WOODLAND TRUST

Drumnaph Wood

Management Plan 2016-2021

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MAPS

THE WOODLAND TRUST

INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.
Please either consult The Woodland Trust website www.woodlandtrust.org.uk or contact the Woodland Trust (wopsmail@woodlandtrust.org.uk) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland.

Our strategic aims are to:

- Protect native woods, trees and their wildlife for the future
- Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website www.woodlandtrust.org.uk. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
10. Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site – their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

1.0 SITE DETAILS

Site name:	Drumnaph Wood
Location:	2 miles N. of Maghera
Grid reference:	C841037, OS 1:50,000 Sheet No. 8
Area:	31.91 hectares (78.85 acres)
Designations:	Environmentally Sensitive Area

2.0 SITE DESCRIPTION

2.1 Summary Description

At the gateway to the Sperrin Hills, this beautiful ancient woodland is a precious jewel. It's one of the few remaining fragments of a great forest that once covered much of mid-Ulster. Enjoy walking through flower-rich woods or spotting Irish hares in the rush meadows.

2.2 Extended Description

The woodland is 2 miles north of Maghera town and it is central to the upper River Bann catchments just east of the Sperrin Hills. The surrounding land is mainly beef and sheep grazing lands, with mixed scrub, oakwood and wetland areas to the south and west. Access is from the Grillagh & Gortinure Roads off the main A29 road running north from Maghera to Coleraine and the Halfgayne Road via An Carn, Drumnaph Community Nature Reserve. There are wide views west to Carntogher Mt. in the Sperrins and north to the Grillagh River and Gortinure hamlet.

The fields are mainly alluvial loams thus making for good planting land, albeit with an acid bias to the soils. All of the fields are planted with NI provenance trees which are all from Co. Antrim or Co. L'Derry sources, and these were contract grown by Knockmohr Nursery, Greenisland.

The whole site comprises 31.9 ha [78.8 acres] of diverse habitats with six priority HAP of mixed ash woods, rush pasture, lowland fens, hedgerows, ponds and rivers.

The area has 11.8 Ha. of planted fields, 14.7ha of ancient woodland and 5.4 Ha of fen and rush meadow. The woodland and the fens make up 20.9ha of semi natural habitats.

The site was brought to our attention in Nov. '98 by the Carntogher Community Association (CCA) who are strong advocates for conservation of the woodland and surrounding habitats. It was bought in Feb 2000 with funds from the Millennium Commission, Heritage Lottery Fund (HLF), NIEA & NI Electricity.

The fields to the north [cmpt. 1] are mainly improved pasture with the odd remnant of the oak and hazel woodland that was cut down previous to 1970. Half is rushy pasture [cmpt 1a] to the northern part of a stony esker ridge that runs from the river heading south into the woodland.

The Rush meadow [cmpt. 2] is partly heath/myrtle to the north and rushy meadow to the south; both link to form an acid heath type flora and fauna; with good invertebrate/lepidoptera, small mammal and frog populations. Irish hare use this area more than other areas.

The Fen /mire [cmpt. 3] is low lying, meso-trophic with typical fen vegetation; although the south of it has rushes. The fen has been re-wetted with bund pipes controlling the levels.

The adjoining Woyd planting work started in Oct 2000, which allowed for public access to the north whilst retaining the south as closed habitat for conservation. The 2001 HLF management of the wood included fencing around all of the site and some causeway bunding and woodland path works in autumn 2000, corresponding to when the Woyd work was done .

HLF funded the ancient wood and this work completed in autumn 2001, with the fen dipwells and water level controls in place, the scrub clearance and the causeway paths all completed. Work on the snaglists from this completed the site works in mid 2002.

The wood to the north has ash, hazel and holly dominating whilst to the south it is mainly oak and hazel with a holly under storey and regeneration. It has typical Ancient Semi Natural Woodland (ASNW) flora and fauna with badger, Irish hare (2000 survey) and otter present in the river (verb command spraint).

