

# Forest Management Plan

Littleton Forest

Forest Code: TY12

Period Covered: 2011 to 2015

Version 3.0

**FINAL**

***Forest Manager***

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## What is this document?

The term "Forest Management Plan" (FMP) describes all the site-level plans for the land managed by Coillte. Each site level plan represents the best balance of the social, economic and environmental objectives sought by our shareholders and stakeholders. This document is a summary of the finalised management plans for the forest in question.

Please note, however, that due to the unpredictable nature of renewable resource management deviations may occur from this plan and it should be used as a guide only.

The glossary of terms for Forest Management Plans would also be useful (see [http://www.coillte.ie/coillteforest/plans/district\\_strategic\\_plans/glossary/](http://www.coillte.ie/coillteforest/plans/district_strategic_plans/glossary/))

## Introduction

Littleton forest is situated primarily in the low lying land area of Tipperary, with Kilkenny bordering on the east and north east of the forest and the Slieveardagh hills running through the area from north east to south west.

The Coillte forest properties within the area are, Ardragh, Ballaghboy, Ballytarsna, Bawnreagh, Bnmderryhogan, Borris, Buffanagh, Castletown, Cloonleagh, Coalbrook, Connoly, Coolquill, Crab, Crohane Lower, Curraheen, Derrycoogh, Derryhogan, Derryvella, Garransilly, Garryclogh, Garrynoe, Glengoole, Glengoole North, Gragaugh, Grallagh, Grangecrag, Jessfiled, Kilraugh, Kilcooly, Killeen, Kilmakill, Leigh, Leigh, Lickfinn, Liskeveen, Longfordpass North, Longfordpass South, Lorgoe, Mellison, Moyne, Newhill, Noan, Noard, Poyntstown, Sallybog and Tinnock.

The main soil types in the north of the forest are cut over peat on top of carboniferous limestone and glacial drift. In the southern part of the forest, it is mostly gley over shale.

The main towns and villages located in the catchment area are Littleton, Twomileborris, Gortnahoe, Glengoole, Ballinonty, Killenaule and Ballingarry.

Tributaries of the river Suir and the river Barrow rise and flow through the forest area.

### **Nature Conservation**

Parts of the forest come under the river Nore Freshwater Pearl Mussel catchment area but are well clear of any forest operations. Consultation is carried out with the National Parks and Wildlife Service and the Fisheries Board before operations begin to ensure that any necessary mitigation measures are carried out. Kilcooly and Grangecrag estates have old woodland areas (areas where there has been forest cover since the 1830s). These are being harvested with care and conifers have been removed and the areas are being replanted with broadleaf species.

### **Recreation**

Grangecrag property has a walk area managed and developed by the local community group. Killcooly property, due to its old estate layout, is also a popular area for walking as part of Coillte's open forest policy.

### **Security**

There have been a number of fires and a lot of dumping over the years in the forest, due to its scattered nature and proximity to bogs and turbary areas. This is being counteracted by the erection of barriers and the dropping of boulders at strategic locations to prevent excess. Constant contact with adjoining stakeholders and litter wardens also helps to reduce the problem.

### **Adjoining land use**

The adjoining land uses are agricultural, mainly grazing, and there is also quite a lot of turf cutting and peat milling in the area. Bord na Mona have a briquette factory just outside Ballyanonty village and much of its harvest land area surrounds the forest.

### **Other comments**

The leased estate properties of Killcooly and Grangecrag have many items of archaeological and cultural interest, such as a church graveyard and 10km boundary stone wall in Kilcooly and a Ice House and Wellington Monument in Grangecrag. There is also a private water supply going from Grangecrag to Kilcooly estate.

In Grangecrag other features are the Abbey, an Icehouse, a stone built reservoir and an old disused railway line. Christmas trees have been sold from Killcooly property over the years.

Coillte's practice is to sell, lease or develop a limited area of non-strategic land, for purposes other than forestry. Most sales are made in response to local demand and typically comprise house sites, isolated dwelling houses, sections of recently acquired farms, small outlying forest properties and gravel pits. Sections of land in Forest Properties at Crab, Noard and Newhill may be sold or developed for non-forestry purposes during the lifetime of this plan. Although forest management staff will be happy to discuss what they know of the plans for these areas the actual sale, if it proceeds, will be subject to the consultation procedures as detailed in our Stakeholder Consultation Code of Practice [http://www.coillte.ie/community/consultation\\_policy/](http://www.coillte.ie/community/consultation_policy/) and Coillte's policy on removal of these lands from those covered by our SFM certificate [http://www.coillte.ie/businesses/land\\_development/property\\_management\\_policy/](http://www.coillte.ie/businesses/land_development/property_management_policy/)

Coillte is actively pursuing opportunities to purchase immature forest in this area. Since Coillte's inception, land acquisitions have far outweighed our land sales and each new area bought will be opened up for recreational use under our Open Forest policy.

## Forest management

### ***Management Approach***

This forest, like all of Coillte's forests, is being managed under the principles of sustainable forest management and is certified by the Forest Stewardship Council (FSC). Sustainable forest management principles ensure economic, social and environmental sustainability in the day to day management of forests.

The total area of the forest is 2,728 hectares. There is a long term lease of 516 hectares in Kilcooly and Grangeclag properties and there are 510 hectares planted through farm partnership schemes. 2,425 hectares at Littleton forest will be managed for timber production, 245 hectares for biodiversity and 17 hectares for nature conservation. Due to the low lying nature of the forest, it falls into the low landscape design category with the exception of Grangeclag property which is of medium landscape design. Coupe felling and replanting with suitable landscape species are taken into account as part of the overall landscape plan.

