this site.

Four climatic factors are used to define the climate for any given location. These are warmth, wetness, continentality and windiness. Continentality has the least impact so is dropped from the overall climate zone designation.

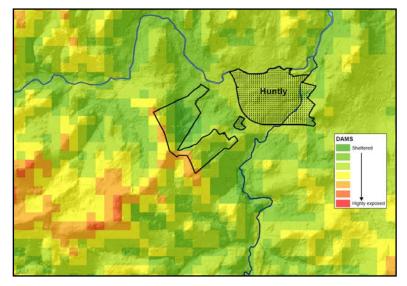


The climate data for Ittingstone from interrogating the ESC is:

AT5	DAMS	MD
861- 1133	7 - 16	55 - 115

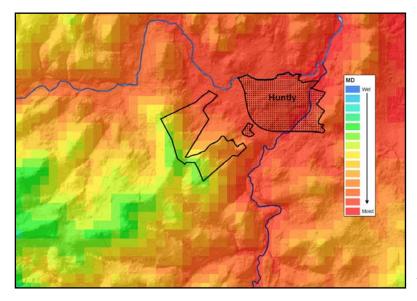


AT5 is the accumulated total of the day-degrees above the growth threshold temperature of 5°, which provides a convenient measure of summer warmth. The results for AT5 place Ittingstone in the "cool" zone.



**DAMS** is the Detailed Aspect Method of Scoring. This represents the amount of physically damaging wind that forest stands experience in the year.

The range of DAMS is from 3 to 36 and windiness is the most likely limiting factor to tree growth at higher elevations in Britain.



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MD is the Moisture Deficit for the area. Moisture deficit reflects the balance between potential evaporation and rainfall and therefore emphasises the dryness of the growing season (rather than the wetness of the winter or whole year). These results place Ittingstone on the boundary of the "moist" and "wet" zones.

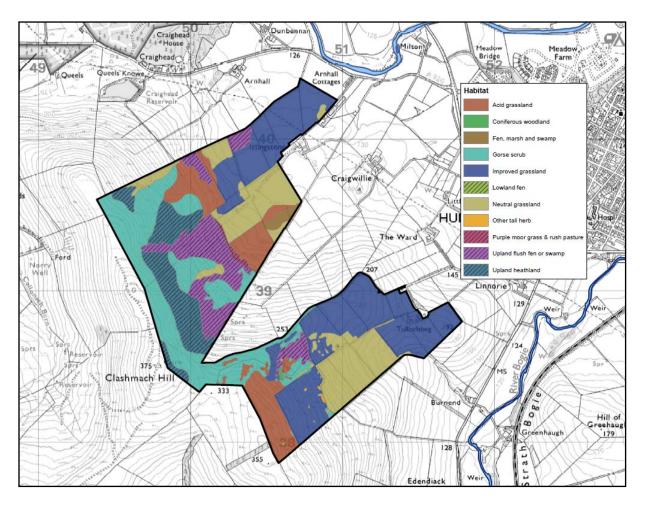
These results will be used to help assist in the choice of land management options in the land management proposals for the site (see section 4). Where tree planting is proposed each tree species has tolerances for these and other factors and they can be used to identify species suitable for the site conditions.

Further information on these criteria and the application of ESC can be found in Forestry Commission Bulletin 124 - An Ecological Site Classification for Forestry in Great Britain.

#### 2.3 Biodiversity and environmental designations

Full reports on the vegetation of both Upper Tullochbeg and Ittingstone were undertaken by an ecologist Nov 2012 and Nov 2010 respectively. The full reports can be seen at appendix 2.

This report identifies four UK biodiversity action plan priority habitats. (See map below)



During consultation SNH raised no objection to a change of land management despite the fact that they are priority habitats. It is assumed that their size and current condition means that it is not essential to maintain them all as open habitats in the long term. Native woodland planted on the sites could be of equal or higher biodiversity potential.

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Upland Flush, Fen or Swamp (NVC M23a). Juncus acutiflorus neutral mire on middle slopes.

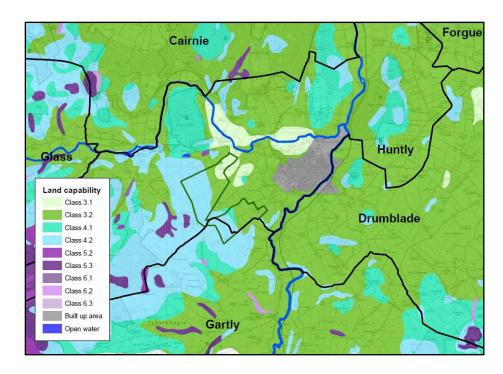
#### 2.4 The existing land use

Prior to FCS purchasing the land at Upper Tullochbeg and Ittingstone they were managed as two individual agricultural units. The total area of the purchase was 216.5ha and this is classified as 100.1ha of rough grazing, 33.7ha of permanent pasture and 80.6ha of arable land.



Looking east from the north west corner of Ittingstone (with Huntly in the middle ground).

The land lies between the 130 and 370 contours and has a predominantly north east facing aspect. There is a degree of shelter from Clasmhach Hill to the west with the lower half of the farm sheltered by the natural topography of the site.



James Hutton Institute 1:50,000 land capability for agriculture.

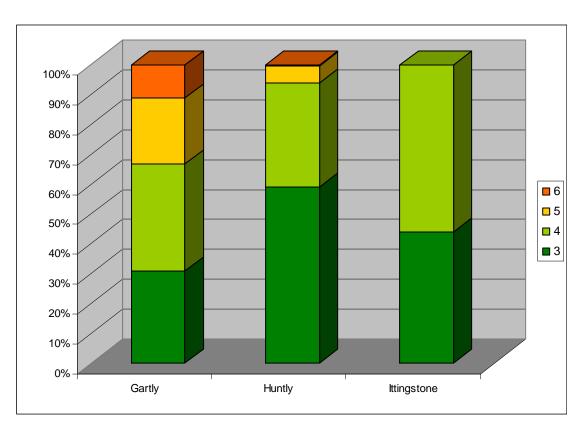
The land's classification according to the James Hutton Institute's (JHI) 1:50,000 land capability map is shown in the table and figure below.

Land classification	Area (ha)	%
3(1)	19.5	9
3(2)	75.6	35
4(1)	5.6	3
4(2)	115.8	53

The capability for the land according the JHI land classifications is:

- 3(1) land is capable of producing a moderate range of crops with high yields of cereals and grass; potatoes and other vegetables are also grown.
- 3(2) land is capable of producing a modest range of crops with an increasing trend towards grass within the rotation.
- 4(1) land is capable of producing a narrow range of crops; enterprises are based primarily on grassland with short arable breaks.
- 4(2) land is primarily suited to grassland with some limited potential for other crops (such as barley, oats or forage crops).

When the proportion of the different land capabilities at Ittingstone are compared to the parishes of Huntly and Gartly, across whose boundaries the site is located, it is clear that the capability of the land is about average for the surrounding areas.



#### Impact of potential loss of agricultural land to the local economy

Any loss of agricultural land due to tree planting, and therefore agricultural production, will inevitably have an impact on the local economy, both directly and indirectly. To quantify this impact it is necessary to establish the proportion of the local production that would be lost following the removal of any area planted with woodland.

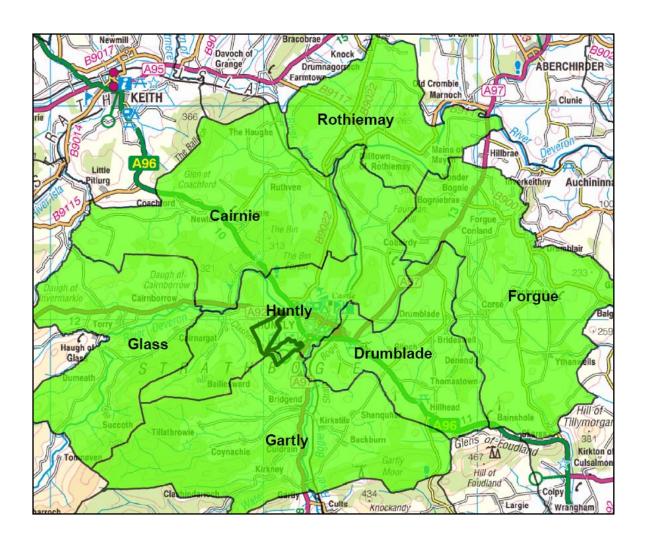
Comparison with the parishes containing Ittingstone and those surrounding the mart at Huntly, the main local centre for the sale of livestock, is shown below. The data was supplied by the Scottish Government Rural Payments & Inspections Division to allow the comparisons to be undertaken.

Land, cattle and sheep according to the June Agricultural Census 2013 (supplied by Scottish Government Rural Payments & Inspections Division)

	Arable crops <sup>(1)</sup>		Utilised agricultural land <sup>(2)</sup>		Total agricultural land	
	Holdings	Hectares	Holdings	Hectares	Holdings	Hectares
Cairnie	39	1463	78	2706	82	3087
Drumblade	42	2762	57	3203	57	3352
Forgue	78	4854	109	5597	110	6029
Gartly	29	1995	46	3062	48	3262
Glass	17	1124	31	2731	33	3441
Huntly	33	1552	57	3151	60	3529
Rothiemay	43	2391	78	3322	80	3958

 $<sup>^{\</sup>left( 1\right) }$  Includes crops, fallow land and grass under five years old

<sup>(2)</sup> Includes arable land, grass over five years old and rough grazing



When compared to the figures for the various agricultural production categories the 80.6ha of arable crops at Ittingstone is equivalent to just 0.50% of this type of land. The total area of 216.5ha of all land capabilities represents just 0.81% of the total argricultural land locally.