The woodland has indicators such as the lack of boulder clearance, floral assemblage, historical records and map presence from c1600 and vertebrate species present. It is a remnant of an upland oak woodland which has reverted to hazel and ash after felling during the plantation period of C18th and the war years. Now dominated by hazel to the south with 15 standard oaks emerging from the hazel canopy and ash dominants in the northern section. The wood appears not to be succeeding to ash or oak because of the closed hazel canopy and only when gaps appear do ash or oak take hold.

Grazing was having a major affect until the WT bought the wood in Feb 2000, since then the wood flora has returned in abundance, especially bluebell, wood anemone, lesser celandine and primrose. Profuse fungi swards occurred in autumn 2000 & 2001 and due to lack of disturbance they spared.

Evidence of badger, fox, field mice, otter and many bird species including many raptors, barn owl, kingfisher and heron in the River Grillagh. A first record for the hobby in the edge to the north of the wood was in July 2001, during the biodiversity survey by QUB/WM Associates

A Rath (earth mound /hill fort) exists in the middle north of the fields; this is an early Christian settlement usually linked to other settlements of the same tribe as indicated by the other raths nearby on hills to the west. These were set in turbulent times and often had moats and souterrains (underground tunnels) to escape from raiders.

The main access path crosses the fields due west, past the rath, into the northern ash wood and thorn thickets, through hazel & oak woods and into the mire to the east, returning north to the car park. A new path connects from the ancient woodland into the Drumnaph Community Nature Reserve. A large wooden sculpture of native animals is set in near the entrance and is called Dulra (nature in Irish) after the natural biodiversity project of the local Carntogher community group.

Drumnaph Woodland is within the Magherafelt Area Plan 2015 & adjacent to the Carn Glenshane SAC consultation area. The site is also designated within the Sperrins Environmentally Sensitive Area. An advancement to an ASSI could be a possibility in the future.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Drumnaph Wood is located about two miles (3km) north of Maghera.

By public transport:

There is a bus service between Maghera and Upperlands which is about half a mile (1km) from Drumnaph Wood. For further information contact 028 90 66 66 30 or visit translink.co.uk

By car:

From Maghera, take the A29 heading north and continue for about two miles (3km) before turning left on to Gortinure Road. Drive for one mile (0.6km) and then turn left on to Grillagh Road. The Drumnaph Wood car park is on the left and is signposted. It has space for 10 cars.

From the car park the path leads into the three planted fields, then into the woodland and rush meadow, to make a two-and-a-half-mile (4km) circular route that returns through the fen or the woods.

Ordnance Survey NI, Discoverer 8

3.2 Access / Walks

The wood's main entrance is via a farm track from the car park on the Grillagh Road to the east. A large wooden sculpture of native animals stands close to the entrance while elsewhere there is a modern stone circle featuring six decorated pillars, as well as decorated standing stones.

There are three waymarked footpaths through the reserve: the Woodland Trail (three miles/4km), the Ruachan Trail (0.6 mile/1km) and the Loch Bran Trail (one mile/1.5km).
One 400m (450 yard) section of the Woodland Trail is suitable for pushchairs and wheelchairs.

Drumnaph Wood is connected to a number of other historic locations nearby by the Carntogher History Trail. A guide to the 11-mile (17.5km) trail can be downloaded from the Carntogher Community Association's website www.ancarn.org

4.0 LONG TERM POLICY

Long Term Intentions and Vision: the Objectives and Milestones over the next 25 years are:

That WT and CCA intend to adhere to the management plan and agree to manage it as a landscape mosaic for:

• Biodiversity conservation through appropriate habitat management.
• Awareness, recreation & interpretation- to develop awareness of the site through interpretation and PR activity.
• To conserve and protect the core ancient woodland by linking and buffering it with adjacent semi natural habitats and through the 13 ha planting linkage and where possible the restoration and management of hedgerows as wildlife corridors on and off site through the CCA and adjacent landowners.
• Access routes to and within the site.
• To continue to look for opportunities to link existing woodland, wetlands and access through working in partnership with CCA and our stakeholders.

- The key features are public access, semi-natural ancient woodland, non-woodland semi natural habitat and historic features.