### ***Thinning and clearfell***

Harvesting in the old estates like Grangeclag, will produce a lot of hard wood timber which will be supplied to Dundrum Sawmill and other hardwood mills for value added products and firewood for the local market. Harvesting in Littleton forest is achieved by a combination of thinning and clearfelling as appropriate. One of the biggest constraints in the management of this forest is its even-aged nature, together with its propensity to fall through windblow. Clearfelling is carried out occasionally and on the basis of a limited coupe size. As part of ongoing management of the forest, the even-age will be restructured over time for the purposes of landscape and diversity purposes. Landscape plans are in place and Coillte endeavours to improve the visual nature of Littleton forest.

### ***Replanting***

Areas felled will be replanted within 2 years with spruces, larches and broadleaf species with open space and scrub being left for the purposes of biodiversity and landscape. River buffer zones will be left open to naturally regenerate at appropriate stages of harvesting and broadleaf planting back from the buffers is policy. Appropriate properties/areas assessed and considered of ecological importance have plans in place to facilitate the most appropriate management system to conserve and enhance them.

## Current forest statistics

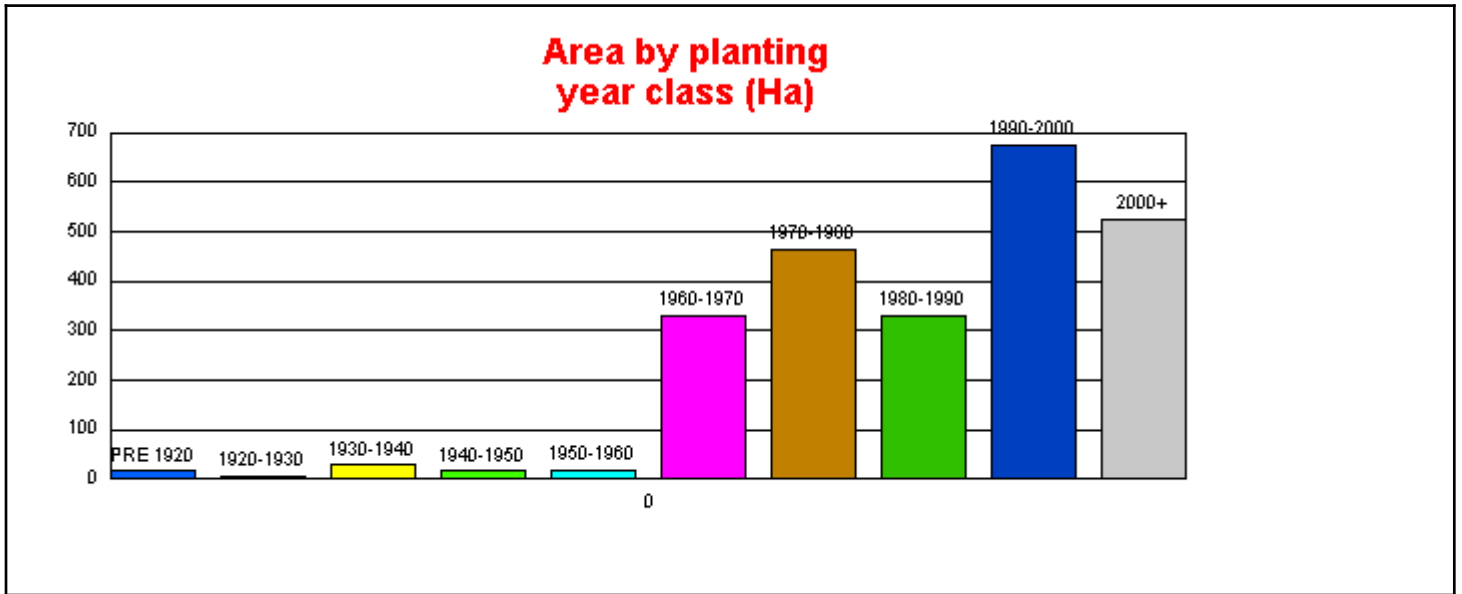
LAND USE TYPE		GROSS AREA (HA)
BHF	Broadleaf high forest	117
CHF	Conifer high forest	2,319
MHF	Mixed conifer & broadleaf HF	117
MISC	Miscellaneous	3
BLOWN	Blown conifer or broadleaf	11
SCRUB	B'leaf which cannot grow to HF	1
SWAMP	Waterlogged area	3
UNDEV	Conifer (YC < 4)	27
BAREPL	Bare plantable	32
BAREUP	Bare unplantable	20
BURNED	Burned conifer or broadleaf	12
FELLED	Felled conifer or broadleaf	19
<b>Total gross area (Ha)</b>		<b>2,679</b>

### Land use type by gross area



Bare plantable	1.2%
Bare unplantable	0.8%
B'leaf which cannot grow to HF	0.0%
Blown conifer or broadleaf	0.4%
Broadleaf high forest	4.4%
Burned conifer or broadleaf	0.4%
Conifer (YC < 4)	1.0%
Conifer high forest	86.6%
Felled conifer or broadleaf	0.7%
Miscellaneous	0.1%
Mixed conifer & broadleaf HF	4.4%
Waterlogged area	0.1%
<b>Total:</b>	<b>100.0%</b>

Based on INV\_04



## Social & Environmental Impact Assessment

Coillte's Social and Environmental Impact Assessment (SEIA) is the means by which we document the potential threats to the forest and its environment from our activities or the activities of others and our approach to reducing the risk of damage.

We asked for submissions from the public at our pre-planning consultation stage and this is where each issue should be dealt with. In some cases we will not have been able to implement all suggestions in full but you should be able to see the reasons why, in the interests of balance, an alternative course of action was taken.

The item labelled 'DSP Ref' refers to a District Strategic Plan which sets in context how Company policy is implemented at ground-level in some of these areas. The District Strategic Plans for each District are found at :

[http://www.coillte.ie/forests/plans/district\\_strategic\\_plans/](http://www.coillte.ie/forests/plans/district_strategic_plans/)

**Topic:** Amenity/Recreation

**Topic consultation**

Grangecrag Community Group, walking clubs, and other local estate owners.