Having assessed these results it is clear that even if this entire agricultural holding were to be removed from agricultural production there would be no significant impact on the critical mass of the local agricultural industry. In summary there would still be sufficient capacity locally to sustain the ongoing success of agriculture in the area and additionally the downstream dependent industries in the area.

#### 2.5 Landscape and land use

#### 2.5.1 Landscape character and value

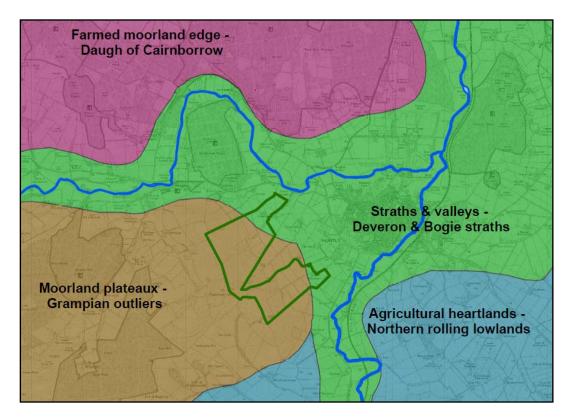
The visual amenity of Ittingstone is important in the context of the local area.

Scottish Natural Heritage, in partnership with local authorities and other agencies have carried out a National Programme of Landscape Character Assessment. This programme aims to improve knowledge and understanding of the contribution that landscape makes to the natural heritage of Scotland. It considers the likely pressures and opportunities for change in the landscape, assesses the sensitivity of the landscape to change and includes guidelines indicating how landscape character may be conserved, enhanced or restructured as appropriate.

These assessments are considered during the preparation of all Land Management Plans and where appropriate all efforts are made to follow the guidance given, where it matches with current FCS policy.

The Ittingstone site is covered by Scottish Natural Heritage Landscape Character Assessment report No102, South and Central Aberdeenshire, produced in 1998 by Environmental Resources Management.

Ittingstone straddles the boundaries of the Straths and valleys – Deveron and Bogie straths and Moorland plateaux – Grampian outliers.



The Grampian outliers are made up of a series of moorland spurs that extend from the central massi of the Cairngorms into the farmed landscape of Garioch and Formartine. These spurs form an interrelated system of highland ridges and peaks. They exhibit an almost uniform landcover of heather and forest, are subject to the same landscape pressures, and, viewed from the surrounding low lying farmland, seem to coalesce into an almost continuous dark backdrop.

#### Key characteristics:

- Smooth, undulating landform which forms dark ridges across the skyline when viewed from the lowlands;
- Outcrops stand proud of the surrounding low farmland;
- Forms distinct edge with the green fields of pasture on the lower slopes;
- Promontories present spectacular views of the surrounding lowland;
- Settlement is restricted to the edges with occasional isolated houses and derelict buildings;
- Colours abd tones vary with the weather and season.

#### Specific guidance:

Aim: To increase diversity of landcover.

- Extensive monocultures present uniform backdrop to views from lowland areas; increased species mix will enhance visual diversity and interest.
- Small patches of conifers are generally inappropriate, being out of character with the large scale of the upland forms.

Aim: To conserve the distinct moorland edge.

- The union of forestry and farmland at the base of slopes can appear attractive, but a more gradual transition between moor and field with the conservation of drystone dykes and a succession of vegetation, will encourage wildlife and provide local visual interest.
- Scattered, loosely planted stands of conifers and native pine on lower slopes add a natural feel to the upland edge whichcan provide an interesting transition between the upland and farmed landscapes.

Aim: To preserve and extend moorland area.

- This landscape character area is physically fragmented by lowland inliers, but dense coniferous forest fragments open moorland still further; maintainance of a continuous tract of moorland with views into lowland areas will provide a valuable recreational resource and link distinctive upland features.
- Maintenance of open views st point along upland roads provides a good opportunity to experience the landscape.

The Deveron and Bogie straths are dictated by the complex lithology in the area. The wide valleies of the lower Deveron and of the Bogie are due to the wide band of soft gabbros. These are characterised by flat rolling farmland forming a wide saddle between the high moorland ridges. The landscape pattern is one of fields that drop gently towards the rivers or extend across the flood plain, and a loose network of hedges and shelrbelts and small clumps of woodland. Farming is mixed but predominantly pasture. All of the river banks are lined by intermittent clumps of alder and willow. The landscape is generally well settled. Roads run alongside the rivers, and houses and villages are concentrated along these. Farm buildings are evenly scattered across the landscape enclosed with pronounced woodland stands.

Although an essentially agricultural landscape, the moorland backdrop to most views is a key aspect of the area's character, lending a grand sense of scale.

#### Key characteristics

- Distinct valley form with wide vallies associated with softer rocks.
- A mosaic of diverse land uses; rough sheep grazing, hay fields, commercial forestry plantations and deciduous woodlands.
- A neat farmland patchwork on the flood plain, dominated by pasture with post and wire fencing and hedges.
- Patches of neglected farmland with broken stone dykes and derelict pasture.
- Shallow, rocky rivers lined by broadleaf woods amidst well wooded farmland.
- Conifer-covered knolls standing pround of the open straths.
- Dense settlement within the valley, associated with road corridors.
- Farmhouses scattered along the straths.

#### Specific guidance

Aim: To retain the small scale farmed character and diverse land uses of the valley slopes.

- Preservation of traditional field boundaries, such as drystone dykes and hedgerows, will enhance the landscape pattern.
- Small blocks of commercial forestry will fit within thr existing farmland pattern.
- Local prominent landscape features such as the stands of Scots pine on mounds may be enhanced through management.

Aim: To retian a rural character between major settlements.

Aim: To conserve the setting of large houses and estates and to manage policy woodlands.

 Preservation and management od policy woodlands and stone dykes and replanting of avenues of trees will benefit both the estate and the wider landscape.

Aim: To retain road links within the valley and hence enhance the landscape pattern.

 Woodland within the strath may be enhanced by additional landscape planting and routing new infrastructure away from prominent stands.

#### 2.5.2 Neighbouring land use

The aerial photograph below shows how Ittingstone is surrounded by a mix of farmland and moorland.

Arnhall cottages, Ittingstone and Beechgrove are all on the boundary of the land management plan area. This will need to be considered during the planning process.



Aerial photograph of Ittingstone.

#### 2.6 Social factors

#### 2.6.1 Recreation

Ittingstone currently has one route that is used for informal recreation, mostly by walkers. It runs from the Ward area of HUntly to the top of Clashmach hill, which has great views out across the site towards Huntly. The opportunity to increase the access provision and maintain the views will be part of the planning process for this site.



View from near the top of Clashmach hill.

#### 2.6.2 Community

The closest settlement of any size is the town of Huntly which is within 1 km from Ittingstone. The population of Huntly is around 4500 and although the site is not currently well used access can easily be achieved on foot although it does require the crossing of a main road (the A96).

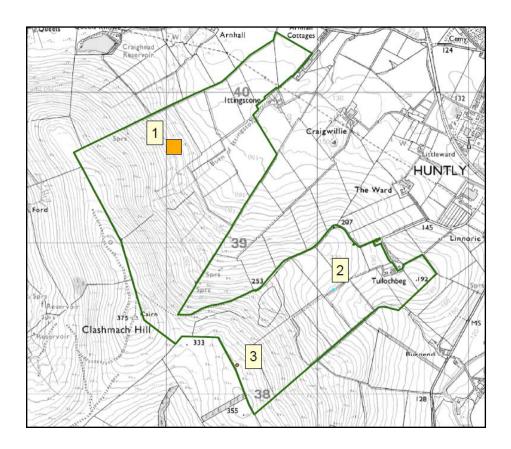
Information from stakeholders and the local community has been sought via letter, email and a public meeting held in the Stewarts hall, Huntly.

Contact was made with all known neighbours, both contiguous and in the local vicinity, all known local interest groups and statutory consultees.

A summary of all the responses received from are summaries in appendix 4.

#### 2.6.3 Heritage

There are no Scheduled Monuments at Ittingstone although 3 recorded nonscheduled monuments are currently known to be on site. These are shown on the map below and their significance will be taken into account as part of the planning process.



ID	Feature
number	
1	Platform
2	Dam
3	Cairn(s)

Non-scheduled monuments.

### 3.0 Analysis and Concept

#### 3.1 Analysis and concept table

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The information gathered in the previous section (2.0 - Background information) needs to be analysed for its relevance to the plan. This will then inform the design concept plan which is based on the land management objectives (section 1.3) and the analysis background information and stakeholder views.

These two proccesses have been undertaken and are presented in the table below. This has been set out against the national themes of the FES strategic directions document and the issues highlighted in the Moray & Aberdeenshire strategic plan.

National	Issue	Analysis	Concept
theme			
Healthy	Resilience and	The climate of the site is predicted	Use the ESC decision support
	adaption to climate	to change in the future.	system and its' built in predicted
	change		future climate models to help
			guide the selection of species
			suitable for planting.
Productive	Transition to a low	The land at Ittingstone falls into	Identify areas where land can be
	carbon economy	several land classification.	removed from agriculture but
			have the least impact on the
			farms productivity.
		New planting areas would increase	Once established new woodland
		the amount of carbon	areas will be managed to
		sequestration occurring on the	produce fuelwood and contribute
		site.	to a low carbon economy locally.
	Increase area for	Areas of Ittingstone have soils	Utilise some of the better quality
	production of quality	that are better than many across	areas to produce a quality
	hardwoods and	the NFE and are suitable for	hardwood timber supply in the
	fuelwood.	broadleaved woodland planting.	long term.