The long-term objective is to manage the site primarily for conservation of the ancient woodland and non-woodland semi natural habitat by sensitive routing of the access, and where possible to control native invasives such as bracken.

Over 5 years the wetland/fen, marshy grassland and standing water will continue to be improved for biodiversity. To carry out a second full and comprehensive habitat survey for the site.

After 10 years the new planting areas, now established woodland buffering existing semi-natural ancient woodland will continue to develop further. Through careful management the woodland will be structurally diverse, contain a wide variety of species, associated wildlife and a rich ground flora beginning to emerge. To have in place, where necessary permanent monitoring of the wetland/fens, semi-natural ancient woodland and new planting.

Over 25 years and long term the aim is for a diverse mosaic of structurally diverse and sustainable rich native woodland, species rich meadows, wetland/fens, open rides, mature hedgerows, interspersed with the public access paths and the Grillagh River.

New Planting:

Historic records of c1600 show most of the fields and wood were mainly oak, hazel and ash mix in equal parts so the overall aim is to re-create this with native planting.
- to plant all native provenance trees in a mixed planting with half of sessile oak with significant ash content (BAP states its Upland mixed ash and Upland oak- but only a mix is aimed for and not one habitat]
Long term the planting will become high forest structure, maintained through minimal intervention; however there will be the option in the first 25yrs to thin the new planting should this be required to

encourage a multi age structure by promoting regeneration, a wide variety of species and associated wildlife.
- to restore the native woodland cover as recorded as recently as 1970 and way back to c.1600 .

Semi-natural Ancient and Secondary Woodland:

Maintain the oak, ash and hazel mixture according to natural succession, with the dominants likely to be but not strictly - ash to the north, hazel to central area and the oak to the south. Long term management will ideally be through minimal intervention, allowing regeneration to establish within canopy gaps as they appear, but at the same time keeping 10-15% of open space.
Hedgerows throughout the site will be maintained, restored and mitigation where necessary to provide links to adjacent land, fragmented woodland and stability against tree disease.
Invasive species will be controlled across the site where necessary. Given the wet and sensitive nature of the site, chemical control will only be used where absolutely necessary.
The southern wood will remain as a conservation zone due to its linear nature, the oak and hazel mix and sensitive ground flora.

Semi-natural open ground habitat:

The wet grasslands are of very high importance, containing a rich diversity of important flora and fauna. The future biodiversity value will be maintained in the long term ideally through grazing the site and preventing excessive scrub encroachment. Grazing by cattle or ponies is preferred and will be sought for the meadows to maintain a varied sward height. Late summer grazing would be ideal. Winter grazing could result in damage to the very wet site. Total scrub area should not exceed 5-10% of the total meadow area.

Controlling the water level will also be a major factor in the future management and biodiversity value of the site. As the floral assemblage relies on the site being very wet, the water table level needs to be maintained at a high level. This is currently managed by a sluice gate at the northern end of the site. The effect of water levels on the flora will be monitored regularly as part of the long term management of the site, as will the monitoring of water levels through test holes. All this information will continually be used to assess and feed back into the management of these important areas.

The fen area or wet modified bog is to be surveyed and appropriate management applied to bring the area where possible back into a bog habitat.
The river will continue to be protected and managed where necessary to maintain populations of Atlantic Salmon, otter and kingfisher.

Access;

To establish and maintain a used path route throughout the site and connecting where possible to access throughout the Carntogher rural community. Paths to be minimal and natural, yet way marked on junctions.

Invasive Species:
For no invasive species in the wood or fields, because there are so few at present it is possible to

control them.

Overall this wood fits the WT outcomes of:
Ancient Woods:- Link and buffer the ASNW with planting and other habitats
Access:- Restore community, public access and visitor interest with further path works and signing
Biodiversity:- Increase biodiversity; enhance the diverse habitats and improve where possible.
People & Community: - Community: increase community involvement through the Carntogher CDA, i.e., through walks and events
Planting : is as above - the 13 ha of new planting

5.0 KEY FEATURES

The Key Features of the site are identified and described below. They encapsulate what is important about the site. The short and long-term objectives are stated and any management necessary to maintain and improve the Key Feature.