**DSP ref**

3.1.7.6

**Impact rating**

MEDIUM

**Issue details**

Possible disturbance associated with forest operations for the walkers using Grangecrag property.

**Risk mitigation**

Consultation at FMP level. Advance Notice at each site and annual advertisement of planned high impact operations placed in local newspaper. See issue reg no. 4356. Liaise with Grangecrag development association.

**Topic:** Archaeology

**Topic consultation**

Forest Service, NPWS, Local County Council.

**DSP ref**

3.5.1

**Impact rating**

MEDIUM

**Issue details**

Within Littleton forest there are many archaeology features. These can be at risk of damage during forest operations.

**Risk mitigation**

All known archaeology features are recorded on the Spatial Data Viewer, Environmental report produced by the Forest Information System FIS highlights the present of Archaeology within each SP. All Known Archaeology features are marked on ground with white stake, this is checked every two years.  
Prior to Forest Harvesting Coillte's environmental officer is given SP maps where archaeology features are marked, the environmental office produces a report outlining mitigation measures which are included in the harvest site file. If environmental officer requests a full archaeology report this is obtained prior to harvesting and mitigation measures adhered to.

**Topic:** Boundaries

**Topic consultation**

Consultation with adjoining landowners when required.  
Consultation during Forest Management Plan reviews.

**DSP ref**

3.1.7.4

**Impact rating**

LOW

**Issue details**

Damage to neighbouring boundaries, during forest operations or during storms.

**Risk mitigation**

Where possible avoid unnecessary damage to neighbouring land, when it does occur repair damage to fence, wall ditch etc agreeing same with neighbour.

<b>Topic:</b> Deer Management	<b><u>Topic consultation</u></b> Stakeholders consulted during forest Management Review. NPWS, Deer Societies, Deer Stalkers, Local People.	<b><u>DSP ref</u></b> 3.1.7.2	<b><u>Impact rating</u></b> LOW
<u>Issue details</u>	Increasing deer numbers are causing damage to young trees preventing natural regeneration.	<u>Risk mitigation</u>	There are Deer licences for Littleton Forest which allow a prescribed Cull within the forest. Open areas are retained within the forest to allow opportunities to stalk deer.
<b>Topic:</b> Dumping	<b><u>Topic consultation</u></b> Tipperary SR.CO.CO litter wardens. Local stakeholders. Bord Na Mona. Turf Cutters.	<b><u>DSP ref</u></b> 3.1.7.6	<b><u>Impact rating</u></b> HIGH
<u>Issue details</u>	Spoils natural beauty of landscape. Dumped materials can be a risk to health and a fire risk.	<u>Risk mitigation</u>	Implementing a security policy to eradicate dumping on Coillte property. Part of this policy aims to erect and secure barriers at forest entrances and along ROW in agreement with stakeholders. Liaising with the litter warden and members of the general public to counteract dumping is a feature of forest management. Use of the Coillte issue register system to record dumping events and actions adopted to protect the estate.
<b>Topic:</b> Habitat impact	<b><u>Topic consultation</u></b> With the Forest Service, National Parks & Wildlife Service, Fisheries and County Councils.	<b><u>DSP ref</u></b> 3.4.1.1	<b><u>Impact rating</u></b> MEDIUM
<u>Issue details</u>	Disturbance to SAC - River Barrow and River Suir.	<u>Risk mitigation</u>	Creation of Buffer zones along streams, establishment of Native Woodlands and other broadleaf riparian zones, retaining open spaces all following Best Practice and relevant Guidelines. A large percentage of these areas have biodiversity management plans in place following a survey by qualified ecologists. An appropriate assessment will also be completed on each of the Designated areas detailing the site overview, the activity of forestry with the appropriate impacts and mitigations. Ref Issue No. 4358.
<b>Topic:</b> Harvesting	<b><u>Topic consultation</u></b> Forest Service, NPWS and Local Co. Co. Regional Fisheries Board, and Adjoining landowners.	<b><u>DSP ref</u></b> 3.1.3	<b><u>Impact rating</u></b> MEDIUM
<u>Issue details</u>	Impact on the environment , landscape, materials assets and people.	<u>Risk mitigation</u>	Harvesting of clearfell crops is a high impact operation in relation to the landscape and can generate great public concerns particularly in sensitive area. Prior to harvesting, consultation has taken place through the FMP review process, sites named in local papers and advance notice erected at site. An EIA at forest level is undertaken at FMP review and a site EIA is carried out prior to harvesting. Issues are identified and mitigated against. Contractors are trained in EIA procedures. Best practice is used during harvesting.



