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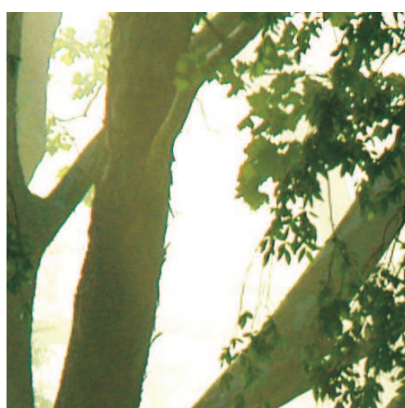


Forám Oidhreachta an Chláir  
Clare Heritage Forum

# Mid East Clare Habitat Mapping Project

## Survey Findings Report

This project is an action under the  
Clare Heritage Plan 2011-2017



November 2011 / Ref: MGE0297



# Survey & Mapping of Habitats In Mid Clare

## Survey Findings Report

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# 1 EXECUTIVE SUMMARY

Clare County Council in association with the Heritage Council, commissioned RPS to survey and map habitats within a designated study area of approximately 96km<sup>2</sup> in Mid Clare. The study excluded lands designated for nature conservation.

County Clare is rich in its diversity of wildlife and habitats; however little is known about the habitats outside these lands designated for nature conservation. The main aim of the survey in Mid Clare is to provide an inventory and classification of the habitats present within the study area and to identify areas of biodiversity importance.

Through this process, we hope to create a more consistent sense of the value and importance of local sites of ecological value, by securing a broader awareness and support for their protection.

Information on the habitats found, was gathered through field by field surveys and interpretation of aerial photography. The habitat boundaries were mapped and classified in accordance with the national habitats classification produced by the Heritage Council, A Guide to Habitats in Ireland (Fossitt, 2000).

The field study was conducted between the months of July and August 2011. All information gleaned from the field studies was then digitised and stored in a Geographical Information System (GIS), which provides a statistical and visual representation of the habitat information.

There are 117 habitat types classified in Ireland (Fossitt, 2000), 89 of these habitat types are terrestrial and 28 of these are marine habitat. Of the 89 terrestrial habitat types, 52 different types of habitats occur within the study area. Of the 52 different habitat types, 5 are classified under cultivated and built land and the remaining 47 habitats are described in detail throughout the report.

The habitats found within the study area are evaluated based on their naturalness, value and vulnerability. Habitats that are assessed to be good examples of Annex I and/or Priority habitats are considered to be of International or National importance. Rare semi-natural habitats with high biodiversity are considered to be of County Importance. Habitats that are considered semi-natural habitat or locally important for wildlife are considered to be of Local

Importance Higher Value, and robust habitats that have been highly modified are considered to be of Local Importance Lower Value.

Good examples of habitats that are considered to be of International, National, High and Moderate ecological value are target noted. These target notes provide detailed information on the habitat including, Survey details, Grid Coordinate, Townland Name, Area in Hectares, Ecological Value, Habitat Code and Habitat Description. The target note also provides a habitat map of the site indicating the extent of the area and a photographic record.

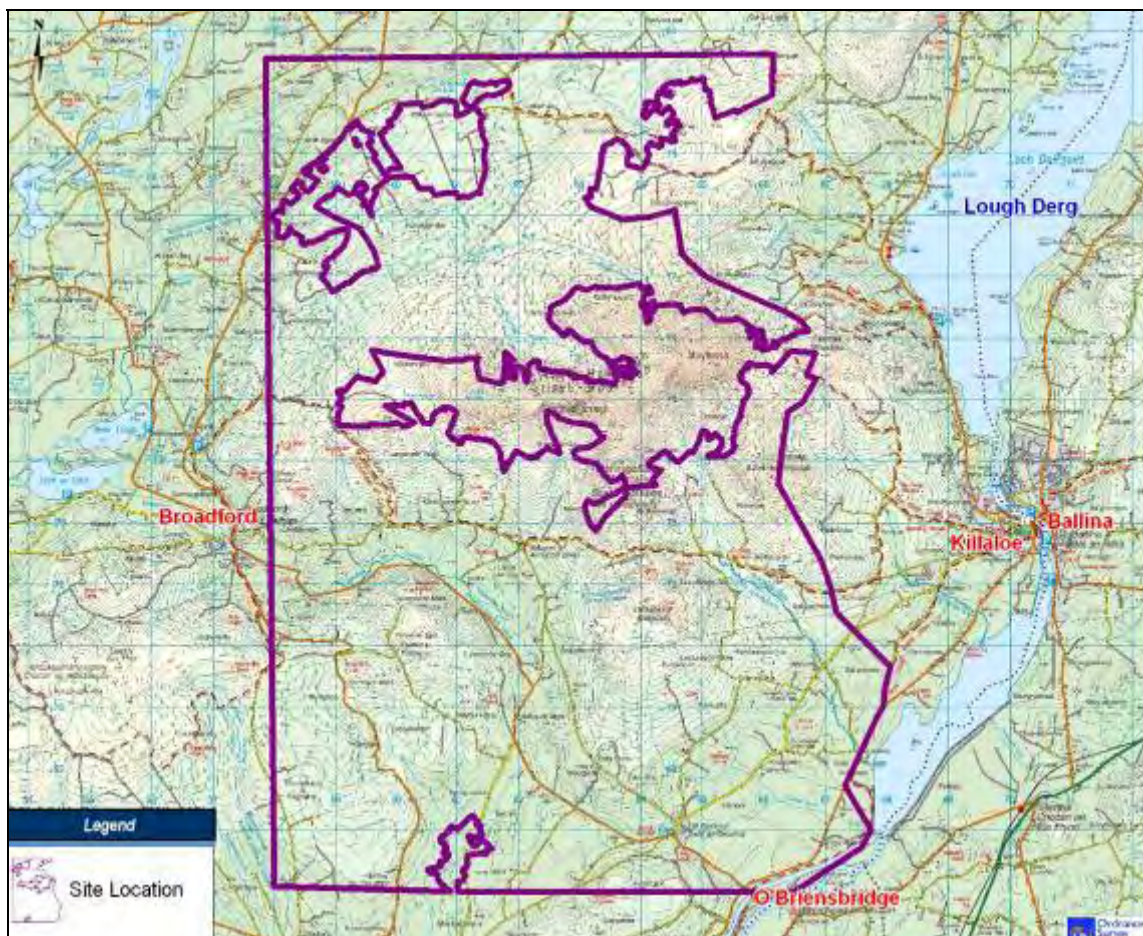
Information from this survey is principally of value in revealing the nature of the biodiversity interest within the Study Area. The results can be used to compare the status of biodiversity with other areas where such surveys have taken place, provide a baseline to inform discussion and policy-making on biodiversity and/or inform future research on other aspects of biodiversity.

## 2 INTRODUCTION

### 2.1 BACKGROUND

In June 2011, Clare County Council commissioned the survey and mapping of habitats within a designated study area of approximately 96km<sup>2</sup> in Mid Clare (refer to **Figure 2.1**). This project is to fulfil the actions for habitat mapping under the County Clare Heritage Plan.

The main aim of the survey was to provide an inventory of the habitats present within the study area delineated in **Figure 2.1** below. The study area spans from Broadford in the west, to Scarriff in the east and from Feakle in the north to O'Brien's Bridge in the south. The detailed mapping and inventory of the habitats, landscape features and ecological features within the study area will form the basis for a review of the variety and extent of habitats present, the identification of areas of high ecological and biodiversity value and important links between these areas. Recommendations will be made for best practice in relation to the conservation, protection and enhancement of areas of natural heritage and biodiversity importance.



**Figure 2.1: Study Area**

## **2.2 BACKGROUND OF THE PROJECT TEAM**

The Project Team represents a combination of expertise, experience and resources providing a range of professional services that are directly relevant to the described tasks.

Ecological assessment requires a high level of skill and practical ability. Ecologists and environmental staff in RPS Galway are supported further by ecological staff distributed between offices in Ireland and the United Kingdom. RPS staff are drawn from scientists and conservation practitioners with broad ecological experience that includes, site survey and evaluation, phase I habitat survey; botanical survey; bird survey; terrestrial mammal, bat and invertebrate surveys.

The field surveys were carried out by RPS ecologists. Paula Kearney was the project manager and is a Senior Project Ecologist within the environmental section of RPS Consulting Engineers in Galway. Paula has eleven years of professional ecological and environmental experience. Richard Mundy, who is also a Senior Project Ecologist with RPS in Cork, assisted with training and advice in relation to the project. Paula assisted in the field surveys along with Jean Hamilton, Sarah O'Loughlin Irwin, John Curtin and Shane O'Neill. Jean joined RPS in 2006. Since then she has developed her skills in field survey techniques and methodology, and in ecological impact assessment. Sarah O'Loughlin Irwin, John Curtin and Shane O'Neill are independent botanists working on behalf of RPS. They all have extensive experience in terrestrial ecology and botany. Dr. Ruth Staunton is a geologist with over nine years experience and has worked with RPS for over two years. She provided an interpretation of soil, geology and hydrogeology of the study area, using published information available from the GSI.

## **2.3 SCOPE**

The scope of the project as per the brief provided by Clare County Council is as follows;

1. to map and provide supplementary information relating to all habitats within the survey area, to level III of the Fossitt (2000) classification system,
2. to survey, map and provide supplementary information relating to all habitats listed on Annex I of the European Habitats Directive that occur within the survey area,
3. to survey, map and provide supplementary information relating to sites of local biodiversity value, flooding potential and ecological corridors within the survey area, and
4. to provide an interpretation layer of local areas of biodiversity value, ecological corridors, buffer zones, and areas of flood risk.



## 2.4 METHODOLOGY

The habitats within the study area were assessed by means of a desk study of literature pertinent to the area and surrounding area and field surveys. In addition all spatial data was digitised onto a Geographical Information System (GIS) MapInfo Professional version 8.5.

The key elements to be employed in the preparation of the Clare Habitat Mapping Project follow the steps in planning and managing habitat surveys as detailed in the Heritage Council *Best Practice Guidance for Habitat Survey and Mapping*, see **Table 2.1**.

Table 2.1 Outline Steps in Planning and Managing Habitat

Step	Tasks
Determine survey objectives	Identify size of survey area
	Determine data to be collected during field survey
	Decide proportion of survey area to be covered by field survey
Decide on project management structures	Appoint project steering group if required
	Appoint project team
	Provide required skills and training
Prepare for field survey	Finalise survey methodology
	Consider land access
	Divide survey area if required
Prepare project data management procedures	Determine data presentation objectives
	Determine data circulation protocols

### 2.4.1 DESKTOP STUDY

The desktop study involved a comprehensive review of the existing information. The principal sources of information referred to during the desktop review are outlined below.

- Clare County Development Plan 2011-2017,
- East Clare Development Plan 2011-2017,
- South Clare Development Plan 2009-2015,
- Landscape Character Assessment in Ireland. The Heritage Council (2006),
- National and Local, Heritage and Clare Local Biodiversity Plans,
- A review of the National Parks and Wildlife Service database for conservation sites,

- A review of any existing published and unpublished information from the National Parks and Wildlife Service, Clare County Council and the Heritage Council, and
- Habitat/Land Use Maps available such as CORINE data.

Reference will be made to the methodologies and experience gained from the:

- Best Practice Guidance for Habitat Survey and Mapping (Heritage Council, 2011),
- *A Guide to Habitats in Ireland.* Fossitt, J.A 2000. The Heritage Council, Co. Kilkenny.
- Hedgerow Survey Handbook,
- Local Biodiversity Action Plan, and
- Habitat Action Plans.

## 2.4.2 GIS, MAPPING & RECORDING

All available digital mapping and aerial photography was divided up into 3km<sup>2</sup> tiles for ease of processing and field work.

The aerial photography was carefully examined to interpret the type of habitats present within the study area. Using this method some habitats and their spatial extent can be easily identified such as field boundaries, areas of plantation forestry and agricultural grassland. Other habitats are however more difficult to identify such as types of woodland, peatland and swamp. All habitats are classified to Level III of the Fossitt Classification. This classification system is explained in **Section 2.4.4**.

All spatial data was digitised onto a GIS system (MapInfo Professional version 8.5). The advantages of digital mapping are many and include:

- GIS provides a much more effective and efficient means of storing and accessing mapped data,
- Improved data manipulation capabilities,
- Habitat areas can be calculated with much greater accuracy,
- Precise locations of features of interest can be mapped more accurately using GPS (Geographical Positioning System) data, and
- Alterations to site boundaries / habitat areas can be made much more easily.

### 2.4.3 FIELD ACCESS

Prior to the commencement of field surveys local representatives of the Irish Farmers' Association (IFA) were contacted by telephone. A number of actions resulted from these conversations, including advertising the commencement of the survey on local radio and in parish newsletters. Surveyors had information leaflets to issue to farmers during the site survey.

Where possible, prior to entering land, the landowners were located and asked for permission. Not all fields were entered if a habitat could be assessed from the road such as Improved Agricultural Grassland GA1. Overall, landowners encountered for the duration of the project were cooperative and enthusiastic to impart local knowledge on wildlife, land use and farming practices in the area.

### 2.4.4 FIELD SURVEY

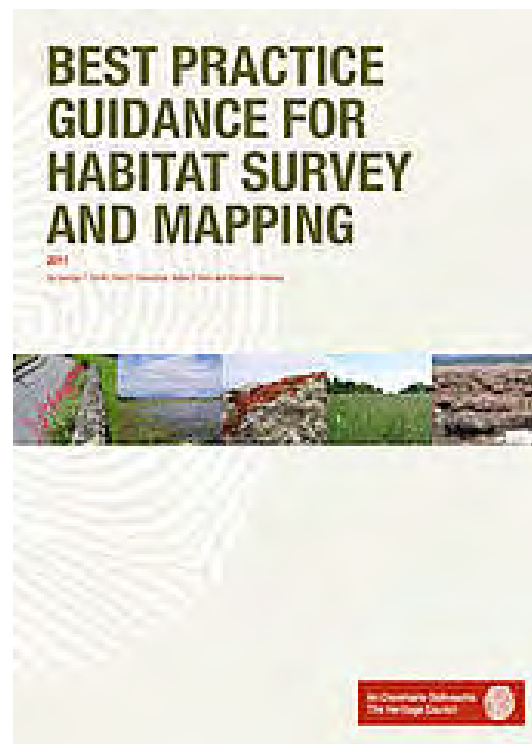
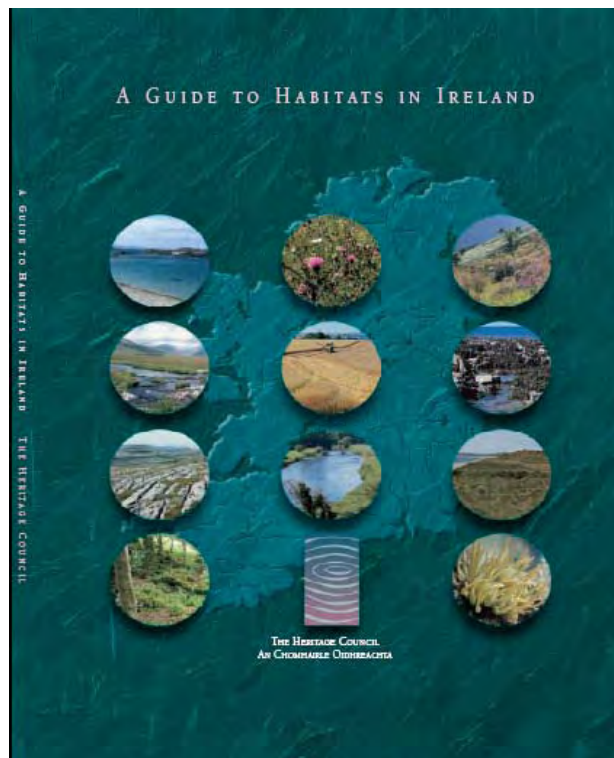
The field survey was based on a combination of field survey and interpretation of aerial photographs, with the use of supporting information, where available.

A habitat is an area in which a specific plant or animal naturally lives, grows and reproduces; an area that provides a plant or animal with adequate food, water, shelter and living space. Through the mapping of habitats, information can be gathered about the plants and animals, which are associated with an area.

Habitats can vary in naturalness, depending on the extent to which they have been modified by development. Throughout Ireland, there is probably no habitat that can be considered completely natural and therefore an assessment is made related to degrees of naturalness.

Habitats can be in terrestrial, freshwater or marine environments, or a combination of these. Many techniques and methodologies have been developed to map habitats and classify habitats around the world; however the Heritage Council has produced a methodology and classification system specific to habitats found in Ireland. These include the following:

- Fossitt, J. (2000) *A Guide to Habitats in Ireland*. The Heritage Council, Kilkenny, and
- Best Practice Guidance for Habitat Survey and Mapping (Heritage Council, 2011).



The habitats on site were classified in accordance with the Fossitt Classification system. The classification is a standard scheme for identifying, describing and classifying wildlife habitats in Ireland. The classification is hierarchical and operates at three levels, Level 1, Level 2 and Level 3. These levels outline the correlation between the habitat categories and the plant communities of botanical classifications. Figure 2.2 is an excerpt from *A Guide to Habitats in Ireland* (Fossitt, 2000) and illustrates the three levels with regard to grassland habitats. Level One is G and is the broad habitat type. Level Two, **GA**, **GS** and **GM**, subdivides the classification into improved, semi-natural and marsh grasslands. Level Three separates these habitats further into distinct categories to clearly distinguish between the grassland habitats.

<b>G Grassland and marsh</b>	<b>GA Improved grassland</b>	<b>GA1 Improved agricultural grassland</b>
		<b>GA2 Amenity grassland (improved)</b>
	<b>GS Semi-natural grassland</b>	<b>GS1 Dry calcareous and neutral grassland</b>
		<b>GS2 Dry meadows and grassy verges</b>
		<b>GS3 Dry-humid acid grassland</b>
		<b>GS4 Wet grassland</b>
	<b>GM Freshwater marsh</b>	<b>GM1 Marsh</b>

Figure 2.2: Excerpt from *A Guide to Habitats in Ireland* (Fossitt, 2000), illustrating the 3 Levels



### 2.4.5 MAP PRODUCTION

All habitats were mapped individually on MapInfo so that the exact location and true extent of the habitats is available to Clare County Council and to aid future research.

Photographs were taken for each habitat types and accompany the habitat descriptions on the digital version of the accompanying Habitat Map. A number of photos are also included in **Section 4.2** which provides a description for each habitat type.

All maps and scientific data sets are collated, logged and referenced in a database that will be held by Clare County Council.

### **3 STUDY AREA CONTEXT**

#### **3.1 STUDY AREA**

The study area spans from Broadford in the west, to Scarriff in the east and from Feakle in the north to O'Briens Bridge in the south (see **Figure 2.1**). The study comprised the survey and mapping of habitats within this designated study area.

The main aim of the survey was to provide an inventory of the habitats present within the study area, excluding the sites already designated for nature conservation. The following section describes the existing environmental conditions within the study area, describing elements such as geology, soils, ecology and land use.

#### **3.2 LAND USE**

The well-drained shales and till subsoils which cover most of the study area are ideal for agriculture, and much of the area is used for pasture. The central section of peaty subsoils provides a variety of land uses including peat extraction, forestry, pasture and silage. The villages and towns including Feakle, Scarriff and Tuamgraney support residential and commercial business.

Peat extraction is a prominent activity within the Raised Bog at Coolreagh in the central region of the study area.

There are also a number of local amenities within the study area which can be enjoyed by tourists and residents of the towns include the following: Game and coarse fishing, Horse riding, and walking. A large golf course (approximately 62ha) has been built to the south east of the bog in Coolreagh. The "The East Clare Way", which is a regional walking route, weaves through the edge of the study area. This walk is important from a tourism perspective.

#### **3.3 LANDFORM AND GEOLOGY**

##### **3.3.1 Landform**

The land within the study site is generally low-lying with higher elevations at the foothills of the Slieve Aughty Mountains in the north of the study area. The minimum and maximum elevations

reached within the site are 30m OD and 210m OD respectively. Poorly drained bog and wet marshland areas, or glacially formed depressions occur within the study site. The higher ground generally comprises well drained, gently undulating pastureland, with occurrences of uneven, hummocky till ridges. These ridges are either formed of limestone epikarst or are glacial features such as drumlins (small elongated hills, typically 500-800m long, 200-300m wide and 20-35m high). **Figure 3.1** illustrates the setting of the study area within the landform of County Clare.



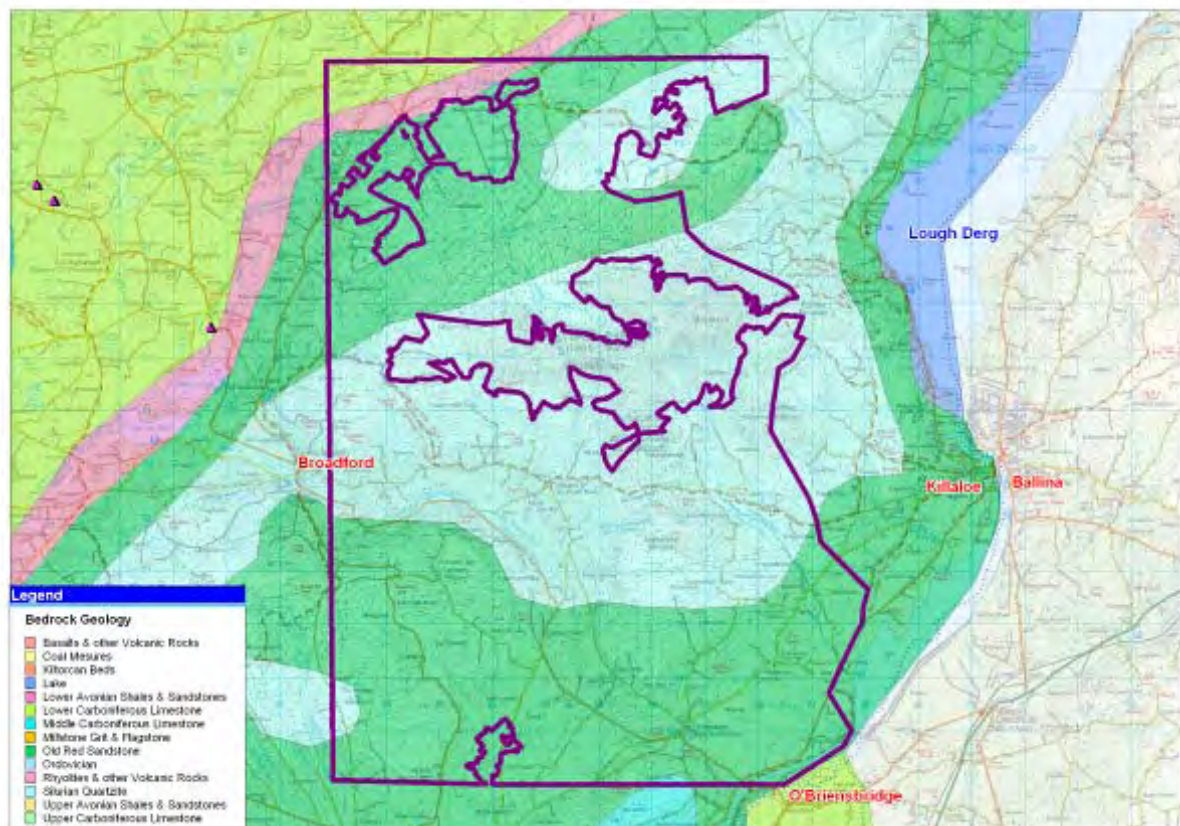
**Figure 3.1: Landform of County Clare. The purple line delineates the Study Area.**

### 3.3.2 Geology, Soils and Subsoils

The geology and soils of Mid Clare are the predominant factors influencing the habitats which it supports. The underlying geology generates a variety of soil-forming parent materials, which are an important element in governing the distribution of vegetation.

A general representation of the solid geology for the study area is presented in **Figure 3.2** and was constructed from available GSI (1:100,000) Bedrock Geology maps and reports. The two dominant rock types of the region are Silurian Quartzite and Old Red Sandstone. Belts of Lower Avonian Shales and Sandstone, and Lower Carboniferous Limestone, can be found in the north western section. No karst features were found within the study area, which conforms to the underlying geology.

Based on information gleaned from the Teagasc Subsoils and Soils map, the study area is predominantly underlain by Lower Palaeozoic Sandstone and Shale Till (TLPSSs), Till Derived from Devonian Sandstones and Shales (TDSs) and Blanket peat.



**Figure 3.2: Geology of Study Area. The purple line delineates the Study Area**



### 3.4 ECOLOGICAL IMPORTANCE

County Clare has a rich and varied landscape and supports a diversity of wildlife and habitats that are both rare in Ireland and Europe. Areas that represent good examples of nationally and internationally important habitats are designated for nature conservation.

Sites of high conservation importance occur within and adjacent to the study area. These sites have been designated as they support a diversity of species that are protected on a National and International scale. The study excludes sites designated for nature conservation; however a review of these sites provides a valuable insight into the landscape and its capability to support such biodiversity.

A number of sites are currently designated for nature conservation under both European and National legislation. These designated sites include; Natural Heritage Areas (NHA), Special Areas of Conservation (SAC) and Special Protection Areas (SPA). Details of applicable legislation are provided in **Table 3.1** and details of designated sites are detailed in **Table 3.2**, and illustrated in **Figure 3.3**.

**Table 3.1: National and European Legislation for Nature Conservation**

Legislation		Explanatory Note
EU Legislation	<b>Habitats Directive 92/43/EU</b> (transposed into Irish Law under the European Communities (Natural Habitats) Regulations 1997 SI/97/094 as amended)	This legislation is structured around the 'Natura 2000' network of protected sites and a strict system of species protection. Ireland has a legal obligation to protect the habitats and species which are listed in the Annexes to the legislation, as Special Areas of Conservation (SACs). The main objective of the Directive is to maintain or restore natural habitats, and species of plants and animals, which are of conservation importance as defined in the Directives, at a favourable conservation status. Ireland supports 60 Annex I habitats that require special conservation measures and, of these, 16 are priority types that are considered to be in danger of disappearance (see Table 4.2).
	<b>Birds Directive 79/409/EE</b>	This Directive identifies 194 species and sub-species of birds afforded protection. Annex 1 lists the bird species for which conservation requires the designation of Special Protection Areas (SPAs); this also applies to important concentrations of migratory birds. SPAs also form part of the Natura 2000 network of sites.

Legislation		Explanatory Note
NATIONAL LEGISLATION	Wildlife (as amended) Act 1976	This legislation aims to protect sites of scientific interest because of their habitats, plants and animals, or landforms and geological or geomorphological features from damaging developments and / or land uses. At a national level it provides a mechanism through which statutory protection is afforded as Natural Heritage Areas (NHAs). It also strengthens the protective status of SACs and SPAs by ensuring that protection will in all cases apply from the time of notification of proposed SAC and SPA sites. The Act further encompasses the statutory protection for important geological and geomorphological sites, including fossil sites by designation as NHAs.
	The Flora (Protection) Order 1999	This order sets out a list of plant species which are protected by Section 21 of the Wildlife Act, 1976 (as amended). If a plant species appears in this list it is illegal to cut, uproot or damage the listed species in any way, or to offer them for sale. This prohibition extends to the taking or sale of seed. It is also illegal to alter damage or interfere in any way with their habitats. This protection applies wherever the plants are found and is not confined to designated sites.

**Table 3.2: Brief Description of Designated Sites Located within or Adjacent to the Study Area**

	Brief Description
cSAC 002312	<b>Slieve Bernagh Bog</b> is situated to the west of Lough Derg, in the south-east of Co. Clare. The site comprises the Slieve Bernagh mountain range, with the highest peaks at Moylussa (532 m) and Cragnamurragh (526 m), and the surrounding peatlands that flank its northern slopes. Slieve Bernagh Bog is a candidate SAC selected for blanket bog, wet heath and dry heath, all habitats listed on Annex I of the E.U. Habitats Directive. Several species of birds, typical of open moorland, have been recorded from this site. These include Skylark, Meadow Pipet, Red Grouse, Wheatear and Raven. At least two pairs of Hen Harriers are known to occur within the Slieve Bernagh to Keeper Hill region and birds would use the cSAC for foraging habitat. This species is listed on Annex I of the E.U. Birds Directive. The Irish Hare, a Red Data Book species, occurs within the site.
cSAC/pNHA 001013	<b>Glenomra Wood SAC</b> is a deciduous wood located approximately 10km north of Limerick City. Downy Birch ( <i>Betula pubescens</i> ) is the dominant tree in the canopy, and reaches a height of more than 20m in places. Other tree species include Ash ( <i>Fraxinus excelsior</i> ), Beech ( <i>Fagus sylvatica</i> ) and Sessile Oak ( <i>Quercus petraea</i> ). The understory is dominated by Holly ( <i>Ilex aquifolium</i> ), and also includes Hazel ( <i>Corylus avellana</i> ), regenerating Birch and Bramble ( <i>Rubus fruticosus</i> agg.). Willows ( <i>Salix</i> spp.) occur in the wetter areas. This site is of considerable ecological significance as it is a good example of a semi-natural deciduous woodland – a habitat type listed on Annex I of the EU Habitats Directive. Three Red Data Book animals have also been recorded on the site – Pine Marten ( <i>Martes martes</i> ), Badger ( <i>Meles meles</i> ) and Hare ( <i>Lepus timidus hibernicus</i> ).
cSAC 002165	<b>Lower River Shannon SAC</b> is a large site running along the Shannon Valley from Killaloe to Loop Head / Kerry Head, covering a distance of approximately 120km. The site includes the lower freshwater reaches of the River Shannon, the Shannon and Fergus Estuaries, and a marine area between Kerry Head and Loop Head. The site is of very high ecological value as it plays host to a large number of habitats and species listed on Annexes I and II of the EU Habitats Directive. The site has been chosen as an candidate SAC due to the presence of lagoons and alluvial wet woodlands, and also for <i>Molinia</i> meadows, floating river vegetation, tidal mudflats, estuaries, Mediterranean Salt Meadows, Atlantic Salt

	Brief Description
	Meadows, perennial vegetation of stony banks, sand banks, <i>Salicornia</i> mudflats, reefs, large shallow inlets, sea cliffs and bays – all of which are listed on Annex I of the EU Habitats Directive. The site was also chosen for the presence of several species listed on Annex II of the same directive – River Lamprey, Sea Lamprey, Brook Lamprey, Bottle-nosed Dolphin, Atlantic Salmon, Otter and Freshwater Pearl Mussel. This site forms the eastern and southern boundary of the study area for the South Clare Habitat Survey.

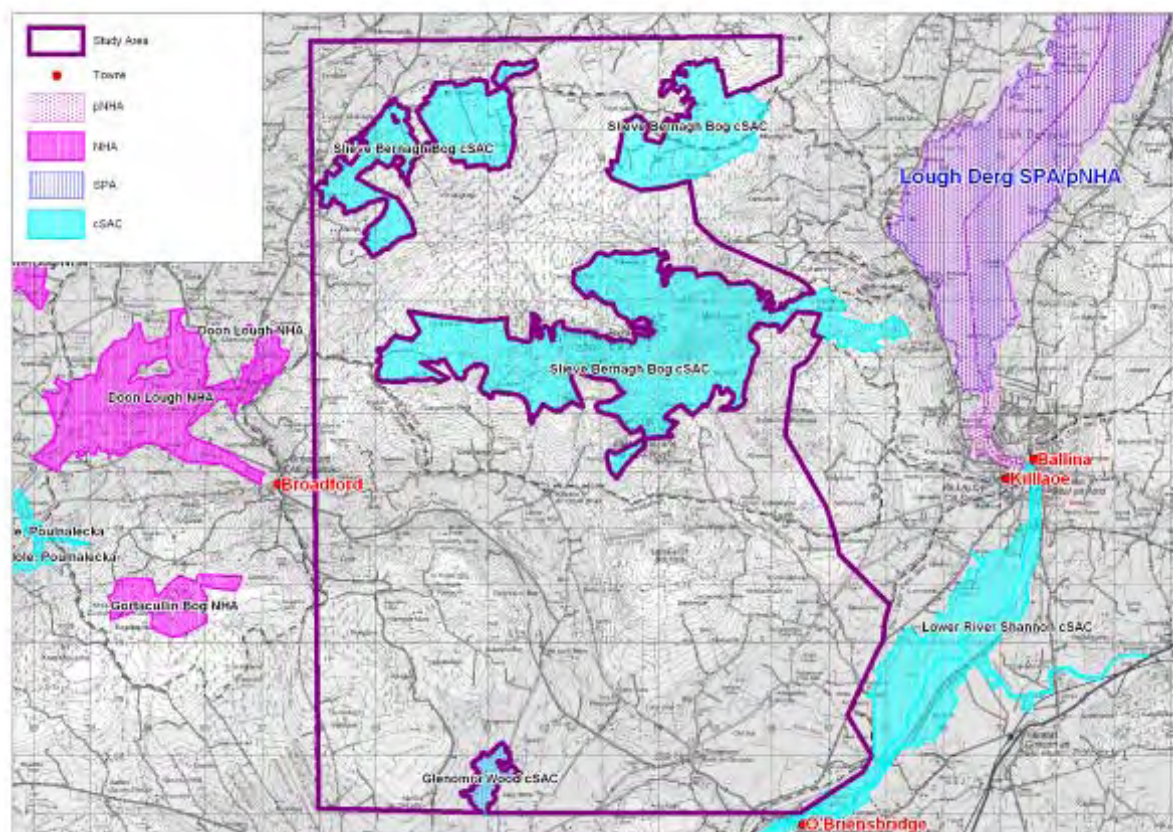


Figure 3.3: Designated Sites within or adjacent to the Study Area.

### 3.4.1 RARE FLORA WITHIN STUDY AREA

#### 3.4.1.1 Flora Atlas

The principal source of information regarding the distribution of flora in Ireland is the *New Atlas of the British & Irish Flora* (Preston *et al.*, 2002). This atlas shows data for vascular plants in individual 10 x 10 km squares. The study area falls within eight 10 x 10 km squares including N30, N31, N32, M31, M32, O31, O32 and O33. The records for these 10 km squares were consulted and a search was carried out to investigate if any rare or protected plant species had been recorded in the squares, during the 1987-1999 atlas survey carried out by the Botanical Society of the British Isles (BSBI). The search included the vascular

plants that are listed in Annex II of the EU Habitats Directive, Flora Protection Order (FPO) of 1999, the Wildlife Act 1976, the Irish Red Data Book (IRDB) and the NPWS Site Synopsis for designated sites within the study area. There are no records for rare or protected species within the study area. The NPWS were contacted in relation to records from the County Clare Rare Flora survey carried out under contract to NPWS in 2006. This search revealed that all of the rare vascular plant sites surveyed during this survey are outside of the study area. The species found outside the boundary of the study area are shown in **Table 3.4**.

**Table 3.4: Flora Atlas Data**

Common Name	Scientific Name
Musk Thistle	<i>Carduus nutans</i>
Small White Orchid	<i>Pseudorchis albida</i>
Henbane	<i>Hyoscyamus niger</i>
Chives	<i>Allium schoenoprasum</i>
Mudwort	<i>Limosella aquatica</i>
Hairy Violet	<i>Viola hirta</i>
Narrow-Leaved Helleborine	<i>Cephalanthera longifolia</i>

## 4 HABITATS

### 4.1 HABITAT EVALUATION

The ecological interest of a site is assessed based on whether it is of *international, national, regional or local importance* as this has a direct bearing on its magnitude and significance. All impacts related to species or habitats protected by statute or Biodiversity Action Plans, priority species or habitats that are considered at national level. Seasonal factors that affect distribution patterns and habitats of species were taken into account when conducting the surveys and the potential of the site to support certain populations.