5.1 Ancient Semi Natural Woodland

Description

Once upland oakwood in the 1600s, but now felled, yet it retains some oaks with a dominant hazel canopy over most of the wood with some ash regeneration to the north. It seems to veer towards an ash and hazel wood in the north with an oakwood to the south. Looking at the woodland from the wetland area you can see the points of a number of long established Holly Trees within the wood and prominant Oaks such as McCarthy's Oak. Ground flora consists of swaths of bluebells and wood anemone with presence of wood aven, wild garlic including a variety of ferns, mosses, lichens and fungi. This site is of particular interest in terms of fungi and lichen species.

Significance

One of the few remnants of oak & hazel wood in the east Sperrins; assigned 18th out of 36 Sperrin ASSI woodlands, even before any ASSI status applies. Diversity of habitats is important with the adjoining fens, river, boglands and planting areas.

Opportunities & Constraints

Opportunity to try and spread ASNW species into the open and adjoining planted land to the north. Difficult to favour the oak now that hazel has a closed canopy; but its possible to enlarge the wood to the north on the Woyd planting site, as it is mainly planted with local provenance oak, ash and hazel.

Factors Causing Change

Invasive snowberry and laurel, Uncontrolled Grazing, Natural Regeneration Of..Hazel, water on site, climate change

Long term Objective (50 years+)

Buffer the 17.7 Ha ancient woodland area through the establishment of 11.8 Ha planting creating an overall continuous woodland area of 29.5Ha. Long term both areas will ideally be under minimal intervention, and regenerating through natural processes. No invasive non native species present and to control the invasive native bracken. To link the existing woodland, extend and restore hedgerows providing a network of usable and sustainable habitat for people and wildlife and to have a programme of monitoring and recording where necessary to inform management decisions and biodiversity enhancement.

Short term management Objectives for the plan period (5 years)

Buffer the woods with 13ha new planting to the north, 30% ash & 40% oak. Historic records of c1600 show oak dominant but NIBS/BAP states Upland Ash. Management will be of a minimal intervention, main priority is to ensure the establishment of the trees planted in 2000 in the fields (Cmpt 1a-c) next to the wood. The areas of new planting will continue where possible to maintain the links throughout the site and to buffer the existing ancient woodland. To diversify the new planting where possible through management, to have begun a program of inter-planting in preparation for Ash Dieback. To continue to monitor for new disease threats, species biodiversity and tree health through the use of volunteers WT and An Carn. To have begun a program of wildlife monitoring to inform management decisions.

5.2 Semi Natural Open Ground Habitat

Description

The Fen/Wetland are significant open areas with unique wetland flora and fauna, and to be managed to allow some flooding on the lower bog with a sluice being placed in 2001. The wetland areas form a significant part of the site along with areas of degraded bog showing some typical bog species such as areas of sphagnum, bog asphodyl and sun dews. The wetland contains indicator species to suggest this area has remained undisturbed for a significant length of time e.g. Wild Angelica, along with marsh violet, common spotted orchid and devils-bit scabious. Their are two pond areas within the wetland one is accessible by the bunded path and the other is hidden further into the site. Both ponds attract a variety of species such as damselflies, dragonflies, common frog.

Significance

So few bogland and rush meadows remain in east Sperrin Hills and this combined with the woodland habitats and new planting make it important as a mosaic of habitats. Lowland Fens, Lowland Heathlands, Ponds and Lowland Meadows are all Priority habitats for NI and registered with Biodiversity Action Plans.

Opportunities & Constraints

There is a distinct opportunity to manage a diversity of habitats with the wood adjoining and to create more floral diversity plus otter foraging habitat next to the river and ditches.

The lowland meadows will provide hunting areas for birds of prey such as sparrow hawk, buzzard and barn owl.

To continue working with the Carntogher CDA to look at grazing some of the areas to maintain a diverse species composition and to open the sward in the meadows allowing less competitive wild flora to return over time.