<b>Topic:</b>	<b>Haulage</b>	<b><u>Topic consultation</u></b> <b>Local County Council and local residents.</b>	<b><u>DSP ref</u></b> <b>3.1.3</b>	<b><u>Impact rating</u></b> <b>MEDIUM</b>
<u>Issue details</u>	Damage to public roads from timber haulage.			
	<u>Risk mitigation</u>			
	Coillte and local Co. Co. have agreed haulage routes, these are marked on SP maps and communicated to haulage contractors and must be adhered to. Haulage is confined to legal weights limits. Coillte have contributed to the upgrade of certain public roads through the CLAR programme and through local improvement schemes. Ref issue no. 3888			
<b>Topic:</b>	<b>Landscape impact</b>	<b><u>Topic consultation</u></b> <b>Forest Service, Local Co. Co. neighbours and local communities.</b>	<b><u>DSP ref</u></b> <b>3.3</b>	<b><u>Impact rating</u></b> <b>MEDIUM</b>
<u>Issue details</u>	Change to the visual appearance of the landscape due to clearfelling.			
	<u>Risk mitigation</u>			
	Every property within the estate is part of a landscape unit which is classified into sensitivity classes. Every High, Medium and Low rated sites have a landscape design plan in place which is adhered to at clearfell and restocking stage, for the more higher sensitivity class's, the more detailed landscape plan is. See issue ref no. 4355			
<b>Topic:</b>	<b>Local heritage</b>	<b><u>Topic consultation</u></b> <b>Forest Service, NPWS.</b>	<b><u>DSP ref</u></b> <b>3.5.2</b>	<b><u>Impact rating</u></b> <b>MEDIUM</b>
<u>Issue details</u>	These sites are not defined as national monuments, but are of local cultural value and interest. These may be at risk of damage during forest operations.			
	<u>Risk mitigation</u>			
	Unlike archaeological sites there is not a national register of these features. The district is compiling a list on an ongoing basis of all known sites and recording any new discoveries. This list is then reviewed in the planning stage and before any high impact operation is undertaken so as to protect all these sites example would be old stone ditches, water supply, mass rocks, lime kilns and ruins of old houses.			
<b>Topic:</b>	<b>Water quality</b>	<b><u>Topic consultation</u></b> <b>Forest Service, NPWS, Local Co. Co. and Regional Fisheries Board.</b>	<b><u>DSP ref</u></b> <b>3.1.7.5</b>	<b><u>Impact rating</u></b> <b>HIGH</b>
<u>Issue details</u>	Damage to water bodies and habitats from nutrients release and sedimentation.			
	<u>Risk mitigation</u>			
	At a planning level (FMP) all water courses marked on OS maps will be given a buffer zone management unit with a biodiversity objective, this buffer zone will be felled in conjunction with the adjoining management unit. The restocking rate is lower and species selected suitable to riparian zones (broadleaves). At site level an EIA is carried out on all sites outlining impacts and mitigation measures put in place. On sensitive sites a water management plan is put in place with water monitoring and water testing. Work on any site will be stopped where there is a risk of a pollution incident.			

## Forest Management Plan Summary

### Thinning

Thinning, whereby a portion of the trees are removed at successive stages prior to clearfell, is a desirable practice when aiming to grow quality timber. This table shows the maximum total area which may be scheduled for thinning during the period of this plan in each of the Coillte forest properties in this forest. This level of thinning would mark a significant increase over previous years and is purely an indicative, aspirational level. Please note that Coillte forest property names do not always follow townland names or boundaries.

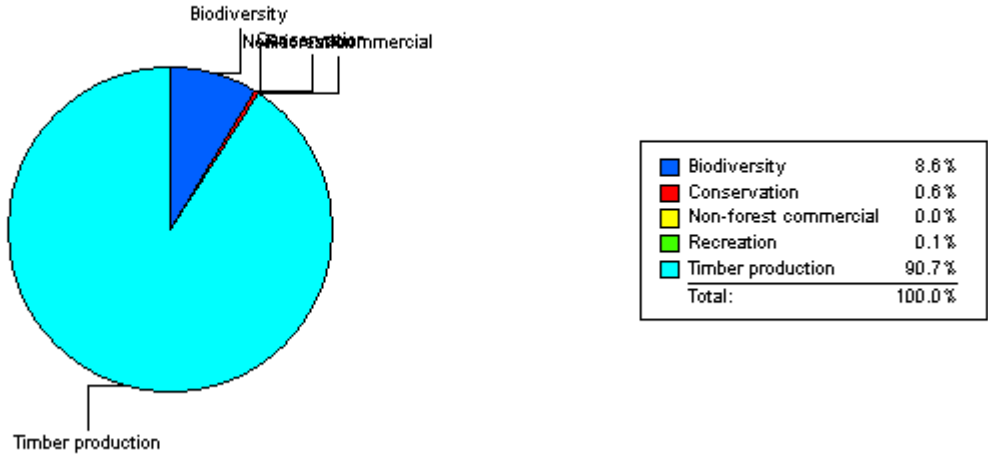
#### Potential thinning areas

<u>FOREST PROPERTY</u>	<u>THINNING AREA (HA)</u>
BALLAGHBOY	27
BALLYTARSNA	58
BAWNREAGH	31
BNMDERRYHOGAN	40
BUFFANAGH	5
CASTLETOWN	20
CLOONCLEAGH	49
COOLQUILL	81
CRAB	29
CROHANE LOWER	1
DERRYCOOGH	87
DERRYVELLA	28
GARRYCLOGH	9
GRAGAUGH	17
GRALLAGH	22
GRANGECRAG	37
KILCOOLY	178
KILLEEN	19
LEIGH	19
LISKEVEEN	102
LONGFORDPASS NORTH	4
LONGFORDPASS SOUTH	19
LURGOE	25
MELLISON	34
NOAN	11
SALLYBOG	4
<b>Total</b>	<b>956</b>

**Management Objective**

Coillte's estate is managed on a multi-objective basis, where an attempt is made to balance the pursuit of economic returns, environmental protection and enhancement and social returns like landscape protection and employment. Rather than attempting to achieve a perfect balance on every site we recognise that some sites have a greater potential than others in pursuing different objectives. To this end, we nominate a principal objective for each site. This categorisation for this forest is outlined below.