Consideration was given to the guidelines produced by the National Road Authority 'Guidelines for Assessment of Ecological Impacts of National Road Schemes, NRA Revision 1, 2006'. **Table 4.1** provides a suggested ranking based on the Site Evaluation Scheme as detailed in the NRA Guidelines. The wording in the table has been adjusted slightly and references to fisheries waters have been removed for the purposes of this report.

**Table 4.1: Ecological Site Evaluation Scheme**

Ratings for Ecological Sites	
<b>A</b>	<p><b>International Importance:</b></p> <ul style="list-style-type: none"> <li>- 'European Site' including Special Area of Conservation (SAC), Site of Community Importance (SCI), Special Protection Area (SPA) or proposed Special Area of Conservation.</li> <li>- Proposed Special Protection Area (pSPA).</li> <li>- Site that fulfills the criteria for designation as a 'European Site' (see Annex III of the Habitats Directive, as amended).</li> <li>- Features essential to maintaining the coherence of the Natura 2000 Network.</li> <li>- Site containing 'best examples' of the habitat types listed in Annex I of the Habitats Directive.</li> <li>- Resident or regularly occurring populations (assessed to be important at the national level) of the following:               <ul style="list-style-type: none"> <li>o Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; and/or</li> <li>o Species of animal and plants listed in Annex II and/or IV of the Habitats Directive.</li> </ul> </li> <li>- Ramsar Site (Convention on Wetlands of International Importance Especially Waterfowl Habitat 1971).</li> <li>- World Heritage Site (Convention for the Protection of World Cultural &amp; Natural Heritage, 1972).</li> <li>- Biosphere Reserve (UNESCO Man &amp; The Biosphere Programme).</li> <li>- Site hosting significant species populations under the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals, 1979).</li> <li>- Site hosting significant populations under the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats, 1979).</li> <li>- Biogenetic Reserve under the Council of Europe.</li> <li>- European Diploma Site under the Council of Europe.</li> <li>- Salmonid water designated pursuant to the European Communities (Quality of Salmonid Waters) Regulations, 1988, (S.I. No. 293 of 1988).</li> </ul>

Ratings for Ecological Sites	
<b>B</b>	<p><b>National Importance:</b></p> <ul style="list-style-type: none"> <li>- Site designated or proposed as a Natural Heritage Area (NHA).</li> <li>- Statutory Nature Reserve.</li> <li>- Refuge for Fauna and Flora protected under the Wildlife Acts.</li> <li>- National Park.</li> <li>- Undesignated site fulfilling the criteria for designation as a Natural Heritage Area (NHA); Statutory Nature Reserve; Refuge for Fauna and Flora protected under the Wildlife Act; and/or a National Park.</li> <li>- Resident or regularly occurring populations (assessed to be important at the national level) of</li> <li>- the following: <ul style="list-style-type: none"> <li>o Species protected under the Wildlife Acts; and/or</li> <li>o Species listed on the relevant Red Data list.</li> </ul> </li> <li>- Site containing 'viable areas' of the habitat types listed in Annex I of the Habitats Directive.</li> </ul>
<b>C</b>	<p><b>County Importance:</b></p> <ul style="list-style-type: none"> <li>- Area of Special Amenity.</li> <li>- Area subject to a Tree Preservation Order.</li> <li>- Area of High Amenity, or equivalent, designated under the County Development Plan.</li> <li>- Resident or regularly occurring populations (assessed to be important at the County level) of the following: <ul style="list-style-type: none"> <li>o Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive;</li> <li>o Species of animal and plants listed in Annex II and/or IV of the Habitats Directive;</li> <li>o Species protected under the Wildlife Acts; and/or</li> <li>o Species listed on the relevant Red Data list.</li> </ul> </li> <li>- Site containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfil the criteria for valuation as of International or National importance.</li> <li>- County important populations of species, or viable areas of semi-natural habitats or natural heritage features identified in the National or Local BAP, if this has been prepared.</li> <li>- Sites containing semi-natural habitat types with high biodiversity in a county context and a high degree of naturalness, or populations of species that are uncommon within the county.</li> <li>- Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.</li> </ul>
<b>D</b>	<p><b>Local Importance (higher value):</b></p> <ul style="list-style-type: none"> <li>- Locally important populations of priority species or habitats or natural heritage features identified in the Local BAP, if this has been prepared;</li> <li>- Resident or regularly occurring populations (assessed to be important at the Local level) of the following: <ul style="list-style-type: none"> <li>o Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive;</li> <li>o Species of animal and plants listed in Annex II and/or IV of the Habitats Directive;</li> <li>o Species protected under the Wildlife Acts; and/or</li> <li>o Species listed on the relevant Red Data list.</li> </ul> </li> <li>- Sites containing semi-natural habitat types with high biodiversity in a local context and a high degree of naturalness, or populations of species that are uncommon in the locality;</li> <li>- Sites or features containing common or lower value habitats, including naturalised species that are nevertheless essential in maintaining links and ecological corridors between features of higher ecological value.</li> </ul>

Ratings for Ecological Sites	
<b>E</b>	<b>Local Importance (lower value):</b> <ul style="list-style-type: none"> <li>- Sites containing small areas of semi-natural habitat that are of some local importance for wildlife;</li> <li>- Sites or features containing non-native species that are of some importance in maintaining habitat links.</li> </ul>

The evaluation and selection criterion for the local conservation sites is based on the 'Ratcliffe Criterion' as set out in the Nature Conservation Review 1977. This approach to the designation of local sites has been adopted in the UK and Northern Ireland, and Guidance for the Identification and Selection of Local Sites has been developed by the Department for the Environment Food and Rural Affairs (DEFRA). A synopsis of the Ratcliffe criterion is provided in **Table 4.2**.

**Table 4.2 Ratcliffe Criteria**

Criteria	Description
<b>Size</b>	A habitat's importance for nature conservation generally increases with its size.
<b>Diversity</b>	Variety is better than uniformity, species or habitat richness is generally better than a poor species or habitat complement.
<b>Naturalness</b>	Sites, which have remained relatively unaltered by man, tend to be the most valuable. Furthermore, sites which are considered most natural are generally those which are hardest to recreate.
<b>Fragility</b>	A habitat that is fragile is one that is sensitive to changing influences. Habitats, which are liable to such influences, are likely to be of higher value than those which are not.
<b>Typicalness</b>	Those habitats which are representative or typical of good examples of their type are considered of higher value than those which are not.
<b>Rarity</b>	A site where rare or protected species or habitats exist is considered of higher value.
<b>Position in an ecological or geographical unit</b>	Sites, and their associated habitats, which are contiguous with other similar sites tend to be more valuable than those sites, which are situated in isolation.
<b>Potential Value</b>	Habitats, which, through an adjustment of current influences, have the potential to be, of a higher nature conservation value than they are currently, have additional value
<b>Intrinsic Value</b>	This criterion is based upon the value humans' place on a feature of ecology as opposed to its actual nature conservation value.

#### 4.1.1 Annex I Habitats

Fossitt Level 3 habitats are also described in terms of their links to Annex I habitats. Habitats of particular conservation importance include those that are listed in Annex I of the Habitats Directive 92/43/EEC. Ireland supports 60 Annex I habitats that require special conservation measures and, of these, 16 are priority types that are considered to be in danger of

disappearance (see Appendix 1). It is important, therefore, that links to Annex I habitats are considered because of their significance for nature conservation and environmental policy at national and European levels.

The Interpretation Manual of European Union Habitats - EUR27 is a scientific reference document published by the European Commission for the interpretation of Priority and Non-Priority Annex I habitat types of the Council Directive 92/43/EEC. This manual incorporates descriptive sheets for Priority and Non-Priority Habitats, which establishes clear, operational scientific definitions of habitats, using pragmatic descriptive elements (e.g. characteristic plants) and taking into consideration regional variations. The *Status of EU Protected Habitats and Species in Ireland* (NPWS 2008) was also consulted which provides details on the status of listed habitats and species and also provides lists of typical species for these habitats in Irish context. These documents are considered when identifying links to Annex 1 and/or Priority Habitats.

#### **4.1.2 Target Notes**

Good examples of habitats that are linked to Annex I habitats and habitats that are considered to be of International, National, High and Moderate ecological value are target noted. These target notes provide detailed information on the habitat including, Survey details, Grid Coordinate, Townland Name, Area in Hectares, Ecological Value, Habitat Code and Habitat Description. The target note also provides a habitat map of the site indicating the extent of the area and a photographic record.



## 4.2 HABITATS RECORDED WITHIN STUDY AREA

The following section comprises summary descriptions and assessments of the principal Fossitt Level 3 habitats found within the study area. Habitats of high conservation and biodiversity interest are complemented by species lists and target notes which are contained in Appendix A.

### • Acid Oligotrophic Lakes FL2

One example of an Acid Oligotrophic Lake FL2 was found in the townland of Ballydonaghan, in the north western section of the study area. Ballydonaghan Lough is located in a small valley surrounded by blanket bog, some of which is afforested, and areas of Wet grassland GS4. The lake is approximately 0.7ha in size and is fringed with Reed swamp FS1. The lake itself supports submerged vegetation such as Bog Bean (*Menyanthes trifoliata*), Pondweed (*Potamogeton* sp.) and White Water Lily (*Nymphaea alba*). At the northern shore of the lake there is a floating mat of vegetation with Marsh-like plant communities which grades into Wet grassland GS4. This lake is not linked to either of the annexed habitats.

Ecological Interest	Links to Annex I Habitats	Locations
A/B - International to National Importance, Highly Sensitive	Acid oligotrophic lake is linked to two annexed habitats, 'oligotrophic waters containing very few minerals of sandy plains ( <i>Littorelletalia uniflorae</i> ) (3110)' and 'oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> (3130)'.	Ballydonaghan Lough.



Image 4.1: Bog bean within Ballydonaghan Lough

#### • Mesotrophic Lakes FL4

Only one example of a Mesotrophic Lake FL4 was found within the study area. McNamara's Lough is located in the south eastern corner of the study area between Bridgetown and O'Briensbridge and is approximately 0.8ha in size. It is surrounded by Wet Willow-Alder-Ash Woodland WN6 and a Mature Treeline WL2. Stoneworts (*Chara* spp.), Alternate Water-Milfoil (*Myriophyllum alternifolium*), and Water-plantain (*Alisma plantago-aquatica*) were observed growing in the lake. The invasive species Canadian Pondweed (*Elodea canadensis*) was also recorded within the lake. The surrounding shoreline is host to a wide variety of wetland species and mature woodland surrounds the entire lake.

Ecological Interest	Links to Annex I Habitats	Locations
C - County Importance, Very Sensitive	Mesotrophic lakes are not linked to any Annex I Habitats under the EU Habitats Directive.	McNamara's Lough



Image 4.2: Woodland surrounding McNamara's Lough, a Mesotrophic Lake

#### ▪ Other Artificial Lakes & Ponds FL8

This habitat classification applies to artificial or ornamental bodies of standing water. These water bodies are often stagnant and high in nutrients and are considered to be eutrophic. Flooded quarries are also included in this classification, in addition to water features of amenity areas such as golf courses and parks.

Ecological Interest	Links to Annex I Habitats	Locations within Study Area
E- Local Importance (lower value), Robust	Artificial Lakes & Ponds do not correspond to Annex I Habitats	Ballyquin More

- **Eroding Upland Rivers FW1**

A number of eroding upland rivers drain the upland regions of the study area. These rivers and streams runoff the mountainous areas such as Slieve Bernagh in the north and feed into a number of larger rivers including the Carrownagowan River, Coumnagun River and Inchalughoge River, and Ardcloony River, to the south west, which flow either into Lough Derg to the west or smaller lakes outside the study area to the east, north and south. Several smaller rivers and streams which drain uplands to the south of the study area are tributaries of the Glenomra River (the main lowland depositing river in the area).

Eroding upland rivers and streams have relatively fast, turbulent flow with little or no deposition of fine sediment and the beds of the rivers are characterised by exposed bedrock and loose cobbles. Due to the rapid movement of water and unstable eroding channels, which are key features of such rivers, little vegetation is present. However, on the banks on these rivers and streams mosses, liverworts and broadleaved herbs often occur, and there are some examples where these are linked to woodland habitats (with/without riparian influence). The main channels have a range of features such as riffles, pools and runs, which are characteristic of eroding / upland rivers.

Ecological Interest	Links to Annex I Habitats	Locations
C - County Importance, Very Sensitive	Eroding upland rivers do not have links to any Annex I or Priority Habitats under the EU Habitats Directive.	Carrownagowan River, Coumnagun River, Inchalughoge River, Ardcloony River



**Image 4.3: Upland eroding river with exposed rocks.**

### • Depositing Lowland Rivers FW2

The Glenomra River is the largest of the depositing lowland rivers that drain the study area, this is a tributary of the Broadford River which flows west of Broadford into Doon Lough. There are a number of smaller rivers and streams, such as the Black River which flows into the lower Lough Derg. The lowlands of the study area have been drained considerably - a network of drains exists within the floodplain of the Glenomra River. The riparian vegetation on the banks of these rivers varies considerably throughout the study area, varying between peatlands, wetland habitats to improved grassland and woodland. These rivers are fringed by emergent vegetation which generally corresponds to Reed and Large Sedge Swamp FS1, Tall Herb Swamp FS2 and Marsh GM1, with species such as Bulrush (*Typha latifolia*), Common Club Rush (*Schoenoplectus lacustris*), Common Reed (*Phragmites australis*) and Fools Watercress (*Apium nodiflorum*).

Ecological Interest	Links to Annex I Habitats	Locations
C - County Importance, Very Sensitive	Depositing lowland rivers do not have links to any Annex I or Priority Habitats	Glenomra River

### • Drainage Ditches FW4

Drainage ditches occur throughout the study site. The drains flow into larger tributaries of the larger rivers within the study area. The water in drains is slow-moving and stagnant in places. Fools Watercress (*Apium nodiflorum*) and Common duckweed (*Lemna minor*) are frequent species in this habitat with Water Mint (*Mentha aquatica*) occurring in the verges. Tall emergent vegetation is evident in drains throughout the study area. This vegetation corresponds with Reed and Large sedge swamp (FS1), and occurs in the deep drains.

Ecological Interest	Links to Annex I Habitats	Locations
D- Local Importance (higher value), Moderately Sensitive	Drainage ditches are not linked to any Annex I habitats. Drains are important for invertebrate diversity, and also Common Frog ( <i>Rana temporaria</i> ) and Smooth Newts ( <i>Triturus vulgaris</i> ). Drains flow into designated watercourses and are therefore considered sensitive.	Occur throughout study site.

### • Non-Calcareous Springs FP2

A non-calcareous spring FP2 was located in a small Wet Pendunculate Oak-Ash Woodland WN4 copse dominated by Hazel (*Corylus avellana*) with abundant Willows, such as the Eared Willow (*Salix aurita*). The ground is somewhat poached by cattle and horses however it retains substantial vegetation cover in the field layer with abundant bryophytes, grasses and broadleaved herbs. It is thought that the spring(s) are non-calcareous in nature on the basis of the floral species present and also based on the fact that the main wet area is underlain by granite bedrock according to the GSI 1:100,000 bedrock maps.

Ecological Interest	Links to Annex I Habitats	Locations within Study Area
D-Local Importance (Higher Value), Moderately Sensitive	This feature does not correspond Annex I Habitat	<b>Kilmore, target note 4504-a_TN2/3</b>

#### • Reed and Large Sedge Swamps FS1

Areas of Reed and large Sedge Swamps occupy drains and the margins of Depositing Lowland Rivers FW2 with a few large areas in the townlands of Woodpark and Ballymoloney in the southern regions of the study area. This habitat often forms intimate mosaics with Tall Herb Swamps FS2, Marsh GM1 and Wet Grassland GS4 and were therefore often too small to map. Common Reed (*Phragmites australis*), Great Fen-sedge (*Cladium mariscus*) and Common Club-rush (*Schoenoplectus lacustris*) are the dominant species, with commonly occurring species such as Common Reedmace (*Typha latifolia*), Water Mint (*Mentha aquatica*), Purple Loosestrife (*Lythrum salicaria*) and Water Plantain (*Alisma plantago-aquatica*).

Ecological Interest	Links to Annex I Habitats	Locations
C - County Importance, Very Sensitive	Reed and Large Sedge Swamps are not linked to any Annex I habitats.	Occurs in drains, rivers and fringing lakes throughout study site

#### • Improved Agricultural Grassland GA1

Improved agricultural Grassland GA1 occurs throughout the site, especially in low-lying areas. This habitat type comprises primarily a grassy sward of typical agricultural grassland cultivars, typically a Perennial Rye-grass (*Lolium perenne*) and White Clover (*Trifolium repens*) mix. Cock's-foot (*Dactylis glomerata*), Fescues (*Festuca* spp.), Yorkshire Fog (*Holcus lanatus*) and Meadow species (*Poa* spp.) also occurring, particularly in the field margins. Where drainage is poor there may be abundant rushes – common throughout the study area.

Herb species such as Ribwort Plantain (*Plantago lanceolata*) and Daisy (*Bellis perennis*) occur abundantly. Depending on management practices species such as Thistles (*Cirsium* sp.), Dandelion (*Taraxacum* sp.), Creeping Cinquefoil (*Potentilla reptans*), Silverweed (*Potentilla anserina*), Chickweed (*Cerastium glomeratum*), Common Mouse-ear (*Cerastium fontanum*) and Common Nettle (*Urtica dioica*), can be common. The margins and field boundaries of Improved Agricultural Grassland GA1 provide some ecological value. Uncultivated vegetation occurs along hedgerows, stonewalls and fences, which can support a diversity of grassland species and the tall sward provides food, shelter and commuting routes for small animals and insects.



Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat type is not linked to EU Annex I habitats	Throughout Study Area



Image 4.4: Improved Agricultural Grassland with occasional patches of rushes.

- Amenity Grassland (improved) GA2**

The amenity grassland occurs in gardens, parks, golf courses and football pitches, and comprises a short sward which is maintained through regular mowing. The species composition includes; Rye-grasses (*Lolium* spp.), bents (*Agrostis* spp) and fescues (*Festuca* spp.). Daisy (*Bellis perennis*), Clovers (*Trifolium* spp.) and Dandelion (*Taraxacum* spp.) also occur. This habitat type is found throughout the study area, mainly in residential gardens.

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat type does not have links to EU Annex I habitats	Throughout the study site.

- Dry Calcareous and Neutral Grassland GS1**

Dry Calcareous and Neutral Grassland GS1 occurs in localised areas in the central and southern study area, on free draining base rich soils in areas of low intensity agriculture. The habitats of this type tended towards the neutral and none of the habitats recorded contained indicators of calcareous grassland such as Carline Thistle (*Carlina vulgaris*) and Field Scabious (*Knautia arvensis*).

This grassland classification can be very species diverse containing grass species such as bents (*Agrostis* spp.), meadow-grasses (*Poa* spp.), Meadow Foxtail (*Alopecurus pratensis*),

Timothy (*Phleum pratense*), fescues (*Festuca* spp.), Sweet Vernal-grass (*Anthoxanthum odoratum*), Crested Dog's-tail (*Cynosurus cristatus*), Cock's-foot (*Dactylis glomerata*) and Yorkshire-fog (*Holcus lanatus*) occur. Common broadleaved herbs include clovers (*Trifolium* spp.), Yarrow (*Achillea millefolium*), Common Knapweed (*Centaurea nigra*), Selfheal (*Prunella vulgaris*), Bird's-foot Trefoil (*Lotus corniculatus*). These low intensity grasslands are under threat of scrub encroachment and some areas were seen where scrub is currently invading.

Ecological Interest	Links to Annex I Habitats	Locations
C- County Importance, Very Sensitive	Calcareous grasslands with either high numbers or diversity of orchids is linked to the priority habitat, 'semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometea</i> )' (*important orchid sites) (6210)'.	Occurs throughout study area, particularly in the centre and in the south.



**Image 4.5: Close up of Dry Calcareous/Neutral Grassland with abundant Selfheal (*Prunella vulgaris*) and Eyebrights (*Euphrasia* spp.)**

#### • Dry Meadows and Grassy Verges GS2

Few agricultural fields are now managed as traditional hay meadow and this habitat is largely confined to field and road margins. As these grasslands are rarely fertilised, a good diversity of grassland species persists. Species include; False Oat-grass (*Arrhenatherum elatius*), Cock's Foot (*Dactylus glomerata*), Meadow Foxtail (*Alopecurus pratensis*) and Yorkshire Fog (*Holcus lanatus*). There is also a good diversity of herbaceous species, including Spear Thistle (*Cirsium vulgare*), Ragwort (*Senecio jacobaea*), Meadowsweet (*Filipendula ulmaria*), Red and White Clover (*Trifolium pratense* and *T. repens*), Willowherb (*Epilobium* sp.), Common Knapweed (*Centaurea nigra*) and Selfheal (*Prunella vulgaris*). Also present are

species such as Meadow vetchling (*Lathyrus pratensis*) and Tufted vetch (*Vicia cracca*) which climb the stems of other plants. Lesser Trefoil (*Trifolium dubium*), Daisy and Shepherd's Purse (*Capsella bursa-pastoris*) can occur in the disturbed areas. This habitat type is declining in the Irish landscape due to changes in farming practises. As these grasslands are not fertilised or intensively grazed they are species diverse and provide good habitat for many species of invertebrates.

Ecological Interest	Links to Annex I Habitats	Locations
C- County Importance, Very Sensitive	This grassland habitat is linked to the annexed habitat, 'Lowland hay meadows ( <i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i> ) (6510)'. One example of this habitat type was found within the Study Area, at Ardtaggle (see Target note 4505-c_TN4).	Scattered throughout the study area, particularly in the south western section in the townlands of Kilroughil and Kilcredáun.



Image 4.6: Dry Meadow habitat with Bush Vetch and Greater Bird's-foot Trefoil

#### • Dry-Humid Acid Grassland GS3

This habitat type is scattered around the study area, though largely it is confined to steep slopes around Lackeragh Mountain, Glenvagalliagh Mountain and Formoyle Beg. It often forms mosaics with Wet heath HH3, Upland blanket bog PB2 and Wet grassland GS4. It exhibits a good species diversity of vascular plants, herbs and mosses. Species include Purple moor grass (*Molinia caerulea*), Mat Grass (*Nardus stricta*), Bent grass (*Agrostis spp*), Wavy Hair Grass (*Deschampsia flexuosa*), Fescue Grasses (*Festuca spp.*), Tormenitil (*Potentilla erecta*), Self Heal (*Prunella vulgaris*), Sheep's Sorrel (*Rumex acetosella*) and Devil's-bit Scabious (*Succisa pratensis*). Hard Fern (*Blechnum spicant*) and Bracken



(*Pteridium aquilinum*) and mosses such as *Polytrichum commune* and *Sphagnum* spp. also occur.

Ecological Interest	Links to Annex I Habitats	Locations
C- County Importance, Very Sensitive	EU Habitats Directive Annex I includes the priority habitat 'species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas (6320)' which is linked to Dry-humid acid grasslands. This habitat type was found at Drummod and Aillemore.	Ballymoloney, Drummod, Ballydonaghan, Aillemore



Image 4.7: Acid grassland vegetation

#### • Wet Grassland GS4

This habitat is widespread occurring throughout the site where drainage is impeded. On acidic soils this habitat is characterised by rushes (*Juncus articulatus/acutiflorus/effusus/inflexus*), sedges (*Carex* spp.), Purple Moor-grass (*Molinia caerulea*), Tormentil (*Potentilla erecta*), Devil's-bit Scabious (*Succisa pratensis*), Heath Wood-rush (*Luzula multiflora*) and Lousewort (*Pedicularis* sp.). Bog mosses (*Sphagnum* spp.) can often be found in the damp hollows throughout. This habitat often forms mosaics with Wet Heath HH3 and Upland Blanket Bog PB2. Wet Grassland often grades in to Marsh GM1 and forms mosaics with it in places.

Small areas of *Molinia*-dominated Wet Grassland GS4 also occur in few areas such as in the townlands of Kilroughil and Ballydonaghan. These *Molinia* rich grasslands correspond to EU Habitats Directive Annex I Habitat, '*Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinia caerulea*)' (6410).

The species diversity of this grassland type varies considerably throughout the study area and is largely determined by management practices. Species-rich and diverse examples of Wet Grassland GS4 are target noted.

Ecological Interest	Links to Annex I Habitats	Locations
C/D- County to Local Importance, Very to Moderately Sensitive	Few Wet Grassland GS4 habitats within the study site correspond to the EU Habitats Directive Annex I Habitat: ' <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> )' (6410). Devil's-bit Scabious, which is the food plant of the Marsh Fritillary, prevails in a number of sites. Wet grasslands are susceptible to agricultural management practices; therefore species rich examples are under constant threat. Although this habitat type is widespread, it is considered to be of moderate ecological value.	Throughout the study site.



**Image 4.8: Wet grassland with abundant rushes, Yorkshire Fog and Greater Bird's-foot Trefoil**

- **Marsh GM1**

Small areas of Marsh GM1 are found throughout the study area, occurring predominantly in the margins of rivers in association with other habitats such as Reed and Large Sedge Swamps, Tall Herb Swamps FS2, and wet hollows in Wet Grassland GS4 habitats - often forming intimate mosaics with these habitats and covering too small an area to map. More extensive areas of Marsh are located in the vicinity of Bridgetown. Marsh GM1 habitat comprises a diversity of species similar to Wet Grassland GS4; however there is a predominance of herbs including Ragged Robin (*Lynchnis flos-cuculi*), Meadowsweet (*Filipendula vulgaris*) and Marsh Woundwort (*Stachys palustris*), with horsetails (*Equisetum* spp), Yellow Iris (*Iris pseudacorus*), and Reedmace (*Typha latifolia*) occurring.



Ecological Interest	Links to Annex I Habitats	Locations
C/D- County to Local Importance, Very to Moderately Sensitive	Marsh may sometimes contain pockets of the Annex I habitat, 'hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (6430)'.	Throughout Study Area



**Image 4.9: Marsh with abundant Marsh Woundwort**

- Dry Siliceous Heath HH1**

Small areas of Dry Siliceous Heath occur in the central section of the study area, in the Lackerragh mountain region and on the south-facing slopes of the Slieve Bernagh Bog cSAC. This habitat type is generally found in areas with free-draining acidic soils and it often exists in close association with Dry-humid Acid Grasslands GS3. Typical species include Ling (*Calluna vulgaris*) and Bell heather (*Erica cinerea*).

Ecological Interest	Links to Annex I Habitats	Locations
A/B- International to National Importance, Highly Sensitive	Dry siliceous heath is linked to the Annex I habitat 'European dry heaths (4030)' and any areas with scattered Juniper ( <i>Juniperus communis</i> ) may correspond to the annexed habitat ' <i>Juniperus communis</i> formations on heaths or calcareous grasslands'.	Ballymoloney, Carrownakilly



**Image 4.10: Ling, Bell heather and Gorse – Dry Siliceous heath species**

- **Wet Heath HH3**

This habitat type occurs in small areas throughout the site such as in the northern townlands of Drummod and Caherhurlly. With more sizable examples mainly confined to the south western section of the study area in the townlands of Formoyle and Drumsillagh as well as in the Slieve Bernagh Bog cSAC. It is a common habitat in Cutover Bogs (PB4), but also occurs on shallow peat, generally under 0.5 metres in depth.

Wet heath species include Ling Heather (*Calluna vulgaris*) and Cross-leaved Heath (*Erica tetralix*), Bilberry (*Vaccinium myrtillus*), Purple Moor-grass (*Molinia caerulea*), Common Rush (*Juncus effusus*), Heath Rush (*Juncus squarrosus*), Heath Milkwort (*Polygala serpyllifolia*), Devil's bit Scabious (*Succisa pratensis*) and Cotton grass (*Eriophorum vaginatum*). Mosses such as *Rhytidiadelphus loreus*, *Hylocomium splendens* and *Polytrichum commune* are common, with *Sphagnum* species and Star Sedge (*Carex echinata*) occurring in the flushed areas.

Ecological Interest	Links to Annex I Habitats	Locations
A/B- International to National Importance, Highly Sensitive	Wet heath is linked to the Annex I habitat 'northern Atlantic wet heaths with <i>Erica tetralix</i> (4010)'.	Formoyle, Drumsillagh, Drummod, Caherhurlly, Magherareagh





**Image 4.11: Wet Heath in Kyleglass: Deergrass, Purple-moor Grass, and dwarf shrubs Ling heather and Bog Myrtle**



**Image 4.12: Close-up of Wet Heath vegetation – Heath rush, *Sphagnum* moss, Ling heather and Purple-moor Grass**

- **Dense Bracken HD1**

Small areas of Dense Bracken HD1 occur in a variety of habitats within the study area, such as in areas of scrub, and woodland. This habitat also occurs in the upland grasslands in areas of low intensity grazing.

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat is not linked to EU Habitats Directive Annex I Habitats. This vegetation type can be invasive and is considered to be of low conservation value.	Small areas throughout study area



**Image 4.13: Dense Bracken with Gorse scrub invading**

- **Raised Bogs PB1**

Uncut raised bogs are a rarity in Ireland and those found within the study area are no exception. Raised bogs are found mostly in the midlands of Ireland; however they also occur in a limited number of areas in County Clare. They form in lowland areas in river valleys, hollows and lake basins. Their domed shape gives rise to the name 'raised bog' and can be as deep as 13m.

Within the study area, there is one area of Raised Bog PB1 occurring in Clonboy. The dome shape can still be seen at some of these sites, however, the tall peat banks and ramparts show evidence of a long history of peat extraction, and so only small pockets can be classified as intact Raised Bog. The areas of Cutover Bog PB4 are often colonised by Wet Heath HH3 vegetation, or if it has been significantly drained and reclaimed, Dry Humid Acid Grassland GS3 can establish. Some of the bogs have been planted with conifers and/or Bog Woodland WN7 has established on the drier edges. Bog habitats are also under threat from the invasion of non-native species such as Rhododendron (*Rhododendron ponticum*).

The typical floral assemblage of Raised Bog includes; Deergrass (*Trichophorum cespitosum*), Common Cottongrass (*Eriophorum angustifolium*.), Bog Rosemary (*Andromeda*

*polifolia*), Bog Asphodel (*Narthecium ossifragum*), White Beak Sedge (*Rhynchospora alba*), Purple Moor-grass (*Molinia caerulea*) and Sundew (*Drosera rotundifolia*) with Sedge (*Carex spp.*) and Rush species (*Juncus spp.*). Ling Heather (*Calluna vulgaris*), Cross-leaved Heath (*Erica tetralix*) and occasional dwarf shrubs also occur such as Bilberry (*Vaccinium myrtillus*) and Bog Myrtle (*Myrica gale*). Wetter areas and pools containing large patches of Sphagnum are interspersed across the bog with Reindeer Mosses (*Cladonia spp.*) on the drier hummocks.

In Raised Bogs (PB1), the annexed habitat, 'depressions on peat substrates of the Rhynchosporion (7150)' can occur in the cutover areas.

Ecological Interest	Links to Annex I Habitats	Locations
A/B- International to National Importance, Highly Sensitive	Raised bogs has links to the priority habitat, '*active raised bogs (7110)' if they are still capable of peat formation, or if peat formation has temporarily ceased. 'Degraded raised bogs still capable of natural regeneration (7120)' are also listed as an annexed habitat. These are damaged bogs where it is judged that the peat forming capability can be restored within 30 years. The annexed habitat, 'depressions on peat substrates of the Rhynchosporion (7150)' occurs in pockets as a sub-habitat of raised bog.	Clonboy,



**Image 4.14: Clonboy: Intact Raised Bog in the foreground with bare peat banks showing extent of cutting**





**Image 4.15: Close-up of Intact Raised Bog vegetation at Clonboy with Deergrass, Bog Asphodel, Cross-leaved Heath and White-beaked Sedge**

- **Upland Blanket Bog PB2**

There are few areas of pristine Upland Blanket Bog within the study area. Previously this type of habitat would have covered all of the uplands between Broadford and Killaloe, however, they have largely been damaged due to anthropogenic activities such as land reclamation for agriculture, forestry, peat extraction and overgrazing. Intact examples are to be found in the Slieve Bernagh cSAC, and the townlands adjoining it, such as Gortarassa, Classagh, Ballydonaghan and Ballykildea. This habitat may grade into Wet heath HH3 and where it has been drained and/or improved it may grade into Wet grassland GS4, Dry-humid Acid grassland GS3 or Improved Agricultural grassland GA1.

Typical flora occurring in Upland blanket bog includes Deergrass (*Tricophorum cespitosum*), cottongrasses (*Eriophorum* spp.), Ling (*Calluna vulgaris*), Cross-leaved Heath (*Erica tetralix*), Bilberry (*Vaccinium myrtillus*) with locally abundant Purple Moor-grass (*Molinia caerulea*) and Bog Asphodel (*Narthecium ossifragum*). Bog mosses (*Sphagnum* spp.) can be found throughout, and on dry exposed hummocks in conjunction with Raindeer moss (*Cladonia* sp.).



Ecological Interest	Links to Annex I Habitats	Locations
A/B- International to National Importance, Highly Sensitive	Blanket bogs that are still capable of peat formation are linked to the priority habitat 'blanket bogs (*if active bog) (7130)', while the annexed habitat 'depressions on peat substrates of the <i>Rhynchosporion</i> (7150)' can occur as a sub habitat of blanket bog. Limited areas of intact blanket bog are evident at higher altitudes.	Gortarassa, Classagh, Ballydonaghan, Ballykildea, Killuran More, Coumnagun, Carrownakilly



Image 4.16: Upland Blanket Bog at Classagh surrounded by Confer plantations

#### • Cutover Bog PB4

Turf banks occur throughout the Raised Bog PB1 areas and in the majority of the Blanket Bog PB2 areas within the study site. These ramparts are relics of a long history of peat extraction in the area. Bare banks are still evident where turbary harvesting of peat is ongoing. The areas of modified Raised Bog PB1, that have been cut have re-vegetated with varying assemblages of species, depending on hydrology, depth of peat remaining, nature of the peat and underlying substratum. The peat banks as a result of natural succession have been colonised with heath vegetation. However, the wetter hollows are usually dominated by Deer Grass (*Trichophorum cespitosum*), Bog Cotton Grasses (*Eriophorum angustifolium*) and Bog Asphodel (*Narthecium ossifragum*). The *Sphagnum* species occur throughout.

Ecological Interest	Links to Annex I Habitats	Locations
C- County Importance, Very Sensitive	The EU Annex I habitat 'depressions on peat substrates of the <i>Rhynchosporion</i> (7150)' can occur in pockets on cutover bog. However this was not found within the study area.	O.Briensbridge, Clonboy, Gortarassa, Inchalughoge, Carragnoe Valley



**Image 4.17: Cutover Bog in Clonboy**

- **Poor Fen and Flush PF2**

Fens develop from damp or water logged hollows in the landscape and areas which were too small to map can be found throughout the study area. They are generally associated with lake edges, flood plains and river valleys. Fens often form mosaics with a variety of woodland, wetland and open water habitats. Poor Fen and Flush PF2 are fed by groundwater or surface waters that are acidic and typically occur in peat-forming systems. Vegetation is usually dominated by sedges (*Carex* spp.) and rushes (*Juncus* spp.). Other common species include Bog Bean (*Menyanthes trifoliata*), Common Cottongrass (*Eriophorum angustifolium*), Yorkshire Fog (*Holcus lanatus*), Heath Bedstraw (*Galium saxatile*) and Marsh Cinquefoil (*Potentilla palustris*). Extensive areas carpeted with mosses are characteristic of this habitat type. Examples of Poor Fen and Flush can be found at Muingboy/Kyleglass, Cloongaheen East and Ballydonaghan.