Cons; Cost, access and contacts for the appropriate grazers for the areas.
Funding constraints.

Factors Causing Change

Water levels, willow encroachment, natural succession to scrub.

Long term Objective (50 years+)

Retain & maintain the 5.42 ha of two SNOGHs (semis natural open ground habitats) of rush meadow and fen- as separate habitats. Manipulate water levels for optimal wetland condition for inverts, birds and flora. To be reviewed on a regular basis to ensure a species rich composition. To be in a system of rotation grazing where possible on the meadows and parts of the wetland. To re-survey the whole site and map out in terms of habitat classification and the appropriate management regime for each habitat type, working together as a whole in terms of a resilient mosaic. To link existing lowland meadows, heathland and wetland areas, extend and restore hedgerows providing a network of usable and sustainable habitat for people and wildlife and to have a program of monitoring and recording where necessary to inform management decisions and biodiversity enhancement.

Short term management Objectives for the plan period (5 years)

Ensure bunds integrity is maintained. Monitor water levels and adjust pipes as appropriate. To continue to monitor for new disease threats, species biodiversity and tree health through the use of volunteers WT and An Carn. To have begun a program of wildlife monitoring to inform management decisions. To survey and investigate the de-graded bog heathland area for suggestions of further management.

5.3 Informal Public Access

Description

There are three entrances onto the site; two off the Grillagh Road and one off the Halfgayne Road via the entrance to Drumnaph Community Nature Reserve. The main entrance to the wood is off the Grillagh Road with a small car park, welcome signage and a nearby picnic bench by the river for visitors to enjoy. The other entrance off the Grillagh Road is down a right of way lane in between adjacent farming ground. There is a substancial large car park off the Halfgayne Road maintained by the local community association An Carn where you are welcome to walk all year round. There you will find info boards, leaflet with a map and way markers for three trails; Ruachan Trail (1 km), Loch Bran Trail (1.5 km) and Woodland Trail (4 km). Follow the woodland trail to make your way between the two areas through the ancient woodland.

Significance

Access & Recreation: The aim was to create and renovate 4km of access routes through the woodland, grassland and wetland for the benefit of the communities surrounding the mosaic, to enhance the local environment and quality of life.

Heritage and Cultural Value: creating a vibrant community woodland, protecting existing structures and local features of cultural and heritage importance.

This is important for the public to gain enjoyment of the landscape, to create a sense of ownership and well being, to learn and appreciate the wide variety of wildlife and the spectacular views. This project fulfills all of the Trusts key outcomes of biodiversity, access, enjoyment, new planting and protecting ancient woodland.

Opportunities & Constraints

Opportunity: continue to look for joint projects with the community association through outreach, education and interpretation through the site. Addition of improved access to the wetland areas via a boardwalk. More sustainable access through the ancient woodland using larger traditional stone material.
Constraints : lack of machine access to the woodland and only one path via the long narrow strip of ASNW on the ridge just below the fields.

Factors Causing Change

Climate change, water on site, increased use by school groups and community association, Natural Succession To Ash and hazel…

Long term Objective (50 years+)

To manage the 4km access routes throughout the area and to provide new paths where possible, increase public usage with PR, whilst improving the interpretation and information in the long term.

To continue to work with An Carn Carntogher CDA and our other stakeholders to look at ways of continuing to provide access for all to the area and to continue to look for and connect links to the adjacent hills, surrounding woodland and rural landscape to offer a safe, welcoming and sustainable place for people to use, visit and benefit from locally and regionally. Link in with Carntogher CDA Heritage Trail

Short term management Objectives for the plan period (5 years)

Paths of 4km are to be maintained through the woods and fields by mowing and clearing a 2m x 2m corridor established previously. To create access where possible to the wetland areas on site providing wildlife watching facilities and educational interpretation. To upgrade and renew the welcome information panels at the Grillagh Road entrance. To look at a sustainable long term solution for the paths through the ancient woodland, to prevent where possible from weather damage, usage and the protection of sensitive ground flora.