	Support jobs by	The starter farm at Upper Tullochbeg	The starter farm unit provides
	contributing to the	ensures the house is occupied by	an introduction to the
	local economy.	someone working locally and using	agricultural industry for a new
		local shops and suppliers.	entrant.
	Increase the	The starter farm at Upper Tullochbeg	Retain part of the area in
	agricultural use of	makes appropriate use of the	agriculture to contribute to the
	the national estate.	currently available buildings.	local and national agricultural
			and wider economy by providing
			home grown food for "Scotland's
			table".
_	The Scottish	Ittingstone can contribute to the	Identify areas where land can be
	Government's	Scottish Government's woodland	removed from agriculture and
	woodland	expansion target of 10,000 ha per	planted with trees that will have
	expansion policy.	year.	the least impact on the farms
			productivity.
Treasured	Engage with local	Ittingstone offers the potential for	Promote the work at Ittingstone
	communities.	the District to work closely with the	to the local community, and
		local community, and other	other organisations, as an
		organisations, to promote increased	opportunity for them to engage
		involvement in work in the	with various aspects of work in
		countryside.	the countryside.
Cared for	Increasing area of	Ittingstone has soils that are better	Identify areas where land can be
	broadleaved	quality than many others on the NFE	removed from agriculture and be
	woodland.	and are suitable for planting	planted with broadleaved trees
		broadleaved woodland.	that will have the least impact
			on the farms productivity.
	Maintain open	The habitat survey of Ittingstone	Maintain or enhance the
	habitats in good	identified several habitats covered by	ecological condition of the
	ecological	habitat action plans.	identified open habitats.
	condition.	F	

### 4.0 Land Management Proposals

Using the analysis and concept table above three different senarios were prepared and presented at a public consultation drop-in session on 18 February 2015 in the Stewarts Hall, Huntly. The difference in the senarios was the amount of planting proposed compared to the amount of land retained in agriculture. See maps 4 to 6 for the senarios presented.

The drop-in session was advertised in the local paper and all the consultees were written to advising them of the opportunity to view the draft proposals. 27 people attended the drop-in session and gave their opinion. All attendees were in favour of tree planting to a greater or lesser degree. Of those who expressed a choice between the senarios seven chose the option to plant the majority of the land. Five preferred the second option of retaining only the best land in agriculture while no-one wanted the planting to be restricted to the rough grazing areas.

All the comments received are recorded in the consultation record in appendix 3.

Given this response to the presented senarios and the land management objectives set for the site it has been decided to persue the option of planting the majority of the site with broadleaves.

See Management map

#### 4.1 Starter farm

Around 47ha of the area has been retained in agriculture as a starter farm based around the Upper Tullochbeg farm house and buildings.

A starter farm is a part time unit that limits the start up capital required by the new entrant. It also frees up time for them to work off farm which allows them to generate additional capital to build up their business, while also expanding their knowledge and skills base. By bringing off farm income back to the unit they are effectively generating more income for the local economy.

The size of the starter farm is appropriate for a new entrant into the agricultural sector. If the unit were too large the land would not be fully utilised. The new entrant would require a higher level of investment and would need to obtain more start up capital. They would also be required to pay a higher rent in the

longer term. This would be a limiting factor for many new entrants to the industry.

The management and utilisation of the area identified as the starter farm is down to the tennant and their particular business model which will need to be tailored to suit the quantity and quality of land available to them.

#### 4.2 New broadleaved woodland

An increase in the area of broadleaved woodland that is managed to be productive, wether this be for the supply of firewood into the thriving local market or the growing of high quality hardwood sawlogs, is an objective within Moray & Aberdeenshire forest district and Ittingstone contains areas of better quality land that are very suitable for the growing of productive broadleaves.

For this to be successful broadleaved species need be planted that are suited to the site conditions and have the potential to be productive. A number of non native broadleaved species have been suggested by the FCS's Forest Management and Silvicultural support officer as having that potential.

The species chosen for the planting of Ittingstone have included some from this list. These species include:

Red alder – a native to costal areas of north west America from southern Alaska to California. It is a light demanding pioneer species that is often found in mixture with Douglas fir and Sitka spruce in its native range. It can grow very fast on suitable sites but can be short lived. The best growth is found on soils of poor to medium nutrient regime and fresh to wet soil moisture.

Big leaf maple – another native of north west America from Vancouver Island south to central California. It is found naturally in forest types with conifers such as Douglas fir and Sitka spruce. It is a species of intermediate shade tolerance that is cold hardy. It prefers soils of poor to medium fertility and of fresh to moist soil moisture.

Red oak – a native to eastern North Anerica and a long standing plantation species in Holland, Belgium and northern France. It is a shade tolerant species which is fully cold hardy in Britain. It is best suited to moderately dry to moist soils of poor to medium nutrient status. The species is windfirm and moderately tolerant of exposure and of drought.

These species selections are part of a process of increasing the area and diversity of broadleaved species grown for productive purposes. However the species detailed above have not been planted on a commercial scale locally previously so there is an element of learning by experimenting in this process.

The woodland areas will be planted with a shape to fit with the landscape and existing field boundaries, reinforcing the geometric shapes of the field pattern, but also to allow the adjacent agricultural land to be managed efficiently.

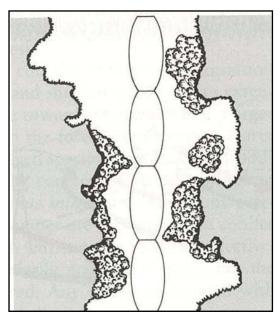
The planting will be undertaken in robust single species groups of 16 (4x4) to 25 (5x5) plants at a spacing varying from 2m x 2m to 1m x 1m with an average stocking density of 5,000 stems per hectare. This planting spacing will ensure that the woods can be managed to be productive in the future.

#### 4.3 Open ground

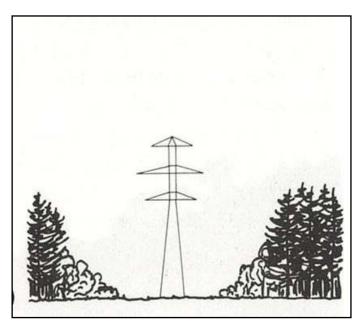
The priority for the open ground is to help the boundaries of the new woodlands to fit into the landscape and provide a wayleave for the powerlines and gas pipeline that cross the site. That is the areas are being kept open to enhace the visual amenity of the woodlands. Where possible

the open areas will be retained where there is also a biodiversity value to them.

As the powerlines and gas pipeline that cross the site run on the lower ground perpendicularly to the main views of the site their visual impact is minimal. Therefore there is no need for overly wide areas of open space along the service corridors. However to minimise their impact they will pass through a series of irregular open spaces split by areas where trees appear to to meet across the open space. This will be achieved by planting smaller trees and shrubby species as an extension of the productive forest edge.



Example of plan of planting along the powerlines.



Example of section through the planting along the powerlines.

In the longer term the open areas towards to top of the site will need to be managed to preventing the natural regeneration of trees taking over from the current vegetation. These areas could be kept open by cutting a proportion of the invading trees with chainsaws and/or clearing saws or the area could be grazed by stock. The decision on the most appropriate management regime will be taken at the time the operation needs to be undertaken.

# Appendix 1 – The national and local context of Ittingstone.

#### National context

Ittingstone has been purchased to support the objectives of the Scottish Government as set out in "The role of Scotland's National Forest Estate and strategic directions 2013-2016"<sup>1</sup>. This document describes the role of and strategic directions for Scotland's National Forest Estate (NFE).

The NFE is one of the biggest opportunities for the Scottish Government to directly implement the principals laid out in its **Land Use Strategy**<sup>2</sup>. The Land Use Strategy aims to deliver multiple benefits from Scotland's countryside. Ittingstone, as part of the NFE, provides an opportunity to implement the Scottish Government's climate change commitments by harnessing the ability of trees to sequester carbon. It can provide additional environmental services including contributing to flood mitigation and ensuring the NFE, and its biodiversity, is robust and able to adapt to future climate change.

Within this context the role of the NFE can be described in terms of the services it has the potential to provide:

- Supporting services such as primary production, nutrient dispersal and cycling;
- Provisioning services such as timber, food (farmed and wild), water, minerals, energy (hydropower, wind energy and biomass fuels);
- Regulating services such as carbon sequestration and climate regulation, flood management, purification of water and air, detoxification of contaminated sites and biological reservoirs for crop pollination and pest and disease control;
- Cultural services around recreational experiences, cultural, intellectual and spiritual inspiration and scientific advancement.

<sup>&</sup>lt;sup>1</sup>The role of Scotland's National Forest Estate and strategic directions 2013-2016 http://www.forestry.gov.uk/fesplans

<sup>&</sup>lt;sup>2</sup>Getting the best from our land – A land use strategy for Scotland http://www.scotland.gov.uk/Topics/Environment/Countryside/Landusestrategy

The **Starter Farm initiative** was developed to contribute to the FSC's activities to implement the land use strategy for Scotland. It was designed to test a new way of using opportunities that arise on the NFE to provide much sought after openings for new entrants to the agricultural sector.

New entrants to farming were first offered the chance to lease part-time 'starter farm' units on the NFE as part of a pilot initiative introduced in January 2012.