Ecological Interest	Links to Annex I Habitats	Locations
C- County Importance, Very Sensitive	Does not have links to any annexed habitats however their distribution in Ireland is limited and therefore should be considered of high ecological value in a local context.	Muingboy/Kyleglass Cloongaheen East Ballydonaghan



**Image 4.18: Poor Fen and Flush with abundant Rushes and Bog Bean**

- **Transition Mire and Quaking Bog PF3**

Transition Mire and Quaking Bog are very wet peat-forming systems and are characterised by having features which are transitional between poor and rich fens. This habitat was found in only three locations in the study area, in the townlands of Ballydonaghan and Ballynamona. This area is wetter than most raised bogs in the area and does not display the typical dome shape that is characteristic. It does however contain many typical raised bog species; Round-leaved Sundew (*Drosera rotundifolia*), White Beak-sedge (*Rhynchospora alba*) and Bog asphodel (*Narthecium ossifragum*), alongside more fen affiliated species such as Marsh Cinquefoil (*Potentilla palustris*). Vegetation typically forms a floating matt or scraw and moss coverage can be extensive.

Ecological Interest	Links to Annex I Habitats	Locations
B- National Importance, Highly Sensitive	Transition Mire and Quaking Bog has links to the Annex I habitat 'transition mires and quaking bogs (7140)'.	Ballydonaghan Ballynamona





**Image 4.19: Transition Mire and Quaking Bog habitat**

- Oak-Birch-Holly Woodland WN1**

This habitat type is scattered throughout the study area, with numerous examples of small size found, for example, in the townlands Gortatrassa, Knockalecka, Aharinaghbeg, Fahy More (South), Knockatloe, Drummod and Ballydonaghan. This type of woodland occurs on acid or base-poor soils that may be either dry or humid, but not waterlogged. Stands are usually dominated by Sessile Oak (*Quercus petraea*) or mixed stands of Sessile and Pedunculate Oak (*Q. petraea* and *Q. robur*) or their hybrids. Downy Birch (*Betula pubescens*) can be the dominant tree in some situations, as is the case with the examples found in the study area. Other common trees are Holly (*Ilex aquifolium*) and Rowan (*Sorbus aucuparia*).

The woodlands of this type found within the study area were quite humid with moss-covered siliceous boulders and a rich field layer. Species recorded were Hard Fern (*Blechnum spicant*), Polypody Fern (*Polypodium vulgare*), Honeysuckle (*Lonicera periclymenum*), Great Wood-rush (*Luzula sylvatica*), Remote Sedge (*Carex remota*), Wood Sorrel (*Oxalis acetosella*) and Greater Stitchwort (*Stellaria holostea*). Moss species covering tree trunks and rocks included Feather Moss (*Thuidium tamarascinum*), Common Haircap (*Polytrichum commune*) and Little Shaggy-moss (*Rytidiadelphus loreus*).

Ecological Interest	Links to Annex I Habitats	Locations
B/C- National to County Importance, Highly to Very Sensitive	This habitat is linked to the Annex I habitat 'old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (91A0)'. One example of this annexed habitat was found at Aharinaghbeg ( <b>4503-d_TN2</b> ).	Throughout the study area in small pockets.



Image 4.20: Birch-dominated Woodland in the townland of Aharinaghbeg

- **Oak-Ash-Hazel Woodland WN2**

This habitat type has a very limited distribution within the study area as it occurs on base-rich or calcareous soils that are generally dry or well drained and these conditions are not common here. It is comprised of Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), and Hazel (*Corylus avellana*), with Holly (*Ilex aquilinum*) occurring intermittently. The composition of the ground flora is variable and may include Ivy (*Hedera helix*), Lords and Ladies (*Arum maculatum*), Wood Anemone (*Anemone nemorosa*), Sanicle (*Sanicula europaea*), Ramsons (*Allium ursinum*) and a variety of ferns.

Ecological Interest	Links to Annex I Habitats	Locations
C- County Importance, Very Sensitive	This habitat is not linked to any Annex I habitats, however the habitat is considered to be of moderate to high conservation value in a local context as semi-natural woodlands are a rarity in the landscape.	Knockaderreen



**Image 4.21: Hazel at top of steeply sloping Oak-Ash-Hazel Woodland**

- **Wet Pedunculate Oak-Ash Woodland WN4**

There are small isolated areas of this habitat type within the study area, located in Kilmore, Drummod, Killuran More and Knocklaur, in the western section. Wet Pedunculate Oak-Ash Woodland WN4 typically has dominant Pedunculate Oak (*Quercus robur*) – however Sessile Oak (*Quercus robur*) was found to occur at this site - and/or Ash (*Fraxinus excelsior*) however some of the examples seen here were in an early stage of development with only occasional Oak trees/saplings present. Other common species include: Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*), Willow (*Salix* sp.) and Holly (*Ilex aquifolium*). The ground flora is comprised of Enchanter's-nightshade (*Circaea luteiana*), Ivy (*Hedera helix*), Brambles (*Rubus fruticosus* agg.), Herb Robert (*Geranium robertianum*), Honeysuckle (*Lonicera periclymenum*), Creeping Bent-grass (*Agrostis stolonifera*), Wood Sorrel (*Oxalis acetosella*) and Wood Avens (*Geum urbanum*).

Ecological Interest	Links to Annex I Habitats	Locations
B/C- National to County Importance, Highly to Very Sensitive	Semi-natural woodlands are a rarity in the landscape otherwise dominated by agricultural grassland, heath and conifer plantations. On alluvial sites this habitat corresponds to the Annex I priority habitat 'alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-padion, Alnion incarnate, Salicion albae) (91E0)'. There are no alluvial sites within the study area.	Kilmore, Drummod, Knocklaur, Killuran More





**Image 4.22: Wet Pendunculate Oak-Ash Woodland**

- **Riparian Woodland WN5**

This classification includes woodlands of river margins that occur in ribbon-like strips and are typically dominated by Willows (*Salix* spp.) with infrequent Alder (*Alnus glutinosa*). This habitat type is limited to the riparian zone of the watercourses and within the study area it was often located in ravines, carved out by fast-flowing mountain streams, inaccessible due to the steepness of the bank. The ground flora varies depending on the levels and frequency of inundation; it may include Meadowsweet (*Filipendula ulmaria*), Nettles (*Urtica dioica*), Wild Angelica (*Angelica sylvestris*) and Creeping Buttercup (*Ranunculus repens*). The invasive species Himalayan Balsam (*Impatiens glandulifera*) may be locally abundant – as found at Scott's Bridge in the townland Lisroe.

Ecological Interest	Links to Annex I Habitats	Locations
C/D- County to Local Importance, Very to Moderately Sensitive	This habitat does not have links to Annex I habitats, however the habitat is considered to be of moderate to high conservation value in a local context as semi-natural woodlands are a rarity in the landscape.	Mainly to the southwest of Slieve Bernagh and southeast of Lackerragh, Mountain where there are numerous streams and rivers.





Image 4.23: Riparian Woodland in the townland of Ross dominated by Willows

- **Wet Willow-Alder-Ash Woodland WN6**

This classification includes woodlands of permanently waterlogged sites that are dominated by willows (*Salix* spp.), Alder (*Alnus glutinosa*) or Ash (*Fraxinus excelsior*). The field layer generally comprises: Creeping Bent (*Agrostis stolonifera*), Meadowsweet (*Filipendula ulmaria*) and Purple-loosestrife (*Lythrum salicaria*) and Skullcap (*Scutellaria galericulata*). In flushed or spring-fed sites the ground flora is often 'grassy' in appearance with abundant Remote Sedge (*Carex remota*) and Creeping Bent (*Agrostis stolonifera*). There are examples of lakeshore woodlands at McNamara's Lough and Ballymacdonnell Lough.

Ecological Interest	Links to Annex I Habitats	Locations
C- County Importance, Very Sensitive	This habitat is not linked to any Annex I habitats, however the habitat is considered to be of moderate to high conservation value in a local context as semi-natural woodlands are a rarity in the landscape.	McNamara's Lough, Ballymacdonnell Lough, Drummod, Cappanashish, Springmount, Knocknalecka



**Image 4.24: Woodland edge with rich ground flora of 'grassy' appearance**

- **Bog Woodland WN7**

This woodland occurs on areas of Cutover Bog (PB4) in the south eastern section of the study site between Bridgetown and O'Briensbridge in the townland of Clonboy, and in a few localised areas in the northern section of the study area. The examples of this habitat type that occur in this area are not yet fully developed but are instead in immature stages. Bog woodland typically occurs on peat bogs of significant depth, where the upper layers are well drained. The dominant tree species is Downy Birch (*Betula pubescens*), with occasional Silver Birch (*Betula pendula*), Scots Pine (*Pinus sylvestris*) and Willow (*Salix spp.*). Royal Fern (*Osmunda regalis*), Ivy (*Hedera helix*), Ling Heather (*Calluna vulgaris*), Bilberry (*Vaccinium myrtillus*), and Honeysuckle (*Lonicera periclymenum*) occur in the understory. Sedges (*Carex spp.*), rushes (*Juncus spp.*), Purple Moor-grass (*Molinia caerulea*) and Bracken (*Pteridium aquilinum*) also occur.

Ecological Interest	Links to Annex I Habitats	Locations
A/B- International to National Importance, Highly Sensitive	This habitat is linked to the Annex I priority habitat 'Bog Woodland (91D0)' which refers to woodland of intact raised bog and is very rare in Ireland. This priority habitat was not found within the study area.	Clonboy Leitrim Fahy More Inchalughoge Caherhurlly



**Image 4.25: Bog Woodland WN7 beginning to form on an area of Cutover Bog in the townland of Clonboy**

- **(Mixed) Broadleaved Woodland WD1**

This woodland type occurs throughout the study area with the greatest concentration in the central southern section. This category incorporates woodlands composed of both native and non-native broadleaved tree species with up to 25% conifers. The woodlands range in species diversity and composition, including; Oak (*Quercus* spp.), Beech (*Fagus sylvatica*), Sycamore (*Acer pseudoplatanus*), Ash (*Fraxinus excelsior*), Sweet Chestnut (*Castanea sativa*), and the occasional conifer such as Sitka Spruce (*Picea sitchensis*). The scrub layer and ground flora varies dramatically between the sites, depending on species mix of trees, drainage and management practices.

Ecological Interest	Links to Annex I Habitats	Locations
D- Local Importance (higher value), Moderately Sensitive	This habitat does not have links to any Annex I habitats and is quite common throughout the study area. However, compartments of deciduous woodland can be valuable to wildlife, providing refuge and foraging for a variety of animals. It is therefore considered to be of high conservation value in a local context.	Throughout Study Site





**Image 4.26: Mixed broadleaved woodland – Sweet Chestnut, Sessile Oak and Beech**

- **Mixed Broadleaved/Conifer Woodland WD2**

This habitat comprises mixed stands of broadleaved trees and conifer trees. Small areas of this woodland type can be found throughout the study area.

Ecological Interest	Links to Annex I Habitats	Locations
D- Local Importance (higher value), Moderately Sensitive	This habitat does not have links to any Annex I habitats, but does however offer some refuge to wildlife.	Throughout study site

- **(Mixed) Conifer plantation WD3**

Small compartments of this habitat type occur throughout the study area. Most have been planted for commercial plantation forestry.

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat does not have links to any Annex I habitats.	Throughout study site

- **Conifer Plantation WD4**

There are several extensive areas of commercial forestry in the study area, for example in the north western section in the townlands of Carrownagowan and Inchalughoge, and Carrownakilly in the east. There are also large areas in the uplands at Lackeragh and Magherareagh. Other small pockets are scattered throughout the study area. Many of these areas have been recently planted. The plantations are harvested for commercial forestry. The closed canopies of these woodlands deprive the ground layers of light and are therefore a diverse woodland flora is absent. Deciduous trees are often planted on the edge of conifer

plantations to increase species diversity. In some cases, habitats of conservation value such as Wet Heath have been planted with conifers.

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat does not have links to any Annex I habitats.	Large area in the north western corner and in the east, smaller areas are scattered throughout the study area

- **Scattered Trees and Parkland WD5**

Small clusters of Scattered Trees and Parkland WD5 occur in agricultural grasslands throughout the study area, and in a few larger areas such as the grove of Beech trees located near Bridgetown. Large mature native and non-native trees are a prominent feature in the landscape. Horse chestnut, Beech and Oak are a regular feature. These large mature trees can provide refuge for a number of bird species, including Long-eared Owl (*Asio otus*), bats and a variety of insects.

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat does not have links to any Annex I habitats, however some exquisite examples of mature trees have persisted in these landholdings.	Bridgetown



**Image 4.27: Scattered Trees and Parkland**

- **Scrub WS1**

Scrub vegetation occurs on thin soils where agriculture has been abandoned and scrub has encroached. To be considered scrub, the habitat must comprise 50% of shrubs, low trees and /or brambles with a canopy height of less than 5m. Species such as Hazel (*Corylus avellana*) and Gorse (*Ulex europaeus*) are a common component, as are Bramble (*Rubus fruticosus* agg.), Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*).

Areas of scrub occur throughout the study area, largely dominated by Gorse, Blackthorn, Hawthorn and Bramble.

Ecological Interest	Links to Annex I Habitats	Locations
D- Local Importance (higher value), Moderately Sensitive	This habitat is not linked to any Annex I habitats, however it can be important for wildlife, particularly insects and birds.	Throughout study site



**Image 4.28: Area of dense Scrub (WS1) in the townland of Kiluran More**

- Immature Woodland WS2**

Plots of immature woodland occur in few areas in the south of the study site. The plantations are principally on marginal agricultural land such as Wet grassland GS4 and the ground flora reflects these habitats. Immature Woodlands WS2 are a favoured foraging habitat for Hen Harrier.

Ecological Interest	Links to Annex I Habitats	Locations
D/E- Local Importance (lower to higher value), Moderately Sensitive to Robust	This habitat is not linked to any Annex I habitats, however it can be important for wildlife, particularly insects and birds.	Ardtaggle Bridgetown / O'Briensbridge





**Image 4.29: Immature plantation of Scot's Pine and Oak**

- **Ornamental/non-native shrub WS3**

This habitat type is associated with residential gardens and is also found surrounding abandoned houses. There was only one example of this habitat type which was not in a built-up area, this was located in the townland of Cappanlish. Ornamental shrubs consisted mainly of Fuschia (*Fuschia magellanica*), with Beech (*Fagus sylvatica*) and Sessile Oak (*Quercus petraea*).

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat does not have links to Annex I habitats.	Throughout Study Area in residential gardens and abandoned homesteads

- **Recently-felled Woodland WS5**

This habitat type occurs in large areas in the central northern section of the study area where Conifer Plantations are extensive. There are smaller areas of Recently-felled woodland in the southern region. Following harvesting of the timber these areas are recolonised by Rose-bay Willowherb (*Chamerion angustifolium*), Foxglove (*Digitalis purpurea*) and grasses such as False Oat-grass (*Arrhenatherum eliatum*) in between the brash and tree stumps.

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat is not linked to any Annex I habitats.	Widespread throughout Conifer plantations in the study area



- **Hedgerows WL1**

Hedgerows occur throughout the study area. They are often found in association with stonewalls and earth banks. These linear features are prominent throughout the study site. Good examples of well-managed and diverse examples were recorded, with the greatest species diversity occurring in the hedgerows bordering roads. In areas where management of hedgerows has ceased or is not upkept they have become gappy or are surrounded by encroaching scrub, or developing into tree-lines. Species composition may include native and ornamental/non-native species; native species included Honeysuckle (*Lonicera periclymenum*), Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Gorse (*Ulex europaeus*), Holly (*Ilex aquifolium*), Elder (*Sambucus nigra*) and Willow (*Salix* spp). Taller mature trees were also recorded within the hedgerows, such as Ash (*Fraxinus excelsior*), Oak (*Quercus* spp.) and Scots Pine (*Pinus sylvestris*) but to be considered hedgerows these must not dominate the feature. Non-native species recorded include Sycamore (*Acer pseudoplatanus*), Fuchsia (*Fuchsia magellanica*) and Montbretia (*Crocsmia x crocosmiflora*), and in some areas the extremely invasive exotic species Japanese Knotweed (*Fallopia japonica*). The ground flora of hedgerows within the study area was equally diverse supporting a variety of species corresponding to Dry Meadows and Grassy Verges Habitat GS2.

Ecological Interest	Links to Annex I Habitats	Locations
D- Local Importance (higher value), Moderately Sensitive	This habitat is not linked to any Annex I habitats. Tree-lines and hedgerows provide habitats for plants and animals and also provide connectivity between larger wildlife habitats, allowing birds and mammals to move between them.	Throughout study site

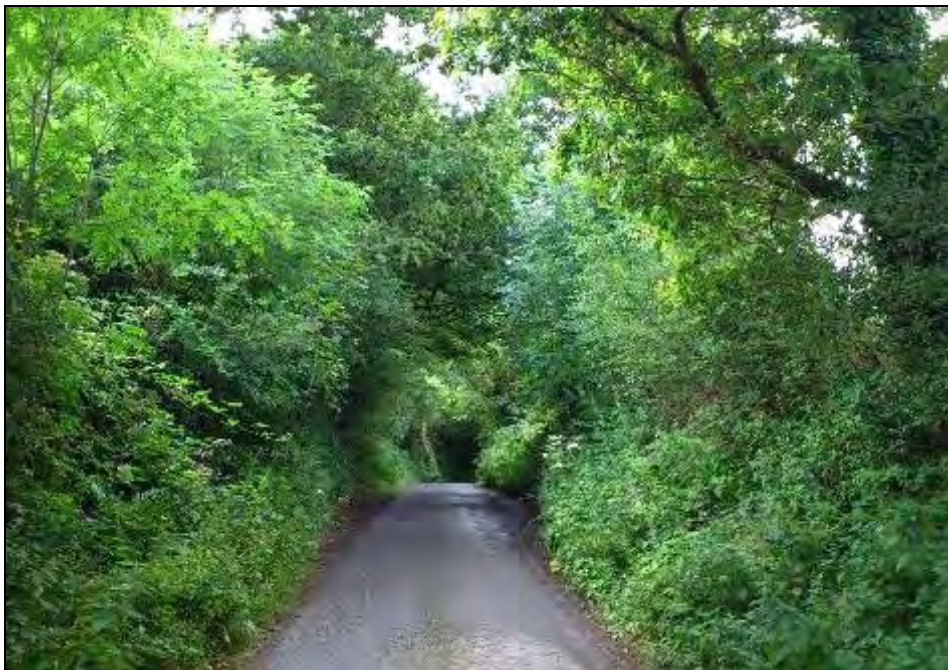


**Image 4.25: Traditional management of Hedgerows includes laying**

- **Tree-lines WL2**

Exceptional examples of mature tree-lines can be found enclosing farmlands throughout the study site. Mature Oak (*Quercus* spp) is a prominent feature with Scots Pine (*Pinus sylvestris*), Ash (*Fraxinus excelsior*), Beech (*Fagus sylvatica*) and Sycamore (*Acer pseudoplatanus*), Horsechestnut (*Aesculus hippocastanum*), Elder (*Sambucus nigra*) and Poplars (*Populus* Spp.) occur occasionally. Hedgerows dominated by Leyland Cypress (*Cupressocyparis leylandii*) and Laurel (*Prunus laurocerasus*), were also recorded, usually bordering houses. A good diversity of herbaceous species was found in the understorey, including Herb Robert (*Geranium robertianum*), Bush Vetch (*Vicia sepium*), Common Figwort (*Scrophularia nodosa*), Creeping Buttercup (*Ranunculus repens*), Bramble (*Rubus fruticosus*), Couch Grass (*Elytrigia repens*), Ivy (*Hedera helix*), Ground Ivy (*Glechoma hederacea*), Broad-leaved Dock (*Rumex obtusifolius*) and Cleavers (*Galium aparine*). The ground beneath the herbaceous layer often has a dense covering of moss. Tree-lines and hedgerows provide suitable habitats for nesting birds and can also be valuable for providing connectivity between larger areas of wildlife habitats, allowing birds and mammals to move between them.

Ecological Interest	Links to Annex I Habitats	Locations
D- Local Importance (higher value), Moderately Sensitive	This habitat is not linked to any Annex I habitats. Tree-lines and hedgerows provide habitats for plants and animals and also provide connectivity between larger wildlife habitats, allowing birds and mammals to move between them.	Throughout study site



**Image 4.26: Tree-lined road near Bridgetown**

- **Exposed Siliceous Rock ER1**

This habitat type is represented as rock outcrops which are often partially vegetated (less than 50% cover) with heath-type vegetation and lichens. These rock outcrops are frequently too small to map, occurring in a mosaic with Wet Heath HH3, Dry Siliceous Heath HH1, Scrub WS1, or Woodland habitats. There are also a number of disused quarries in the area which also fall into this classification. The largest of these disused quarries is at Ardskeagh which also has extensive areas of exposed loose shale, a large pit filled with water and numerous exposed pits which were excavated. These pits are somewhat recolonised with Gorse (*Ulex europaea*) and heather (*Calluna vulgaris*, *Erica cinerea*). There are smaller disused quarries which may be classified here or as Siliceous Scree and Loose Rock ER3.

Ecological Interest	Links to Annex I Habitats	Locations
D- Local Importance (higher value), Moderately Sensitive	This habitat has links to the Annex I habitat 'siliceous rocky slopes with chasmophytic vegetation (8220)'. No examples of this annexed habitat were found within the study area.	Throughout the study area



Image 4.27: Exposed sandstone at a disused quarry in Drumsillagh

- **Siliceous Scree and Loose Rock ER3**

This habitat type occurs in the townlands of Ardskeagh, Formoyle and Crean in the form of disused quarries of shale, or gravel. Typically this type of habitat occurs on the steep slopes or at the base of cliffs which may or may not be vegetated. Vegetation would comprise dwarf shrubs and mosses with less than 50% cover.



Ecological Interest	Links to Annex I Habitats	Locations
D- Local Importance (higher value), Moderately Sensitive	This habitat is linked to the Annex I habitat 'siliceous scree of the montane to snow levels ( <i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i> ) (8110)'. No examples of this annexed habitat occur within the study area.	Ardskeagh Formoyle Crean



Image 4.28: Loose shale at Ardskeagh disused quarry

- Exposed Sand, Gravel or Till ED1**

There is only one example of this habitat at the disused quarry at Ballyquin More. The exposed sand, gravel or till is often colonised by a variety of broadleaved herbs and grasses.

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat is not linked to any Annex I habitat.	Ballyquin More

- Spoil and Bare Ground ED2**

Small areas of spoil and bare ground occur throughout the study area, these are largely too small to map. This habitat type is often associated with excavations for the construction of buildings and roads, and the dredging of drains and watercourses. Largely unvegetated but if left undisturbed for long enough pioneer species will colonise these habitats.

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat is not linked to any Annex I habitat.	Throughout the study area

- Recolonising Bare Ground ED3**

This habitat classification is used to describe areas of bare ground or derelict sites that have been colonised by herbaceous plants. To be considered under this category vegetation

should exceed 50% cover. This habitat can support early pioneer plants and ruderal species such as Nettles (*Urtica dioica*); Willow-herbs (*Epilobium* spp.), Colt's-foot (*Tussilago farfara*), Teasel (*Dipsacus fullonum*), Dandelion (*Taraxacum* spp.), Ragwort (*Senecio jacobaea*) and annual grasses may also be present but should not dominate. There are examples of this habitat scattered throughout the study area.

Ecological Interest	Links to Annex I Habitats	Locations
D- Local Importance (higher value), Moderately Sensitive	This habitat is not linked to any Annex I habitat.	Throughout the study area

- **Active Quarries and Mines ED4**

There is a large active quarry in the southern section of the study area in the townland of Woodpark, near Bridgetown. It provides sand, gravel and stone for general construction purposes. There smaller quarries in the north eastern area of the study site.

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat is not linked to any Annex I habitat.	Woodpark Carnagnoe



**Image 4.29: Active quarry at Woodpark**



- **Refuse and Other Wastes ED5**

This category includes any areas where domestic, agricultural or industrial waste is stored, treated or disposed. There are two locations of this sort within the study area at Derry, and at Woodpark where there is a scrap yard.

Ecological Interest	Links to Annex I Habitats	Locations
E- Local Importance (lower value), Robust	This habitat is not linked to any Annex I habitat.	Woodpark Derry

- **Arable Crops BC1**

Agricultural land that is cultivated for the production of crops including cereals and root or leaf crops is included here. There was only one example of this type in the south western section of the study site; this was a Maize crop which had failed due to the poor summer. However, where they occur they may provide important habitats for birds associated with farmland such as Yellowhammer and Lapwing.

Ecological Interest	Links to Annex I Habitats	Locations
D/E- Local Importance (higher to lower value), Moderately Sensitive to Robust	This habitat is not linked to any Annex I habitat.	Drumsillagh

- **Horticultural Land BC2**

This category includes land that is cultivated for the production of fruits, vegetables, herbs and ornamental flowers. This habitat type is only found in one location in the south western region of the study area in the townland of Kilroughil.

Ecological Interest	Links to Annex I Habitats	Locations
D/E- Local Importance (higher to lower value), Moderately Sensitive to Robust	This habitat is not linked to any Annex I habitat.	Kilroughil

- **Stone Wall and Other Stonework BL1**

This category includes stone walls and other stonework excluding buildings which are intact, for example stone bridges and ruined stone buildings. These may have been constructed with or without mortar. Older structures which have been neglected may be important wildlife habitats. For example stone bridges and ruined buildings may have bat roost potential. Stone structures may be colonised by mosses, lichens and higher plants.

Ecological Interest	Links to Annex I Habitats	Locations
D/E- Local Importance (higher to lower value), Moderately Sensitive to Robust	This habitat is not linked to any Annex I habitat but may provide habitats for annexed species.	Throughout the study area



**Image 4.30: Dry stone wall at Ballybroghan with bat roost potential**

- Earth Banks BL2**

This is a common type of field boundary and is often found in conjunction with hedgerows or drainage ditches. It may be composed of peat, earth, gravel or stone. Typically these are vegetated with a wide range of grasses and broadleaved herbs. Earth banks are considered to be of high ecological value in a local context as they can provide refuge for a wide variety of wildlife. An example of this habitat type is described in Target Note **4505-a\_TN3**.

Ecological Interest	Links to Annex I Habitats	Locations
D/E- Local Importance (higher to lower value), Moderately Sensitive to Robust	This habitat is not linked to any Annex I habitat but may provide habitats for annexed species.	Throughout the study area



Image 4.31: Vegetated Earth bank at Fahy Beg

- **Buildings and Artificial Structures BL3**

This classification includes all buildings: domestic, agricultural, industrial; and artificial surfaces such as roads, tracks, car parks, pavements etc. Older structures can be important habitats for wildlife such as bats and birds.

Ecological Interest	Links to Annex I Habitats	Locations
D/E- Local Importance (higher to lower value), Moderately Sensitive to Robust	This habitat is not linked to any Annex I habitat but may provide habitats for annexed species.	Throughout the study area

#### 4.2.1 Wildlife Recorded

Where signs of wildlife were seen or heard they were recorded in the Target Notes. Records of Sparrowhawks (*Accipiter nisus*) seen and heard are in Target Notes **4444-d, 4504-a, 4505-a, 4505-b**. Signs of Badger (*Meles meles*) were recorded in Target Notes **4444-d, 4446-c, 4505-a, 4387-a, 4328-b**. Fox was seen and recorded in Target Notes **4328-b**. Signs of Deer (probably *Cervus elaphus*) recorded in Target Notes **4444-d, 4388-a, 4328-b, 4328-d**. Redshank (*Tringa tetanus*) was recorded in Target Note **4445-c**. Hare (*Lepus timidus hibernicus*) recorded in Target Notes **4446-c, 4503-b, 4388-a, 4388-d** and Feral Goats recorded in Target Note **4503-b**.

### 4.3 SUMMARY OF HABITATS

The habitats recorded within the study area, percentage cover and overall ranking in accordance with the guidelines in Table 4.1 are detailed in Table 4.3.

**Table 4.3: Conservation Value of Habitats Recorded Within the Study Area**

Habitat Group	Habitat Sub-Group	Habitat	Townland	Target Note Ref.	Ranking
<b>F Freshwater</b>	<b>FL Lakes and Ponds</b>	FL2 Acid oligotrophic lakes	Ballydonaghan	4271-a_TN2	C- County Importance
		FL4 Mesotrophic lakes	O'Briensbridge	4505-c_TN1	C- County Importance
		FL8 Other Artificial lakes and ponds	Ballyquin More	N/A	E- Local Importance (Lower Value)
	<b>FW Watercourses</b>	FW1 Eroding/upland rivers	Cappanaslish Killeagy (Goonan) Kilroughil Bridgetown	4445-c_TN3, 4445-b_TN5, 4446-c_TN6, 4505-a_TN5	C- County Importance
		FW2 Depositing/lowland rivers	Kilbane	4387-a_TN2	C- County Importance
		FW4 Drainage ditches	Throughout the Study Area	N/A	D- Local Importance (Higher Value)
	<b>FP Springs</b>	FP2 Non-calcareous springs	Kilmore	4504-a_TN2/3	D- Local Importance (Higher Value)
	<b>FS Swamps</b>	FS1 Reed and large sedge swamps	Ballynamona Ballydonaghan	4504-b_TN1, 4271-a_TN2	D- Local Importance (Higher Value)
<b>G Grassland &amp; Marsh</b>	<b>GA Improved grassland</b>	GA1 Improved agricultural grassland	Throughout Study Area	4387-d_TN1	E- Local Importance (Lower Value)
		GA2 Amenity grassland (improved)	Throughout Study Area	N/A	E- Local Importance (Lower Value)



Habitat Group	Habitat Sub-Group	Habitat	Townland	Target Note Ref.	Ranking
	<b>GS Semi-natural grassland</b>	GS1 Dry calcareous and neutral grassland	Throughout Study Area	N/A	D- Local Importance (Higher Value)
		GS2 Dry meadows and grassy verges	Killeagy Killeagy Kilroughil Kilroughil Ross Fahy Beg Ardataggle Inchalughoge Garraunboy	4387-b_TN1 4387-b_TN2, 4446-c_TN2, 4446-c_TN5, 4446-d_TN1, 4505-a_TN3, 4505-c_TN4, 4329-a_TN4, 4388-d_TN1	A/D- International to Local Importance (Higher Value)
		GS3 Dry-humid acid grassland	Killeagy Cloonconry Beg Springmount Ballymoloney Ballymoloney Ballymoloney O'Briensbridge Magherareagh Drummod Drummod Drummod Ballydonaghan Ballydonaghan Ballydonaghan Cloongaheen West Cloongaheen West Aillemore	4387-b_TN2, 4445-a_TN1, 4504-a_TN4, 4445-b_TN2, 4445-b_TN3, 4445-b_TN4, 4505-b_TN4, 4388-c_TN3, 4270-b_TN9, 4270-d_TN7, 4270-d_TN8, 4271-a_TN5, 4271-d_TN2, 4271-d_TN4, 4386-b_TN1, 4386-b_TN4, 4388-c_TN4	B/D- National to Local Importance (Higher Value)
		GS4 Wet grassland	Killeagy Cloongaheen East Cloonconry Beg	4387-b_TN2, 4387-c_TN1, 4445-a_TN2,	A/D- International to Local Importance (Higher Value)
			Drumsillagh/Sallybank Drumsillagh/Sallybank Aharinaghbeg	4503-b_TN1, 4503-b_TN2, 4503-d_TN1,	

Habitat Group	Habitat Sub-Group	Habitat	Townland	Target Note Ref.	Ranking
			Fahy More Lackereagh More Kilroughil Kilroughil Kilroughil Leitrim Bridgetown Bridgetown O'Briensbridge Drummod Drummod Ballydonaghan Caherhurlly Caherhurlly Ballydonaghan Inchalughloge Magherareagh	4445-d_TN1 4446-a_TN1, 4446-c_TN1, 4446-c_TN3 4446-c_TN4, 4504-b_TN3, 4505-a_TN4, 4505-a_TN8, 4505-d_TN1, 4270-b_TN5, 4270-b_TN7, 4270-b_TN14, 4271-b_TN1, 4271-b_TN2, 4271-d_TN1, 4329-a_TN1, 4388-c_TN2	
	<b>GM Freshwater marsh</b>	GM1 Marsh	Ballynamona Bridgetown Bridgetown Ballydonaghan Drummod Ballymacdonnell Ballydonaghan Ballydonaghan	4504-b_TN1, 4505-a_TN4, 4505-a_TN7, 4271a_TN2, 4270-b_TN8, 4270-d_TN9, 4271-a_TN2, 4271-a_TN3	C/D- County to Local Importance (Higher Value)
<b>H Heath &amp; Dense Bracken</b>		HH1 Dry siliceous heath	Ballymoloney Ballymoloney Carrownakilly	4445-b_TN1, 4445-b_TN4, 4330-c_TN2	A/B- International to National Importance
	<b>HH Heath</b>	HH3 Wet heath	Formoyle More Muingboy/Kyleglass Kyleglass Leitrim O'Briensbridge Drummod	4444-d_TN1, 4444-d_TN2, 4444-d_TN3, 4504-b_TN3, 4505-a_TN1, 4270-d_TN5,	A/D- International Importance to Local Importance (Higher Value)

Habitat Group	Habitat Sub-Group	Habitat	Townland	Target Note Ref.	Ranking
			Drummod Ballymacdonnell Caherhurly Caherhurly Inchalughloge Carrownakilly Cloongaheen West Coumbrack Magherareagh Magherareagh Carrownakilly	4270-d_TN6, 4270-d_TN10, 4271-b_TN1, 4271-b_TN3, 4329-a_TN1, 4330-c_TN1, 4386-b_TN2, 4388-a_TN3, 4388-c_TN1, 4388-c_TN2, 4330-a_TN2	
	<b>HD Dense bracken</b>	HD1 Dense bracken	Killuran More Kilroughil Drummod Classagh	4328-b_TN3, 4446-c_TN5, 4270-b_TN10, 4388-a_TN1	D/E-Local Importance (Higher to Lower value)
<b>P Peatlands</b>	<b>PB Bogs</b>	PB1 Raised bogs	Clonboy	4505-b_TN2,	A/B- International to National Importance
		PB2 Upland blanket bog	Gortatrassa, Killuran More Gortatrassa Inchalughloge Ballydonaghan Drummod Ballydonaghan Ballydonaghan Coumnagun Carrownakilly Cloongaheen West Classagh Classagh	4328-b_TN1, 4328-b_TN2, 4328-d_TN2, 4329-a_TN2 4270-b_TN13, 4270-d_TN1, 4271-a_TN1, 4271-a_TN4, 4329-b_TN1, 4330-a_TN1, 4386-b_TN3, 4388-a_TN4, 4388-a_TN5	A/C- International to County Importance
		PB4 Cutover bog	Gortatrassa O'Briensbridge O'Briensbridge Clonboy	4328-b_TN1, 4505-a_TN1, 4505-a_TN2, 4505-b_TN2,	C- County Importance