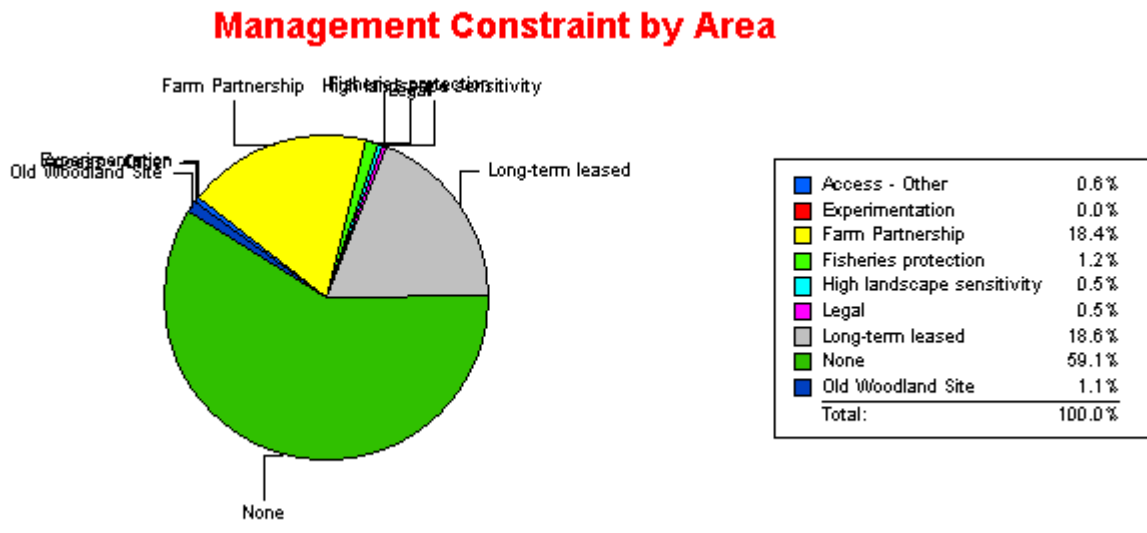
**Management Objective by Area**



<u>Management Objective</u>	<u>Biodiversity sub-objective</u>	<u>AREA (HA)</u>
Biodiversity	Buffer zone (general)	33
	Habitat enhancement	13
	Habitat protection	191
Conservation		17
Non-forest commercial		0
Recreation		2
Timber production		2,520
<b>Total</b>		<b>2,777</b>

**Constraint or secondary objective**

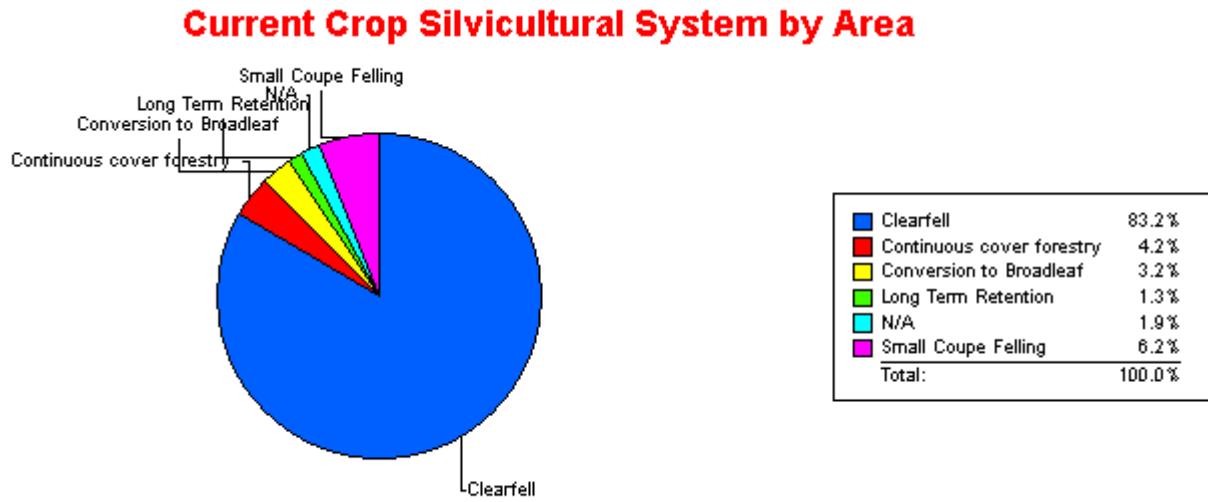
This graph shows the forest area categorised by the principal constraint or, in many cases, secondary objective being pursued on each site.



<u>MANAGEMENT CONSTRAINT</u>	<u>MANAGEMENT OBJECTIVE</u>	<u>AREA (HA)</u>
Access - Other	Timber production	16
Experimentation	Timber production	1
Farm Partnership	Biodiversity	1
	Timber production	510
Fisheries protection	Biodiversity	33
High landscape sensitivity	Conservation	13
Legal	Biodiversity	12
	Timber production	1
Long-term leased	Biodiversity	77
	Conservation	4
	Non-forest commercial	0
	Timber production	435
None	Biodiversity	115
	Recreation	2
	Timber production	1,524
Old Woodland Site	Timber production	32
<b>Total</b>		<b>2,777</b>

### Silvicultural System

This graph shows the forest area categorised by the silvicultural system employed on each site.