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	7.90	Oak (sessile)		High forest	Mostly wet ground/exposed site, Site structure, location, natural features & vegetation	Ancient Semi Natural Woodland, Informal Public Access, Semi Natural Open Ground Habitat	
Previously oak and hazel woodland upto 1975, when it was cut down for grazing land. Two large hill fields with rush pasture areas. Semi improved yet with common rush (Juncus conglomeratus) prevalent along the river side and slopes							
1b	3.40	Oak (sessile)		High forest	Site structure, location, natural features & vegetation	Ancient Semi Natural Woodland, Informal Public Access, Semi Natural Open Ground Habitat	Environmentally Sensitive Area
Large north sloping field previously grazed. To SW is a Rath earth circle to be left open to 20m around. North the River Grillagh. SE is rushy & wet next to ditch running north. Hedge lines all round and woodland to south with stone remains of C.19th settlement. Field was wooded until early 70s.							
1c	1.70	Alder species		High forest	Site structure, location, natural features & vegetation	Ancient Semi Natural Woodland, Informal Public Access, Semi Natural Open Ground Habitat	Environmentally Sensitive Area
A small flat field previously grazed. Bordered on north by River grillagh and south to east by north flowing ditch. Deep loam soils of alluvial extraction yet prone to winter flooding every few years. Main shared access from Grillagh Rd. by a 4m wide gravel track across neighbours field for 30m							

2a	3.00	Open ground		Non-wood habitat	Mostly wet ground/exposed site	Ancient Semi Natural Woodland, Informal Public Access, Semi Natural Open Ground Habitat	Environmentally Sensitive Area
A Rush meadow leaning to a fenland in the northern section, its surrounded by woodland except in the north. It has deep peat soils with a very wet patch in the centre. The north has a typical fen mix of bog myrtle, cotton, asphodel, and heaths. The south has rushy ground going into scrub. A stream runs out south into the woodland. In summer this area has many orange tips and other invertebrates as well as field mice and frogs. It's a fine hunting area for raptors and a foraging area for badger, Irish hare, fox and bat species.							
3a	2.42	Open ground		Non-wood habitat	Mostly wet ground/exposed site	Ancient Semi Natural Woodland, Informal Public Access, Semi Natural Open Ground Habitat	Environmentally Sensitive Area
The Fenland is low lying, next to the eastern ditches and with a main access track to its southern edge . A good mix of fen plants and some bog plants to the north with rushy ground slightly raised to the south . A valuable fen which adds to the diversity of habitats and provides both floral and fauna biodiversity. It has been bunded to the east with control pipes outlets in the (Rivers agency) listed ditch; the ditch is cleaned out every three years and thus the bunds and pipes control the height of the water in the fenland. There are 5 dipwells and a depth measure in a cross transect of the fen. These have been recorded by the contractors so far.							
4a	13.20	Hazel	1740	Min-intervention	No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Semi Natural Woodland, Informal Public Access, Semi Natural Open Ground Habitat	
A stony esker ridge running N-S. steeply sloping eastwards. Surrounded by mires and wet fields, hence its survival as ASNW. Historically traced back to 1600 AD by Annesley Malley with estate records from the Church of Ireland, show that it was once mainly sessile oak up to the 1740s, when it was cut for Derry shipbuilding. Now mainly hazel, holly, ash and some oak. Regeneration is mainly holly and ash. Known for badger, fox, and many birds of prey. Long eared and barn owls (SAP priority spp.) recorded by Wulfe Murphy & JOB.							

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2016	1b	Thin	4.00	0	0
2017	2a	Thin	3.16	0	0
2017	3a	Thin	1.50	0	0

GLOSSARY

Ancient Woodland

Ancient woods are defined as those where there has been continuous woodland cover since at least 1600 AD. In Scotland ancient woods are defined strictly as sites shown as semi-natural woodland on the 'Roy' maps (a military survey carried out in 1750 AD, which is the best source of historical map evidence) and as woodland all subsequent maps. However, they have been combined with long-established woods of semi-natural origin (originating from between 1750 and 1860) into a single category of Ancient Semi-Natural Woodland to take account of uncertainties in their identification. Ancient woods include Ancient Semi-Natural Woodland and plantations on Ancient Woodland Sites (see below). May support many species that are only found in ancient woodland.