Habitat Group	Habitat Sub-Group	Habitat	Townland	Target Note Ref.	Ranking
	<b>PF Fens and Flushes</b>		O'Briensbridge Inchalughloge	4505-b_TN4, 4329-a_TN3	
		PF2 Poor fen and flush	Muingboy/Kyleglass Ballydonaghan Cloongaheen East	4444-d_TN2, 4270-b_TN12, 4387-c_TN2	C- County Importance
		PF3 Transition mire and quaking bog	Ballydonaghan Ballydonaghan Ballynamona	4270-d_TN2, 4271-a_TN4, 4504-b-TN1	B-National Importance
<b>W Woodland and scrub</b>	<b>WN Semi-natural woodland</b>	WN1 Oak-birch-holly woodland	Gortatrassa Aharinaghbeg Fahy More (South) Knockatloe Drummod Drummod Drummod Ballydonaghan	4328-d_TN1, 4503-d_TN2, 4504-c_TN1, 4270-b_TN1, 4270-b_TN4, 4270-b_TN10, 4270-b_TN11, 4270-d_TN4	B/C- National to County Importance
		WN2 Oak-ash-hazel woodland	Knockaderreen	4446-b_TN1	C- County Importance
		WN4 Wet Pendunculate oak-ash woodland	Killuran More Killuran More Kilmore Knocklaur Drummod	4328-b_TN6, 4328-b_TN7, 4504-a_TN2-3, 4270-b_TN2, 4270-b_TN6	C/D- County to Local Importance (Higher Value)
		WN5 Riparian woodland	Kilmore Killeagy (Goonan) Knockaderreen Ross Bridgetown Bridgetown/O'Briensbridge	4504-a_TN1, 4445-b_TN5, 4446-b_TN1, 4446-d_TN2, 4504-b_TN2, 4505-a_TN9	C/D- County to Local Importance (Higher Value)
		WN6 Wet willow-alder-ash woodland	Cappanaslish Cappanaslish O'Briensbridge	4445-c_TN1, 4445-c_TN2, 4505-c_TN1,	C/D- County to Local Importance (Higher Value)



Habitat Group	Habitat Sub-Group	Habitat	Townland	Target Note Ref.	Ranking
			O'Briensbridge Drummod	4505-c_TN2, 4270-b_TN3	
		WN7 Bog woodland	Cloongaheen East Fahy More	4387-c_TN2, 4504-d_TN2	C- County Importance
	<b>WD Highly modified/non-native woodland</b>	WD1 (Mixed) broadleaved woodland	Cappanaslish Bridgetown O'Briensbridge Ardataggle	4445-c_TN3, 4505-a_TN5, 4505-c_TN1, 4505-c_TN3	D- Local Importance (Higher Value)
		WD2 Mixed broadleaved/conifer woodland	Killuran More Clonboy	4328-b_TN3, 4505-a_TN11	D- Local Importance (Higher Value)
		WD3 Mixed Conifer Woodland	On the slopes and foothills of Slieve Bearnagh and scattered throughout study area	N/A	E- Local Importance (Lower Value)
		WD4 Conifer plantation	On the slopes and foothills of Slieve Bearnagh and scattered throughout study area	N/A	E- Local Importance (Lower Value)
		WD5 Scattered trees and parkland	Bridgetown/O'Briensbridge	4505-a_TN10	D- Local Importance (Higher Value)
	<b>WS Scrub/transitional woodland</b>	WS1 Scrub	Killuran More Killeagy Cloongaheen East Ballymoloney Ballymoloney Leitrim Ballydonaghan Carrownakilly Classagh Magherareagh	4328-b_TN5, 4387-b_TN2, 4387-c_TN2, 4445-b_TN1, 4445-b_TN4, 4504-b_TN3, 4271-a_TN3, 4330-a_TN3, 4388-a_TN1, 4388-c_TN2	D- Local Importance (Higher Value)
		WS2 Immature woodland	Ardataggle Bridgetown/O'Briensbridge	4504-d_TN1, 4505-b_TN1	D- Local Importance (Higher Value)
		WS3 Ornamental/ non-native	Cappanaslish	4445-c_TN4	D- Local Importance

Habitat Group	Habitat Sub-Group	Habitat	Townland	Target Note Ref.	Ranking
		shrubs			(Higher Value)
		WS5 Recently-felled woodland	O'Briensbridge	4505-b_TN3	E- Local Importance (Lower Value)
	<b>WL Linear woodland/scrub</b>	WL1 Hedgerows	Killuran More Killuran More Cloongaheer Fahy Beg Bridgetown Throughout study area	4328-b_TN3, 4328-b_TN4, 4387-a_TN1, 4505-a_TN3, 4505-a_TN6	D- Local Importance (Higher Value)
		WL2 Treelines	Cloongaheen West Fahy Beg Bridgetown and Throughout study area	4387-a_TN2, 4505-a_TN3, 4505-a_TN6	C- County Importance
<b>E Exposed rock and disturbed ground</b>	<b>ER Exposed rock</b>	ER1 Exposed siliceous rock	Throughout study area	N/A	D- Local Importance (Higher Value)
		ER3 Siliceous scree and loose rock	Ardskeagh Formoyle Crean	N/A	D- Local Importance (Higher Value)
		ED1 Exposed sand, gravel or till	Ballyquin More	N/A	E- Local Importance (Lower Value)
		ED2 Spoil and bare ground	Throughout study area	N/A	E- Local Importance (Lower Value)
		ED3 Recolonising bare ground	Throughout study area	N/A	D- Local Importance (Higher Value)
		ED4 Active quarries and mines	Woodpark Carnagnoe	N/A	E- Local Importance (Lower Value)
		ED5 Refuse and Other Wastes	Woodpark Derry	N/A	E- Local Importance (Lower Value)
<b>B Cultivated and built</b>	<b>BC Cultivated land</b>	BC1 Arable crops	Drumsillagh	N/A	D/E-Local Importance (Higher

Habitat Group	Habitat Sub-Group	Habitat	Townland	Target Note Ref.	Ranking
land					to Lower value)
		BC2 Horticultural land	Kilroughil	N/A	D/E-Local Importance (Higher to Lower value)
	BL Built land	BL1 Stone walls and other stonework	Ballydonaghan Ballydonaghan Drumsillagh/Sallybank	4271-a_TN6, 4271-d_TN3, 4503-b_TN1	D/E-Local Importance (Higher to Lower value)
		BL2 Earth banks	Fahy Beg and throughout study area	4505-a_TN3	D/E-Local Importance (Higher to Lower value)
		BL3 Buildings and artificial surfaces	Ballydonaghan Ballymacdonnell Coumbrack and throughout study area	4270-d_TN3, 4270-d_TN11, 4388-a_TN2	D/E-Local Importance (Higher to Lower value)

## 4.4 SITES OF LOCAL BIODIVERSITY INTEREST

Discussed below are the habitat types found within Mid Clare and their sensitivity to development. The habitat types are subdivided into **Highly Sensitive**, **Very Sensitive**, **Moderately Sensitive** and **Robust Habitats**. Habitats classified as Highly Sensitive or Very Sensitive should, where appropriate, form part of plans to retain and enhance existing biodiversity.

### 4.4.1 A/B: Internationally/Nationally Important Ecological Sites – Highly Sensitive Habitats

These habitats have been chosen due to their links to Annex I habitats as listed in the Habitats Directive. These habitats are considered to be highly sensitive. Locations of these habitats within the study area are given, along with Target Notes numbers for the best examples of these habitat types.

#### Grassland Habitats

- Dry Meadows and Grassy Verges GS2 corresponds to the EU Annex I habitat 'Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) (6510)'. There was one example of this habitat type found within the study area in the Ardtaggle townland (Target Note **4505-c\_TN4**).
- Dry-humid Acid Grassland GS3 is linked to the Annex I priority habitat 'Species-rich *Nardus* grasslands on siliceous substrates in mountain areas (6230)'. Acid grasslands are frequent throughout the study area, however the priority habitat was only found at two locations: in the townlands of Aillemore and Drummod (Target Notes **4388-c\_TN4** and **4270-d\_TN8**).
- Wet Grassland GS4 is linked to the Annex I habitat '*Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinia caerulea*) (6410)'. Wet Grassland is abundant throughout the study area, but examples corresponding to the annexed habitat were found at only three sites: in the townlands of Kilroughil and Ballydonaghan (Target Notes **4446-c\_TN3**, **4446-c\_TN4** and **4270-b\_TN14**).

#### Heath and Dense Bracken Habitats

- Dry Siliceous Heath HH1 is linked to the Annex I habitat 'European dry heaths (4030)'. There were few areas of Dry heath found in the study area however one example of the annexed habitat is located in the townland of Ballymoloney (Target Note **4445-b\_TN1**).



- Wet Heath HH3 corresponds to the annexed habitat 'northern Atlantic wet heaths with *Erica tetralix* (4010)'. Found in the townlands of Formoyle More, Kyleglass, Ballymacdonnell, Inchalughoge and Cloonaheen West. Good examples of this habitat type are described in Target Notes **4444-d\_TN1**, **4444-d\_TN3**, **4270-d\_TN10**, **4329-a\_TN1** and **4386-b\_TN2**.

#### Peatland Habitats

- Raised Bog PB1 is a priority habitat if actively peat-forming as 'Active Raised Bogs (7110)'. Raised bog areas are located in the townland of Clonboy (Target Notes **4505-b\_TN2** and **4329-a\_TN2**).
- Upland blanket bog PB2 where it is actively peat-forming corresponds to the priority habitat 'Blanket bog (if active) (7130)'. Located in the townlands Inchalughoge, Gortarassa, Classagh, Ballydonaghan, Ballykildea, Killuran More, Coumnagun and Carrownakilly, Target notes 4328-b\_TN1, 4328-d\_TN2, 4329-a\_TN2, 4271-a\_TN1, 4271-a\_TN4, 4329-b\_TN1, 4330-a\_TN1, 4386-b\_TN3, 4388-a\_TN4 and 4388-a\_TN5
- Transition Mire and Quaking Bog PF3 corresponds to the annexed habitat, 'Transition mires and quaking bogs (7140)'. Found at a single location, in the townland of Ballynamona (see Target Note **4504-b\_TN1**).

#### Woodland Habitats

- Oak-birch-holly Woodland WN1 is linked to the Annex I habitat 'Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (91A0)'. This habitat is found at one location, in the townland of Aharinagbeg (see Target Note **4503-d\_TN2**).

The areas listed above are of particular interest on an International and National level. These habitats are listed under Annex I of the EU Habitats Directive and a number of them are also Priority Habitats. These sites are rich in biodiversity and support a number of Annex II species. The Peatlands and Woodlands provide refuge and habitat for numerous animal and invertebrate species, including, Badger, Fox, Pine Martin, Smooth Newt, Common Frog, various species of bird including Barn Owl, Sparrow Hawk, Kestrel, Meadow Pipit, Sky Lark, and a variety of beetle, dragon fly and damselfly species.

#### 4.4.2 C - County Importance – Very Sensitive Habitats

These habitats are considered to be of High Ecological Importance to a County Level as they contain semi-natural habitat types with high biodiversity in a county context with a high

degree of naturalness. They also form valuable linkages and function as part of the designated sites, which are found within and border the study area.

### **Freshwater Habitats**

- Acid oligotrophic lakes FL2. Found at Ballydonaghan Lough (Target Note **4271-a\_TN2**).
- Mesotrophic Lakes FL4. McNamara's Lough (Target Note **4505-c\_TN1**).
- Eroding Upland Rivers FW1. Found throughout the study area.
- Depositing/Lowland Rivers FW2. Found throughout the study area.
- Reed and Tall Sedge Swamps FS1. Occurs in drains, rivers and fringing lakes throughout study area, for example at Ballynamona (Target Note **4504-b\_TN1**).

### **Grassland and Marsh Habitats**

- Dry-humid Acid Grassland GS3 which corresponds to the priority habitat 'Species-rich *Nardus* grasslands on siliceous substrates in mountain areas (6230)' but is small in size is considered to have a high ecological importance at a county level. Examples of this kind were found at Drummod and Ballydonaghan (**4270-d\_TN8** and **4271-d\_TN2**).

### **Peatland Habitats**

- Upland Blanket Bog PB2 which does not correspond to the annexed habitat 'Blanket Bog (if active) (7130)' is found throughout the study area. Good examples of this habitat are found in Ballydonaghan, Drummod, Killuran More and described in Target Notes 4270-b\_TN13, 4270-d\_TN1, 4328-b\_TN2.
- Cutover Bog PB4 which does not correspond to the annexed habitat, 'depressions on peat substrates of the Rhynchosporion (7150)' was found in numerous locations throughout the study area, including Gortarassa, O'Briensbridge and Clonboy (see Target Notes **4328-b\_TN1**, **4505-a\_TN1**, **4505-a\_TN2** and **4505-b\_TN2**).
- Poor Fen and Flush PF2 is limited in extent in Ireland and thus is of special conservation importance. This habitat is found in a few locations within the study area, for example is the townlands of Muingboy and Cloonagheen East (Target Notes **4444-d\_TN1** and **4387-c\_TN2**)

### **Woodlands**

- Oak-Birch-Holly Woodland WN1 which does not correspond to the annexed habitat 'Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (91A0)' occurs in

small isolated pockets scattered throughout the study area. Good examples of this habitat can be found in the townlands of Drummod, Knockaloe and Ballydonaghan (Target Notes **4270-b\_TN1/TN4/TN11** and **4270-d\_TN4**).

- Oak-Ash-Hazel Woodland WN2 was found only at one site, in the townland of Knockaderreen (Target Note **4446-b\_TN1**).
- Wet Pedunculate Oak-Ash Woodland WN4. There are small isolated areas of this habitat type in the western section of the study area, located in the townlands of Kilmore, Drummod, Killuran More and Knocklaur (Target Notes **4328-b\_TN6**, **4328-b\_TN7**, **4504-a\_TN2-3**, **4270-b\_TN2** and **4270-b\_TN6**).
- Riparian Woodland WN5 is considered to be of ecological importance on a county level as semi-natural woodlands are of limited distribution in Ireland. This type of habitat is found where there are numerous streams and rivers for example in the vicinity of Slieve Bernagh and Lackeragh Mountain (Target Notes **4504-a\_TN1**, **4445-b\_TN5**, **4446-b\_TN1** and **4446-d\_TN2**).
- Wet Willow-Alder-Ash Woodland WN6 which does not correspond to the Annex I habitat 'Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-padion, Alnion incanae, Salicion albae) (91E0)' but is semi-natural is considered to be of ecological importance to county level as semi-natural woodlands are of limited distribution in Ireland. This type of habitat is found on the shores of McNamara's Lough and Ballymacdonnell Lough, and in the townlands of Drummod, Cappanaslish and O'Briensbridge (Target Notes **4445-c\_TN1/TN2**, **4505-c\_TN1/2** and **4270-b\_TN3**).
- Treelines WL2 are of limited extent in Ireland and are considered to be of high ecological value in a county context, particularly when composed of native species, as they can provide a corridor along which wildlife can travel and play a role in connecting habitats which have become fragmented in the landscape. Treelines of note were found in the townlands of Cloonagheen West, Fahy Beg and Bridgetown (Target Notes **4387-a\_TN2** and **4505-a\_TN3/TN6**).

#### **4.4.2.1 D – Local Importance (Higher Value) – Moderately Sensitive Habitats**

Sites containing some semi-natural habitat or locally important for wildlife;

##### **Freshwater Habitats**

- Drainage Ditches FW4. These are found scattered throughout the study area.

### Grassland and Marsh Habitats

- Dry Meadows and Grassy Verges GS2. Where this habitat does not correspond to the annexed habitat 'Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) (6510)' but has a good diversity of species, it is considered to be of high ecological importance at a local level. This habitat was found at a number of locations within the study area. Good examples are described in Target Notes **4387-b\_TN1**, **4387-b\_TN2**, **4445-d\_TN1**, **4446-c\_TN2**, **4329-a\_TN4** and **4388-d\_TN1**.
- Dry-humid Acid Grassland GS3 which does not correspond to the priority habitat 'Species-rich *Nardus* grasslands on siliceous substrates in mountain areas (6230)' but is fairly species-rich is considered to have a high ecological importance at a local level. This type of habitat was found scattered throughout the study area with good examples described in Target Notes **4387-b\_TN2**, **4445-a\_TN1**, **4504-a\_TN4**, **4445-b\_TN2**, **4445-b\_TN5**, **4505-b\_TN4**, **4388-c\_TN3** and **4270-b\_TN9**.
- Wet Grassland GS4. Where Wet Grassland does not correspond to the Annex I habitat '*Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) (6410)', but is still quite species-rich, it is considered to be of high ecological importance on a local scale. This habitat type was found scattered throughout the study area. Good examples are described in Target Notes **4387-c\_TN1**, **4445-a\_TN2**, **4503-b\_TN1**, **4445-d\_TN1**, **4446-a\_TN1**, **4505-d\_TN1**, and **4270-b\_TN5**.
- Marsh GM1. This habitat type was scattered throughout the study area. Good examples of this habitat type are described in Target Notes **4505-a\_TN7**, **4271-a\_TN2**, **4270-b\_TN8** and **4271-a\_TN3**.

### Heath and Dense Bracken Habitats

- Dry Siliceous Heath HH1 where it does not correspond to the Annex I habitat 'European dry heaths (4030)' but still supports a good diversity of species is considered to be of high ecological importance on a local scale. This type of habitat is located in the townlands of Ballymoloney and Carrownakilly (Target Notes **4445-b\_TN4** and **4330-c\_TN2**).
- Wet Heath HH3 which does not correspond to the annexed habitat 'northern Atlantic wet heaths with *Erica tetralix* (4010)'. Found in the townlands of Formoyle More, Kyleglass, Ballymacdonnell, Inchalughoge and Cloonaheen West. Good examples of this habitat type are described in Target Notes **4504-b\_TN3**, **4505-a\_TN1**, **4270-d\_TN5**, **4271-b\_TN1**, **4388-a\_TN3** and **4388-c\_TN1**.

### Woodlands and Scrub

- (Mixed) Broadleaved Woodland WD1. This habitat type is found throughout the study area, for example, a particularly diverse example with a good proportion of native species is located at Cappanlish (Target Note 4445-c\_TN3).
- Mixed Broadleaved/Conifer Woodland WD2. This woodland type is also found throughout the study site such as at Killuran More and Clonboy (Target Notes **4338-b\_TN3** and **4505-a\_TN11**).
- Scrub WS1. This habitat type is found throughout the study area.
- Immature Woodland WS2. Found in the townlands of Ardataggle and Bridgetown/O'Briensbridge.
- Ornamental/non-native Shrubs WS3. Found throughout the study area localised in residential areas.
- Hedgerows WL1 criss-cross the whole of the study area, except for some upland and conifer plantation areas.

### Exposed Rock and Disturbed Ground

- Exposed Siliceous Rock ER1 was found throughout the study area. One of the larger examples of this habitat type is located in the disused quarry at Ardskeagh.
- Siliceous Scree and Loose Rock ER3 was found in several locations such as in the townlands of Ardskeagh, Formoyle and Crean.
- Recolonising Bare Ground ED3 is found scattered throughout the study area.

### Cultivated and Built Land

- Stone Walls and Other Stonework BL1 which may provide wildlife habitats and thus are classified as having high ecological value in a local context are found throughout the study area, for example in the townland of Ballydonaghan (Target Note **4271-a\_TN3**).
- Earthbanks BL2 are found throughout the study area, often in association with Treelines or Hedgerows.
- Buildings and Artificial Surfaces BL3 may be considered to be of high ecological value in a local context where they provide habitats for wildlife, for example an abandoned homestead in Coumbrack (Target Note **4388-a\_TN3**).



#### 4.4.2.2 E- Local Importance (Lower Value) – Robust Habitats

##### **Grassland and Marsh Habitats**

- Improved Agricultural Grassland GA1 is one of the main habitats in the study area.
- Amenity Grassland GA2 is found throughout the study area, mainly in gardens and parklands.

##### **Heath and Dense Bracken Habitats**

- Dense Bracken HD1 was recorded in small patches throughout the study area, mainly in areas of under-grazed farmland.

##### **Woodlands**

- (Mixed) Conifer plantation WD3. Found in small pockets throughout the study area, often in association with Conifer Plantations WD4.
- Conifer Plantation WD4. Large areas in the north western section, in the townlands of Carrownagowan and Inchalughoge, and Carrownakilly in the east. There are also large areas in the uplands at Lackeragh and Magherareagh.
- Scattered Trees and Parkland WD5. A good example of this habitat is located near Bridgetown.
- Recently Felled Woodland WS5 occurs throughout the study area in association with Conifer Plantations WD4.

##### **Exposed Rock and Disturbed Ground**

- Exposed Sand, Gravel or Till ED1 was found at the disused quarry in Ballyquin More
- Spoil and Bare Ground ED2 was found throughout the study area.
- Active Quarries and Mines ED4. A good example of this type was found at Woodpark, near Bridgetown.
- Refuse and Other Wastes ED5. Found in Woodpark and Derry townlands.

##### **Cultivated and Built Land**

- Arable Crops BC1 was found in the townland of Drumsillagh/Sallybank
- Horticultural Land BC2. Found in the townland of Kilroughil.
- Stone Walls and Other Stonework BL1. Found throughout the study area.
- Buildings and Artificial Surfaces BL3. Found throughout the study area.

The locations of these habitats can be found in **Table 4.2** and in the supporting Habitat Map.

## 4.5 HABITAT MANAGEMENT AND INVASIVE SPECIES

Some of the sites found within the study area which are of high conservation value are under threat from invasive species. The locations of these invasive species can be seen on the habitat map. These sites are in need of management measures in order to restore them to a favourable conservation status. Recommendation on the treatment and prevention of spread these species is provided in various guidance documents, including the following:

- Clare County Council, (2009). *Clare Invasive Alien Species Project*. The Heritage Council & Clare County Council,
- European Commission's Invasive Species website.  
([http://ec.europa.eu/environment/nature/invasivealien/index\\_en.htm](http://ec.europa.eu/environment/nature/invasivealien/index_en.htm)).
- Invasive Species Ireland. ([www.invasivespeciesireland.com](http://www.invasivespeciesireland.com)) *Best Practice Management Guidelines*, and
- NRA, 2008c. *Guidelines on The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads* .National Roads Authority

### 4.5.1 Himalayan balsam

The Broadford/Glenomra River is the largest Lowland/depositing River FW2 within the study area. Numerous rivers and streams drain the adjacent upland areas to the north and south. It flows through the valley east of Broadford which is a natural floodplain. The bank-side vegetation is currently under threat from invasion by Himalayan balsam (*Impatiens glandulifera*). This is an introduced species which is native to the western Himalayan Mountains; it can form dense monocultural stands, shading out native plants, in particular colonising river banks and damp areas. It is considered to cause significant environmental impact and is known to be invasive in many parts of continental Europe. This species was noted on the day of the site visit to have colonised an area of the riverbank where the Kilbane road crosses the Glenomra River at Scott's Bridge. This not only threatens this waterside vegetation but is also capable of spreading as seeds may be dispersed by water, animal or human means. It is recommended that this species be removed in a sensitive fashion in order to prevent the spread of this species in accordance with the Best Practice Management Guidelines.

#### 4.5.2 Rhododendron

There were a number of heath and bog habitats found to be relatively intact, some of which are classified as Annex I habitats, and therefore of high ecological value. These habitats are important for their composition of species, which is largely native. Where there is a semi-natural assemblage of native species the habitat will support a good variety of insects, birds and mammals. The integrity of these habitats in some cases is threatened by the invasion of Rhododendron (*Rhododendron ponticum*) which is starting to spread in numerous areas. This poses a threat to the diversity of the bog habitat, as Rhododendron is an invasive species which grows thickly and casts a heavy shade, suppressing the growth of other plants beneath it.

It is recommended that the Rhododendron be cleared at these sites, in order to preserve the integrity of the bog habitat. There are several publications available on control of Rhododendron, such as Best Practice Management Guidelines Rhododendron *Rhododendron ponticum* and Cherry Laurel *Prunus laurocerasus*, Maguire, C.M., Kelly, J. and Cosgrove, P.J. (2008). Methods for control of Rhododendron described in this publication include cutting and removal of the plant, and treatment of stumps.

#### 4.5.3 Japanese knotweed

Japanese knotweed (*Fallopia japonica*) is categorised as one of the 100 worst invasive alien species list by the Global Invasive Species programme. This species was seen in numerous locations within the study area, for the most part it was seen to be colonising hedgerows and treelines, and in one particular case it has infested an entire field in the townland of Inchalughoge in the northern section of the study area. Japanese knotweed (*Fallopia japonica*) is not known to reproduce by seed in Ireland but does however, rapidly spread vegetatively. A new colony can grow from a small fragment of rhizome (underground stem). It forms dense thickets and shades out native plant species, reducing local biodiversity and preventing the dispersal of native species. It can also do serious damage to buildings, roads and infrastructure as well as river banks as it spreads by rhizomes, these send up new shoots which are strong enough to penetrate through tarmac. It is extremely important to adhere to the Best Practice Management Guidelines, for example those published by Invasive Species Ireland and Clare County Council, as Japanese knotweed is notoriously difficult to control and needs to be treated and disposed of properly in order to prevent its spread.

## 4.6 ECOLOGICAL CORRIDORS AND BUFFER ZONES

The survey identified areas of biodiversity importance on a local and national level. Some examples of priority habitat protected under the EU Habitats Directive were also identified. Under the provisions of the Directive require Member States have an obligation under the Habitats Directive to protect, maintain or restore natural habitats, which are of conservation importance as defined in the Directive, at a favourable conservation status.

In addition, Article 10 of the Habitats Directive refers to features of the landscape which are of major importance for wild flora and fauna, by virtue of their linear and continuous structures (such as rivers with their banks or the traditional systems for marking field boundaries), or their function as stepping stones (such as ponds or small woods). These features are essential for the migration, dispersal and genetic exchange of wild species. Member States are required to endeavour, where they consider it necessary, in their land use planning and development policies, to encourage the management of these features of the landscape, with a view to improving the ecological coherence of the Natura 2000 network.

Many habitats of conservation concern particularly designated sites are linked to the surrounding landscape by natural and manmade features, such as water courses (rivers, streams, canals and drainage ditches), hedgerows, treelines, roads and railways. Therefore, areas of conservation concern must not be considered in isolation, their linkages and buffer zones must also be protected to ensure the continued migration of species and genetic diversity throughout the study area.

Prescribing buffer zone widths to within or outside designated sites, areas of conservation concern or ecological corridors is dependant on a number of variables and often a 'one size fits all' approach is not always applicable. The need for maintaining a buffer zone adjacent to conservation sites is well documented; the width, however, is contested.

When prescribing buffer zones the following should be considered;

- Conservation value of the feature to be protected,
- Intensity of adjacent land use,
- Tolerance of species and habitat to disturbance,
- Buffer characteristics (e.g. slope, soil type);

- Specific buffer functions,
- Proximity to existing development and lands zoned for development, and
- Area that could be practicable and appropriate from the point of management of the buffer zone.

For example, buffer zones have been recommended for Riparian Zone Management in Forestry and are detailed in guidance from the Department of Agriculture Food and the Forest Service. The purpose of these buffer zones is to protect watercourses from forestry activities. Details of recommended buffer zones are provided in **Table 4.4** below.

**Table 4.4: Buffer Zone widths for Riparian Zone Management in Forestry**

Geology –soils – terrain – slope - run off		
Average slope leading to aquatic zone	Zone width on each side of the aquatic zone	Zone width on each side of highly erodable soils
Moderate slope 0-1in7	10m	15m
Steep 1in7 –1in3	15m	20m
Very steep 1in3 or >	20m	25m

(Source:[http://www.westernrbd.ie/PDF/Riparian/RiparianZone\\_Workshop\\_Pat\\_OCallaghan.pdf](http://www.westernrbd.ie/PDF/Riparian/RiparianZone_Workshop_Pat_OCallaghan.pdf))

There are no prescribed buffer zones for ecological corridors and designated sites, therefore for illustrative purposes buffer zones of 20m, 50m and 100m have been place around key ecological corridors and designated sites. Drains and hedgerows also provide valuable corridors; these features are illustrated but are not buffered. The buffer zones are illustrated in **Figure 4.1**.



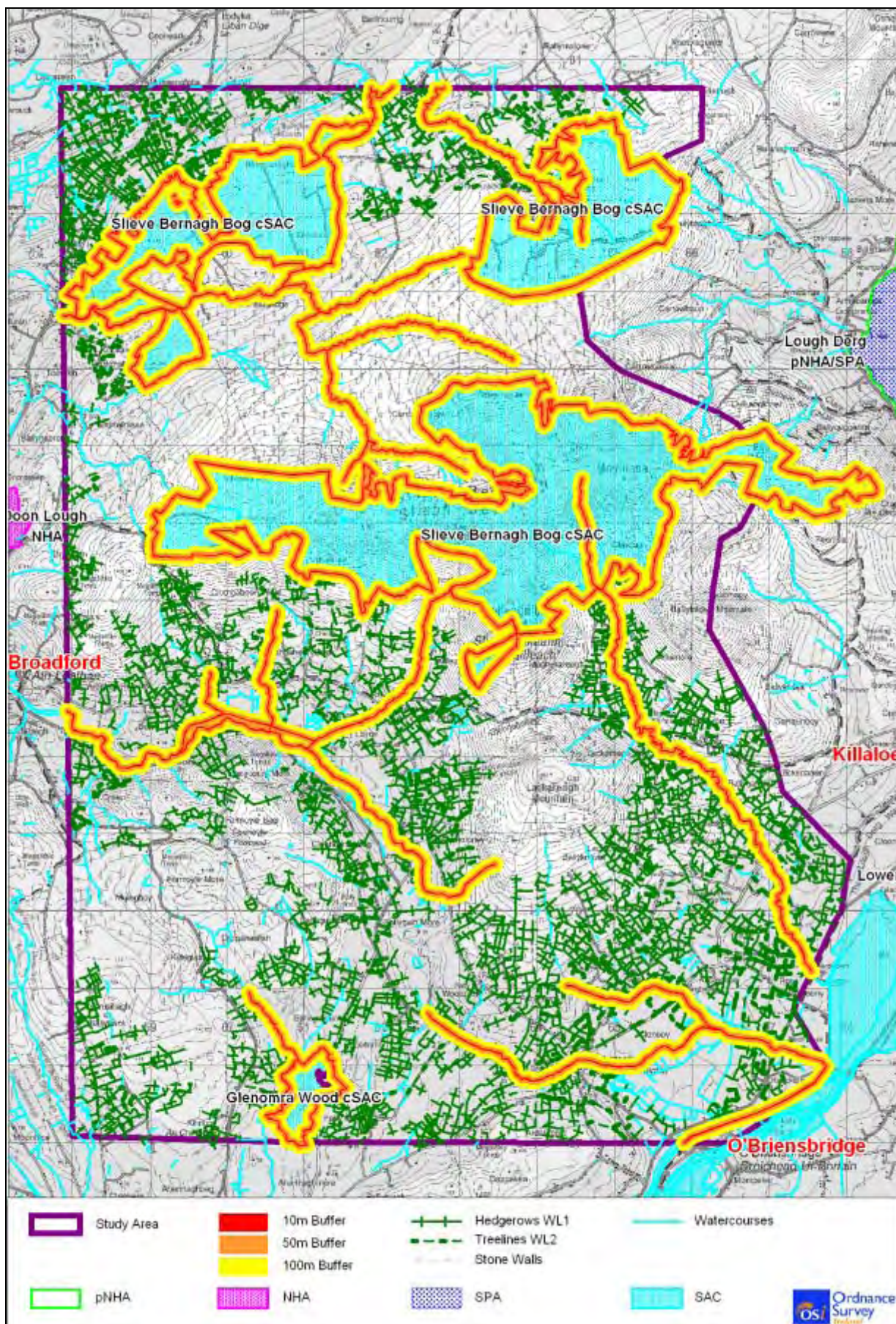


Figure 4.1 Buffer Zones



#### 4.7 AREAS LIABLE TO FLOOD

As part of the project brief, there is a requirement to outline and compare existing habitats with areas marked as “liable to flood” in the 6 inch Ordnance Survey maps. The Clare County Development Plan 2011-2017 - Strategic Flood Risk Assessment and the current OPW flood maps for the area ([www.floodmaps.ie](http://www.floodmaps.ie)) were also consulted for recorded flood events correspond to the “liable to flood” identified on the 6 inch maps.

The locations of all of the flood events within and adjacent to the study area are shown in **Habitat Map** attached and **Figure 4.1** below.

Each area is identified and discussed below in relation to flooding potential and existing habitats. The areas identified as “liable to flood” in the 6 inch maps are delineated by a black line.

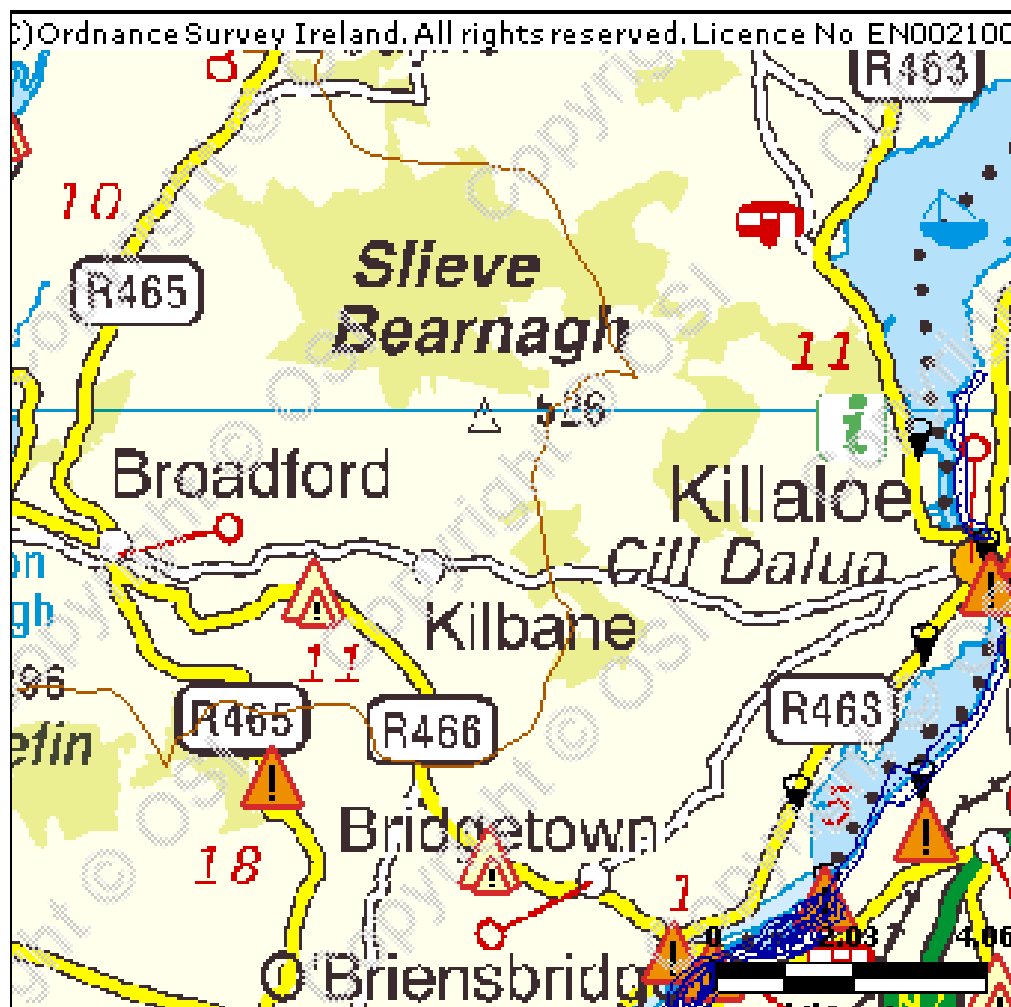
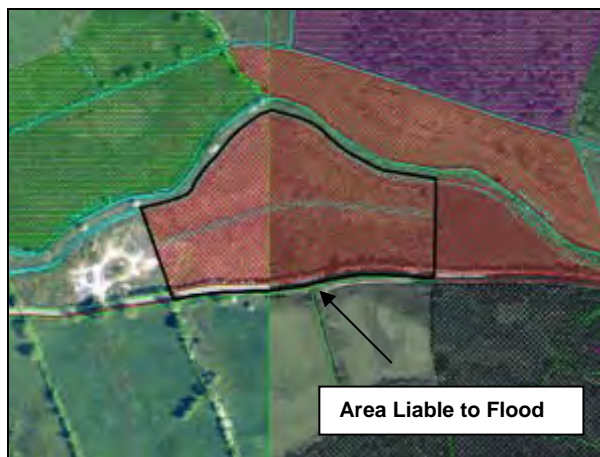


Figure 4.1: OPW National Flood Mapping Flood events within the Study Area

**AREA 1: GLENOMRA RIVER, EAST OF GRAFFA BRIDGE (IGR: 160030, 172350)**

Habitat Map

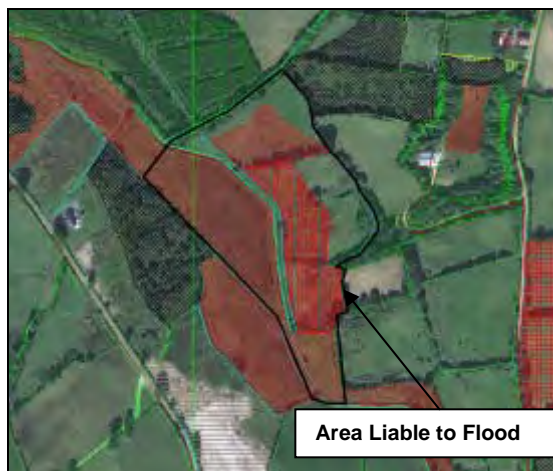


Extent of Flooding (OPW Flood Map)

**Habitats:** The area comprises Wet Grassland (GS4). This area may extend eastwards and westwards along the Glenomra River.