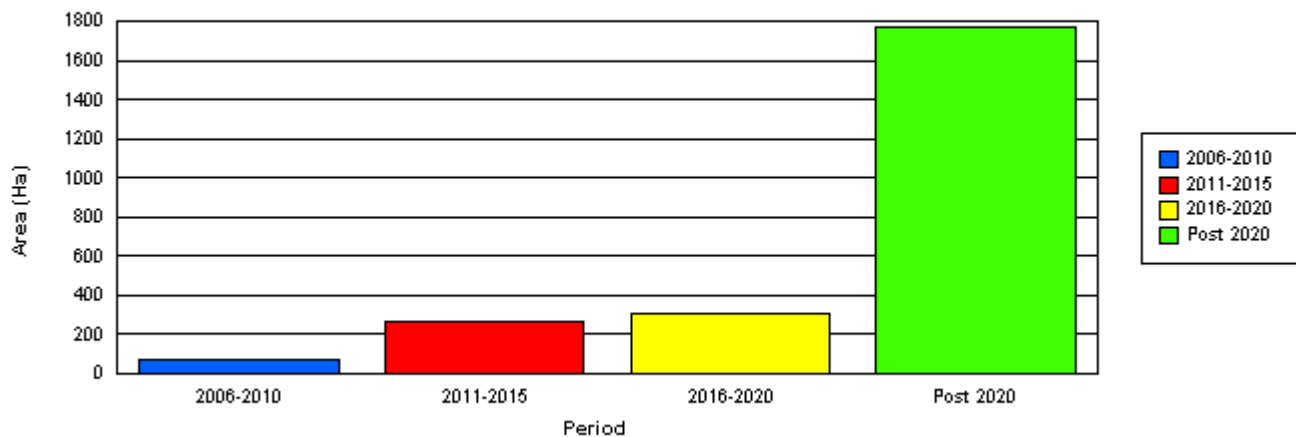


<u>SILVICULTURAL SYSTEM</u>	<u>MANAGEMENT OBJECTIVE</u>	<u>AREA (HA)</u>
Clearfell	Biodiversity	23
	Conservation	13
Continuous cover forestry	Timber production	2,274
	Biodiversity	56
Conversion to Broadleaf	Recreation	2
	Timber production	59
Long Term Retention	Biodiversity	77
	Timber production	11
N/A	Biodiversity	30
	Conservation	4
Small Coupe Felling	Timber production	3
	Biodiversity	50
Small Coupe Felling	Non-forest commercial	0
	Timber production	1
Small Coupe Felling	Biodiversity	1
	Timber production	171
<b><u>Total</u></b>		<b><u>2,777</u></b>

### Felling areas

This graph shows the total area which is scheduled to be felled in each 5 year period shown. This is based on a summation of site-by-site plans where an indicative fell year is given.

**Clearfell area by period and forest property**



**AREA (HA)**

**2006-2010**

BALLYTARSNA	17
KILCOOLY	8
KILLEEN	33
LONGFORDPASS NORTH	4
LONGFORDPASS SOUTH	7
<b>Period total:</b>	<b>69</b>

**2011-2015**

BALLYTARSNA	17
BAWNREAGH	12
CASTLETOWN	10
CLOONCLEAGH	16
CRAB	20
DERRYCOOGH	31
DERRYHOGAN	7
DERRYVELLA	11
GARRYCLOGH	18
KILCOOLY	14
KILMAKILL	7
LEIGH	40
LISKEVEEN	13
LONGFORDPASS NORTH	24
LONGFORDPASS SOUTH	21
LURGOE	8
<b>Period total:</b>	<b>268</b>

**2016-2020**

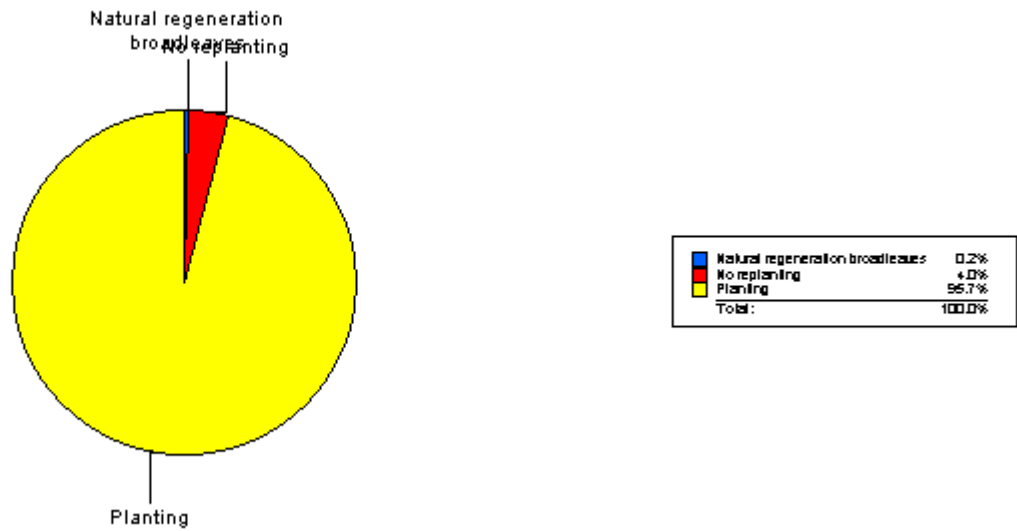
BALLYTARSNA	24
CASTLETOWN	19
CLOONCLEAGH	16
DERRYCOOGH	29
DERRYVELLA	16
GRALLAGH	50
KILCOOLY	16
KILLEEN	18

LEIGH	34
LISKEVEEN	30
LONGFORDPASS NORTH	20
LONGFORDPASS SOUTH	14
LURGOE	12
NOAN	7
<b>Period total:</b>	<b>306</b>
<b>Post 2020</b>	
ARDRAGH	24
BALLAGHBOY	47
BALLYTARSNA	32
BAWNREAGH	69
BNMDERRYHOGAN	64
BORRIS	22
BUFFANAGH	4
BURNCHURCH	10
CASTLETOWN	42
CATHAGANSTOWN	8
CLOONCLEAGH	19
CONNOLY	40
COOLQUILL	140
CRAB	22
CROHANE LOWER	32
CROHANE UPPER	16
DERRYCOOGH	42
DERRYHOGAN	9
GARRANSILLY	3
GARRYCLOGH	25
GARRYNOE	55
GLENGOOLE	13
GLENGOOLE NORTH	20
GRAGAUGH	17
GRALLAGH	78
GRANGECRAG	54
JESSFIELD	31
KILBRAUGH	5
KILCOOLY	229
KILLEEN	26
KILMAKILL	83
KNOCKATOOREEN	21
KNOCKFORLAGH	19
LEIGH	39
LICKFINN	16
LISKEVEEN	67
LONGFORDPASS NORTH	41
LONGFORDPASS SOUTH	58
LURGOE	27
MELLISON	36
MONABLANCHAMEEN	10
MOYNE	17
NOAN	18
NOARD	54
POYNTSTOWN	14
SALLYBOG	44
TINNOCK	16
<b>Period total:</b>	<b>1,779</b>

### Regeneration plans

This graph shows the forest area categorised by the method of restocking to be used for each site.