The Rationale for Woodland Expansion<sup>1</sup> lays out the Scottish Government's thinking on how woodland expansion can best increase the delivery of public benefits from Scotland's land. The document identifies a number of woodland creation priorities for Scotland:

- Helping to tackle greenhouse gas emissions. Carbon sequestration, timber and fuel production.
- Restoring lost habitats and adapting to climate change. Forest habitat networks and new native woodlands.
- Helping to manage ecosystem services. Sustainable flood management and protection of soil and water resources.
- Underpinning a sustainable forest products industry. Consistent and reliable timber supply for timber processing and wood fuel investments.
- Supporting rural development. Supporting local businesses and farm diversification.
- Providing community benefits. Provision of welcoming and well-managed woodlands in and around communities and where health and community need is greatest.
- Enhancing urban areas and improving landscapes. Improving derelict, underused and neglected land, improving degraded or unsightly environments and diversifying farmed landscapes.

The Nature Conservation (Scotland) Act 2004 places a specific duty on all public bodies to further the conservation of biodiversity and to have regard to the Scottish Biodiversity Strategy<sup>2</sup>. That strategy, published in 2004, aims to achieve by 2030 a landscape where, amongst other things:

"Organisms can move, feed, reproduce and disperse effectively, and are better able to adapt to changing circumstances of land use and climate change".

<sup>&</sup>lt;sup>1</sup> The Scottish Government's Rationale for Woodland Expansion http://www.forestry.gov.uk/forestry/INFD-7FWEQ5

<sup>&</sup>lt;sup>2</sup> Scottish Biodiversity Strategy -http://www.scotland.gov.uk/Publications/2004/05/19366/37239

Habitat networks are one of the main ways identified to achieve this. Habitat networks are patches of habitat that are physically or functionally connected, so that dependent species are able to move and/or disperse between patches to create interlinked populations. The development of networks should increase the resilience of species populations to threats, which is especially important for species which are slow colonisers and/or those living in small fragmented populations.

Networks should help wildlife adapt to climate change, both by encouraging more robust populations that can survive change in situ, and by making it easier for species to colonise new areas if current sites become unsuitable. The predicted pace of climate change means that networks will need to be developed and functioning over the next few decades to relieve the growing pressures on our wildlife.

As there are no specific national policies for agriculture in Scotland it is difficult to link the management of the agricultural elements at Ittingstone to an overarching national strategy. However the background to the industry is that livestock numbers have been dropping since 2005. This is as a direct result of the **Common Agricultural Policy** (CAP). With CAP currently under review it is not possible to know what impact this could have on the future for the agricultural industry in Scotland.

#### Local context

The strategic directions document for the NFE was published in 2013 and lays out in broad terms the story of, nature of, and vision for the NFE. District strategic plans are the next level down in the planning framework. These set out at the district level how different parts of the local NFE will contribute to the national picture. The new **Strategic Plan for Moray & Aberdeenshire District**<sup>1</sup> has recently completed public consultation.

The Strategic Plan for Moray & Aberdeenshire will drive our Land Management Plans (LMP) and integrate varied land management priorities to maximise public benefit, and optimise ecosystem service provision. Ecosystem services include such varied objectives as conserving vulnerable species, to maintaining a supply of timber and biomass, and providing the largest area for recreational provision in Scotland.

<sup>1</sup> Moray & Aberdeenshire Forest District Strategic Plan - http://www.forestry.gov.uk/fesplans

SEPA has designated the river Deveron a priority catchment¹. "Priority catchments are river and costal catchments that are currently failing to meet water quality standards, and which will not achieve improved water quality without a focused management approach. The River Deveron catchment has several designations relating to the importance of its waters which, coupled with a range of diffuse pollution effects, make restoring and protecting it a high priority. The main pressures in the catchment include: agricultural pollution, sewage treatment works discharges, septic tanks, morphology and abstraction." The SEPA publication Diffuse Pollution Priority Catchment: Technical Summary – River Deveron⁴ is available from the SEPA website and contains more details of the issues and how the issues are being addressed. As Ittingstone is located on the banks of the Deveron it has a part to play in the improvement of the catchment.

**SNH**, in partnership with local authorities and other agencies have carried out a National Programme of **Landscape Character Assessment**. This programme aims to improve knowledge and understanding of the contribution that landscape makes to the natural heritage of Scotland. It considers the likely pressures and opportunities for change in the landscape, assesses the sensitivity of the landscape to change and includes guidelines indicating how landscape character may be conserved, enhanced or restructured as appropriate.

¹ River Deveron Catchment http://www.sepa.org.uk/water/river\_basin\_planning/dp\_priority\_catchments/river\_deveron\_catchment.a spx

#### Aberdeenshire Council has a Forest and Woodland Strategy<sup>1</sup>

The key aim of the strategy is:

To ensure the sustainable management of the woodlands and forests of Aberdeenshire and Aberdeen City, creating a balanced landscape where woodlands and forests; add to people's quality of life and well being, contribute to the local economy, provide opportunities for recreation and tourism and protect and enhance biodiversity and the environment.

#### This means:

- encouraging multi-benefit forestry in new planting and through restructuring
- balancing forestry against other land uses
- protecting sensitive areas; and
- identifying priority areas for expansion of a variety of forest and woodland types

The section on creating new woods and forests states that:

Identifying priority areas where woodland expansion might be targeted is a key role of this Strategy. Looking at the whole forest resource in the North East, it should be possible to achieve benefits to landscape, habitat and recreation whilst producing commercial timber. Whilst expecting a range of proposals for new planting to come forward, specific types of new planting are encouraged by this Strategy to work towards the aims identified. Although woodland is an important feature of the North East, the total area of woodland (14%) is low compared with many of our European neighbours where woodland cover is often greater than 30%.

<sup>&</sup>lt;sup>1</sup> Forest and Woodland Strategy for Aberdeenshire & Aberdeen City - http://www.aberdeenshire.gov.uk/natural/trees/forest\_strategy05.pdf

Feedback from **stakeholders and the local community** has been sought via written and electronic correspondence. Letters or emails were sent to all known neighbours, both contiguous and in the local vicinity, all known local interest groups and statutory consultees.

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# Appendix 2 – Summary report on the vegetation of Upper Tullochbeg and Ittingstone

SUMMARY REPORT ON THE VEGETATION OF

# UPPER TULLOCHBEG,

ABERDEENSHIRE, OCTOBER 2012

#### Ben Averis

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#### November 2012

A survey commissioned by Forest Enterprise Scotland



#### INTRODUCTION

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In this survey, commissioned by Forest Enterprise Scotland (FES) and carried out on 11<sup>th</sup> October 2012, the vegetation of Upper Tullochbeg Farm, 2 km SW of Huntly, Aberdeenshire, was mapped at the scale of 1:10,000 using the FES UK Biodiversity Action Plan (UKBAP) classification. The approximate centre of the site is at Ordnance Survey grid reference NJ 506 384. The site has an area of about 50 hectares and is on N-NE-facing slopes with an altitudinal range of 220-350 m. The southern part of the site is mostly short, grazed, improved and semi-improved pasture. The remainder is mostly a mixture of gorse scrub,

acid grassland, coarse neutral grassland and rush pasture. There is also a small area of larch woodland and some patches of dry heath.

The fieldwork took about 6 hours to complete. Physical access around the site was generally easy. The weather was cool and cloudy. Each mapped vegetation unit (polygon) was given a code number which is labelled on the 1:10,000 map. An aerial photograph provided by FES was used to help define vegetation boundaries. The FES UK Biodiversity Action Plan (UKBAP) classification data for each polygon were entered onto a Microsoft Excel spreadsheet. The appropriate National Vegetation Classification (NVC) communities were recorded and included in the spreadsheet.

This brief report provides a summary account of the vegetation and botanical interest of the surveyed area. The 1:10,000 map and the habitat data spreadsheet are provided separately but the map and the table of habitat codes (for each polygon) are also copied into this report for convenience (see Map 1 and Table 1 at end of report).

While walking back to the car at Tullochbeg, the vegetation of the surrounding fields was also mapped briefly as seen from the track, as these fields, although outwith the official survey area, are also within FES ownership.

#### **BRIEF SITE DESCRIPTION**

This site occupies moderate to fairly steep N-NE-facing slopes with an altitudinal range of 220-350 m. Locally – on the highest ground in the south and also on the lowest slopes – the slopes are more gentle.

The southern part of the site is mostly short, grazed, improved pasture (NVC MG6) and semi-improved pasture (U4b). The remainder is mostly a mixture of gorse scrub (W23), unimproved acid grassland (U4a and some U5), coarse neutral *Deschampsia cespitosa* grassland (MG9), damp rushy neutral grassland (MG10a) and wetter neutral rush mire (M23). There is also a small area of larch woodland and some patches of dry heath (H10-12).

#### **DESCRIPTIONS OF HABITAT TYPES**

These are described below under headings corresponding to NVC communities except for two habitats which could not be classified meaningfully using the NVC.

**W23** *Ulex europaeus-Rubus fruticosus* **agg. scrub** (belongs within UK BAP non-priority habitat 'broadleaved, mixed & yew woodland'): this is scrub consisting mainly of a dense growth of gorse *Ulex europaeus*, growing up to about 3 m in height, beneath which the sparse, species-poor flora was not examined in details but includes *Agrostis capillaris*, *Holcus lanatus* and *Potentilla erecta*; W23 is extensive on well-drained slopes in the northern part of the site, mainly in mosaics with acid grassland (U4).