**Watercourses nearby:** The Glenomra River runs along the northern boundary of the area liable to flood.

**OPW Flood maps website:** The OPW website highlights a flooding event approximately 300m to the east of the site. It is likely that there have been further flood events nearby along this river.

**AREA 2: GLENOMRA RIVER AT CLOONCONRY BEG: (162100, 171080)**

Habitat Map



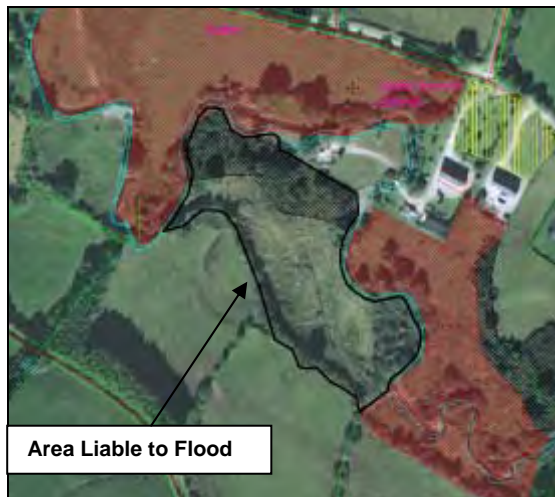
Extent of Flooding (OPW Flood Map)

**Habitats:** The habitats in the area marked Liable to Flood on the 6" Historical Maps comprise mainly Wet Grassland (GS4) to the west of Glenomra River and Marsh (GM1) to the east. This area liable to flooding may extend northwest and southeast along the Glenomra River.

**Watercourses nearby:** This wet area is just south of the confluence of the Aileenagommaun River and the Glenomra River.

**OPW Flood maps website:** The OPW website highlights a flooding event approximately 2km to the northwest of the site along the Glenomra River. It is likely that there have been further flood events nearby along this river.

### AREA 3: ARDCLOONY RIVER AT LACKAREAGH BEG: (165440, 172270)



Habitat Map



Extent of Flooding (OPW Flood Map)

**Habitats:** The habitats in the area marked Liable to Flood on the 6" Historical Maps comprise mainly Improved Grassland (GA1) with Yellow Iris (*Iris Pseudacorus*) and some Scrub (WS1) to the northern part of the area. There are areas of Wet Grassland (GS4) to the northwest and southeast of the area, and some Improved Grassland (GA1) and Scattered Trees (WD5) to the southeast of the area.

**Watercourses nearby:** This area is just south of Ardclony River.

**OPW Flood maps website:** There are no OPW records for recent flooding events at this location.

**AREA 4: BLACK RIVER AT LACKAREAGH BEG: (162950, 168290)****Habitat Map****Extent of Flooding (OPW Flood Map)**

**Habitats:** The habitats in the area marked as recurring flood events comprise mainly Improved Grassland (GA1) to the south of the regional road, R466. There are areas of Wet Grassland (GS4), Marsh (GM1) and Reed and Large Sedge Swamps to the north of the regional road, R466.

**Watercourses nearby:** The Black River runs to the north of the flood event area.

**OPW Flood maps website:** This area is not marked as Liable to Floods on the 6" Historical Maps but is recorded as a recurring flood events on the OPW website.

**4.7.1 Conclusions on Areas Liable to Flood**

A total of four areas were identified from the 6 inch Ordnance Survey maps as 'liable to flood', while one area with a recurring flood on the OPW website is not mapped as 'liable to flood' on the 6 inch Ordnance Survey maps. Many of these, and adjacent, areas are still represented by wetland habitats which reflect high water tables or seasonal inundation with flood waters. Some areas are however Improved Agricultural Grasslands which have been subject to changes in the historical drainage patterns. These changes may have been implemented by the landowners or the OPW as part of maintenance works on the arterial drainage network or flood alleviation programmes.

In relation to the potential development of these lands careful consideration must be given to wetland habitats and their associated hydrology, whether they are supported by surface or



groundwater fluctuations. Further investigation is required at these locations to identify potential pollution pathways and appropriate measures to be put in place to protect wetland habitats and their associated waterbodies.

## 5 OVERALL CONCLUSIONS AND RECOMMENDATIONS

Information from this survey is principally of value in revealing the nature of the biodiversity interest within the Study Area. The results can be used to compare the status of biodiversity with other areas where such surveys have taken place, provide a baseline to inform discussion and policy-making on biodiversity and/or inform future research on other aspects of biodiversity.

There are 117 habitat types classified in Ireland (Fossitt, 2000), 89 of these habitat types are terrestrial and 28 of these are marine habitat. Of the 89 terrestrial habitat types, 52 different types of habitats occur within the study area. Of the 52 different habitat types, 5 are classified under cultivated and built land and the remaining 47 habitats are described in detail throughout the report.

The habitats found within the study area are evaluated based on their naturalness, value and vulnerability. Habitats that are assessed to be good examples of Annex I and/or Priority habitats are considered to be of International or National importance. Rare semi-natural habitats with high biodiversity are considered to be of County Importance. Habitats that are considered semi-natural habitat or locally important for wildlife are considered to be of Local Importance Higher Value, and robust habitats that have been highly modified are considered to be of Local Importance Lower Value.

The habitat inventory and supporting biodiversity evaluation of the lands in Mid Clare has important implications for spatial planning in the area. This information also establishes a forum for education and further research into the biodiversity value of study area.

### 5.1 RECOMMENDATIONS FOR SPATIAL PLANNING

Spatial Planning goes beyond traditional land use planning to bring together and integrate policies for the development and use of land with other policies and programs which influence the nature of places and how they function. The challenge for planning is to guide and manage the use of these resources as wisely as possible so as to provide for requirements now and in the future without compromising the ability of those resources to continue to sustain future generations. Spatial Planning therefore attempts to achieve a balance between development and conservation.

Strategic planning should recognise the sensitivity of the certain habitats to development, in particular water dependant habitats, where disruptions in the hydrological regime of an area can have significant impacts on these sensitive habitats. Projects such as quarrying, road building and large industrial and residential developments can cause irreversible consequences to these habitats.

Linkages and buffer zones have been incorporated into the Clare County Development Plan 2011-2017. The removal of these linkages leads to habitat fragmentation and isolation. These corridors ensure the continued vitality of designated sites and protected habitats.

Specific policies should be developed to take into consideration habitats categorised in **Section 4.4** Sites of Local Biodiversity Interest. Development should be avoided in habitats classified as Highly Sensitive and Very Sensitive and minimised in habitats classified as Moderately Sensitive. The majority of the study area is covered by habitats categorised as Robust and development may be considered in these areas.

Where development is considered in habitats listed categorised as Highly Sensitive and Very Sensitive, policies may contain requirements for developers to evaluate and assess the impacts of the proposals on sensitive habitats. Under the Environmental Liability Regulations (SI 547, 2008), it is also important to note that protected species and natural habitats fall under the remit of this legislation wherever they occur in Ireland, for example in sites that do not meet the criteria for designation as a SAC. Designated site boundaries do not as a result present any limits on their protection. Damage to protected species and natural habitats can take place where such species and habitats occur, including migratory species.

Where developments are required for the socio-economic improvement of an area, these developments should be evaluated against the wider area at a strategic level. The assessment must include the direct, indirect and cumulative impacts of such developments, and the evaluation of any possible environmental impacts to specific sensitive habitats against the impact of the habitat coverage within the locality and area as a whole. Where such developments require it, this information should be assessed through a Strategic Environmental Assessment (SEA) Process.

## 5.2 STAKEHOLDER ENGAGEMENT

The positive engagement and co-operation of land owners and their representative bodies such as IFA etc., can contribute significantly to the success of the protection of local sites of ecological value. The management of these sites should also reflect the broad interests of landowners and identify mechanisms which will allow effective input.

The availability of digital information at County Council Offices, Teagasc, IFA and civic centres will assist in the dissemination of information to landowners, developers and agencies that advice on landuse and development. Hardcopies of the Habitat Map and report can also be made available on request at these centres.

## 5.3 OPPORTUNITIES FOR FURTHER RESEARCH

Further studies should be conducted at sites identified as Internationally, Nationally, County Important Ecological Sites and also sites identified as being of Local Importance Higher Value as per Table 4.1 Section 4.1. Some of these sites may meet the criteria for designation under European or Irish legislation, such as those described in **Section 4.1.1**.

Other sites that do not meet the criteria for legal designation as detailed in Section but contain habitats of conservation value may be designated as Sites of Local Nature Conservation Interest (SLNCI) and a strategic context for the designation of these sites may be incorporated into Local Area Plans in conjunction with the National Parks and Wildlife Service.

## **APPENDIX A**

### **ANNEX I HABITATS**



**APPENDIX 1: Habitat categories in this classification and their relationships with EU Annex I habitats, and with habitat complexes from the BioMar marine biotope classification. Note that correspondence is approximate in many cases.**

<b>NON-MARINE</b>	<b>EU Annex I habitats (Natura 2000 code)</b> (* – priority type)
<b>FRESHWATER</b>	
<b>FL1</b> Dystrophic lakes	Natural dystrophic lakes and ponds (3160)
<b>FL2</b> Acid oligotrophic lakes	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) (3110) Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea (3130)
<b>FL3</b> Limestone/marl lakes	Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. (3140)
<b>FL4</b> Mesotrophic lakes	
<b>FL5</b> Eutrophic lakes	Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation (3150)
<b>FL6</b> Turloughs	*Turloughs (3180)
<b>FL7</b> Reservoirs	
<b>FL8</b> Other artificial lakes and ponds	
<b>FW1</b> Eroding/upland rivers	Watercourses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation (3260)
<b>FW2</b> Depositing/lowland rivers	Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation (3270)
<b>FW3</b> Canals	
<b>FW4</b> Drainage ditches	
<b>FP1</b> Calcareous springs	*Petrifying springs with tufa formation (Cratoneurion) (7220)
<b>FP2</b> Non-calcareous springs	
<b>FS1</b> Reed and large sedge swamps	
<b>FS2</b> Tall-herb swamps	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (6430)
<b>GRASSLAND AND MARSH</b>	
<b>GA1</b> Improved agricultural grassland	
<b>GA2</b> Amenity grassland (improved)	
<b>GS1</b> Dry calcareous and neutral grassland	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometea) (*important orchid sites) (6210) <i>Juniperus communis</i> formations on heaths or calcareous grasslands (5130) Calaminarian grasslands of the Violetalia calaminariae (6130)
<b>GS2</b> Dry meadows and grassy verges	Lowland hay meadows ( <i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i> ) (6510)
<b>GS3</b> Dry-humid acid grassland	*Species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas (and submountain areas in continental Europe) (6230) Calaminarian grasslands of the Violetalia calaminariae (6130)
<b>GS4</b> Wet grassland	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) (6410)
<b>GM1</b> Marsh	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (6430)
<b>HEATH AND DENSE BRACKEN</b>	
<b>HH1</b> Dry siliceous heath	European dry heaths (4030)
<b>HH2</b> Dry calcareous heath	<i>Juniperus communis</i> formations on heaths or calcareous grasslands (5130)
<b>HH3</b> Wet heath	Northern Atlantic wet heaths with <i>Erica tetralix</i> (4010)
<b>HH4</b> Montane heath	Alpine and Boreal heaths (4060)
<b>HD1</b> Dense bracken	

<b>PEATLANDS</b>	
<b>PB1</b> Raised bog	*Active raised bogs (7110) Degraded raised bogs still capable of natural regeneration (7120) Depressions on peat substrates of the Rhynchosporion (7150)
<b>PB2</b> Upland blanket bog	Blanket bog (*if active bog) (7130)
<b>PB3</b> Lowland blanket bog	Depressions on peat substrates of the Rhynchosporion (7150)
<b>PB4</b> Cutover bog	Depressions on peat substrates of the Rhynchosporion (7150)
<b>PB5</b> Eroding blanket bog	
<b>PF1</b> Rich fen and flush	*Calcareous fens with <i>Cladium mariscus</i> and species of the Caricion davallianae (7210) Alkaline fens (7230)
<b>PF2</b> Poor fen and flush	
<b>PF3</b> Transition mire and quaking bog	Transition mires and quaking bogs (7140)
<b>WOODLAND AND SCRUB</b>	
<b>WN1</b> Oak-birch-holly woodland	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (91A0)
<b>WN2</b> Oak-ash-hazel woodland	
<b>WN3</b> Yew woodland	* <i>Taxus baccata</i> woods of the British Isles (91J0)
<b>WN4</b> Wet pedunculate oak-ash woodland	*Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-padion, Alnion incanae, Salicion albae) (91E0)
<b>WN5</b> Riparian woodland	
<b>WN6</b> Wet willow-alder-ash woodland	
<b>WN7</b> Bog woodland	*Bog woodland (91D0)
<b>WD1</b> (Mixed) broadleaved woodland	
<b>WD2</b> Mixed broadleaved/conifer woodland	
<b>WD3</b> (Mixed) conifer woodland	
<b>WD4</b> Conifer plantation	
<b>WD5</b> Scattered trees and parkland	
<b>WS1</b> Scrub	<i>Juniperus communis</i> formations on heaths or calcareous grasslands (5130)
<b>WS2</b> Immature woodland	
<b>WS3</b> Ornamental/non-native shrub	
<b>WS4</b> Short rotation coppice	
<b>WS5</b> Recently-felled woodland	
<b>WL1</b> Hedgerows	
<b>WL2</b> Treelines	
<b>EXPOSED ROCK/ DISTURBED GROUND</b>	
<b>ER1</b> Exposed siliceous rock	Siliceous rocky slopes with chasmophytic vegetation (8220)
<b>ER2</b> Exposed calcareous rock	Calcareous rocky slopes with chasmophytic vegetation (8210) *Limestone pavements (8240)
<b>ER3</b> Siliceous scree and loose rock	Siliceous scree of the montane to snow levels ( <i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i> ) (8110)
<b>ER4</b> Calcareous scree and loose rock	Calcareous and calcshist scree of the montane to alpine levels ( <i>Thlaspietea rotundifolii</i> ) (8120)
<b>EU1</b> Non-marine caves	Caves not open to the public (8310)
<b>EU2</b> Artificial underground habitats	
<b>ED1</b> Exposed sand, gravel or till	
<b>ED2</b> Spoil and bare ground	
<b>ED3</b> Recolonising bare ground	
<b>ED4</b> Active quarries and mines	
<b>ED5</b> Refuse and other waste	

CULTIVATED AND BUILT LAND	
BC1	Arable crops
BC2	Horticultural land
BC3	Tilled land
BC4	Flower beds and borders
BL1	Stone walls and other stonework
BL2	Earth banks
BL3	Buildings and artificial surfaces
COASTLAND	
CS1	Rocky sea cliffs
CS2	Sea stacks and islets
CS3	Sedimentary sea cliffs
CW1	Lagoons and saline lakes
CW2	Tidal rivers
CM1	Lower salt marsh
CM2	Upper salt marsh
CB1	Shingle and gravel banks
CD1	Embryonic dunes
CD2	Marram dunes
CD3	Fixed dunes
CD4	Dune scrub and woodland
CD5	Dune slacks
CD6	Machair
CC1	Sea walls, piers and jetties
CC2	Fish cages and rafts

## **APPENDIX B**

### **TARGET NOTES**

TARGET NOTES - ID No. 1																																																														
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 21/07/11																																																												
Surveyor: John Curtin		County name: Clare																																																												
1:2,500 Sheet no: 4270-b	Townland: Knockatloe	Grid Ref: 159810, 179866																																																												
Target note no.: TN1		Area: 3ha																																																												
Ecological value: <b>County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.</b>																																																														
Habitat code  WN1	<p>Area of Oak-birch-holly woodland (WN1) adjacent to road. Gently sloping downhill to south. Outcrops of siliceous rocks covered in bryophytes occur throughout the site. Trees found on site which correspond to WN1 included; Sessile Oak (<i>Quercus petraea</i>), Birch (<i>Betula sp.</i>), Rowan (<i>Sorbus aucuparia</i>), Holly (<i>Ilex aquifolium</i>) with Billberry (<i>Vaccinium myrtillus</i>) and Wood Sage (<i>Teucrium scorodonia</i>) as ground layer. Honeysuckle (<i>Lonicera periclymenum</i>) was also recorded. An eroding stream (FW1) borders the site on the west following a southerly direction. The stream crosses the road via a stone culvert. This has a dry roof with crevices and has a good roost potential for bats. No evidence of bats was found. An adult sparrowhawk with two juveniles were also recorded on site.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Betula sp.</i></td><td>Birch</td><td>Dominant</td></tr> <tr><td><i>Blechnum spicant</i></td><td>Hard Fern</td><td>Occasional</td></tr> <tr><td><i>Crataegus monogyna</i></td><td>Hawthorn</td><td>Occasional</td></tr> <tr><td><i>Epilobium sp.</i></td><td>Willowherb</td><td>Occasional</td></tr> <tr><td><i>Filipendula ulmaria</i></td><td>Meadowsweet</td><td>Occasional</td></tr> <tr><td><i>Geranium robertianum</i></td><td>Herb Robert</td><td>Abundant</td></tr> <tr><td><i>Geum urbanum</i></td><td>Wood Avens</td><td>Occasional</td></tr> <tr><td><i>Hedera helix</i></td><td>Ivy</td><td>Frequent</td></tr> <tr><td><i>Ilex aquifolium</i></td><td>Holly</td><td>Occasional</td></tr> <tr><td><i>Lathyrus pratensis</i></td><td>Meadow Vetchling</td><td>Rare</td></tr> <tr><td><i>Lonicera periclymenum</i></td><td>Honeysuckle</td><td>Rare</td></tr> <tr><td><i>Oxalis acetosella</i></td><td>Wood sorrel</td><td>Abundant</td></tr> <tr><td><i>Asplenium scolopendrium</i></td><td>Hart's-tongue Fern</td><td>Rare</td></tr> <tr><td><i>Polypodium vulgare</i></td><td>Polypody Fern</td><td>Rare</td></tr> <tr><td><i>Quercus petraea</i></td><td>Sessile Oak</td><td>Occasional</td></tr> <tr><td><i>Rubus fruticosus</i> agg.</td><td>Bramble</td><td>Abundant</td></tr> <tr><td><i>Sorbus aucuparia</i></td><td>Rowan</td><td>Occasional</td></tr> <tr><td><i>Teucrium scorodonia</i></td><td>Wood Sage</td><td>Rare</td></tr> <tr><td><i>Vaccinium myrtillus</i></td><td>Bilberry</td><td>Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Betula sp.</i>	Birch	Dominant	<i>Blechnum spicant</i>	Hard Fern	Occasional	<i>Crataegus monogyna</i>	Hawthorn	Occasional	<i>Epilobium sp.</i>	Willowherb	Occasional	<i>Filipendula ulmaria</i>	Meadowsweet	Occasional	<i>Geranium robertianum</i>	Herb Robert	Abundant	<i>Geum urbanum</i>	Wood Avens	Occasional	<i>Hedera helix</i>	Ivy	Frequent	<i>Ilex aquifolium</i>	Holly	Occasional	<i>Lathyrus pratensis</i>	Meadow Vetchling	Rare	<i>Lonicera periclymenum</i>	Honeysuckle	Rare	<i>Oxalis acetosella</i>	Wood sorrel	Abundant	<i>Asplenium scolopendrium</i>	Hart's-tongue Fern	Rare	<i>Polypodium vulgare</i>	Polypody Fern	Rare	<i>Quercus petraea</i>	Sessile Oak	Occasional	<i>Rubus fruticosus</i> agg.	Bramble	Abundant	<i>Sorbus aucuparia</i>	Rowan	Occasional	<i>Teucrium scorodonia</i>	Wood Sage	Rare	<i>Vaccinium myrtillus</i>	Bilberry	Occasional
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## Habitat Map



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Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 25/07/11																																																																					
Surveyor: John Curtin		County name: Clare																																																																					
1:2,500 Sheet no: 4270-b	Townland: Knocklaur	Grid Ref: 158445, 180524																																																																					
Target note no.: TN2		Area: 0.1ha																																																																					
Ecological value: <b>County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.</b>																																																																							
Habitat code  WN4	<p>Woodland following course of stream with topography rising to the left and right of stream (FW1). Area is poached. Trees corresponding to WN4 found on the site include; <i>Corylus avellana</i> (Hazel), <i>Fraxinus excelsior</i> (Ash), <i>Crataegus monogyna</i> (Hawthorn) and <i>Salix</i> (Willow). Other species corresponding to wet pedunculate oak-ash woodland include; <i>Hedera helix</i> (Ivy), <i>Rubus fruticosus</i> agg (bramble), <i>Filipendula ulmaria</i> (Meadowsweet), <i>Circaea lutetiana</i> (Enchanters-Nightshade), and <i>Carex remota</i>.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (Latin name)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Betula pubescens</i></td><td>Downy Birch</td><td>Frequent</td></tr> <tr><td><i>Carex remota</i></td><td>Remote Sedge</td><td>Occasional</td></tr> <tr><td><i>Circaea lutetiana</i></td><td>Enchanter's-nightshade</td><td>Frequent</td></tr> <tr><td><i>Corylus avellana</i></td><td>Hazel</td><td>Frequent</td></tr> <tr><td><i>Crataegus monogyna</i></td><td>Hawthorn</td><td>Frequent</td></tr> <tr><td><i>Dryopteris filix-mas</i></td><td>Male Fern</td><td>Frequent</td></tr> <tr><td><i>Filipendula ulmaria</i></td><td>Meadowsweet</td><td>Occasional</td></tr> <tr><td><i>Fraxinus excelsior</i></td><td>Ash</td><td>Frequent</td></tr> <tr><td><i>Geranium robertianum</i></td><td>Herb Robert</td><td>Occasional</td></tr> <tr><td><i>Geum urbanum</i></td><td>Wood Aven</td><td>Occasional</td></tr> <tr><td><i>Hedera helix</i></td><td>Ivy</td><td>Frequent</td></tr> <tr><td><i>Leontodon</i> sp.</td><td>Hawkbit</td><td>Occasional</td></tr> <tr><td><i>Oxalis acetosella</i></td><td>Wood sorrel</td><td>Occasional</td></tr> <tr><td><i>Phyllitis scolopendrium</i></td><td>Hart's-tongue Fern</td><td>Frequent</td></tr> <tr><td><i>Prunus</i></td><td>Blackthorn</td><td>Occasional</td></tr> <tr><td><i>Rubus fruticosus</i> agg.</td><td>Bramble</td><td>Abundant</td></tr> <tr><td><i>Rumex sanguineus</i></td><td>Wood Dock</td><td>Occasional</td></tr> <tr><td><i>Salix</i></td><td>Willow</td><td>Occasional</td></tr> <tr><td><i>Stachys sylvatica</i></td><td>Hedge Woundwort</td><td>Occasional</td></tr> <tr><td><i>Valeriana officinalis</i></td><td>Wild Valerian</td><td>Rare</td></tr> <tr><td><i>Vicia sepium</i></td><td>Bush Vetch</td><td>Rare</td></tr> <tr><td><i>Viola</i> sp.</td><td>Violet</td><td>Occasional</td></tr> </tbody> </table>		Species (Latin name)	Species (common name)	DAFOR Scale	<i>Betula pubescens</i>	Downy Birch	Frequent	<i>Carex remota</i>	Remote Sedge	Occasional	<i>Circaea lutetiana</i>	Enchanter's-nightshade	Frequent	<i>Corylus avellana</i>	Hazel	Frequent	<i>Crataegus monogyna</i>	Hawthorn	Frequent	<i>Dryopteris filix-mas</i>	Male Fern	Frequent	<i>Filipendula ulmaria</i>	Meadowsweet	Occasional	<i>Fraxinus excelsior</i>	Ash	Frequent	<i>Geranium robertianum</i>	Herb Robert	Occasional	<i>Geum urbanum</i>	Wood Aven	Occasional	<i>Hedera helix</i>	Ivy	Frequent	<i>Leontodon</i> sp.	Hawkbit	Occasional	<i>Oxalis acetosella</i>	Wood sorrel	Occasional	<i>Phyllitis scolopendrium</i>	Hart's-tongue Fern	Frequent	<i>Prunus</i>	Blackthorn	Occasional	<i>Rubus fruticosus</i> agg.	Bramble	Abundant	<i>Rumex sanguineus</i>	Wood Dock	Occasional	<i>Salix</i>	Willow	Occasional	<i>Stachys sylvatica</i>	Hedge Woundwort	Occasional	<i>Valeriana officinalis</i>	Wild Valerian	Rare	<i>Vicia sepium</i>	Bush Vetch	Rare	<i>Viola</i> sp.	Violet	Occasional
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**Habitat Map****Photographic Record**





**Images 1-4 Overview of Habitat**





## TARGET NOTES - ID No. 3

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 25/07/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4270-b	<b>Townland:</b> Drummod	<b>Grid Ref:</b> 158767, 180040
<b>Target note no.:</b> TN3		<b>Area:</b> 1ha
<b>Ecological value:</b> County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.		

**Habitat code**

WN6

Wet woodland with marshy understory, appears to be permanently flooded. Willow is abundant. The area is flat. Threatened by Japanese Knotweed (*Fallopia japonica*).

**Species List**

Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale
<i>Alnus glutinosa</i>	Alder	Occasional
<i>Fallopia japonica</i>	Japanese Knotweed	Frequent
<i>Filipendula ulmaria</i>	Meadowsweet	Frequent
<i>Fraxinus excelsior</i>	Ash	Occasional
<i>Galium palustre</i>	Marsh-bedstraw	Occasional
<i>Glyceria cf maxima</i>	Sweet-grass	Abundant
<i>Iris</i> sp.	Iris	Frequent
<i>Mentha aquatica</i>	Water Mint	Frequent
<i>Quercus petraea</i>	Sessile Oak	Occasional
<i>Salix</i>	Willow	Abundant
<i>Rosa canina</i>	Dog Rose	Occasional

**Habitat Map**

### Photographic Record



Image 1: Japanese Knotweed *Fallopia japonica*

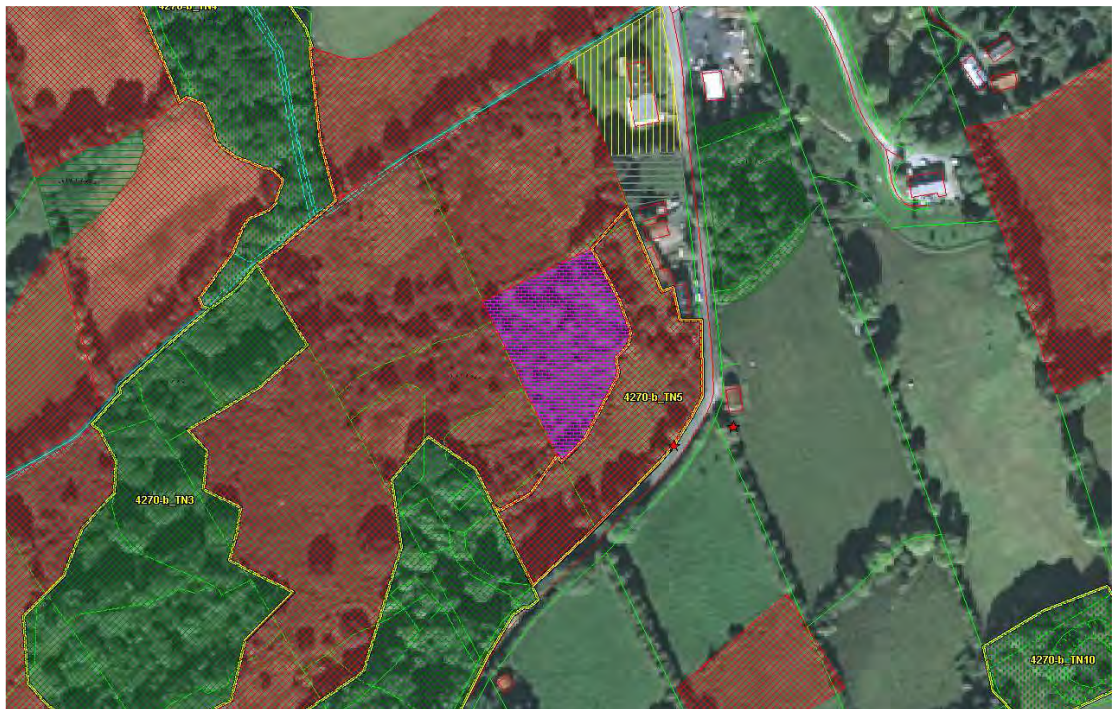
TARGET NOTES- ID No. 4																																																					
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Surveyor: John Curtin		County name: Clare																																																			
1:2,500 Sheet no: 4270-b	Townland: Drummod	Grid Ref: 158784, 180243																																																			
Target note no.: TN4		Area: 0.8ha																																																			
Ecological value: <b>County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.</b>																																																					
Habitat code  WN1	<p>Woodland following course of stream. Ground well poached in areas. Bramble (<i>Rubus fruticosus</i> agg.) dominates the ground flora in other areas. There is natural regeneration of oak (<i>Quercus petraea</i>), ash (<i>Fraxinus excelsior</i>) and willow (<i>Salix sp</i>) saplings as well as some sycamore (<i>Acer pseudoplatanus</i>). Oak is the most abundant tree species in the woodland.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Acer pseudoplatanus</i></td> <td>Sycamore</td> <td>Occasional</td> </tr> <tr> <td><i>Alnus glutinosa</i></td> <td>Alder</td> <td>Occasional</td> </tr> <tr> <td><i>Circaea lutetiana</i></td> <td>Enchanters-Nightshade</td> <td>Occasional</td> </tr> <tr> <td><i>Crataegus monogyna</i></td> <td>Hawthorn</td> <td>Frequent</td> </tr> <tr> <td><i>Dryopteris filix-mas</i></td> <td>Male Fern</td> <td>Occasional</td> </tr> <tr> <td><i>Fagus sylvatica</i></td> <td>Beech</td> <td>Occasional</td> </tr> <tr> <td><i>Filipendula ulmaria</i></td> <td>Meadowsweet</td> <td>Occasional</td> </tr> <tr> <td><i>Fraxinus excelsior</i></td> <td>Ash</td> <td>Occasional</td> </tr> <tr> <td><i>Geranium robertianum</i></td> <td>Herb Robert</td> <td>Occasional</td> </tr> <tr> <td><i>Hedera helix</i></td> <td>Ivy</td> <td>Occasional</td> </tr> <tr> <td><i>Ilex aquifolium</i></td> <td>Holly</td> <td>Rare</td> </tr> <tr> <td><i>Prunus spinosa</i></td> <td>Blackthorn</td> <td>Occasional</td> </tr> <tr> <td><i>Quercus petraea</i></td> <td>Sessile Oak</td> <td>Abundant</td> </tr> <tr> <td><i>Rubus fruticosus</i> agg.</td> <td>Bramble</td> <td>Dominant</td> </tr> <tr> <td><i>Salix sp.</i></td> <td>Willow</td> <td>Occasional</td> </tr> <tr> <td><i>Vaccinium myrtillus</i></td> <td>Bilberry</td> <td>Rare</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Acer pseudoplatanus</i>	Sycamore	Occasional	<i>Alnus glutinosa</i>	Alder	Occasional	<i>Circaea lutetiana</i>	Enchanters-Nightshade	Occasional	<i>Crataegus monogyna</i>	Hawthorn	Frequent	<i>Dryopteris filix-mas</i>	Male Fern	Occasional	<i>Fagus sylvatica</i>	Beech	Occasional	<i>Filipendula ulmaria</i>	Meadowsweet	Occasional	<i>Fraxinus excelsior</i>	Ash	Occasional	<i>Geranium robertianum</i>	Herb Robert	Occasional	<i>Hedera helix</i>	Ivy	Occasional	<i>Ilex aquifolium</i>	Holly	Rare	<i>Prunus spinosa</i>	Blackthorn	Occasional	<i>Quercus petraea</i>	Sessile Oak	Abundant	<i>Rubus fruticosus</i> agg.	Bramble	Dominant	<i>Salix sp.</i>	Willow	Occasional	<i>Vaccinium myrtillus</i>	Bilberry	Rare
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**Habitat Map****Photographic Record****Image 1: Overview of Habitat**

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<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 25/07/11																																																																		
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare																																																																		
<b>1:2,500 Sheet no:</b> 4270-b	<b>Townland:</b> Drummod	<b>Grid Ref:</b> 158970, 180080																																																																		
<b>Target note no.:</b> TN5		<b>Area:</b> 40ha																																																																		
<b>Ecological value:</b> Local Importance (Higher Value)																																																																				
<b>Habitat code</b>  GS4	Grassland with some bramble and nettle encroachment. Slope moves downhill away from road to the East. Borders area of dense bracken (HD1) to the West and Japanese Knotweed to the South.																																																																			
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**Habitat Map****Photographic Record****Image 1: Overview of Habitat**