**Regeneration Method by Currently Forested Area**

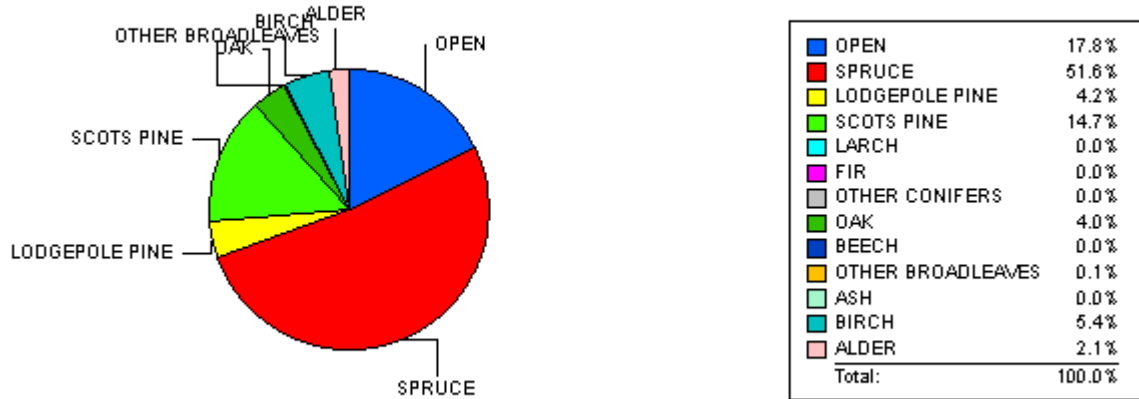


<u>REGENERATION METHOD</u>	<u>MANAGEMENT OBJECTIVE</u>	<u>AREA (HA)</u>
Natural regeneration broadleaves	Biodiversity	6
No replanting	Biodiversity	28
	Timber production	80
Planting	Biodiversity	188
	Conservation	17
	Recreation	2
	Timber production	2,373
<b>Total</b>		<b>2,694</b>



### Restock 2011-2015

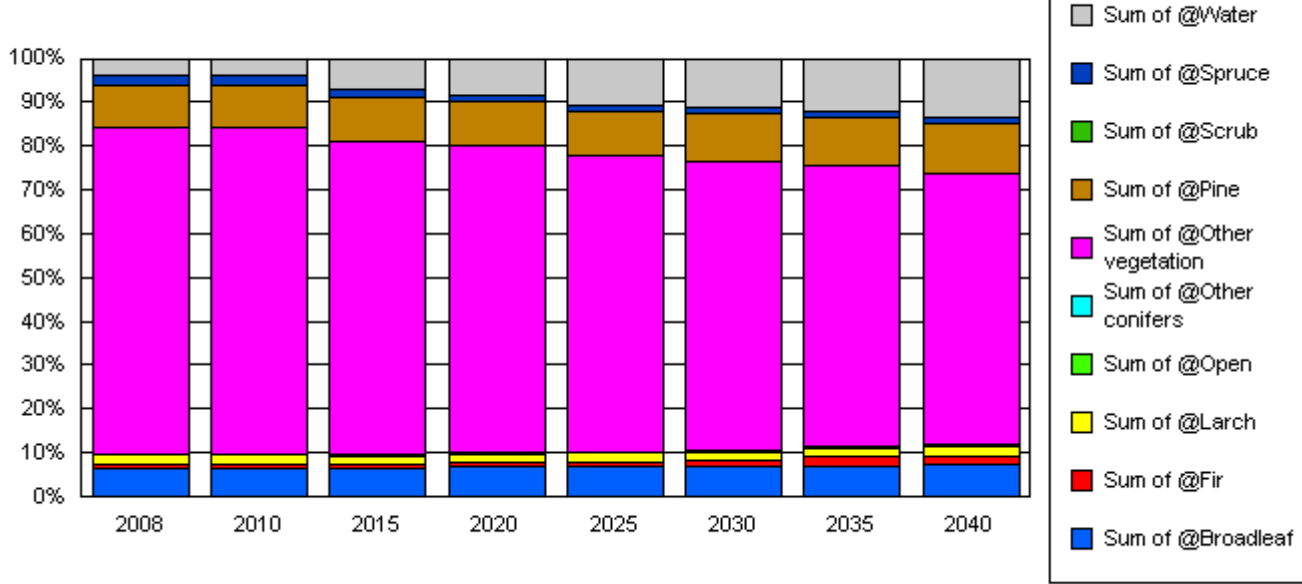
This graph shows the forest area categorised by the species being used in restocking each of the sites being felled during the period 2011-2015.



<u>OPEN</u>	45.2	<u>OAK</u>	10.3
<u>SPRUCE</u>	131.4	<u>BEECH</u>	0.0
<u>PINE</u>	10.8	<u>OTHER BROADLEAVES</u>	0.3
<u>SCOTS PINE</u>	37.3	<u>ASH</u>	0.0
<u>LARCH</u>	0.0	<u>BIRCH</u>	13.8
<u>FIR</u>	0.0	<u>ALDER</u>	5.4
<u>OTHER CONIFERS</u>	0.0	<u>TOTAL</u>	263.9