Ancient Semi - Natural Woodland

Stands in ancient woods defined as those consisting predominantly of native trees and shrubs that have not obviously been planted, which have arisen from natural regeneration or coppice regrowth.

Ancient Woodland Site

Stands in ancient woods that have been converted to plantations, of coniferous, broadleaved or mixed species, usually for timber production, including plantations of native species planted so closely together that any semi-natural elements of the understorey have been suppressed.

Beating Up

Replacing any newly planted trees that have died in the first few years after planting.

Broadleaf

A tree having broad leaves (such as oak) rather than needles found on conifers (such as Scots pine).

Canopy

The uppermost layer of vegetation in a woodland, or the upper foliage and branches of an individual tree.

Clearfell

Felling of all trees within a defined area.

Compartment

Permanent management division of a woodland, usually defined on site by permanent features such as roads. See Sub-compartments.

Conifer

A tree having needles, rather than broadleaves, and typically bearing cones.

Continuous Cover forestry

A term used for managing woods to ensure that there are groups or individual trees of different ages scattered over the whole wood and that some mature tree cover is always maintained. Management is by repeated thinning and no large areas are ever completely felled all at once.

Coppice

Trees which are cut back to ground levels at regular intervals (3-25 years).

Exotic (non-native) Species

Species originating from other countries (or other parts of the UK) that have been introduced by humans, deliberately or accidentally.

Field Layer

Layer of small, non-woody herbaceous plants such as bluebells.

Group Fell

The felling of a small group of trees, often to promote natural regeneration or allow planting.

Long Term Retention

Discrete groups of trees (or in some cases single trees) that are retained significantly past their economic felling age. Operations may still be carried out within them and thinning is often necessary to maintain stability.

Minimum Intervention

Areas where no operations (such as thinning) will take place other than to protect public safety or possibly to control invasive exotic species.

Mixed Woodland

Woodland made up of broadleaved and coniferous trees.

National vegetation classification (NVC)

A classification scheme that allows an area of vegetation to be assigned to the standardised type that best matches the combination of plant species that it contains. All woodlands in the UK can be described as being one of 18 main woodland types (W1 - W18), which principally reflect soil and climatic conditions. For example, Upland Oakwoods are type W11, and normally occur on well drained infertile soils in the cooler and wetter north and west of Britain. Each main type can be subdivided into numerous subtypes. Most real woods contain more than one type or sub-type and inevitably some woods are intermediate in character and can't be properly described by any sub type.

Native Species

Species that arrived in Britain without human assistance.

Natural Regeneration

Naturally grown trees from seeds falling from mature trees. Also regeneration from coppicing and suckering.

Origin & Provenance

The provenance of a tree or seed is the place where seed was collected to grow the tree or plant. The origin is the geographical location within the natural range of a species from where seeds/tree originally derives. Thus an acorn collected from a Turkey oak in Edinburgh would have an Edinburgh provenance and a southern European origin.

Re-Stocking

Re-planting an area of woodland, after it has been felled.

Shrub Layer

Formed by woody plants 1-10m tall.

Silviculture

The growing and care of trees in woodlands.

Stand

Trees of one type or species, grouped together within a woodland.

Sub-Compartment

Temporary management division of a compartment, which may change between management plan periods.

Thinning

The felling of a proportion of individual trees within a given area. The remaining trees grow to fill in the space created.

Tubex or Grow or Tuley Tubes

Tubes placed over newly planted trees or natural regeneration that promote growth and provide protection from animals such as rabbits and deer.

Weeding

The control of vegetation immediately around newly planted trees or natural regeneration to promote tree growth until they become established. Either by hand cutting or with carefully selected weed killers such as glyphosate.

Windblow/Windthrow

Trees or groups of trees blown over (usually uprooted) by strong winds and gales.