H10c-H12c: heath floristically intermediate between H10c Calluna vulgaris-Erica cinerea heath, Festuca ovina-Anthoxanthum odoratum sub-community and H12c Calluna vulgaris-Vaccinium myrtillus heath, Galium saxatile-Festuca ovina sub-community (belongs within UK BAP Priority habitat 'Upland heathland'): this is short (15-20 cm) heath in which Calluna vulgaris is abundant to dominant, along with more or less equal amounts of Erica cinerea and Vaccinium myrtillus, as well as some V. vitis-idaea, Agrostis vinealis, Deschampsia flexuosa, Carex panicea, C. binervis, Potentilla erecta, Galium saxatile and mosses including abundant Hylocomium splendens; occurs as small patches in openings among gorse scrub in the NW of the site.

M23a Juncus effusus/acutiflorus-Galium palustre rush-pasture, Juncus acutiflorus sub-community (belongs within UK BAP Priority habitat 'upland, flush fen or swamp'): rush mire with tall (30-50 cm) swards of Juncus acutiflorus accompanied by a species assemblage including the grasses Agrostis capillaris and Holcus lanatus, herbs including Ranunculus acris, Rumex acetosa, Cirsium palustre, Cardamine pratensis, Lathyrus pratensis, Galium uliginosum, Lychnis flos-cuculi and Stellaria uliginosa, and mosses including Rhytidiadelphus squarrosus and Brachythecium rivulare; common and locally extensive on damp to wet slopes in the northern half of the site.

M23b Juncus effusus/acutiflorus-Galium palustre rush-pasture, Juncus effusus sub-community (belongs within UK BAP Priority habitat 'Purple moorgrass & rush pasture' and non-priority habitat 'fen, marsh & swamp'): similar to the M23a just described, but dominated by Juncus effusus instead of J. acutiflorus; small areas present on damp ground in the central part of the site and in the north-east.

MG6 Lolium perenne-Cynosurus cristatus pasture (belongs within UK BAP non-priority habitat 'Improved grassland'): agriculturally improved, species-poor grassland with abundant Lolium perenne and other species including Cynosurus cristatus, Agrostis capillaris, Trifolium repens and Ranunculus repens; occupies well-drained, gently to moderately sloping land in the southern half of the site (some of this in subtle mosaics with semi-improved U4b grassland), with smaller areas also in the far north (also in mosaics with U4b) and north-east (in mosaics with MG10s rushy grassland).

MG9 Holcus lanatus-Deschampsia cespitosa grassland (belongs within UK BAP non-priority habitat 'Neutral grassland'): coarse grassland with abundant tussocks of Deschampsia cespitosa accompanied by other species including Holcus lanatus, Dactylis glomerata, Agrostis capillaris, Juncus effusus and the moss Rhytidiadelphus squarrosus; locally common on damp slopes in the northern half of the site.

MG10a Holcus lanatus-Juncus effusus rush-pasture, Typical sub-community (belongs within UK BAP non-priority habitat 'Neutral grassland'): damp grassland in which tall tussocks of Juncus effusus grow abundantly among other species including Holcus lanatus, Agrostis stolonifera, Trifolium repens, Ranunculus repens, Cirsium arvense, Senecio jacobea, Epilobium obscurum and Montia fontana; common on damp ground in the northernmost part of the site (with W23 gorse and U4 acid grassland) and in the north-east

(forming patches among MG6 improved grassland); in one place in the far NE the MG10 occupies very wet ground and has species including the grass *Glyceria fluitans*.

**U4 Festuca ovina-Agrostis capillaris-Galium saxatile** grassland (belongs within UK BAP priority habitat 'Lowland Dry Acid Grassland'): Typical sub-community U4a (unimproved acid grassland) has short (20-25 cm) grassland with swards of *Agrostis capillaris* and *Anthoxanthum odoratum*, with some *Holcus lanatus* and *Deschampsia flexuosa*, and scattered plants of the herbs *Potentilla erecta, Galium saxatile, Rumex acetosa, Ranunculus acris, Cirsium palustre, Succisa pratensis* and the mosses *Rhytidiadelphus squarrosus, Hylcomium splendens* and *Pleurozium schreberi* on well-drained slopes in the NW; *Holcus lanatus-Trifolium repens* sub-community U4b (semi-improved acid grassland) is similar but with frequent to abundant *Holcus lanatus*, and is widespread and common at this site; U4b occurs in mosaics with MG6 improved grassland in the south, where U4b and MG6 grade into each other with very indistinct boundaries.

**U5 Nardus stricta-Galium saxatile grassland** (belongs within UK BAP priority habitat 'Lowland Dry Acid Grassland'): similar to the U4a described above but with *Nardus stricta* very abundant to dominant, and other species including *Luzula pilosa, Trientalis europaea, Carex panicea, Taraxacum* agg. and *Viola palustris*; one small area of this type of grassland on well-drained ground in the central-N part of the site (in a glade surrounded mainly by W23 gorse scrub).

**S22** *Glyceria fluitans* swamp (belongs within UK BAP priority habitat 'Lowland Fen'): this is swamp vegetation in which semi-floating swards of *Glyceria fluitans* are abundant and accompanied by *Agrostis stolonifera* and scattered *Sparganium erectum, Ranunculus flammula, Epilobium obscurum, Myosotis scorpioides* and *Poamogeton natans*; this vegetation occupies a small, very wet hollow in the nar NE of the site, surrounded by *Juncus effusus*.

**Larch plantation** (belongs within UK BAP non-priority habitat 'coniferous woodland'): small area of mature larch on upper slopes, surrounded by gorse scrub (W23), rush mire (M23) and acid grassland (U4).

#### **BRIEF ASSESSMENT OF BOTANICAL INTEREST**

The vegetation is broadly typical of that found more widely along the fringes of the eastern Grampians.

Botanical interest is generally low to medium. It is low in the improved MG6 and semi-improved U4b grasslands, MG9 *Deschampsia cespitosa* coarse grasslands, MG10 *Juncus effusus* rush pastures, and W23 gorse scrub. These vegetation types are generally species-poor at this site. The vegetation is of slightly greater (but still low to medium) botanical interest in the unimproved acid grasslands (U4a and U5, including some *Trientalis europaea* in U5 at NJ 5065 3852), the M23a rush mires and the H10-12 heaths.

Five UK BAP Priority habitats were found in this survey:

- Purple Moorgrass & Rush Pasture (NVC M23b). Only a small area of M23 rush mire was
  found in the enclosed farmland part of this site, where it belongs in this UK BAP priority
  habitat and occurs in association with MG10 rushy grassland and MG6 improved
  grassland. (M23 rush mire is common upslope in the upland part of the site, where most of
  it i.e. M23a belongs in a different priority habitat.)
- Upland Flush, Fen or Swamp (NVC M23a). This is common on damp to wet ground in the northern half of the site.
- Upland Heathland (NVC H10c-H12c). Small patches of this heath occur among gorse scrub in the NW of the site.
- Lowland Fen (S22). One small area of this was found, in a very wet hollow on low ground in the far NE of the site, surrounded by *Juncus effusus*.

#### SOME THOUGHTS ABOUT FUTURE MANAGEMENT

It is assumed that tree-planting is being considered at this site. The following native tree and shrub species appear appropriate to the habitats present:

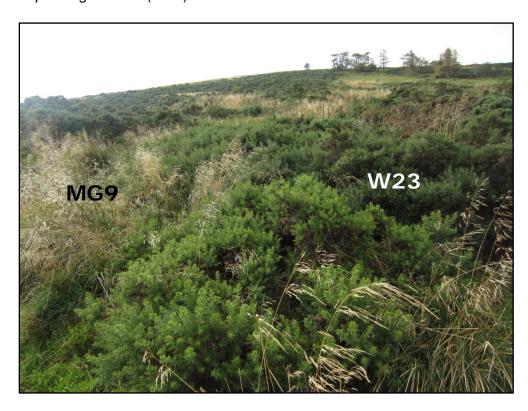
- In the areas of U4 grassland: oak (either or both species), birch (either or both species), rowan, hazel, aspen and hawthorn.
- In the areas of MG6 improved grassland: oak (either or both species), birch (either or both species), ash, wych elm, rowan, hazel, aspen, bird cherry, wild cherry, hawthorn and blackthorn.
- In the areas of MG9 and MG10 grasslands and M23 rush mire: downy birch, ash, wych elm, rowan, alder, bird cherry, grey willow and goat willow. In my opinion it would be best to keep some of the M23a rush mire unplanted, to allow woodland to develop more naturally there.
- In the areas of H10-12 heath: birch (either or both species), rowan, juniper and pine.
   However, these heaths are themselves of sufficient ecological interest that it seems best to leave them unplanted, especially as they are only small in extent (so leaving them unplanted would reduce the planted area by only a small amount).
- The S22 swamp is too wet for any tree-planting.

If the area is deer-fenced and grazing removed completely in order to allow young trees to grow more freely, it would be best for this to be a temporary measure so that grazing can return when the young trees are large enough to withstand browing (this might take about 20 years). Any period of at least a few years without grazing means some risk of a reduction in botanical diversity through ground vegetation becoming more strongly dominated by a small number of common, vigorous plant species; the longer this period the greater the risk of losing smaller plants and causing a noticeable reduction in the diversity and conservation interest of the ground flora. Through much of the site this is not a vital issue because the botanical interest is currently low, but in the M23a rush mires and H10c-H12c heaths botanical interest is slightly higher and it would be worth (if possible) limiting any period without grazing.

#### **ACKNOWLEDGEMENTS**

This survey was commissioned by Forest Enterprise Scotland. The contract details – including the provision of the base map and aerial photograph of the site – were arranged by Philippa Murphy at the FES office at Huntly. I thank Jackie Cumberbirch (FES Conservation Ranger) for accompanying me during the fieldwork.