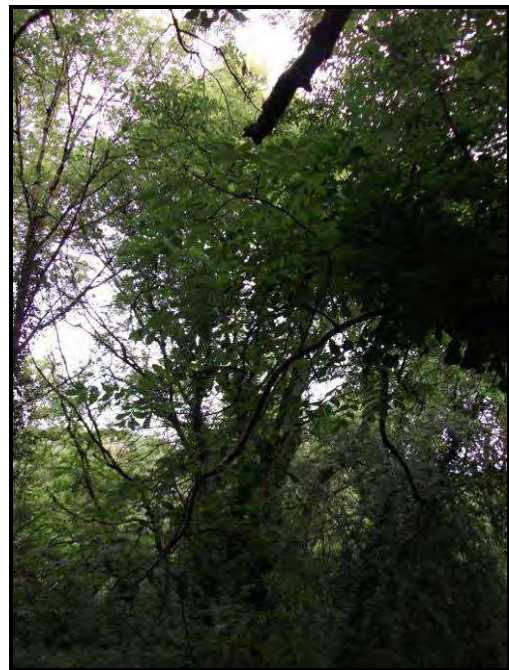


**Image 2: Close-up of sheep sorrel *Rumex acetosella***



TARGET NOTES- ID No. 6																																																								
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 25/07/11																																																						
Surveyor: John Curtin		County name: Clare																																																						
1:2,500 Sheet no: 4270-b	Townland: Drummod	Grid Ref: 158800, 179910																																																						
Target note no.: TN6		Area: 2.5ha																																																						
Ecological value: <b>County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.</b>																																																								
Habitat code  WN4	<p>Woodland bordering road. Sloped downhill to the north west. Some sandstone outcrops with good bryophyte layer covering. Brambles (<i>Rubus fruticosus</i> agg.) dominate the understory.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Bryophyte</i></td> <td>Moss spp</td> <td>Abundant</td> </tr> <tr> <td><i>Circaea lutetiana</i></td> <td>Enchanters-Nightshade</td> <td>Abundant</td> </tr> <tr> <td><i>Crataegus monogyna</i></td> <td>Hawthorn</td> <td>Occasional</td> </tr> <tr> <td><i>Crepis</i> sp.</td> <td>Hawk's-beard</td> <td>Occasional</td> </tr> <tr> <td><i>Dryopteris filix-mas</i></td> <td>Male Fern</td> <td>Frequent</td> </tr> <tr> <td><i>Fraxinus excelsior</i></td> <td>Ash</td> <td>Dominant</td> </tr> <tr> <td><i>Geranium robertianum</i></td> <td>Herb Robert</td> <td>Occasional</td> </tr> <tr> <td><i>Geum urbanum</i></td> <td>Wood Aven</td> <td>Occasional</td> </tr> <tr> <td><i>Ilex aquifolium</i></td> <td>Holly</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus effusus</i></td> <td>Soft Rush</td> <td>Occasional</td> </tr> <tr> <td><i>Asplenium scolopendrium</i></td> <td>Hart's-tongue Fern</td> <td>Occasional</td> </tr> <tr> <td><i>Prunus spinosa</i></td> <td>Blackthorn</td> <td>Occasional</td> </tr> <tr> <td><i>Quercus petraea</i></td> <td>Sessile Oak</td> <td>Occasional</td> </tr> <tr> <td><i>Ranunculus repens</i></td> <td>Creeping Buttercup</td> <td>Rare</td> </tr> <tr> <td><i>Rubus fruticosus</i> agg.</td> <td>Brambles</td> <td>Dominant</td> </tr> <tr> <td><i>Rumex sanguineus</i></td> <td>Wood Dock</td> <td>Rare</td> </tr> <tr> <td><i>Salix</i></td> <td>Willow</td> <td>Rare</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Bryophyte</i>	Moss spp	Abundant	<i>Circaea lutetiana</i>	Enchanters-Nightshade	Abundant	<i>Crataegus monogyna</i>	Hawthorn	Occasional	<i>Crepis</i> sp.	Hawk's-beard	Occasional	<i>Dryopteris filix-mas</i>	Male Fern	Frequent	<i>Fraxinus excelsior</i>	Ash	Dominant	<i>Geranium robertianum</i>	Herb Robert	Occasional	<i>Geum urbanum</i>	Wood Aven	Occasional	<i>Ilex aquifolium</i>	Holly	Occasional	<i>Juncus effusus</i>	Soft Rush	Occasional	<i>Asplenium scolopendrium</i>	Hart's-tongue Fern	Occasional	<i>Prunus spinosa</i>	Blackthorn	Occasional	<i>Quercus petraea</i>	Sessile Oak	Occasional	<i>Ranunculus repens</i>	Creeping Buttercup	Rare	<i>Rubus fruticosus</i> agg.	Brambles	Dominant	<i>Rumex sanguineus</i>	Wood Dock	Rare	<i>Salix</i>	Willow	Rare
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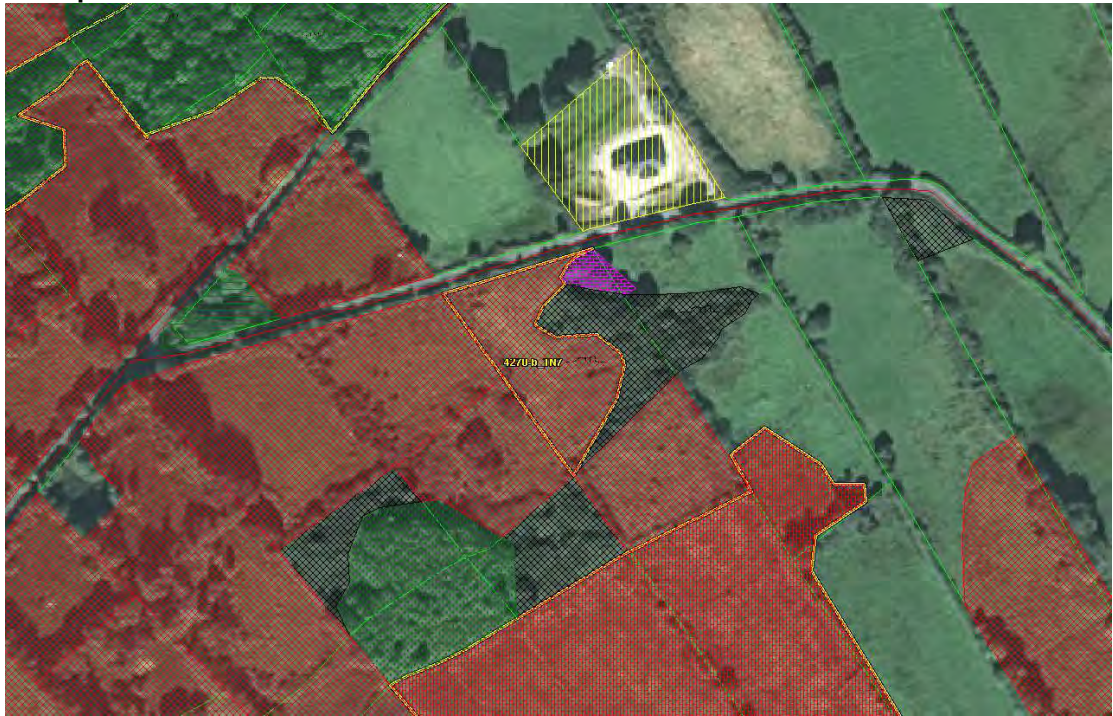




**Image 3: Close-up of ground layer**



TARGET NOTES- ID No. 7																																																																							
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 25/07/10																																																																					
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare																																																																					
<b>1:2,500 Sheet no:</b> 4270-b	<b>Townland:</b> Drummod	<b>Grid Ref:</b> 158857, 179710																																																																					
<b>Target note no.:</b> TN7		<b>Area:</b> 0.3ha																																																																					
<b>Ecological value:</b> <span style="color: red;">Local Importance (Higher Value)</span>																																																																							
<b>Habitat code</b>  GS4	<p>Neglected wet grassland with Bracken and bramble scrub encroachment. Several oak planted (6-9ft tall). Willow and scrub bordering to the south. Slopes downhill to south. Field to west similar. Sward height at time of survey ~ 4-5ft. Fairly wet.</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 5px;">Species (common name)</th> <th style="text-align: left; padding: 5px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;"><i>Anthoxanthum odoratum</i></td><td style="padding: 5px;">Sweet Vernal-grass</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Calluna vulgaris</i></td><td style="padding: 5px;">Ling Heather</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Carex pendula</i></td><td style="padding: 5px;">Pendulous Sedge</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Dactylis glomerata</i></td><td style="padding: 5px;">Cooks-foot</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Dactylorhiza cf maculata</i></td><td style="padding: 5px;">Heath-spotted Orchid</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Erica cinerea</i></td><td style="padding: 5px;">Bell Heather</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Erica tetralix</i></td><td style="padding: 5px;">Cross-leaved Heather</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Holcus lanatus</i></td><td style="padding: 5px;">Yorkshire Fog</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Juncus articulatus</i></td><td style="padding: 5px;">Jointed Rush</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Juncus effusus</i></td><td style="padding: 5px;">Soft Rush</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Lonicera periclymenum</i></td><td style="padding: 5px;">Honeysuckle</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Lotus pedunculatus</i></td><td style="padding: 5px;">Greater Bird's-foot-trefoil</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Molinia caerulea</i></td><td style="padding: 5px;">Purple Moor-grass</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Potentilla erecta</i></td><td style="padding: 5px;">Tormentil</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Prunella vulgaris</i></td><td style="padding: 5px;">Self-heal</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Pteridium aquilinum</i></td><td style="padding: 5px;">Bracken</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Rubus fruticosus</i> agg.</td><td style="padding: 5px;">Bramble</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Rumex acetosella</i></td><td style="padding: 5px;">Sheep's Sorrel</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Scorpidium scorpioides</i></td><td style="padding: 5px;">Hooked Scorpion moss</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Rumex</i> sp.</td><td style="padding: 5px;">Dock</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Stellaria media</i></td><td style="padding: 5px;">Common Chickweed</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Ulex</i> sp.</td><td style="padding: 5px;">Gorse</td><td style="padding: 5px;">Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Calluna vulgaris</i>	Ling Heather	Occasional	<i>Carex pendula</i>	Pendulous Sedge	Occasional	<i>Dactylis glomerata</i>	Cooks-foot	Frequent	<i>Dactylorhiza cf maculata</i>	Heath-spotted Orchid	Rare	<i>Erica cinerea</i>	Bell Heather	Occasional	<i>Erica tetralix</i>	Cross-leaved Heather	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Abundant	<i>Juncus articulatus</i>	Jointed Rush	Frequent	<i>Juncus effusus</i>	Soft Rush	Frequent	<i>Lonicera periclymenum</i>	Honeysuckle	Occasional	<i>Lotus pedunculatus</i>	Greater Bird's-foot-trefoil	Frequent	<i>Molinia caerulea</i>	Purple Moor-grass	Frequent	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Prunella vulgaris</i>	Self-heal	Occasional	<i>Pteridium aquilinum</i>	Bracken	Occasional	<i>Rubus fruticosus</i> agg.	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**Habitat Map****Photographic Record****Image 1: Overview of Habitat****Image 2: Heath-spotted Orchid**



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Target note no.: TN8		Area: 3ha																																																																																							
Ecological value: <b>Local Importance (Higher Value)</b>																																																																																									
Habitat code  GM1	<p>Large marsh (GM1) with good species diversity. The site contained standing water of 2in at time of survey to the north. It is located in a basin with higher ground to the north and south.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (Latin name)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Frequent</td></tr> <tr><td><i>Carex echinata</i></td><td>Star Sedge</td><td>Occasional</td></tr> <tr><td><i>Carex nigra</i></td><td>Common Sedge</td><td>Occasional</td></tr> <tr><td><i>Carex panicea</i></td><td>Carnation Sedge</td><td>Occasional</td></tr> <tr><td><i>Carex pendula</i></td><td>Pendulous Sedge</td><td>Occasional</td></tr> <tr><td><i>Carex pulicaris</i></td><td>Flea Sedge</td><td>Occasional</td></tr> <tr><td><i>Cirsium paluste</i></td><td>Marsh Thistle</td><td>Occasional</td></tr> <tr><td><i>Dactylorhiza sp.</i></td><td>Orchid (fruited)</td><td>Occasional</td></tr> <tr><td><i>Epilobium obscurum</i></td><td>Willowherb</td><td>Occasional</td></tr> <tr><td><i>Epilobium palustre</i></td><td>Marsh Willowherb</td><td>Occasional</td></tr> <tr><td><i>Equisetum sp</i></td><td>Horsetail</td><td>Occasional</td></tr> <tr><td><i>Filipendula ulmaria</i></td><td>Meadowsweet</td><td>Abundant</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Frequent</td></tr> <tr><td><i>Iris sp</i></td><td>Iris</td><td>Occasional</td></tr> <tr><td><i>Juncus articulatus/ acutiflorus</i></td><td>Jointed Rush</td><td>Abundant</td></tr> <tr><td><i>Lotus pendunculatus</i></td><td>Greater Birds-foot-trefoil</td><td>Occasional</td></tr> <tr><td><i>Luzula multiflora</i></td><td>Heath Wood-rush</td><td>Occasional</td></tr> <tr><td><i>Mentha aquatica</i></td><td>Water Mint</td><td>Frequent</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Occasional</td></tr> <tr><td><i>Potentilla anserina</i></td><td>Silverweed</td><td>Occasional</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Occasional</td></tr> <tr><td><i>Prunella vulgaris</i></td><td>Self-heal</td><td>Occasional</td></tr> <tr><td><i>Ranunculus repens</i></td><td>Creeping Buttercup</td><td>Occasional</td></tr> <tr><td><i>Rumex acetosella</i></td><td>Sheep's Sorrel</td><td>Occasional</td></tr> <tr><td><i>Stellaria graminea</i></td><td>Lesser Stitchwort</td><td>Occasional</td></tr> <tr><td><i>Stellaria media</i></td><td>Common Chickweed</td><td>Occasional</td></tr> <tr><td><i>Typha latifolia</i></td><td>Bulrush</td><td>Occasional</td></tr> <tr><td><i>Vicia cracca</i></td><td>Tufted Vetch</td><td>Occasional</td></tr> </tbody> </table>		Species (Latin name)	Species (common name)	DAFOR Scale	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Carex echinata</i>	Star Sedge	Occasional	<i>Carex nigra</i>	Common Sedge	Occasional	<i>Carex panicea</i>	Carnation Sedge	Occasional	<i>Carex pendula</i>	Pendulous Sedge	Occasional	<i>Carex pulicaris</i>	Flea Sedge	Occasional	<i>Cirsium paluste</i>	Marsh Thistle	Occasional	<i>Dactylorhiza sp.</i>	Orchid (fruited)	Occasional	<i>Epilobium obscurum</i>	Willowherb	Occasional	<i>Epilobium palustre</i>	Marsh Willowherb	Occasional	<i>Equisetum sp</i>	Horsetail	Occasional	<i>Filipendula ulmaria</i>	Meadowsweet	Abundant	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Iris sp</i>	Iris	Occasional	<i>Juncus articulatus/ acutiflorus</i>	Jointed Rush	Abundant	<i>Lotus pendunculatus</i>	Greater Birds-foot-trefoil	Occasional	<i>Luzula multiflora</i>	Heath Wood-rush	Occasional	<i>Mentha aquatica</i>	Water Mint	Frequent	<i>Molinia caerulea</i>	Purple Moor-grass	Occasional	<i>Potentilla anserina</i>	Silverweed	Occasional	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Prunella vulgaris</i>	Self-heal	Occasional	<i>Ranunculus repens</i>	Creeping Buttercup	Occasional	<i>Rumex acetosella</i>	Sheep's Sorrel	Occasional	<i>Stellaria graminea</i>	Lesser Stitchwort	Occasional	<i>Stellaria media</i>	Common Chickweed	Occasional	<i>Typha latifolia</i>	Bulrush	Occasional	<i>Vicia cracca</i>	Tufted Vetch	Occasional
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**Habitat Map****Photographic Record**

**Image 1: Abundant Meadowsweet with occasional Marsh Thistle**

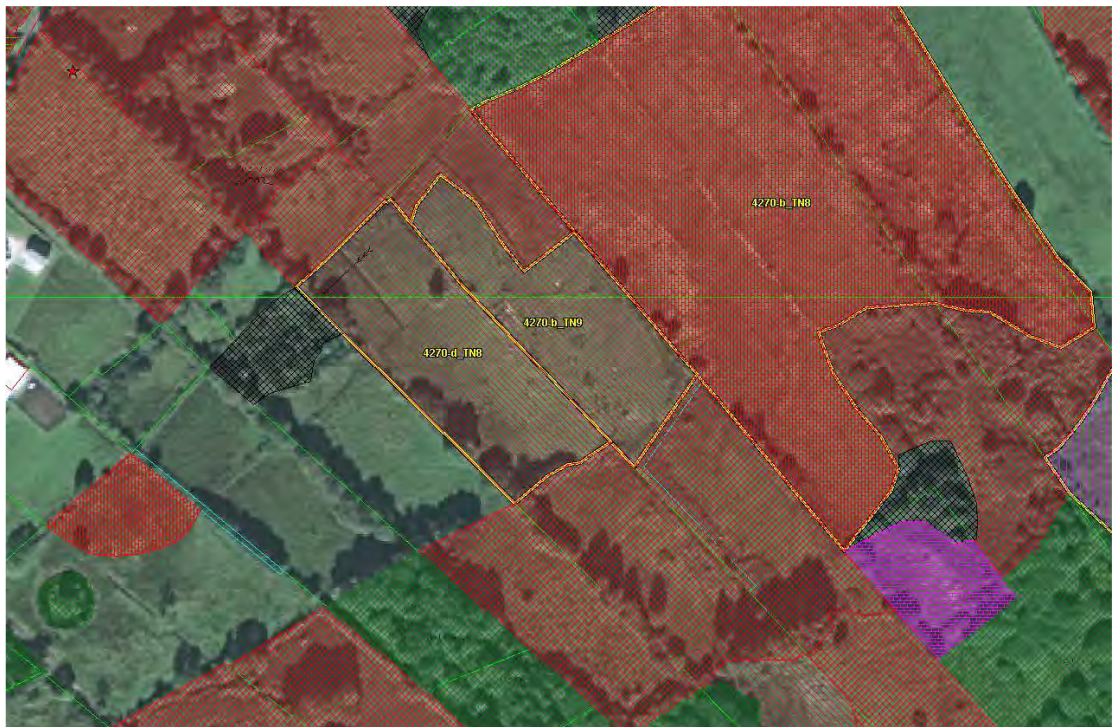


**Image 2: Close-up showing Greater Birds-foot-trefoil and Sedges**





TARGET NOTES- ID No. 9																																																																																									
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<b>1:2,500 Sheet no:</b> 4270-b	<b>Townland:</b> Drummod	<b>Grid Ref:</b> 158833, 179490																																																																																							
<b>Target note no.:</b> TN9		<b>Area:</b> 0.5ha																																																																																							
<b>Ecological value:</b> Local Importance (Higher Value)																																																																																									
<b>Habitat code</b>  GS3	Grassland that borders marsh (TN8) to the south. The site is slightly uphill and dryer than the marsh. Some stone outcrops occur here containing a covering of bryophyte species. An old ruin of a homestead occurs on the site.																																																																																								
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<i>Erica tetralix</i>	Cross-leaved Heather	Occasional																																																																																							
<i>Festuca cf ovina</i>	Sheep Fescue	Occasional																																																																																							
<i>Galium saxatile</i>	Heath Bedstraw	Rare																																																																																							
<i>Holcus lanatus</i>	Yorkshire Fog	Frequent																																																																																							
<i>Juncus articulatus/ acutiflorus</i>	Jointed Rush	Occasional																																																																																							
<i>Juncus effusus</i>	Soft Rush	Frequent																																																																																							
<i>Leontodon</i> sp.	Hawkbit	Occasional																																																																																							
<i>Luzula multiflora</i>	Heath Woodrush	Occasional																																																																																							
<i>Luzula sylvatica</i>	Great Wood-rush	Occasional																																																																																							
<i>Lycopodium</i>	Club Moss	Frequent																																																																																							
<i>Molinia caerulea</i>	Purple Moor-grass	Occasional																																																																																							
<i>Nardus stricta</i>	Mat-grass	Frequent																																																																																							
<i>Pedicularis sylvatica</i>	Lousewort	Occasional																																																																																							
<i>Poa</i> sp.	Meadow grass	Occasional																																																																																							
<i>Polygala vulgaris</i>	Milkwort	Occasional																																																																																							
<i>Potentilla erecta</i>	Tormentil	Occasional																																																																																							
<i>Sphagnum</i> sp.	Peat moss	Occasional																																																																																							
<i>Trifolium repens</i>	White Clover	Occasional																																																																																							
<i>Vaccinium myrtillus</i>	Bilberry	Rare																																																																																							

**Habitat Map****Photographic Record****Image 1: Overview of Habitat**





**Image 2: Close-up of Dry Humid Acid Grassland GS3 vegetation**



**Image 3: Old Ruin**





TARGET NOTES- ID No. 10																																																														
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 26/07/11																																																												
Surveyor: John Curtin		County name: Clare																																																												
1:2,500 Sheet no: 4270-b	Townland: Drummod	Grid Ref: 159137, 179972																																																												
Target note no.: TN10		Area: 0.24ha																																																												
Ecological value: <b>County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.</b>																																																														
Habitat code	<p>Earthen ring fort with dense bracken (HD1) in the center surrounded by woodland. The site is on the summit of a small hill.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Acer pseudoplatanus</i></td> <td>Sycamore</td> <td>Rare</td> </tr> <tr> <td><i>Circaea lutetiana</i></td> <td>Enchanters-Nightshade</td> <td>Occasional</td> </tr> <tr> <td><i>Crataegus monogyna</i></td> <td>Hawthorn</td> <td>Frequent</td> </tr> <tr> <td><i>Fraxinus excelsior</i></td> <td>Ash</td> <td>Frequent</td> </tr> <tr> <td><i>Galium aparine</i></td> <td>Cleavers</td> <td>Occasional</td> </tr> <tr> <td><i>Geranium robertianum</i></td> <td>Herb Robert</td> <td>Frequent</td> </tr> <tr> <td><i>Geum urbanum</i></td> <td>Wood Aven</td> <td>Occasional</td> </tr> <tr> <td><i>Hedera helix</i></td> <td>Ivy</td> <td>Frequent</td> </tr> <tr> <td><i>Heracleum sphondylium</i></td> <td>Hogweed</td> <td>Occasional</td> </tr> <tr> <td><i>Oxalis acetosella</i></td> <td>Wood Sorrel</td> <td>Frequent</td> </tr> <tr> <td><i>Asplenium scolopendrium</i></td> <td>Hart's-tongue Fern</td> <td>Occasional</td> </tr> <tr> <td><i>Prunella vulgaris</i></td> <td>Self-heal</td> <td>Occasional</td> </tr> <tr> <td><i>Prunus spinosa</i></td> <td>Blackthorn</td> <td>Occasional</td> </tr> <tr> <td><i>Quercus petraea</i></td> <td>Sessile Oak</td> <td>Frequent</td> </tr> <tr> <td><i>Ranunculus repens</i></td> <td>Creeping Buttercup</td> <td>Occasional</td> </tr> <tr> <td><i>Rumex sanguineus</i></td> <td>Wood Dock</td> <td>Occasional</td> </tr> <tr> <td><i>Rumex sp</i></td> <td>Dock</td> <td>Occasional</td> </tr> <tr> <td><i>Urtica dioica</i></td> <td>Nettle</td> <td>Occasional</td> </tr> <tr> <td><i>Veronica sp</i></td> <td>Speedwell</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Acer pseudoplatanus</i>	Sycamore	Rare	<i>Circaea lutetiana</i>	Enchanters-Nightshade	Occasional	<i>Crataegus monogyna</i>	Hawthorn	Frequent	<i>Fraxinus excelsior</i>	Ash	Frequent	<i>Galium aparine</i>	Cleavers	Occasional	<i>Geranium robertianum</i>	Herb Robert	Frequent	<i>Geum urbanum</i>	Wood Aven	Occasional	<i>Hedera helix</i>	Ivy	Frequent	<i>Heracleum sphondylium</i>	Hogweed	Occasional	<i>Oxalis acetosella</i>	Wood Sorrel	Frequent	<i>Asplenium scolopendrium</i>	Hart's-tongue Fern	Occasional	<i>Prunella vulgaris</i>	Self-heal	Occasional	<i>Prunus spinosa</i>	Blackthorn	Occasional	<i>Quercus petraea</i>	Sessile Oak	Frequent	<i>Ranunculus repens</i>	Creeping Buttercup	Occasional	<i>Rumex sanguineus</i>	Wood Dock	Occasional	<i>Rumex sp</i>	Dock	Occasional	<i>Urtica dioica</i>	Nettle	Occasional	<i>Veronica sp</i>	Speedwell	Occasional
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HD1/ WN1																																																														

**Habitat Map****Photographic Record****Image 1: Dense Bracken**



**Image 2: Woodland WN1**





TARGET NOTES- ID No. 11																																																											
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 26/07/11																																																									
Surveyor: John Curtin		County name: Clare																																																									
1:2,500 Sheet no: 4270-b	Townland: Drummod	Grid Ref: 159373, 179490																																																									
Target note no.: TN11		Area: 0.7ha																																																									
Ecological value: <b>County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.</b>																																																											
Habitat code  WN1	<p>Oak-birch-holly woodland WN1 uphill from road. Dry underfoot. Linked to a corridor of woodland across road to north. Deep hedgerows also connect this woodland to others to the east.</p> <p><b>Species List.</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Agrostis</i> sp.</td> <td>Bent Grass</td> <td>Occasional</td> </tr> <tr> <td><i>Betula pubescens</i></td> <td>Downy Birch</td> <td>Abundant</td> </tr> <tr> <td><i>Blechnum spicant</i></td> <td>Hard Fern</td> <td>Occasional</td> </tr> <tr> <td><i>Corylus avellana</i></td> <td>Hazel</td> <td>Occasional</td> </tr> <tr> <td><i>Dryopteris filix-mas</i></td> <td>Male Fern</td> <td>Occasional</td> </tr> <tr> <td><i>Epilobium</i> sp.</td> <td>Willowherb</td> <td>Occasional</td> </tr> <tr> <td><i>Fraxinus excelsior</i></td> <td>Ash</td> <td>Frequent</td> </tr> <tr> <td><i>Geranium robertianum</i></td> <td>Herb Robert</td> <td>Frequent</td> </tr> <tr> <td><i>Hedera helix</i></td> <td>Ivy</td> <td>Occasional</td> </tr> <tr> <td><i>Hypericum androsaemum</i></td> <td>Tutsan</td> <td>Rare</td> </tr> <tr> <td><i>Hypericum pulchrum</i></td> <td>Slender St. John's-wort</td> <td>Occasional</td> </tr> <tr> <td><i>Ilex aquifolium</i></td> <td>Holly</td> <td>Frequent</td> </tr> <tr> <td><i>Lonicera periclymenum</i></td> <td>Honeysuckle</td> <td>Occasional</td> </tr> <tr> <td><i>Quercus petraea</i></td> <td>Sessile Oak</td> <td>Occasional</td> </tr> <tr> <td><i>Rubus fruticosus</i> agg.</td> <td>Bramble</td> <td>Abundant</td> </tr> <tr> <td><i>Salix</i></td> <td>Willow</td> <td>Occasional</td> </tr> <tr> <td><i>Silene dioica</i></td> <td>Red Campion</td> <td>Rare</td> </tr> <tr> <td><i>Sorbus aucuparia</i></td> <td>Rowan</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Agrostis</i> sp.	Bent Grass	Occasional	<i>Betula pubescens</i>	Downy Birch	Abundant	<i>Blechnum spicant</i>	Hard Fern	Occasional	<i>Corylus avellana</i>	Hazel	Occasional	<i>Dryopteris filix-mas</i>	Male Fern	Occasional	<i>Epilobium</i> sp.	Willowherb	Occasional	<i>Fraxinus excelsior</i>	Ash	Frequent	<i>Geranium robertianum</i>	Herb Robert	Frequent	<i>Hedera helix</i>	Ivy	Occasional	<i>Hypericum androsaemum</i>	Tutsan	Rare	<i>Hypericum pulchrum</i>	Slender St. John's-wort	Occasional	<i>Ilex aquifolium</i>	Holly	Frequent	<i>Lonicera periclymenum</i>	Honeysuckle	Occasional	<i>Quercus petraea</i>	Sessile Oak	Occasional	<i>Rubus fruticosus</i> agg.	Bramble	Abundant	<i>Salix</i>	Willow	Occasional	<i>Silene dioica</i>	Red Campion	Rare	<i>Sorbus aucuparia</i>	Rowan	Occasional
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**Habitat Map****Photographic Record**

**Image 1: Overview of Woodland vegetation**



**TARGET NOTES- ID No. 12**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 26/7/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4270-b	<b>Townland:</b> Ballydonaghan	<b>Grid Ref:</b> 159947, 180093
<b>Target note no.:</b> TN12		<b>Area:</b> 0.17ha
<b>Ecological value:</b> <b>County Importance</b>		

<b>Habitat code</b>  PF2	Small, very wet Poor Fen and Flush PF2 habitat located at bottom of small valley. Wet grassland (GS4) drains into site from the south. Forestry lies to the east and a small section of bog adjoins site to the north.	
	<b>Species List</b>	
	<b>Species (Latin name)</b>	<b>Species (common name)</b>
	<i>Bryophyte</i>	Mosses
	<i>Equesetum</i> sp.	Horsetail
	<i>Erica tetralix</i>	Cross-leaved heather
	<i>Juncus articulatus</i>	Jointed Rush
	<i>Lycopodium</i> sp.	Club moss
	<i>Menyanthes trifoliata</i>	Bogbean
	<i>Molinia caerulea</i>	Purple Moor-grass
	<i>Potentilla erecta</i>	Tormentil
	<i>Salix</i> sp	Willow
	<b>DAFOR Scale</b>	
		Abundant
		Occasional
		Occasional
		Abundant
		Frequent
		Abundant
		Occasional
		Occasional
		Occasional

**Habitat Map**

## Photographic Record



**Image 1: Close up of Fen vegetation**



**Image 2: Overview of Habitat**



**TARGET NOTES- ID No. 13**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 26/07/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4270-b	<b>Townland:</b> Ballydonaghan	<b>Grid Ref:</b> 159942, 180120
<b>Target note no.:</b> TN13		<b>Area:</b> 2.1ha

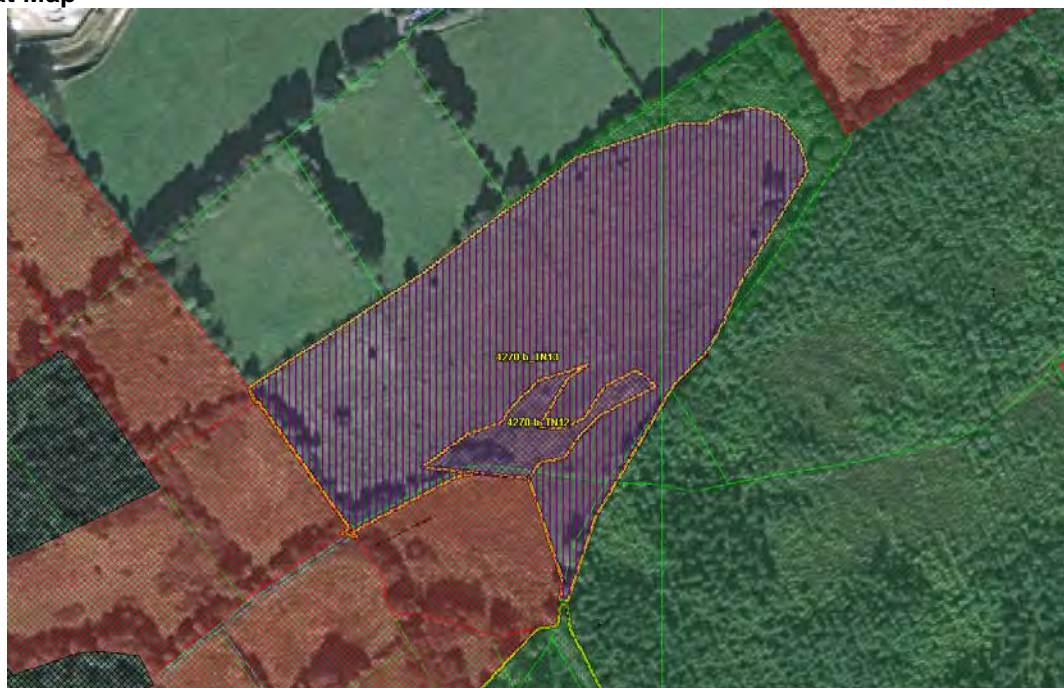
**Ecological value:** County Importance**Habitat code**

PB2

Section of bog just uphill from flush (Target Note 4270-b\_TN12). Does not appear to be active as there is not very much Sphagnum moss and it is quite dry underfoot. Area has recently been burnt and grazed.