### Species diversification

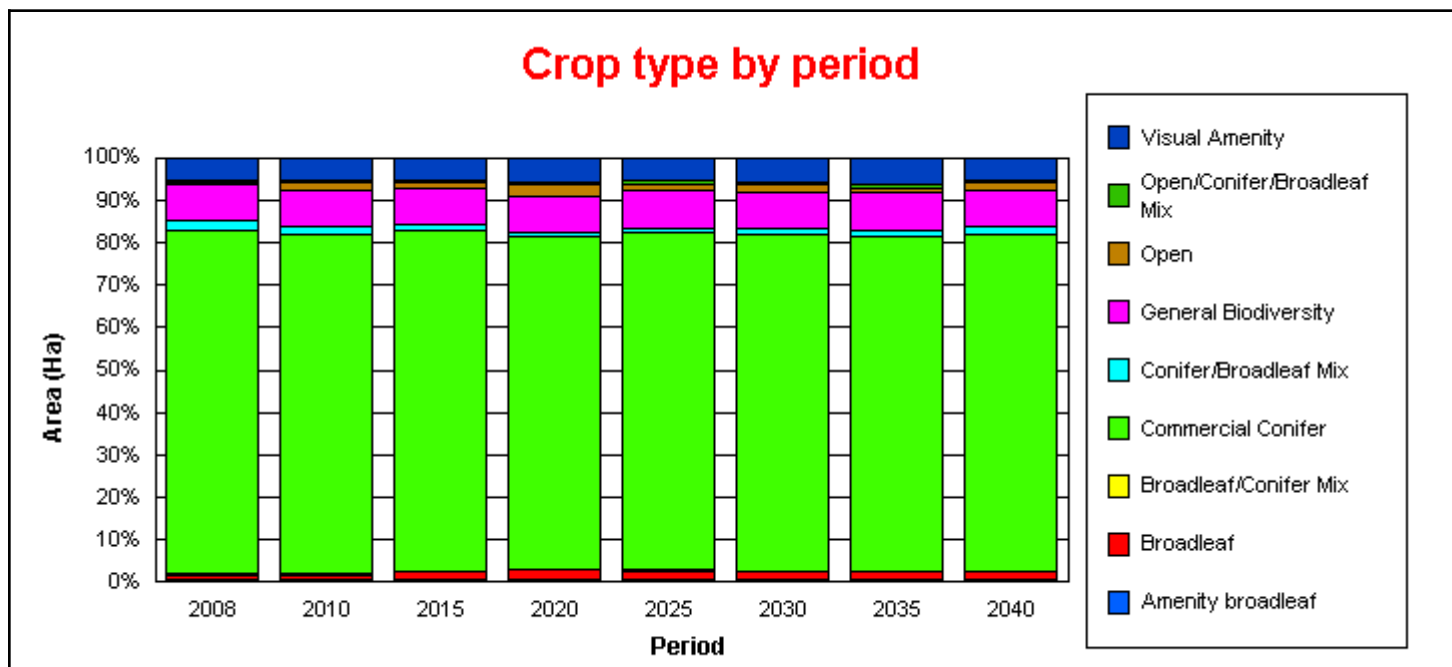
This graph shows how the total forest area occupied by different species groupings and open space will develop in this forest over time. This is calculated using the current inventory of what species is growing on each site, when the site will be felled, and what has been chosen as the successor crop in this Forest Management Plan.



<u>Year</u>	<u>Broadleaf</u>	<u>Fir</u>	<u>Larch</u>	<u>Open</u>	<u>Other conifers</u>	<u>Other vegetation</u>	<u>Pine</u>	<u>Scrub</u>	<u>Spruce</u>	<u>Water</u>
2008	6.4	1.0	2.1	0.0	0.2	74.6	9.8	0.0	2.2	3.8
2010	6.3	1.0	1.9	0.0	0.2	73.6	9.5	0.0	2.1	3.9
2015	6.3	1.0	1.8	0.0	0.1	70.8	10.0	0.0	1.7	7.2
2020	6.5	1.2	1.9	0.0	0.1	68.1	9.5	0.0	1.5	8.2
2025	6.6	1.3	1.8	0.0	0.1	66.8	10.0	0.0	1.4	10.5
2030	6.7	1.6	1.8	0.0	0.1	65.0	10.9	0.0	1.3	11.1
2035	6.9	1.9	1.8	0.0	0.5	63.5	10.9	0.0	1.3	12.1
2040	7.3	1.7	2.2	0.0	0.5	60.9	11.6	0.0	1.2	13.4

### Crop type diversification

Displayed below is a chart showing the development of "crop type" which is a site-by-site categorisation of each Management Unit. For example, a block of forest which is 70% conifer and 30% broadleaf will be reported as "Conifer/Broadleaf mix".



Crop type Area (Ha) in each period

	2008	2010	2015	2020	2025	2030	2035	2040
Amenity broadleaf	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
Broadleaf	23.0	24.8	45.0	58.1	50.1	49.2	47.4	47.4
Broadleaf/Conifer Mix	11.9	11.9	1.4	1.4	1.4	1.4	1.4	1.4
Commercial Conifer	2,150.6	2,120.8	2,130.4	2,077.5	2,112.6	2,101.7	2,092.6	2,101.6
Conifer/Broadleaf Mix	55.1	46.8	36.2	36.2	31.4	37.7	37.7	48.2
General Biodiversity	231.1	230.1	233.7	220.5	233.7	229.4	233.7	233.7
Open	11.0	48.2	36.0	79.2	44.2	43.4	35.4	44.8
Open/Conifer/Broadleaf Mix	13.2	13.2	13.2	13.2	18.0	18.0	18.0	18.0
Visual Amenity	136.1	136.1	136.1	145.6	140.5	150.9	165.7	136.7

	2008	2010	2015	2020	2025	2030	2035	2040
Total	<b>2,652.6</b>	<b>2,652.6</b>	<b>2,652.6</b>	<b>2,652.6</b>	<b>2,652.6</b>	<b>2,652.6</b>	<b>2,652.6</b>	<b>2,652.6</b>

## **Rural broadband rollout**

In January 2009 the Irish Government awarded the contract for the National Broadband Scheme to '3 Ireland'. This project aims to provide Ireland with universal broadband coverage by 2010. Coillte is in a position to facilitate this rollout by providing sites. Sites with the potential to contribute to this programme that are located in this forest may be found in the following District Electoral Divisions:

**DED NAME**

TWO MILE BORRIS