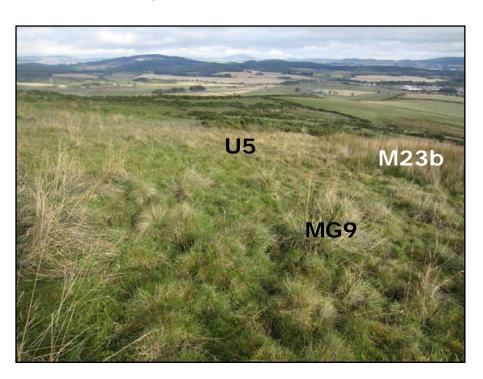
Photograph 1: looking SSW upslope, through gorse scrub (NVC W23) and Deschampsia cespitosa grassland (MG9).



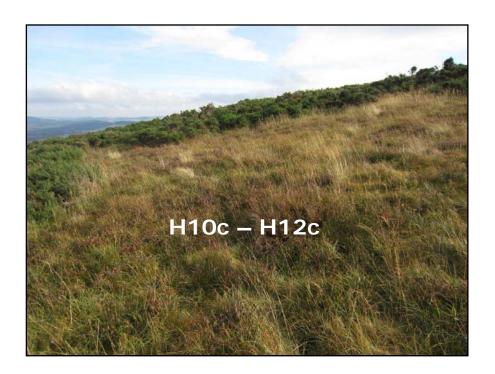
Photograph 2: M23a Juncus acutiflorus neutral mire on middle slopes.



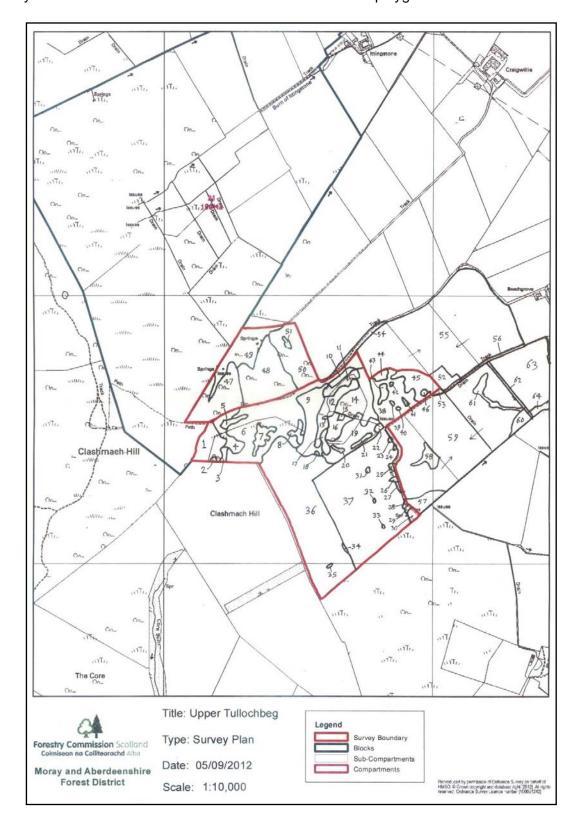
Photograph 3: looking N diagonally downslope, showing MG9 Deschampsia cespitosa neutral grassland, U5 Nardus acid grassland and M23b Juncus effusus neutral mire.



Photograph 4: dry heath (H10-12) on N-facing slope in NW of site, in glade among W23 gorse scrub.



Map 1 Habitat map of Upper Tullochbeg, Aberdeenshire, NJ 506 384 Mapped by Ben Averis on 11<sup>th</sup> October 2012. Habitat codes for polygons are in Table 1.



**Table 1 Habitat data for Upper Tullochbeg, Aberdeenshire, NJ 506 384.** Mapped by Ben Averis on 11<sup>th</sup> October 2012. For polygon code numbers see Map 1.

Polygon Number	Habitat 1	% 1	NVC1(i)	NVC1(ii)	Habitat 2	% 2	NVC2(ii)	NVC2(ii)
1	broadleaved, mixed & yew woodland	100	W23					
2	acid grassland	100	U4a					
3	acid grassland	100	U4a					
4	broadleaved, mixed & yew woodland	70	W23		UPLAND HEATHLAND	15	H10	H12
5	acid grassland	60	U4a		UPLAND HEATHLAND	20	H10	H12
6	broadleaved, mixed & yew woodland	100	W23					
7	acid grassland	60	U4a		UPLAND HEATHLAND	20	H10	H12
8	acid grassland	60	U4a		UPLAND HEATHLAND	20	H10	H12
9	improved grassland	100	MG6					
10	improved grassland	100	MG6					
11	broadleaved, mixed & yew woodland	100	W23					
12	UPLAND, FLUSH FEN OR SWAMP	100	M23a					
13	neutral grassland	100	MG9					
14	UPLAND, FLUSH FEN OR SWAMP	60	M23a		broadleaved, mixed & yew woodland	20	W23	
15	broadleaved, mixed & yew woodland	100	W23					
16	acid grassland	50	U4b	U5	UPLAND, FLUSH FEN OR SWAMP	35	M23a	
17	CONIFEROUS WOODLAND	100						
18	broadleaved, mixed & yew woodland	100	W23					
19	broadleaved, mixed & yew woodland	100	W23					
20	acid grassland	100	U4b					
21	neutral grassland	100	MG9	MG10a				
22	neutral grassland	100	MG9					

23	broadleaved, mixed & yew woodland	100	W23					
24	broadleaved, mixed & yew woodland	100	W23					
25	other tall herb and fern tall ruderal	100	OV25					
26	neutral grassland	100	MG10a					
27	other tall herb and fern tall ruderal	100	OV25					
28	broadleaved, mixed & yew woodland	100	W23					
29	neutral grassland	100	MG9	MG10a				
30	broadleaved, mixed & yew woodland	100	W23					
31	other tall herb and fern tall ruderal	100	OV25					
32	other tall herb and fern tall ruderal	100	OV25					
33	neutral grassland	100	MG10a					
34	neutral grassland	100	MG10a					
35	neutral grassland	100	MG10a					
36	acid grassland	50	U4b		improved grassland	50	MG6	
37	improved grassland	100	MG6					
38	improved grassland	100	MG6					
39	neutral grassland	100	MG10a					
40	neutral grassland	100	MG10a					
41	neutral grassland	100	MG10a					
42	neutral grassland	100	MG10a					
43	neutral grassland	100	MG10a					
44	neutral grassland	100	MG10a					
45	neutral grassland	100	MG10a					
46	LOWLAND FEN	70	<b>S</b> 22		PURPLE MOOR GRASS & RUSH PASTURE	10	M23b	
47	acid grassland	100	U4b					
48	acid grassland	70	U4		broadleaved, mixed & yew woodland	30	W23	
49	neutral grassland	45	MG10a		broadleaved, mixed & yew woodland	40	W23	

50	acid grassland	49	U4b		improved grassland	49	MG6	
51	neutral grassland	70	MG9		broadleaved, mixed & yew woodland	30	W23	
52	neutral grassland	50	MG10a		improved grassland	50	MG6	
53	neutral grassland	100	MG10a					
54	broadleaved, mixed & yew woodland	100	W23					
55	improved grassland	100						
56	neutral grassland	50	MG10a		improved grassland	50	MG7	
57	neutral grassland	50	MG10a		improved grassland	50	MG6	
58	neutral grassland	100	MG10a					
59	improved grassland	100						
60	neutral grassland	50	MG10a		improved grassland	50	MG6	
61	neutral grassland	80	MG10a		improved grassland	20	MG6	
62	neutral grassland	100	MG1					
63	improved grassland	100						
64	neutral grassland	90	MG9	Hlan	broadleaved, mixed & yew woodland	10	W23	

SUMMARY REPORT ON THE VEGETATION OF

# ITTINGSTONE FARM,

ABERDEENSHIRE, NOVEMBER 2010

#### Ben Averis

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#### November 2010

#### A survey commissioned by Forest Enterprise Scotland

#### INTRODUCTION

In this survey, commissioned by Forest Enterprise Scotland (FES) and carried out on 5<sup>th</sup> November 2010, the vegetation of Ittingstone Farm, 2 km W of Huntly, Aberdeenshire, was mapped at the scale of 1:10,000 using the FES UK Biodiversity Action Plan (UKBAP) classification. The approximate centre of the site is at Ordnance Survey grid reference NJ 501 395. The site has an area of 133 hectares and an altitudinal range of 130-365 m. The north-eastern part of the site is enclose farmland on level to gently sloping land. The south-western part, lying further upslope, is unenclosed land on a moderate NE-facing slope.

The fieldwork took one day to complete. Physical access around much of the site was easy, but large parts of the upper ground (in the SW) consist of dense, impenetrable gorse scrub. Each mapped vegetation unit (polygon) was given a code number which is labelled on the 1:10,000 map. The survey data were entered onto a Microsoft Excel spreadsheet. This brief report provides a summary account of the vegetation and botanical interest of the surveyed areas. The 1:10,000 map and the habitat data spreadsheet are provided separately but the map and the main table of habitat codes are also copied into this report for convenience (see Map 1 and Table 1 at end of report).

#### **VEGETATION**

For the purpose of description it is convenient to divide the site into two parts:

#### 1. Enclosed farmland in NE

This enclosed farmland occupies nearly half of the area of the site. It consists of a series of fields on low, level to gently sloping land. The fenceline between points A and B on the vegetation map forms the boundary between the upper (SW) edge of these enclosed fields and the lower (NE) edge of the unenclosed hill ground further upslope.