**Species List**

Species (Latin name)	Species (common name)	DAFOR Scale
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional
<i>Calluna vulgaris</i>	Ling heather	Abundant
<i>Carex hostiana</i>	Tawny sedge	Occasional
<i>Carex</i> sp.	Sedge	Occasional
<i>Centaurea nigra</i>	Common Knapweed	Occasional
<i>Erica cinerea</i>	Bell heather	Occasional
<i>Erica tetralix</i>	Cross-leaved heath	Frequent
<i>Eriophorum</i> sp.	Cottongrass	Rare
<i>Juncus articulatus</i>	Jointed Rush	Abundant
<i>Luzula multiflora</i>	Heath wood-rush	Occasional
<i>Molinia caerulea</i>	Purple Moor-grass	Abundant
<i>Narthecium ossifragum</i>	Bog asphodel	Frequent
<i>Potentilla erecta</i>	Tormentil	Frequent
<i>Sphagnum</i> sp.	Peat moss	Frequent
<i>Vaccinium myrtillus</i>	Bilberry	Occasional

**Habitat Map**

## Photographic Record



Image 1: Overview of habitat



Image 2: Close-up of Blanket bog vegetation with *Narthecium ossifragum*

TARGET NOTES- ID No. 14																																																																													
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 26/07/11																																																																											
Surveyor: John Curtin		County name: Clare																																																																											
1:2,500 Sheet no: 4270-b	Townland: Ballydonaghan	Grid Ref: 159476, 179893																																																																											
Target note no.: TN14		Area: 3ha																																																																											
Ecological value: <b>International Importance – linked to the annexed habitat '6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>)'</b>																																																																													
Habitat code  GS4	<p>Large wet grassland (GS4) with a good species composition. Field was recently baled. The site slopes gently uphill away from the road to the south east. Sward height reached a maximum of 1ft. <i>Sisyrinchium bermudiana</i> (Blue-eyed grass) was present.</p> <p>The species composition is linked to the annex habitat '<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>) (6410)'</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Achillea millefolium</i></td><td>Yarrow</td><td>Occasional</td></tr> <tr><td><i>Agrostis</i> sp.</td><td>Bent grass</td><td>Occasional</td></tr> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Occasional</td></tr> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Abundant</td></tr> <tr><td><i>Carex panicea</i></td><td>Carnation sedge</td><td>Occasional</td></tr> <tr><td><i>Carex pulicaris</i></td><td>Flea Sedge</td><td>Occasional</td></tr> <tr><td><i>Cirsium paluste</i></td><td>Marsh-thistle</td><td>Occasional</td></tr> <tr><td><i>Dactylorhiza</i> sp.</td><td>Orchid</td><td>Occasional</td></tr> <tr><td><i>Euphrasia arctica</i></td><td>Eyebright</td><td>Abundant</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Occasional</td></tr> <tr><td><i>Hypochaeris radicata</i></td><td>Cat's-ear</td><td>Abundant</td></tr> <tr><td><i>Juncus articulatus</i></td><td>Jointed Rush</td><td>Abundant</td></tr> <tr><td><i>Lotus pendunculatus</i></td><td>Greater Bird's-foot-trefoil</td><td>Frequent</td></tr> <tr><td><i>Luzula multiflora</i></td><td>Heath woodrush</td><td>Occasional</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Occasional</td></tr> <tr><td><i>Pedicularis sylvatica</i></td><td>Lousewort</td><td>Occasional</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Frequent</td></tr> <tr><td><i>Prunella vulgaris</i></td><td>Self-heal</td><td>Occasional</td></tr> <tr><td><i>Ranunculus repens</i></td><td>Creeping buttercup</td><td>Occasional</td></tr> <tr><td><i>Rhinanthus minor</i></td><td>Yellow-rattle</td><td>Occasional</td></tr> <tr><td><i>Rumex acetosella</i></td><td>Sheep's Sorrel</td><td>Occasional</td></tr> <tr><td><i>Sisyrinchium bermudiana</i></td><td>Blue-eyed Grass</td><td>Occasional</td></tr> <tr><td><i>Taraxacum</i> sp.</td><td>Dandelion</td><td>Frequent</td></tr> <tr><td><i>Trifolium pratense</i></td><td>Red Clover</td><td>Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Achillea millefolium</i>	Yarrow	Occasional	<i>Agrostis</i> sp.	Bent grass	Occasional	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional	<i>Bryophyte</i>	Moss spp	Abundant	<i>Carex panicea</i>	Carnation sedge	Occasional	<i>Carex pulicaris</i>	Flea Sedge	Occasional	<i>Cirsium paluste</i>	Marsh-thistle	Occasional	<i>Dactylorhiza</i> sp.	Orchid	Occasional	<i>Euphrasia arctica</i>	Eyebright	Abundant	<i>Holcus lanatus</i>	Yorkshire Fog	Occasional	<i>Hypochaeris radicata</i>	Cat's-ear	Abundant	<i>Juncus articulatus</i>	Jointed Rush	Abundant	<i>Lotus pendunculatus</i>	Greater Bird's-foot-trefoil	Frequent	<i>Luzula multiflora</i>	Heath woodrush	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Occasional	<i>Pedicularis sylvatica</i>	Lousewort	Occasional	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Prunella vulgaris</i>	Self-heal	Occasional	<i>Ranunculus repens</i>	Creeping buttercup	Occasional	<i>Rhinanthus minor</i>	Yellow-rattle	Occasional	<i>Rumex acetosella</i>	Sheep's Sorrel	Occasional	<i>Sisyrinchium bermudiana</i>	Blue-eyed Grass	Occasional	<i>Taraxacum</i> sp.	Dandelion	Frequent	<i>Trifolium pratense</i>	Red Clover	Occasional
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<i>Agrostis</i> sp.	Bent grass	Occasional																																																																											
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional																																																																											
<i>Bryophyte</i>	Moss spp	Abundant																																																																											
<i>Carex panicea</i>	Carnation sedge	Occasional																																																																											
<i>Carex pulicaris</i>	Flea Sedge	Occasional																																																																											
<i>Cirsium paluste</i>	Marsh-thistle	Occasional																																																																											
<i>Dactylorhiza</i> sp.	Orchid	Occasional																																																																											
<i>Euphrasia arctica</i>	Eyebright	Abundant																																																																											
<i>Holcus lanatus</i>	Yorkshire Fog	Occasional																																																																											
<i>Hypochaeris radicata</i>	Cat's-ear	Abundant																																																																											
<i>Juncus articulatus</i>	Jointed Rush	Abundant																																																																											
<i>Lotus pendunculatus</i>	Greater Bird's-foot-trefoil	Frequent																																																																											
<i>Luzula multiflora</i>	Heath woodrush	Occasional																																																																											
<i>Molinia caerulea</i>	Purple Moor-grass	Occasional																																																																											
<i>Pedicularis sylvatica</i>	Lousewort	Occasional																																																																											
<i>Potentilla erecta</i>	Tormentil	Frequent																																																																											
<i>Prunella vulgaris</i>	Self-heal	Occasional																																																																											
<i>Ranunculus repens</i>	Creeping buttercup	Occasional																																																																											
<i>Rhinanthus minor</i>	Yellow-rattle	Occasional																																																																											
<i>Rumex acetosella</i>	Sheep's Sorrel	Occasional																																																																											
<i>Sisyrinchium bermudiana</i>	Blue-eyed Grass	Occasional																																																																											
<i>Taraxacum</i> sp.	Dandelion	Frequent																																																																											
<i>Trifolium pratense</i>	Red Clover	Occasional																																																																											



**Habitat Map****Photographic Record****Image 1: Overview of habitat**



## TARGET NOTES- ID No. 15

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 04/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4270-d	<b>Townland:</b> Drummod	<b>Grid Ref:</b> 158777, 179099
<b>Target note no.:</b> TN1		<b>Area:</b> 1.3ha

**Ecological value:** **County Importance**

**Habitat code**

PB2

Area of bog containing a large degree of *Molinia caerulea* (Purple Moor-grass). The site is flat. A newly built house sits on the site.

**Species List**

Species (Latin name)	Species (common name)	DAFOR Scale
<i>Calluna vulgaris</i>	Ling heather	Abundant
<i>Carex nigra</i>	Common Sedge	Occasional
<i>Cladonia</i> sp.	Lichen	Frequent
<i>Erica tetralix</i>	Cross-leaved heather	Frequent
<i>Galium palustre</i>	Marsh-bedstraw	Occasional
<i>Juncus articulatus</i>	Jointed Rush	Frequent
<i>Juncus effusus</i>	Soft rush	Frequent
<i>Lotus pendunculatus</i>	Greater Bird's-foot-trefoil	Occasional
<i>Molinia caerulea</i>	Purple Moor-grass	Dominant
<i>Narthecium ossifragum</i>	Bog asphodel	Occasional
<i>Potentilla erecta</i>	Tormentil	Frequent
<i>Sphagnum</i> sp.	Peat moss	Frequent

**Habitat Map**



## Photographic Record



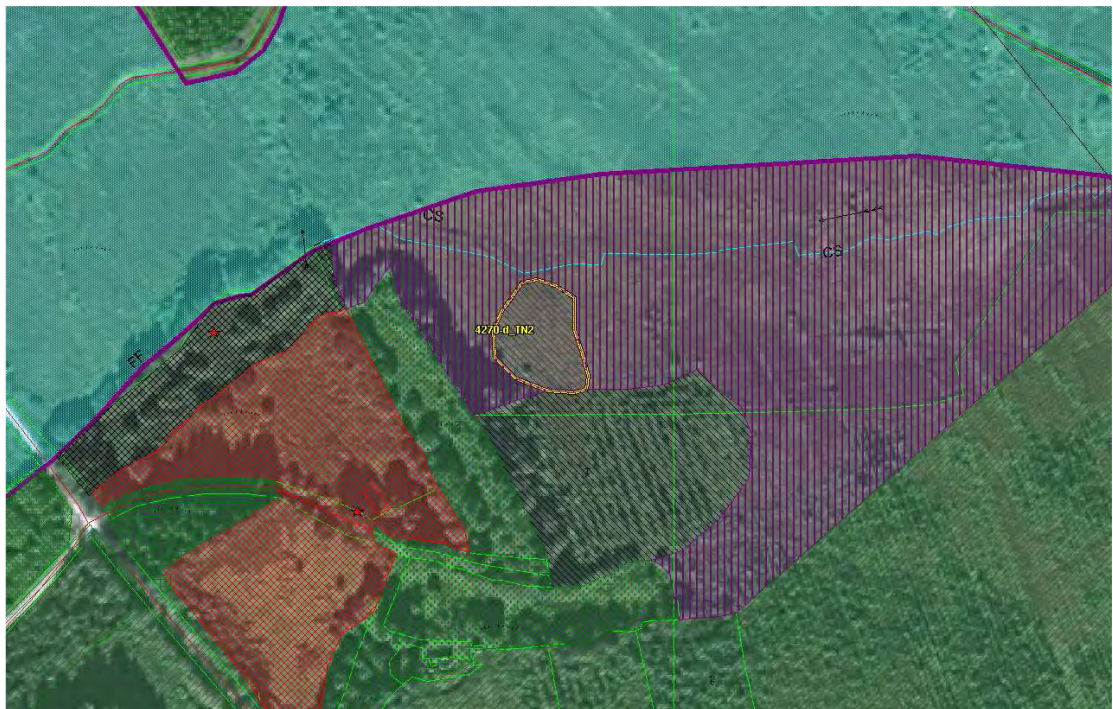
**Image 1: Overview of Habitat**



**Image 2: Close up of Blanket Bog vegetation, *Sphagnum* moss and *Molinia caerulea***





TARGET NOTES - ID No. 16																																															
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 04/08/11																																													
Surveyor: John Curtin		County name: Clare																																													
1:2,500 Sheet no: 4270-d	Townland: Ballydonaghan	Grid Ref: 159930, 178567																																													
Target note no.: TN2		Area: 0.13ha																																													
Ecological value: <b>National Importance</b>																																															
Habitat code  PF3	<p>Area of transition mire and quaking bog (PF3). Very wet, with surface mat of vegetation quaking. The site sits in a depression compared to the surrounding bog. Surrounding the site is numerous <i>Rhododendron ponticum</i> (Rhododendron) plants, thus there is significant threat of invasion by this species.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Bryophyte</i></td> <td>Moss spp</td> <td>Frequent</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling</td> <td>Occasional</td> </tr> <tr> <td><i>Carex nigra</i></td> <td>Common Sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Drosera rotundifolia</i></td> <td>Round-leaved Sundew</td> <td>Occasional</td> </tr> <tr> <td><i>Erica tetralix</i></td> <td>Cross-leaved heather</td> <td>Frequent</td> </tr> <tr> <td><i>Juncus articulatus</i></td> <td>Jointed Rush</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus effusus</i></td> <td>Soft rush</td> <td>Occasional</td> </tr> <tr> <td><i>Menyanthes trifoliata</i></td> <td>Bogbean</td> <td>Abundant</td> </tr> <tr> <td><i>Molinia caerulea</i></td> <td>Purple Moor-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Polygala serpyllifolia</i></td> <td>Heath milkwort</td> <td>Rare</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Frequent</td> </tr> <tr> <td><i>Rhododendron ponticum</i></td> <td>Rhododendron</td> <td>Occasional</td> </tr> <tr> <td><i>Salix sp</i></td> <td>Willow</td> <td>Occasional</td> </tr> <tr> <td><i>Sphagnum sp</i></td> <td>Peat moss</td> <td>Abundant</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Bryophyte</i>	Moss spp	Frequent	<i>Calluna vulgaris</i>	Ling	Occasional	<i>Carex nigra</i>	Common Sedge	Occasional	<i>Drosera rotundifolia</i>	Round-leaved Sundew	Occasional	<i>Erica tetralix</i>	Cross-leaved heather	Frequent	<i>Juncus articulatus</i>	Jointed Rush	Occasional	<i>Juncus effusus</i>	Soft rush	Occasional	<i>Menyanthes trifoliata</i>	Bogbean	Abundant	<i>Molinia caerulea</i>	Purple Moor-grass	Frequent	<i>Polygala serpyllifolia</i>	Heath milkwort	Rare	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Rhododendron ponticum</i>	Rhododendron	Occasional	<i>Salix sp</i>	Willow	Occasional	<i>Sphagnum sp</i>	Peat moss	Abundant
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**Habitat Map****Photographic Record**

**Image 1: Overview of flush habitat**

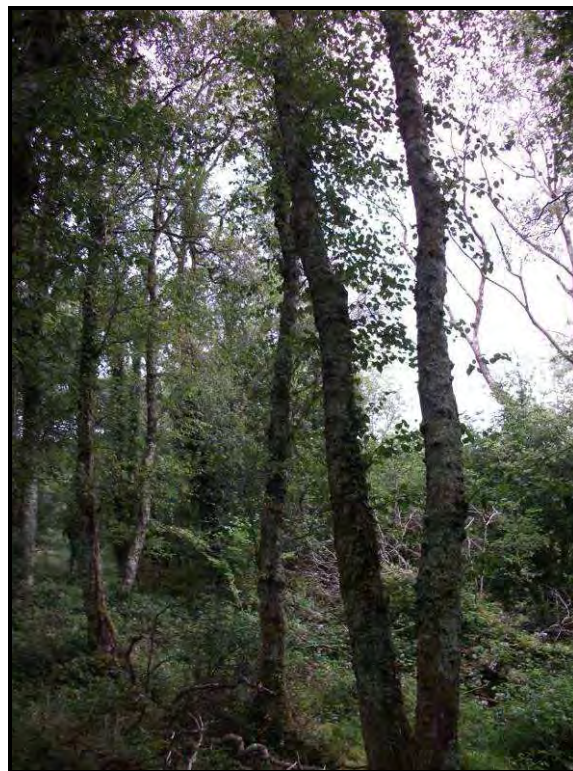


TARGET NOTES - ID No. 17		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 04/08/11
Surveyor: John Curtin		County name: Clare
1:2,500 Sheet no: 4270-d	Townland: Ballydonaghan	Grid Ref: 159360, 179153
Target note no.: TN3		Area: 0.2ha
Ecological value: <b>Local Importance (Lower Value)</b>		
Habitat code BL3	Abandoned house. Has corrugated roof which lowers the possibility of bats using the site as a roost. Trees surround house.	
<b>Habitat Map</b> 		
<b>Photographic Record</b> 		
Image 1: Abandoned house		



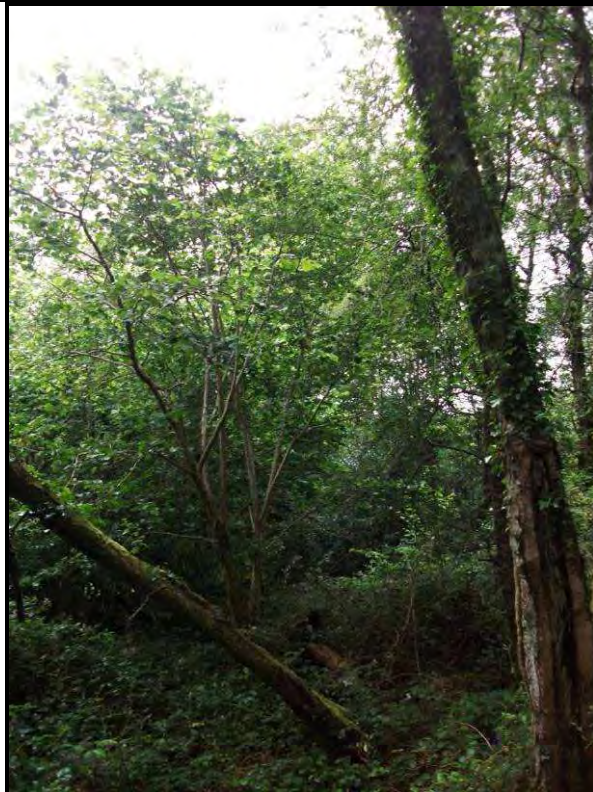
TARGET NOTES - ID No. 18																																																					
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 04/08/11																																																			
Surveyor: John Curtin		County name: Clare																																																			
1:2,500 Sheet no: 4270-d	Townland: Ballydonaghan	Grid Ref: 159519, 179467																																																			
Target note no.: TN4		Area: 0.3ha																																																			
Ecological value: <b>County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.</b>																																																					
Habitat code  WN1	<p>Woodland located on gentle slope uphill to the north west. The site is reasonably open underneath and quiet dry. The area is grazed and seems to be managed; some trees and branches have been cut in the past and cattle have grazed the undergrowth. Although the site does not contain <i>Quercus</i> (oak) species typical of oak-birch-holly woodlands (WN1) it does contain several characteristic species from this habitat including; <i>Betula</i> (birch), <i>Ilex aquifolium</i> (holly), <i>Lonicera periclymenum</i> (honeysuckle) and <i>Teucrium scorodonia</i> (wood sage).</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Agrostis</i> sp.</td> <td>Bent grass</td> <td>Frequent</td> </tr> <tr> <td><i>Betula pubescens</i></td> <td>Downy Birch</td> <td>Frequent</td> </tr> <tr> <td><i>Bryophyte</i></td> <td>Moss spp</td> <td>Frequent</td> </tr> <tr> <td><i>Corylus avellana</i></td> <td>Hazel</td> <td>Frequent</td> </tr> <tr> <td><i>Crataegus monogyna</i></td> <td>Hawthorn</td> <td>Occasional</td> </tr> <tr> <td><i>Fraxinus excelsior</i></td> <td>Ash</td> <td>Frequent</td> </tr> <tr> <td><i>Hedera helix</i></td> <td>Ivy</td> <td>Occasional</td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire Fog</td> <td>Frequent</td> </tr> <tr> <td><i>Ilex aquifolium</i></td> <td>Holly</td> <td>Occasional</td> </tr> <tr> <td><i>Lonicera periclymenum</i></td> <td>Honeysuckle</td> <td>Occasional</td> </tr> <tr> <td><i>Lycopodium</i> sp.</td> <td>Club moss</td> <td>Occasional</td> </tr> <tr> <td><i>Oxalis acetosella</i></td> <td>Wood sorrel</td> <td>Occasional</td> </tr> <tr> <td><i>Rubus fruticosus</i> agg</td> <td>Bramble</td> <td>Frequent</td> </tr> <tr> <td><i>Salix</i> sp.</td> <td>Willow</td> <td>Frequent</td> </tr> <tr> <td><i>Sorbus aucuparia</i></td> <td>Rowan</td> <td>Occasional</td> </tr> <tr> <td><i>Teucrium scorodonia</i></td> <td>Wood Sage</td> <td>Rare</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Agrostis</i> sp.	Bent grass	Frequent	<i>Betula pubescens</i>	Downy Birch	Frequent	<i>Bryophyte</i>	Moss spp	Frequent	<i>Corylus avellana</i>	Hazel	Frequent	<i>Crataegus monogyna</i>	Hawthorn	Occasional	<i>Fraxinus excelsior</i>	Ash	Frequent	<i>Hedera helix</i>	Ivy	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Ilex aquifolium</i>	Holly	Occasional	<i>Lonicera periclymenum</i>	Honeysuckle	Occasional	<i>Lycopodium</i> sp.	Club moss	Occasional	<i>Oxalis acetosella</i>	Wood sorrel	Occasional	<i>Rubus fruticosus</i> agg	Bramble	Frequent	<i>Salix</i> sp.	Willow	Frequent	<i>Sorbus aucuparia</i>	Rowan	Occasional	<i>Teucrium scorodonia</i>	Wood Sage	Rare
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**Habitat Map****Photographic Record**

**Image 1: oak-birch-holly woodland**





**Image 2: woodland canopy is fairly open in areas**

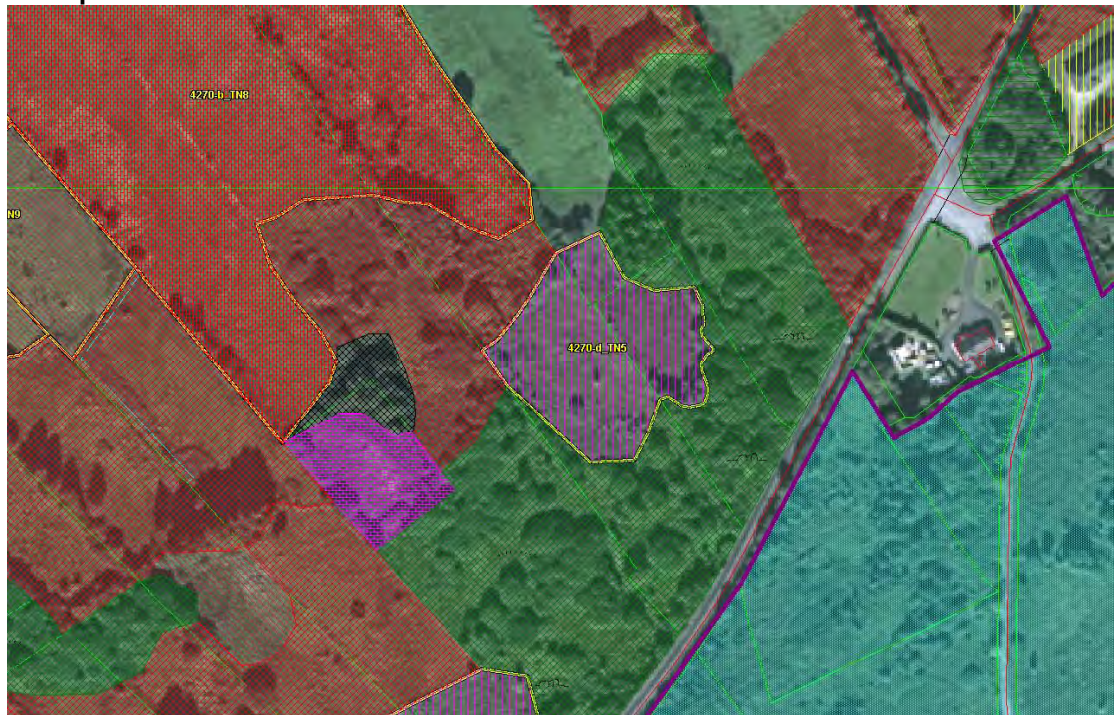


**Image 3: Fallen tree within the woodland. Field layer is rich in grasses and bryophytes**



TARGET NOTES - ID No. 19																																						
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 04/08/11																																				
Surveyor: John Curtin		County name: Clare																																				
1:2,500 Sheet no: 4270-d	Townland: Drummod	Grid Ref: 159083, 179434																																				
Target note no.: TN5		Area: 0.5ha																																				
Ecological Importance: <b>County Importance</b>																																						
Habitat code  HH3	<p>Section of wet heath (HH3) which has recently been burnt. Heather had a height of up to 3ft but is now much reduced. Some stones close to the surface suggest very little peat accumulation.</p> <p>This habitat appears to link to the annexed habitat 'northern Atlantic wet heaths with <i>Erica tetralix</i> (4010)' however due to its small size it is of Ecological Importance to County level.</p> <p>This habitat is adjacent to an area of Wet Willow-Alder-Ash Woodland WN6 with extensive tracts of conifer plantations beyond this area of semi-natural woodland. The area is under threat of afforestation and burning.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling heather</td> <td>Occasional</td> </tr> <tr> <td><i>Carex pulicaris</i></td> <td>Flea sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Cladonia sp</i></td> <td>Lichen</td> <td>Occasional</td> </tr> <tr> <td><i>Dactylorhiza sp.</i></td> <td>Orchid (fruited)</td> <td>Frequent</td> </tr> <tr> <td><i>Erica tetralix</i></td> <td>Cross-leaved heather</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus articulatus</i></td> <td>Jointed Rush</td> <td>Frequent</td> </tr> <tr> <td><i>Molinia caerulea</i></td> <td>Purple Moor-grass</td> <td>Dominant</td> </tr> <tr> <td><i>Narthecium ossifragum</i></td> <td>Bog asphodel</td> <td>Occasional</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Occasional</td> </tr> <tr> <td><i>Salix sp</i></td> <td>Willow</td> <td>Occasional</td> </tr> <tr> <td><i>Vaccinium myrtillus</i></td> <td>Bilberry</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Calluna vulgaris</i>	Ling heather	Occasional	<i>Carex pulicaris</i>	Flea sedge	Occasional	<i>Cladonia sp</i>	Lichen	Occasional	<i>Dactylorhiza sp.</i>	Orchid (fruited)	Frequent	<i>Erica tetralix</i>	Cross-leaved heather	Occasional	<i>Juncus articulatus</i>	Jointed Rush	Frequent	<i>Molinia caerulea</i>	Purple Moor-grass	Dominant	<i>Narthecium ossifragum</i>	Bog asphodel	Occasional	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Salix sp</i>	Willow	Occasional	<i>Vaccinium myrtillus</i>	Bilberry	Occasional
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**Habitat Map****Photographic Record**

**Image 1: Recolonising area of previously burnt heather**





**Image 2: Exposed bedrock – peat accumulation is restricted in parts**



**Image 3: Close-up of vegetation – *Narthecium ossifragum*, *Molinia caerulea***



TARGET NOTES - ID No. 20																																																										
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 04/08/11																																																								
Surveyor: John Curtin		County name: Clare																																																								
1:2,500 Sheet no: 4270-d	Townland: Drummod	Grid Ref: 158962, 179229																																																								
Target note no.: TN6		Area: 1.5ha																																																								
Ecological value: <b>County Importance</b>																																																										
Habitat code  HH3 / WS1/ HD1 / GS4	<p>Mosaic habitat includes <i>Salix</i> (willow) scrub (WS1), <i>Pteridium aquilinum</i> (bracken) (HD1) heath (HH3) and wet grassland (GS4). The area has had some grazing by cattle even though the sward height is quite high (3–6ft.). Underfoot the surface is quite hummocky. The heath species are listed below.</p>																																																									
	<p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Agrostis sp</i></td> <td>Bent grass</td> <td>Occasional</td> </tr> <tr> <td><i>Anthoxanthum odoratum</i></td> <td>Sweet Vernal-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Blechnum spicant</i></td> <td>Hard Fern</td> <td>Occasional</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Frequent</td> </tr> <tr> <td><i>Centaurea nigra</i></td> <td>Common Knapweed</td> <td>Occasional</td> </tr> <tr> <td><i>Cirsium paluste</i></td> <td>Marsh Thistle</td> <td>Occasional</td> </tr> <tr> <td><i>Dactylorhiza sp.</i></td> <td>Orchid (fruited)</td> <td>Occasional</td> </tr> <tr> <td><i>Erica tetralix</i></td> <td>Cross-leaved Heather</td> <td>Frequent</td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire Fog</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus articulatus</i></td> <td>Jointed Rush</td> <td>Frequent</td> </tr> <tr> <td><i>Juncus effusus</i></td> <td>Soft Rush</td> <td>Frequent</td> </tr> <tr> <td><i>Lotus pendunculatus</i></td> <td>Greater Bird's-foot-trefoil</td> <td>Occasional</td> </tr> <tr> <td><i>Molinia caerulea</i></td> <td>Purple Moor-grass</td> <td>Abundant</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Occasional</td> </tr> <tr> <td><i>Pteridium aquilinum</i></td> <td>Bracken</td> <td>Frequent</td> </tr> <tr> <td><i>Rubus fruticosus agg</i></td> <td>Bramble</td> <td>Occasional</td> </tr> <tr> <td><i>Succisa pratensis</i></td> <td>Devils-bit Scabious</td> <td>Rare</td> </tr> <tr> <td><i>Taraxacum sp.</i></td> <td>Dandelion</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Agrostis sp</i>	Bent grass	Occasional	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Blechnum spicant</i>	Hard Fern	Occasional	<i>Calluna vulgaris</i>	Ling Heather	Frequent	<i>Centaurea nigra</i>	Common Knapweed	Occasional	<i>Cirsium paluste</i>	Marsh Thistle	Occasional	<i>Dactylorhiza sp.</i>	Orchid (fruited)	Occasional	<i>Erica tetralix</i>	Cross-leaved Heather	Frequent	<i>Holcus lanatus</i>	Yorkshire Fog	Occasional	<i>Juncus articulatus</i>	Jointed Rush	Frequent	<i>Juncus effusus</i>	Soft Rush	Frequent	<i>Lotus pendunculatus</i>	Greater Bird's-foot-trefoil	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Abundant	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Pteridium aquilinum</i>	Bracken	Frequent	<i>Rubus fruticosus agg</i>	Bramble	Occasional	<i>Succisa pratensis</i>	Devils-bit Scabious	Rare	<i>Taraxacum sp.</i>	Dandelion
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**Habitat Map****Photographic Record**

**Image 1: Tussocky grasses and dwarf shrubs such as heather with occasional Ash trees**





**Image 2: Close-up of vegetation – rushes, Bracken and ferns**



**Image 3: Close-up of tussocky grasses (Purple Moor-grass) with Ling heather and occasional broadleaved herbs such as Tormentil**



TARGET NOTES - ID No. 21																																																																																																		
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1:2,500 Sheet no: 4270-d	Townland: Drummod	Grid Ref: 158530, 178942																																																																																																
Target note no.: TN7		Area: 3ha																																																																																																
Ecological Importance: <b>Local Importance (Higher Value)</b>																																																																																																		
Habitat code  GS3 / GS4 / WS1	<p>Large area of acid grassland (GS3) (several acres) with a smaller proportion of wet grassland (GS4) and scrub (WS1) throughout. Cattle were in field at time of survey. The site slopes downhill to the north west away from the road. The surface of the field was dry with a low sward of 3 inches in general. Some rushes reached a height of 2-3ft. Some stone outcrops occur throughout the field. The site contained a high diversity of species.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Agrostis sp</i></td><td>Bent grass</td><td>Frequent</td></tr> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Occasional</td></tr> <tr><td><i>Betula pendula</i></td><td>Silver Birch</td><td>Rare</td></tr> <tr><td><i>Briza media</i></td><td>Quaking Grass</td><td>Occasional</td></tr> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Abundant</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Frequent</td></tr> <tr><td><i>Carex panicea</i></td><td>Carnation Sedge</td><td>Frequent</td></tr> <tr><td><i>Carex sp.</i></td><td>Sedge</td><td>Rare</td></tr> <tr><td><i>Centaurea nigra</i></td><td>Common Knapweed</td><td>Occasional</td></tr> <tr><td><i>Cirsium paluste</i></td><td>Marsh Thistle</td><td>Occasional</td></tr> <tr><td><i>Crataegus monogyna</i></td><td>Hawthorn</td><td>Occasional</td></tr> <tr><td><i>Erica tetralix</i></td><td>Cross-leaved Heather</td><td>Occasional</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Occasional</td></tr> <tr><td><i>Hypericum pulchrum</i></td><td>Slender St John's-wort</td><td>Rare</td></tr> <tr><td><i>Juncus articulatus</i></td><td>Jointed Rush</td><td>Abundant</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft rush</td><td>Occasional</td></tr> <tr><td><i>Leontodon sp.</i></td><td>Hawkbait</td><td>Frequent</td></tr> <tr><td><i>Lotus pendunculatus</i></td><td>Greater Birds-foot-trefoil</td><td>Frequent</td></tr> <tr><td><i>Luzula campestris</i></td><td>Field Wood-rush</td><td>Occasional</td></tr> <tr><td><i>Mentha aquatica</i></td><td>Water Mint</td><td>Occasional</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Frequent</td></tr> <tr><td><i>Narthecium ossifragum</i></td><td>Bog asphodel</td><td>Occasional</td></tr> <tr><td><i>Pedicularis sylvatica</i></td><td>Lousewort</td><td>Occasional</td></tr> <tr><td><i>Phleum pratense</i></td><td>Timothy Grass</td><td>Occasional</td></tr> <tr><td><i>Plantago lanceolata</i></td><td>Ribwort Plantain</td><td>Occasional</td></tr> <tr><td><i>Polygala serpyllifolia</i></td><td>Heath milkwort</td><td>Occasional</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Frequent</td></tr> <tr><td><i>Prunella vulgaris</i></td><td>Self-heal</td><td>Occasional</td></tr> <tr><td><i>Rubus fruticosus</i> agg.</td><td>Bramble</td><td>Occasional</td></tr> <tr><td><i>Salix sp.</i></td><td>Willow</td><td>Frequent</td></tr> <tr><td><i>Sphagnum sp.</i></td><td>Peat moss</td><td>Frequent</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Agrostis sp</i>	Bent grass	Frequent	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional	<i>Betula pendula</i>	Silver Birch	Rare	<i>Briza media</i>	Quaking Grass	Occasional	<i>Bryophyte</i>	Moss spp	Abundant	<i>Calluna vulgaris</i>	Ling Heather	Frequent	<i>Carex panicea</i>	Carnation Sedge	Frequent	<i>Carex sp.</i>	Sedge	Rare	<i>Centaurea nigra</i>	Common Knapweed	Occasional	<i>Cirsium paluste</i>	Marsh Thistle	Occasional	<i>Crataegus monogyna</i>	Hawthorn	Occasional	<i>Erica tetralix</i>	Cross-leaved Heather	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Occasional	<i>Hypericum pulchrum</i>	Slender St John's-wort	Rare	<i>Juncus articulatus</i>	Jointed Rush	Abundant	<i>Juncus effusus</i>	Soft rush	Occasional	<i>Leontodon sp.</i>	Hawkbait	Frequent	<i>Lotus pendunculatus</i>	Greater Birds-foot-trefoil	Frequent	<i>Luzula campestris</i>	Field Wood-rush	Occasional	<i>Mentha aquatica</i>	Water Mint	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Frequent	<i>Narthecium ossifragum</i>	Bog asphodel	Occasional	<i>Pedicularis sylvatica</i>	Lousewort	Occasional	<i>Phleum pratense</i>	Timothy Grass	Occasional	<i>Plantago lanceolata</i>	Ribwort Plantain	Occasional	<i>Polygala serpyllifolia</i>	Heath milkwort	Occasional	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Prunella vulgaris</i>	Self-heal	Occasional	<i>Rubus fruticosus</i> agg.	Bramble	Occasional	<i>Salix sp.</i>	Willow	Frequent	<i>Sphagnum sp.</i>	Peat moss	Frequent
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	<i>Succisa pratensis</i>	Devils-bit Scabious	Frequent
	<i>Trifolium pratense</i>	Red Clover	Occasional
	<i>Trifolium</i> sp.	Clover	Occasional
	<i>Ulex europaeus</i>	European Gorse	Occasional