Most of the vegetation of these fields is agriculturally improved and semi-improved grassland. Botanical interest in these enclosed fields was found to be low in this survey.

The northernmost fields are the most improved (NVC community MG7). These fields were grazed by sheep at the time of survey.

The other fields have mixtures of improved grassland (MG6b – not as species-poor and *Lolium*-dominated as MG7) and U4b (semi-improved) with smaller amounts of tall neutral grassland (MG1 with abundant *Dactylis glomerata*) and MG9 (*Deschampsia cespitosa* dominant), and patches of *Juncus effusus* (MG10). Some wetter areas here have rush mires with abundant *Juncus effusus* (M23b) and *J. acutiflorus* (M23a). The last NVC type typically contains at least a moderately rich assemblage of species characteristic of wet neutral soils, but the patches of M23a in these fields were less species-rich and more grassy: this might be the result of runoff from the adjacent agricturally improved and semi-improved grassland.

#### 2. Unenclosed hill slope in the SW

This part of the site is a NE-facing slope rising to 365 m near the summit of Clashmach Hill. The fenceline between points A and B on the vegetation map forms the boundary between the lower (NE) edge of this unenclosed hill ground and the upper (SW) edge of the enclosed fields further downslope.

The vegetation of this part of the site is of a much more semi-natural nature than in the enclosed fields. Botanical interest here varies from low to medium.

The lower parts of these slopes have large areas of *Juncus acutiflorus* rush mire (mostly M23a but also some of the more acidic M6d type) mixed with damp *J. effusus* swards (MG10a), areas of tall *Deschampsia cespitosa* grassland (MG9) and drier *Festuca-Agrostis* acid grassland (U4) and gorse scrub (W23). The U4 is mostly of a more semi-natural nature including the U4a and U4e sub-communities, contrasting with the more semi-improved U4b found in parts of the enclosed fields downslope. The M23a rush mires show a similar patter in being mostly of a more semi-natural character (with a moderate representation of wetland herbs) than the poorer and grassier examples among the enclosed fields; for example *Galium uliginosum* was found to be plentiful in some of this M23a mire.

Further upslope there are complex mosaics of dry heath (H12, H10 and H10-12 intermediates) and gorse scrub (W23), with smaller amounts of acid grassland (U4). Gorse scrub is the dominant vegetation type on the uppermost slopes, there it opens out here and there into small patches of H12 heath. Young rowans grow plentifully in the gorse scrub and heath in the southernmost part of the area (polygon 29).

Trientalis eurpoaea was seen sparingly in dry heath on part of this slope (in the northern part of polygon 22).

The vegetation and flora of this unenclosed land are broadly typical of that found more widely around upland fringes of the eastern Highlands. However, the abundance of *Erica cinerea* (including patches of H10 *Calluna-Erica cinerea* heath) in the lower altitude areas of heath was surprising. *E. cinerea* is a species which favours well-drained sites on well-lit slopes, especially sunny slopes facing south to west, where there will be more daytime warmth than on colder, less sunny N-E aspects. This preference for warmer slopes accords with the fact that this species is most abundant in western parts of Britain and Ireland; it is also very strongly western in Europe as a whole. Even in western Britain it commonly thins out on northerly aspects, and the typical pattern in the central and eastern Highlands is for H10 heath on southerly aspects to give way to the more extensive H12 *Calluna-Vaccinium* heath on northerly aspects. Here at Ittingstone, on a NE-facing slope in a north-eastern area with a relatively cool climate, one might understandably expect all of the heath to be H12, yet there is also much H10 and a general abundance of *E. cinerea*.

Gorse has evidently colonized former heathland and grassland on this slope, and from the abundance and extent of young as well as mature growth it appears to be continuing its spread. Cutting and grazing might be the best means of gorse control here. Burning is another option but in the years following burning there can be abundant regrowth of gorse.

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#### **UK BAP Priority habitats found in this survey**

Three UK BAP Priority habitats were seen:

- Upland Heathland (NVC H10 & H12). Common in the unenclosed SW part of the site.
- Upland Fen, Flush & Swamp (NVC M23a and M6d). Common in the lower parts of the unenclosed SW part of the site.
- Purple Moor-grass & Rush pasture: occurrences of M23 rush pasture within the enclosed fields (i.e. in polygons 3, 6 and 31).

#### Birds and mammals seen in this survey

Fauna seen during this survey were buzzard, woodpigeon, meadow pipit, starling, carrion crow, fieldfare, redwing, robin, stonechat, goldcrest, dunnock, great tit, blue tit, chaffinch, greenfinch, goldfinch, yellowhammer, reed bunting, waxwing (7 birds flew E over top of Clashmach Hill) and roe deer.

#### **COMMENTS ON THE SURVEY METHOD**

As in previous years these comments were requested by FES as part of the contract.

In general the survey method was found to be straightforward. The habitat classification is a broad one compared with the NVC, and for the most part there were no problems allocating vegetation and habitats to their appropriate types. Vegetation types can vary on a very small scale, so it is not surprising that many of the polygons are mapped as containing mosaics of two or more habitats. Within these mosaic polygons the percentage cover figures for each component can only be estimates: two surveyors would probably each record slightly different sets of percentages.

The separation between MG6b improved grassland and U4b semi-improved grassland in the enclosed fields on the low ground was not a very obvious one. These two grassland types grade into each other here, including intermediate forms. There is also some subtle variation here between MG1 coarse grassland and MG6 improved grassland (againg with some intermediates), and between MG10a and the slightly wetter and slightly more divers M23b *Juncus effusus* rushy vegetation.

No aerial photograph was provided by FES, but aerial photography found on the internet (Google Maps) helped to define some vegetation boundaries.

The recording of up to three NVC communities per Priority Habitat was generally straightforward. The new spreadsheet format (since 2009) also allowed NVC codes to be entered quickly and easily for non-priority habitats too, so that all of the vegetation mapped in the survey is given NVC coding in the spreadsheet.

The only threat noted in the 'Threats' column was to do with the potential of gorse to spread through the UK BAP Priority Habitats of Upland Heathland and (to a much lesser extent) Upland Fen, Flush & Swamp in the unenclosed south-western parts of the site.

#### **ACKNOWLEDGEMENTS**

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This survey was commissioned by Forest Enterprise Scotland. The contract details – including the provision of the base map of the site – were arranged by Philippa Murphy at the FES office at Huntly.

### Photographs of Ittingstone Farm, Aberdeenshire, NJ 501 395, 5<sup>th</sup> November 2010



General view of the site, looking SW from farm track among enclosed fields



Abundant young rowans among gorse scrub and heath at S end of site



Unenclosed hillslope in S of site, showing mosaic of heath (dark purplish-brown), gorse scrub (dark green), grassland (pale green U4 and even paler MG9) and rush mire (brown patches at right of photo).

#### Map 1 Habitat map of Ittingstone Farm, Aberdeenshire, NJ 501 395

Mapped by Ben Averis on 5<sup>th</sup> November 2010.

Habitat codes for each numbered polyon are given in Table 2 (see next page).

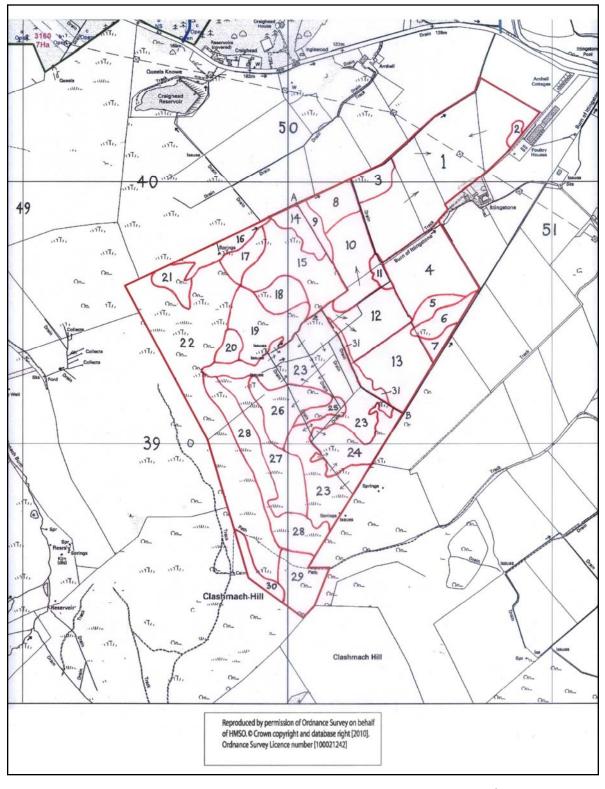


Table 1 Habitat data for each polygon at Ittingstone Farm, Aberdeenshire, NJ 501 395, 5<sup>th</sup> November 2010 (for polygon code numbers see Map 1)

Polygon	Habitat 1	%	NVC1	NVC1	NVC1	Habitat 2	%	NVC2	NVC2
Number	Tiabitat i	1	(i)	(ii)	(iii)	Habitat 2	2	(ii)	(ii)
1	improved grassland	100	MG7						
2	neutral grassland	100	MG1b						
3	PURPLE MOOR GRASS & RUSH PASTURE	60	M23a			neutral grassland	40	MG10a	MG9
4	neutral grassland	94	MG6b			neutral grassland	6	MG10a	MG9
5	acid grassland	100	U4b						
6	PURPLE MOOR GRASS & RUSH PASTURE	90	M23b	M23a		acid grassland	10	U4b	
7	neutral grassland	100	MG1						
8	neutral grassland	55	MG1a-	MG10a		improved grassland	45	MG6b	
9	acid grassland	100	U4b						
10	improved grassland	100	MG6b						
11	neutral grassland	100	MG10a						
12	neutral grassland	70	MG10a	MG9	MG1	acid grassland	30	U4b	
13	acid grassland	95	U4b			neutral grassland	5	MG9	MG10a

14	UPLAND, FLUSH FEN	80	M23a		neutral	15	MG9	
	OR SWAMP				grassland			
15	acid grassland	89	U4		broadleaved, mixed & yew woodland	10	W23	
16	neutral grassland	70	MG9	MG10a	UPLAND, FLUSH FEN OR SWAMP	15	M23a	
17	broadleaved, mixed & yew woodland	90	W23		acid grassland	10	U4	
18	broadleaved, mixed & yew woodland	70	W23		acid grassland	30	U4	
19	broadleaved, mixed & yew woodland	100	W23					
20	UPLAND HEATHLAND	90	H12		broadleaved, mixed & yew woodland	8	W23	
21	UPLAND HEATHLAND	90	H12		broadleaved, mixed & yew woodland	10	W23	
22	broadleaved, mixed & yew woodland	80	W23		UPLAND HEATHLAND	20	H12	H10- H12
23	UPLAND, FLUSH FEN OR SWAMP	75	M23a	M6d	neutral grassland	16	MG9	MG10a
24	broadleaved, mixed & yew woodland	100	W23					
25	neutral grassland	100	MG9					
26	broadleaved, mixed & yew woodland	90	W23		neutral grassland	5	MG9	

27	UPLAND HEATHLAND	40	H12	H10	broadleaved, mixed & yew woodland	40	W23	
28	UPLAND HEATHLAND	70	H12		broadleaved, mixed & yew woodland	20	W23	
29	broadleaved, mixed & yew woodland	90	W23		UPLAND HEATHLAND	10	H12	
30	UPLAND HEATHLAND	80	H12		broadleaved, mixed & yew woodland	20	W23	
31	PURPLE MOOR GRASS & RUSH PASTURE	75	M23a		neutral grassland	20	MG9	MG10a

# Appendix 3 – Consultation record.

Statutory	Date	Date response	Issue raised	Forest District
Consultee	contacted	received	10000 101000	Response
SNH (Isla Martin)	29 Oct 2014 By email	6 Nov 2014 By email	Thank you for consulting us on the land management plan for Upper Tullochbeg and Ittingstone.	
			We do not have any comments to make in this case. However, if there are any specific issues on which you would like our advice, please let me know.	
RSPB	29 Oct 2014 By email		No reply to date	
SEPA	29 Oct 2014 By email	20 Nov 2014 By email	Standard reply (available on request)	
Aberdeenshire Council	29 Oct 2014 By email		No reply to date	
AM Phillip, Agricultural suppliers	29 Oct 2014 By post		No reply to date	
Arnhall cottage occupant	29 Oct 2014 By post	18 Feb 2015 At consultation meeting	Is there opportunity for Nordic sking? Good for fuelwood, ash grows very well. Gas pipeline on flat ground. Preference for scenario 1 or 2.	Opportunity for informal access has been included but not formal recreation facilities due to resource constraints. Ash would be a suitable species for much of this site but we are unable to plant it currently due to ash dieback (Chalara) desease. The line of the gas pipeline has been taken into account.
Arnhall occupant	29 Oct 2014 By post		No reply to date	
Brawlandknowes occupant	29 Oct 2014 By post		No reply to date	
Burnend occupants	29 Oct 2014 By post		No reply to date	
Craigwillie occupants	29 Oct 2014 By post		No reply to date	

<u> </u>	20.0		l a l · · ·	T
Deveron, Bogie &	29 Oct		No reply to date	
Isla rivers trust.	2014			
	By email			
Edendiack	29 Oct		No reply to date	
occupants	2014			
	By post			
Huntly	29 Oct	18 Feb 2015	Prefer scenario 1 as it meets	Opportunity for informal
Community	2014	At	all the criteria as discussed	access has been
Council	By post	consultation	during my visit.	included in the plan.
		meeting	Very well presented at	
			Stewarts hall.	
			Improved access as I consider	
			it's one thing to admire the	
			scenery but quite another to	
			be in it. You can imagine the	
			thoughts and feelings of the	
			community of Huntly &	
			greater Huntly when they	
			realise they can walk and	
			even cycle up and around the	
			hills they look up to and	
	20.0		admire.	
Huntly Mart	29 Oct		No reply to date	
	2014			
I I I I	By post	10 5 1 5515	Chairman C	On a saturation to the state of
Huntly	29 Oct	18 Feb 2015	Chairman – Scenario 1 is	Opportunity for informal
Development	2014	At	more natural. Scenario 2	access has been
Trust	By email	consultation	looks "scrappy". I prefer that	included in the plan but
		meeting	woodland should take	not formal recreation
			precedence.	facilities due to current
			HDT is keen to improve walking & cycling access &	resource constraints.
			routes.	
			It's important to maintain	
			(even improve) the	
			Clashmach hill route but will it	
			also be possible to put some	
			kind of circular route to	
			extend the Clashmach trail.	
Huntly branch of	29 Oct		No reply to date	
NFUS	2014		1.10 (0), 10 date	
	By post			
Linnorie occupant	29 Oct		No reply to date	
	2014		111 100,7 10 0000	
	By post			
Littleward	29 Oct		No reply to date	
occupant	2014			
p	By post			
Ross & Kirsty	29 Oct		No reply to date	
Williams (starter	2014			
farm tenants)	By post			
Mr Simpson	29 Oct		No reply to date	
(Currently lease	2014			
grazing)	By post			
Towns & Carnie	29 Oct		No reply to date	
(agricultural	2014		· <i>'</i>	
suppliers)	By post			
North East region	29 Oct		No reply to date	
of NFUS	2014		, ,	
	By post			
Principal	29 Oct		No reply to date	
agricultural	2014		, ,	
officer, SGRPID	By email			
•				

Scottish	29 Oct	I would draw your attention	A starter farm has
Tennants	2014	to the Woodland Expansion	already established on
Farmers Association	By post	Advisory Group's recommendation that "The	this site thus maintaining an active
Association		focus of woodland expansion	agricultural unit.
		should be away from prime	Comments received at
		agricultural land" and	the consultation
		Recommendation 11 on	meeting on 18 Feb 2015
		Whole Farm Planting which states:	indicated that local farmers do not consider
		states.	the land classification to
		"As a condition of public	be correct. They believe
		support, those (including	the land to be of a lower
		Forest Enterprise Scotland)	class than shown on the
		proposing to create woodlands on whole farms	maps.
		should be required to consider	
		opportunities for integration	
		with other land uses, for	
		example by retaining better of	
		grades of land in agricultural use, and by designing	
		unplanted areas and fencing	
		in ways that accommodate	
		neighbouring farming	
		systems, moorland	
		management and environmental	
		considerations."	
		Upper Tullochbeg and Ittingstone	
		Upper Tullochbeg and	
		Ittingstone comprises	
		216.5ha of farmland og which	
		80.6ha is arable, 33.8ha rough grazing and 100ha of	
		rough grazing. We note that	
		there is already a starter farm	
		of 44.7ha which occupies the	
		existing farm buildings.	
		Many of the comments above apply to these farms	
		especially in regard to the	
		intention to plant the arable	
		land. We would recommend	
		that the arable land be retained in agriculture and	
		added on to the starter unit to	
		give that farm greater	
		viability and scope.	
		We thank you for the	
		opportunity to take part in	
		this consultation and look	
		forward to engaging with Forestry Commission Scotland	
		as the management plans for	
		these units develop.	
	<u> </u>		

Upper	29 Oct		No reply to date	
Tullochbeg, Beechgrove	2014 By post			
occupant	by post			
The Ward	29 Oct		No reply to date	
occupant	2014			
'	By post			
Tullochbeg house	29 Oct	18 Feb 2015	No real preference at the	No formal recreation
occupant	2014 By post	At consultation meeting	moment as not a major visual impact for us. Access to Tullochbeg via single track lane with problems. People already park and block access. No marked paths. What access wil be used for planting machines? Access lane and footpath?	facilities are planned and the informal route will not be publicised on FCS leaflets or website.
Wellheads	29 Oct		No reply to date	
occupant	2014 By post		No reply to dute	
Member of public		18 Feb 2015	Prefer scenario 2 as trees	
		At consultation meeting	provide shelter.	
Member of public		18 Feb 2015 At consultation meeting	Prefer scenario 2.	
Arnhall cottage	29 Oct	18 Feb 2015	Prefer scenario 1. Shelter for	
occupant	2014 By post	At consultation meeting	Arnhall houses. Reduce water flow. Introduce points for wildlife.	
Arnhall cottage occupant	29 Oct 2014 By post	18 Feb 2015 At consultation meeting	Gas pipeline on lower fields. Water supply to main house from hill – could have mains supply now.	Gas pipeline taken account of in plan.
Neighbouring		18 Feb 2015	Prefer scenario 1. Land should	
farmer		At	not be classed as 3.1, much	
		consultation	worse.	
Mambar of multi-		meeting	Duefey compain 1 Comp	The planting will be of
Member of public		18 Feb 2015 At consultation meeting	Prefer scenario 1. Some conifer mixed in broadleaves (Christmas trees) as nurse at bottom of Ittingstone. Plant groups of broadleaves/Scots Pine between patches of gorse.	The planting will be of pure broadleaves with oak and birch towards the top of the hill where the gorse patches are most prevalent.