Habitat Map



Photographic Record



Image 1: Overview of Acid grassland habitat





**Image 2: Close-up of Acid grassland vegetation**



**Image 3: Close-up with Tormentil, Purple Moor-grass, Ling and non-Sphagnum mosses**



TARGET NOTES- ID No. 22																																																																										
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Surveyor: John Curtin		County name: Clare																																																																								
1:2,500 Sheet no: 4270-d	Townland: Drummod	Grid Ref: 158791, 179477																																																																								
Target note no.: TN8		Area: 0.63ha																																																																								
Ecological value: <b>County Importance – may be linked to the priority habitat ‘Species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas (6230)’.</b>																																																																										
Habitat code  GS3	<p>Nice Dry-humid acid grassland (GS3) situated on slight hill. To the south east, downhill lies wet grassland. To the north west improved grassland begins. Cattle graze the site. It was dry underfoot.</p> <p>May be linked to the Annex I priority habitat ‘6230 Species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas (and submountain areas in continental Europe)’. However, as the area is quite small it is assigned an ecological importance value to County level.</p> <p><b>Species List</b></p> <table> <tr> <th>Species (<i>Latin</i> name)</th><th>Species (common name)</th><th>DAFOR Scale</th></tr> <tr><td><i>Achillea millefolium</i></td><td>Yarrow</td><td>Frequent</td></tr> <tr><td><i>Agrostis</i> sp.</td><td>Bent Grass</td><td>Occasional</td></tr> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Frequent</td></tr> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Abundant</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Frequent</td></tr> <tr><td><i>Carex nigra</i></td><td>Common Sedge</td><td>Occasional</td></tr> <tr><td><i>Carex panicea</i></td><td>Carnation Sedge</td><td>Frequent</td></tr> <tr><td><i>Carex pulicaris</i></td><td>Flea Sedge</td><td>Frequent</td></tr> <tr><td><i>Centaurea nigra</i></td><td>Common Knapweed</td><td>Occasional</td></tr> <tr><td><i>Erica tetralix</i></td><td>Cross-leaved Heath</td><td>Occasional</td></tr> <tr><td><i>Hieracium</i> sp.</td><td>Hawkweed</td><td>Frequent</td></tr> <tr><td><i>Juncus articulatus</i></td><td>Jointed Rush</td><td>Occasional</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Occasional</td></tr> <tr><td><i>Juncus squarrosus</i></td><td>Heath Rush</td><td>Frequent</td></tr> <tr><td><i>Lotus pendunculatus</i></td><td>Greater Bird’s-foot-trefoil</td><td>Frequent</td></tr> <tr><td><i>Luzula campestris</i></td><td>Field Wood-rush</td><td>Frequent</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Frequent</td></tr> <tr><td><i>Nardus stricta</i></td><td>Mat-grass</td><td>Frequent</td></tr> <tr><td><i>Polygala serpyllifolia</i></td><td>Heath milkwort</td><td>Occasional</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Frequent</td></tr> <tr><td><i>Sphagnum</i> sp.</td><td>Peat moss</td><td>Frequent</td></tr> <tr><td><i>Succisa pratensis</i></td><td>Devil’s-bit Scabious</td><td>Frequent</td></tr> <tr><td><i>Trifolium</i> sp.</td><td>Clover</td><td>Occasional</td></tr> </table>		Species ( <i>Latin</i> name)	Species (common name)	DAFOR Scale	<i>Achillea millefolium</i>	Yarrow	Frequent	<i>Agrostis</i> sp.	Bent Grass	Occasional	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Bryophyte</i>	Moss spp	Abundant	<i>Calluna vulgaris</i>	Ling Heather	Frequent	<i>Carex nigra</i>	Common Sedge	Occasional	<i>Carex panicea</i>	Carnation Sedge	Frequent	<i>Carex pulicaris</i>	Flea Sedge	Frequent	<i>Centaurea nigra</i>	Common Knapweed	Occasional	<i>Erica tetralix</i>	Cross-leaved Heath	Occasional	<i>Hieracium</i> sp.	Hawkweed	Frequent	<i>Juncus articulatus</i>	Jointed Rush	Occasional	<i>Juncus effusus</i>	Soft Rush	Occasional	<i>Juncus squarrosus</i>	Heath Rush	Frequent	<i>Lotus pendunculatus</i>	Greater Bird’s-foot-trefoil	Frequent	<i>Luzula campestris</i>	Field Wood-rush	Frequent	<i>Molinia caerulea</i>	Purple Moor-grass	Frequent	<i>Nardus stricta</i>	Mat-grass	Frequent	<i>Polygala serpyllifolia</i>	Heath milkwort	Occasional	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Sphagnum</i> sp.	Peat moss	Frequent	<i>Succisa pratensis</i>	Devil’s-bit Scabious	Frequent	<i>Trifolium</i> sp.	Clover	Occasional
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**Habitat Map****Photographic Record**

**Image 1: Overview of Acid grassland with scrub in the distance**





**Image 2: Close-up of Acid grassland vegetation with Heath Rush**



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1:2,500 Sheet no: 4270-d	Townland: Ballymacdonnell	Grid Ref: 158110, 179133																																																																																													
Target note no.: TN9		Area: 1.25ha																																																																																													
Ecological value: <b>County Importance</b>																																																																																															
Habitat code  GM1	<p>Flat marsh (GM1) located in basin. Surface was fairly wet at time of survey although it was a dry day. The sward height reached up to 4ft. Some poaching can be seen.</p> <p>The area has a network of drainage ditches throughout so it is under threat from drying out, however, this habitat has a good diversity of species and therefore can be considered as being of ecological value on a county level.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Agrostis</i> sp.</td><td>Bent Grass</td><td>Occasional</td></tr> <tr><td><i>Angelica sylvestris</i></td><td>Wild Angelica</td><td>Occasional</td></tr> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Occasional</td></tr> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Frequent</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Rare</td></tr> <tr><td><i>Carex nigra</i></td><td>Common Sedge</td><td>Frequent</td></tr> <tr><td><i>Carex panicea</i></td><td>Carnation Sedge</td><td>Frequent</td></tr> <tr><td><i>Carex pendula</i></td><td>Pendulous Sedge</td><td>Occasional</td></tr> <tr><td><i>Carex pulicaris</i></td><td>Flea Sedge</td><td>Occasional</td></tr> <tr><td><i>Centaurea nigra</i></td><td>Common Knapweed</td><td>Frequent</td></tr> <tr><td><i>Cirsium paluste</i></td><td>Marsh Thistle</td><td>Occasional</td></tr> <tr><td><i>Cirsium vulgare</i></td><td>Spear Thistle</td><td>Occasional</td></tr> <tr><td><i>Dactylorhiza</i> sp.</td><td>Orchid</td><td>Occasional</td></tr> <tr><td><i>Equisetum</i> sp.</td><td>Horsetail</td><td>Occasional</td></tr> <tr><td><i>Eriophorum angustifolium</i></td><td>Common Cottongrass</td><td>Occasional</td></tr> <tr><td><i>Filipendula ulmaria</i></td><td>Meadowsweet</td><td>Abundant</td></tr> <tr><td><i>Galium aparine</i></td><td>Cleavers</td><td>Occasional</td></tr> <tr><td><i>Galium saxatile</i></td><td>Heath Bedstraw</td><td>Occasional</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Frequent</td></tr> <tr><td><i>Juncus articulatus</i></td><td>Jointed Rush</td><td>Abundant</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Occasional</td></tr> <tr><td><i>Lotus pendunculatus</i></td><td>Greater Birds-foot-trefoil</td><td>Frequent</td></tr> <tr><td><i>Luzula sylvatica</i></td><td>Great Wood-rush</td><td>Occasional</td></tr> <tr><td><i>Mentha aquatica</i></td><td>Water Mint</td><td>Occasional</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Frequent</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Frequent</td></tr> <tr><td><i>Potentilla palustris</i></td><td>Marsh Cinquefoil</td><td>Occasional</td></tr> <tr><td><i>Ranunculus repens</i></td><td>Creeping Buttercup</td><td>Rare</td></tr> <tr><td><i>Rumex</i> sp.</td><td>Sorrel</td><td>Frequent</td></tr> <tr><td><i>Salix</i> sp.</td><td>Willow</td><td>Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Agrostis</i> sp.	Bent Grass	Occasional	<i>Angelica sylvestris</i>	Wild Angelica	Occasional	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional	<i>Bryophyte</i>	Moss spp	Frequent	<i>Calluna vulgaris</i>	Ling Heather	Rare	<i>Carex nigra</i>	Common Sedge	Frequent	<i>Carex panicea</i>	Carnation Sedge	Frequent	<i>Carex pendula</i>	Pendulous Sedge	Occasional	<i>Carex pulicaris</i>	Flea Sedge	Occasional	<i>Centaurea nigra</i>	Common Knapweed	Frequent	<i>Cirsium paluste</i>	Marsh Thistle	Occasional	<i>Cirsium vulgare</i>	Spear Thistle	Occasional	<i>Dactylorhiza</i> sp.	Orchid	Occasional	<i>Equisetum</i> sp.	Horsetail	Occasional	<i>Eriophorum angustifolium</i>	Common Cottongrass	Occasional	<i>Filipendula ulmaria</i>	Meadowsweet	Abundant	<i>Galium aparine</i>	Cleavers	Occasional	<i>Galium saxatile</i>	Heath Bedstraw	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Juncus articulatus</i>	Jointed Rush	Abundant	<i>Juncus effusus</i>	Soft Rush	Occasional	<i>Lotus pendunculatus</i>	Greater Birds-foot-trefoil	Frequent	<i>Luzula sylvatica</i>	Great Wood-rush	Occasional	<i>Mentha aquatica</i>	Water Mint	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Frequent	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Potentilla palustris</i>	Marsh Cinquefoil	Occasional	<i>Ranunculus repens</i>	Creeping Buttercup	Rare	<i>Rumex</i> sp.	Sorrel	Frequent	<i>Salix</i> sp.	Willow	Occasional
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	<i>Stachys sylvatica</i>	Hedge Woundwort	Frequent
	<i>Stellaria media</i>	Common Chickweed	Occasional
	<i>Succisa pratensis</i>	Devils-bit Scabious	Frequent
	<i>Taraxacum</i> sp.	Dandelion	Occasional
	<i>Valeriana officinalis</i>	Wild Valerian	Frequent
	<i>Vicia</i> sp.	Vetch	Occasional

**Habitat Map**



**Photographic Record**



**Image 1: Marsh habitat with abundant Meadowsweet and occasional Wild Angelica**





**Image 2: Overview of Marsh habitat with tall rank vegetation**



**Image 3: Close-up with Devil's-bit Scabious, Marsh Cinquefoil and Tormentil**



## TARGET NOTES - ID No. 24

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 05/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4270-d	<b>Townland:</b> Ballymacdonnell	<b>Grid Ref:</b> 158830, 178161
<b>Target note no.:</b> TN10		<b>Area:</b> 2.7ha

**Ecological value:** National Importance – linked to the Annex I habitat '4010 Northern Atlantic wet heath with *Erica tetralix*'.

**Habitat code**

HH3

Section of wet heath (HH3) with *Calluna vulgaris* (ling) dominating. Surrounded by forestry except to the north west where the site joins the protected lands of Slieve Bernagh cSAC. The site slopes uphill to the north west.

This area is under threat from invasion by the alien species *Rhododendron* (*Rhododendron ponticum*).

**Species List**

Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale
<i>Calluna vulgaris</i>	Ling Heather	Dominant
<i>Carex panicea</i>	Carnation Sedge	Rare
<i>Cladonia</i> sp.	Lichen	Frequent
<i>Erica tetralix</i>	Cross-leaved Heather	Frequent
<i>Eriophorum angustifolium</i>	Common Cottongrass	Rare
<i>Juncus squarrosus</i>	Heath Rush	Frequent
<i>Luzula campestris</i>	Field Wood-rush	Rare
<i>Molinia caerulea</i>	Purple Moor-grass	Abundant
<i>Potentilla erecta</i>	Tormentil	Occasional
<i>Rhododendron ponticum</i>	Rhododendron	Rare
<i>Sphagnum</i> sp.	Peat moss	Abundant
<i>Trichophorum cespitosum</i>	Deergrass	Frequent

**Habitat Map**




## Photographic Record



**Image 1: Wet heath habitat overview with an abundance of dwarf shrubs**





**Image 2: Ling, Cross-leaved heath, Purple Moor-grass and *Cladonia* lichen**





**Image 3: Wet heath area with adjacent afforested areas**




TARGET NOTES - ID No. 25			
Survey Title: Survey and Mapping of Habitats in Mid Clare			Survey date: 05/08/11
Surveyor: John Curtin			County name: Clare
1:2,500 Sheet no: 4270-d	Townland: Ballymacdonnell		Grid Ref: 159370, 178497
Target note no.: TN11		Area: 0.2ha	
Ecological value: <b>Local Importance (Higher Value)</b>			
Habitat code  BL3	Abandoned house (BL3). It has slates which contain some gaps. Shrubs and trees surround. Good roost potential for bats. Near Slieve Bernagh Bog cSAC		
Habitat Map			
			
Photographic Record			
			
Image 1: Abandoned stone house with loose slates on roof – bat roost potential			





**Image 2: Close-up of loose slates on roof**



TARGET NOTES - ID No. 26																																															
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 30/08/11																																													
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare																																													
<b>1:2,500 Sheet no:</b> 4271-a	<b>Townland:</b> Ballydonaghan	<b>Grid Ref:</b> 160492, 180139																																													
<b>Target note no.:</b> TN1		<b>Area:</b> 0.7ha																																													
<b>Ecological value:</b> <span style="color: red;">County Importance</span>																																															
<b>Habitat code</b>  PB2	<p>Section of bog close to lake to the east. The site is immediately surrounded by scrub (WS1) with forestry (WD4) behind this to the west and south. Sward height on the bog reached up to 4ft. The surface was fairly spongy with some deeper depressions throughout. Some deer droppings present. A frog (<i>Rana temporaria</i>) was spotted on the site.</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 5px;">Species (common name)</th> <th style="text-align: left; padding: 5px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;"><i>Calluna vulgaris</i></td><td style="padding: 5px;">Ling Heather</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Carex pendula</i></td><td style="padding: 5px;">Pendulous Sedge</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Cladonia</i> sp.</td><td style="padding: 5px;">Lichen</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Erica tetralix</i></td><td style="padding: 5px;">Cross-leaved Heather</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Eriophorum vaginatum</i></td><td style="padding: 5px;">Hares-tail Cottongrass</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Juncus articulatus</i></td><td style="padding: 5px;">Jointed Rush</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Juncus effusus</i></td><td style="padding: 5px;">Soft Rush</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Molinia caerulea</i></td><td style="padding: 5px;">Purple Moor-grass</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Myrica gale</i></td><td style="padding: 5px;">Bog Myrtle</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Potentilla erecta</i></td><td style="padding: 5px;">Tormentil</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Ranunculus flammula</i></td><td style="padding: 5px;">Lesser Spearwort</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Ranunculus repens</i></td><td style="padding: 5px;">Creeping Buttercup</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Salix</i> sp.</td><td style="padding: 5px;">Willow</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Sphagnum</i> sp.</td><td style="padding: 5px;">Peat moss</td><td style="padding: 5px;">Frequent</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Calluna vulgaris</i>	Ling Heather	Frequent	<i>Carex pendula</i>	Pendulous Sedge	Rare	<i>Cladonia</i> sp.	Lichen	Occasional	<i>Erica tetralix</i>	Cross-leaved Heather	Frequent	<i>Eriophorum vaginatum</i>	Hares-tail Cottongrass	Occasional	<i>Juncus articulatus</i>	Jointed Rush	Frequent	<i>Juncus effusus</i>	Soft Rush	Rare	<i>Molinia caerulea</i>	Purple Moor-grass	Abundant	<i>Myrica gale</i>	Bog Myrtle	Occasional	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Ranunculus flammula</i>	Lesser Spearwort	Rare	<i>Ranunculus repens</i>	Creeping Buttercup	Rare	<i>Salix</i> sp.	Willow	Occasional	<i>Sphagnum</i> sp.	Peat moss	Frequent
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## Photographic Record



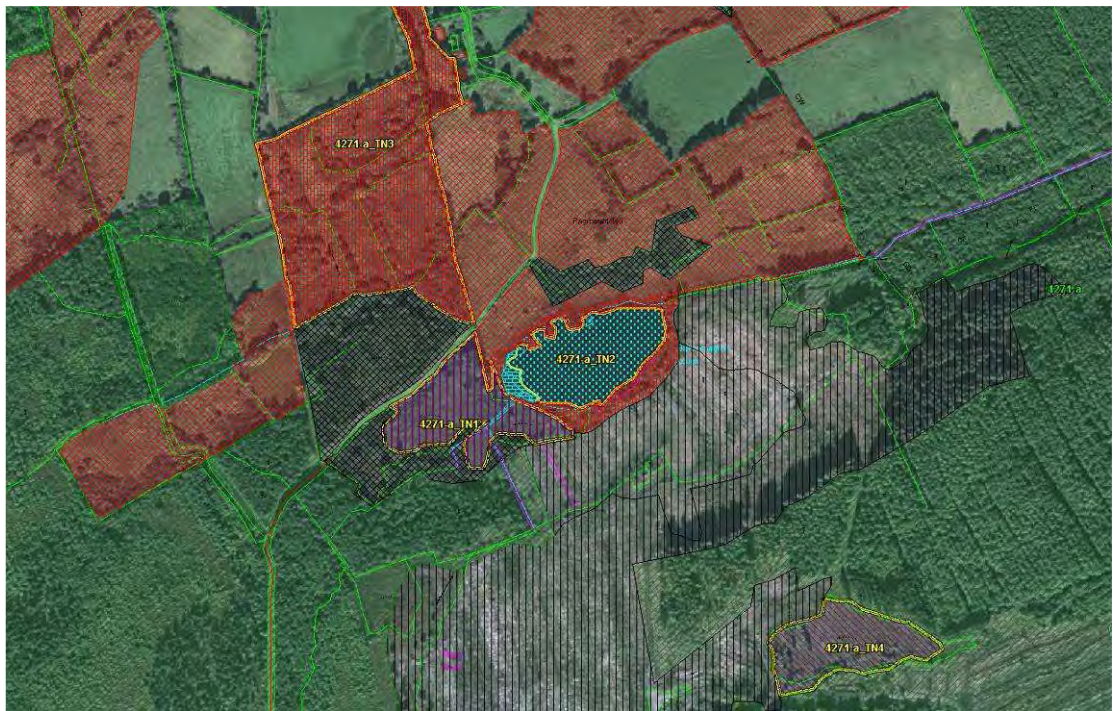
**Image 1: Overview of Upland blanket bog habitat with adjacent Conifer plantation**



**Image 2: Overview of Upland blanket bog habitat with adjacent Conifer plantation**



TARGET NOTES - ID No. 27																																																													
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Surveyor: John Curtin		County name: Clare																																																											
1:2,500 Sheet no: 4271-a	Townland: Ballydonaghan	Grid Ref: 160605, 180193																																																											
Target note no.: TN2		Area: 0.7ha																																																											
Ecological value: <b>County Importance</b>																																																													
Habitat code  FL2 / GM1 / FS1	<p>Acid oligotrophic lake (FL2) in valley with recently cut forestry (WS5) to the south, wet grassland to the north and a small section of blanket bog (PB2) to the west (see TN1). Some reed swamp (FS1) surrounds lake especially to the west. Bordering the lake parallel to the northern shore is an area which may be described as a floating mat of vegetation. Species-wise the closest habitat to this is 'marsh (GM1)'. This quickly grades into wet grassland (GS4).</p>																																																												
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<i>Eriophorum vaginatum</i>	Hare's-tail Cottongrass	Occasional																																																											
<i>Galium aparine</i>	Cleavers	Occasional																																																											
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<i>Potentilla palustris</i>	Marsh Cinquefoil	Frequent																																																											
<i>Prunella vulgaris</i>	Self-heal	Occasional																																																											
<i>Ranunculus flammula</i>	Lesser Spearwort	Frequent																																																											
<i>Salix sp.</i>	Willow	Occasional																																																											

**Habitat Map****Photographic Record**

**Image 1: Acid oligotrophic lake with Marsh and Reed swamp vegetation**





**Image 2: Mosaic of habitats surrounding the lake**

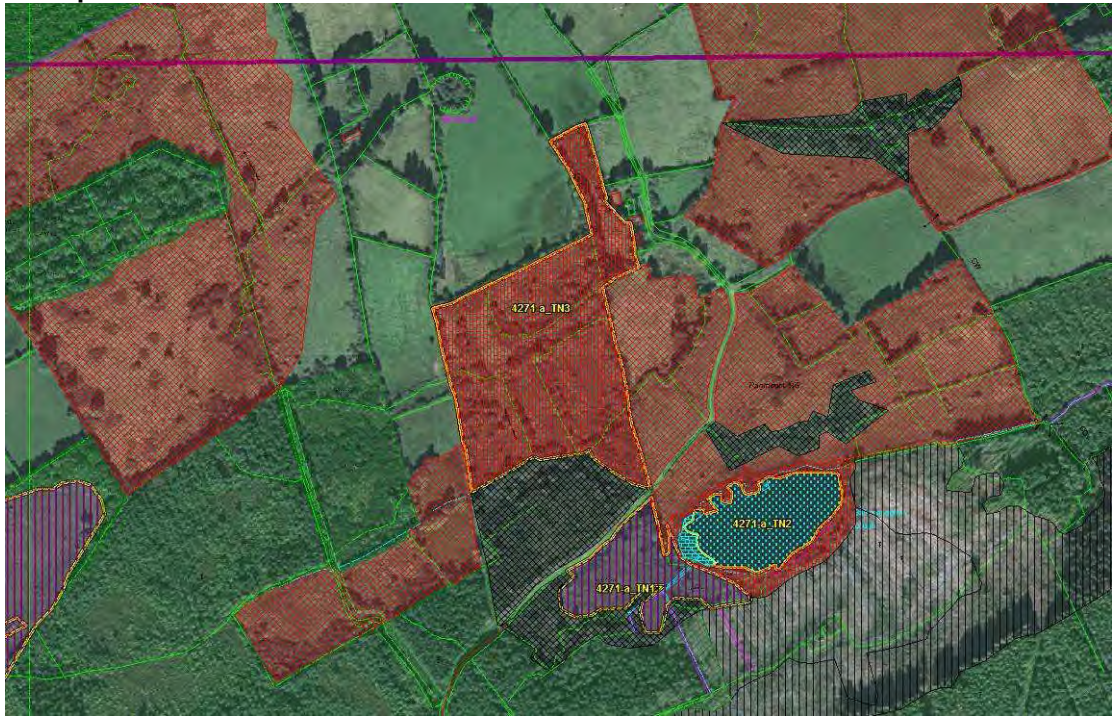


**Image 3: Close-up of the lake with emergent Bogbean**



TARGET NOTES - ID No. 28																																																																													
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 30/08/11																																																																											
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare																																																																											
<b>1:2,500 Sheet no:</b> 4271-a	<b>Townland:</b> Ballydonaghan	<b>Grid Ref:</b> 160422, 180370																																																																											
<b>Target note no.:</b> TN3		<b>Area:</b> 2.7ha																																																																											
<b>Ecological Value:</b> <span style="color: red;">County Importance</span>																																																																													
<b>Habitat code</b>  GM1 / WS1 / GS4	<p>Mosaic of marsh (GM1) with some wet grassland (GS4) and Scrub (WS1). Some standing water in parts. Fairly flat topography. Wet grassland (GS4) and scrub (WS1) surrounds. Sward height reaches up to 5 ft.</p> <p><b>Species List</b></p> <p><b>GM1</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Species (<i>Latin name</i>)</th> <th style="text-align: left;">Species (common name)</th> <th style="text-align: left;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Frequent</td></tr> <tr><td><i>Centaurea nigra</i></td><td>Common Knapweed</td><td>Occasional</td></tr> <tr><td><i>Cirsium paluste</i></td><td>Marsh Thistle</td><td>Occasional</td></tr> <tr><td><i>Dactylis glomerata</i></td><td>Cock's-foot</td><td>Occasional</td></tr> <tr><td><i>Equisetum sp.</i></td><td>Horsetail</td><td>Occasional</td></tr> <tr><td><i>Galium aparine</i></td><td>Cleavers</td><td>Occasional</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Frequent</td></tr> <tr><td><i>Juncus articulatus</i></td><td>Jointed Rush</td><td>Frequent</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Occasional</td></tr> <tr><td><i>Mentha aquatica</i></td><td>Water Mint</td><td>Frequent</td></tr> <tr><td><i>Potentilla anserina</i></td><td>Silverweed</td><td>Frequent</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Occasional</td></tr> <tr><td><i>Ranunculus flammula</i></td><td>Lesser Spearwort</td><td>Occasional</td></tr> <tr><td><i>Ranunculus repens</i></td><td>Creeping Buttercup</td><td>Frequent</td></tr> <tr><td><i>Rumex acetosella</i></td><td>Sheeps Sorrel</td><td>Occasional</td></tr> <tr><td><i>Stachys palustris</i></td><td>Marsh Woundwort</td><td>Occasional</td></tr> <tr><td><i>Stellaria media</i></td><td>Common Chickweed</td><td>Occasional</td></tr> <tr><td><i>Succisa pratensis</i></td><td>Devils-bit Scabious</td><td>Occasional</td></tr> <tr><td><i>Vicia sp</i></td><td>Vetch</td><td>Occasional</td></tr> </tbody> </table> <p><b>WS1</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Species (<i>Latin name</i>)</th> <th style="text-align: left;">Species (common name)</th> <th style="text-align: left;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Crataegus monogyna</i></td><td>Hawthorn</td><td>Occasional</td></tr> <tr><td><i>Prunus spinosa</i></td><td>Blackthorn</td><td>Frequent</td></tr> <tr><td><i>Rubus fruticosus agg</i></td><td>Bramble</td><td>Frequent</td></tr> <tr><td><i>Salix</i></td><td>Willow</td><td>Abundant</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Centaurea nigra</i>	Common Knapweed	Occasional	<i>Cirsium paluste</i>	Marsh Thistle	Occasional	<i>Dactylis glomerata</i>	Cock's-foot	Occasional	<i>Equisetum sp.</i>	Horsetail	Occasional	<i>Galium aparine</i>	Cleavers	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Juncus articulatus</i>	Jointed Rush	Frequent	<i>Juncus effusus</i>	Soft Rush	Occasional	<i>Mentha aquatica</i>	Water Mint	Frequent	<i>Potentilla anserina</i>	Silverweed	Frequent	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Ranunculus flammula</i>	Lesser Spearwort	Occasional	<i>Ranunculus repens</i>	Creeping Buttercup	Frequent	<i>Rumex acetosella</i>	Sheeps Sorrel	Occasional	<i>Stachys palustris</i>	Marsh Woundwort	Occasional	<i>Stellaria media</i>	Common Chickweed	Occasional	<i>Succisa pratensis</i>	Devils-bit Scabious	Occasional	<i>Vicia sp</i>	Vetch	Occasional	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Crataegus monogyna</i>	Hawthorn	Occasional	<i>Prunus spinosa</i>	Blackthorn	Frequent	<i>Rubus fruticosus agg</i>	Bramble	Frequent	<i>Salix</i>	Willow	Abundant
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**Habitat Map****Photographic Record**

**Image 1: Overview of Marsh/ Wet grassland with occasional Marsh Woundwort**





**Image 2: Willow scrub is encroaching**



TARGET NOTES - ID No. 29																																																																				
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1:2,500 Sheet no: 4271-a	Townland: Ballydonaghan	Grid Ref: 160826, 179954																																																																		
Target note no.: TN4		Area: 0.6ha																																																																		
Ecological value: <b>National Importance</b>																																																																				
Habitat code  PB2/PF3	<p>Small section of blanket bog (PB2) and transition mire (PF3) surrounded by forestry (WD4) and recently cut forestry (WS5). Although the site is flat it is situated in a slight valley with a rise occurring outside the site on all directions when the forestry starts. The typical sward height on the blanket bog is up to 5ft, whilst the mire is much shorter; up to 1ft. The blanket bog has some self-seeded spruce growing on it.</p> <p><b>Species List</b></p> <p><b>PB2</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Bryophyte</i></td> <td>Moss spp</td> <td>Frequent</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Frequent</td> </tr> <tr> <td><i>Carex pendula</i></td> <td>Pendulous Sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Cladonia sp</i></td> <td>Lichen</td> <td>Occasional</td> </tr> <tr> <td><i>Erica tetralix</i></td> <td>Cross-leaved Heather</td> <td>Occasional</td> </tr> <tr> <td><i>Eriophorum vaginatum</i></td> <td>Hare's-tail Cottongrass</td> <td>Rare</td> </tr> <tr> <td><i>Molinia caerulea</i></td> <td>Purple Moor-grass</td> <td>Abundant</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Occasional</td> </tr> <tr> <td><i>Sphagnum sp</i></td> <td>Peat moss</td> <td>Abundant</td> </tr> </tbody> </table> <p><b>PF3</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Occasional</td> </tr> <tr> <td><i>Carex pendula</i></td> <td>Pendulous Sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Drosera rotundifolia</i></td> <td>Round-leaved Sundew</td> <td>Frequent</td> </tr> <tr> <td><i>Erica tetralix</i></td> <td>Cross-leaved Heather</td> <td>Frequent</td> </tr> <tr> <td><i>Eriophorum angustifolium</i></td> <td>Common Cottongrass</td> <td>Occasional</td> </tr> <tr> <td><i>Menyanthes trifoliata</i></td> <td>Bogbean</td> <td>Frequent</td> </tr> <tr> <td><i>Molinia caerulea</i></td> <td>Purple Moor-grass</td> <td>Occasional</td> </tr> <tr> <td><i>Narthecium ossifragum</i></td> <td>Bog Asphodel</td> <td>Frequent</td> </tr> <tr> <td><i>Polygala serpyllifolia</i></td> <td>Heath Milkwort</td> <td>Rare</td> </tr> <tr> <td><i>Rhynchospora alba</i></td> <td>White Beak-sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Sphagnum sp</i></td> <td>Peat moss</td> <td>Dominant</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Bryophyte</i>	Moss spp	Frequent	<i>Calluna vulgaris</i>	Ling Heather	Frequent	<i>Carex pendula</i>	Pendulous Sedge	Occasional	<i>Cladonia sp</i>	Lichen	Occasional	<i>Erica tetralix</i>	Cross-leaved Heather	Occasional	<i>Eriophorum vaginatum</i>	Hare's-tail Cottongrass	Rare	<i>Molinia caerulea</i>	Purple Moor-grass	Abundant	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Sphagnum sp</i>	Peat moss	Abundant	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Calluna vulgaris</i>	Ling Heather	Occasional	<i>Carex pendula</i>	Pendulous Sedge	Occasional	<i>Drosera rotundifolia</i>	Round-leaved Sundew	Frequent	<i>Erica tetralix</i>	Cross-leaved Heather	Frequent	<i>Eriophorum angustifolium</i>	Common Cottongrass	Occasional	<i>Menyanthes trifoliata</i>	Bogbean	Frequent	<i>Molinia caerulea</i>	Purple Moor-grass	Occasional	<i>Narthecium ossifragum</i>	Bog Asphodel	Frequent	<i>Polygala serpyllifolia</i>	Heath Milkwort	Rare	<i>Rhynchospora alba</i>	White Beak-sedge	Occasional	<i>Sphagnum sp</i>	Peat moss	Dominant
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**Habitat Map****Photographic Record**

**Image 1: Overview of Upland bog with wet flush area. Spruce from plantation has self-seeded in parts**





**Image 2: Blanket bog vegetation with heather and Purple Moor-grass**



**Image 3: Close-up of Transition mire with abundant *Sphagnum* mosses and occasional Bogbean**



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1:2,500 Sheet no: 4271-a	Townland: Ballydonaghan	Grid Ref: 161953, 180195																																																									
Target note no.: TN5		Area: 0.97ha																																																									
Ecological value: <b>Local Importance (Higher Value)</b>																																																											
Habitat code  GS3	<p>Nice grassland. Site slopes uphill to the north away from stream (FW1). The site has been grazed within a few months. In general the sward height is very short throughout the site; however the stems of several species (<i>Succisa pratensis</i>, <i>Leontodon</i> and <i>Juncus</i>) reach a height of up to 2ft. The site is dry.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Achillea millefolium</i></td> <td>Yarrow</td> <td>Frequent</td> </tr> <tr> <td><i>Anthoxanthum odoratum</i></td> <td>Sweet Vernal-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Bryophyte</i></td> <td>Moss spp</td> <td>Abundant</td> </tr> <tr> <td><i>Carex nigra</i></td> <td>Black Sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Centaurea nigra</i></td> <td>Common Knapweed</td> <td>Occasional</td> </tr> <tr> <td><i>Cynosurus cristatus</i></td> <td>Dog's-tail Grass</td> <td>Occasional</td> </tr> <tr> <td><i>Dactylorhiza sp.</i></td> <td>Orchid (withered)</td> <td>Occasional</td> </tr> <tr> <td><i>Euphrasia arctica</i></td> <td>Eyebright</td> <td>Occasional</td> </tr> <tr> <td><i>Festuca sp.</i></td> <td>Fescue</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus articulatus</i></td> <td>Jointed Rush</td> <td>Frequent</td> </tr> <tr> <td><i>Leontodon autumnalis</i></td> <td>Autumn Hawkbit</td> <td>Occasional</td> </tr> <tr> <td><i>Lichen sp.</i></td> <td>Lichen</td> <td>Frequent</td> </tr> <tr> <td><i>Lotus pendunculatus</i></td> <td>Greater Bird's-foot-trefoil</td> <td>Frequent</td> </tr> <tr> <td><i>Plantago lanceolata</i></td> <td>Ribwort Plantain</td> <td>Occasional</td> </tr> <tr> <td><i>Poa sp.</i></td> <td>Meadow Grass</td> <td>Occasional</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Abundant</td> </tr> <tr> <td><i>Succisa pratensis</i></td> <td>Devils-bit Scabious</td> <td>Abundant</td> </tr> <tr> <td><i>Trifolium sp.</i></td> <td>Clover</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Achillea millefolium</i>	Yarrow	Frequent	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Bryophyte</i>	Moss spp	Abundant	<i>Carex nigra</i>	Black Sedge	Occasional	<i>Centaurea nigra</i>	Common Knapweed	Occasional	<i>Cynosurus cristatus</i>	Dog's-tail Grass	Occasional	<i>Dactylorhiza sp.</i>	Orchid (withered)	Occasional	<i>Euphrasia arctica</i>	Eyebright	Occasional	<i>Festuca sp.</i>	Fescue	Occasional	<i>Juncus articulatus</i>	Jointed Rush	Frequent	<i>Leontodon autumnalis</i>	Autumn Hawkbit	Occasional	<i>Lichen sp.</i>	Lichen	Frequent	<i>Lotus pendunculatus</i>	Greater Bird's-foot-trefoil	Frequent	<i>Plantago lanceolata</i>	Ribwort Plantain	Occasional	<i>Poa sp.</i>	Meadow Grass	Occasional	<i>Potentilla erecta</i>	Tormentil	Abundant	<i>Succisa pratensis</i>	Devils-bit Scabious	Abundant	<i>Trifolium sp.</i>	Clover	Occasional
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**Habitat Map****Photographic Record**



**Image 1: Close-up of Acid grassland with Devil's-bit Scabious, Tormentil and Yarrow**





**Image 2: Overview of grassland with abundant Devil's-bit Scabious**

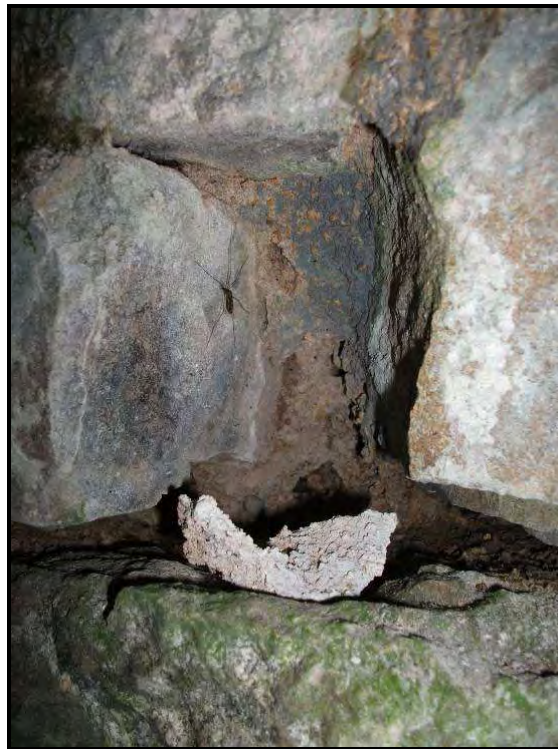


TARGET NOTES - ID No. 31		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 30/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4271-a	<b>Townland:</b> Ballydonaghan	<b>Grid Ref:</b> 161851, 180138
<b>Target note no.:</b> TN6		<b>Area:</b> 0.01ha
<b>Ecological value:</b> Local Importance (Higher Value)		
<b>Habitat code</b>  BL1	Old stone bridge with lots of tree and shrub cover surrounding. Some dry cracks underneath. No bats were present at time of survey however the site has a good roost potential.	
<b>Habitat Map</b> 		
<b>Photographic Record</b>  <p><b>Image 1: Old stone bridge</b></p>		





**Image 2: stonework underneath bridge**



**Image 3: Crack in stonework – bat roost potential**





**Image 4: Arch of bridge**

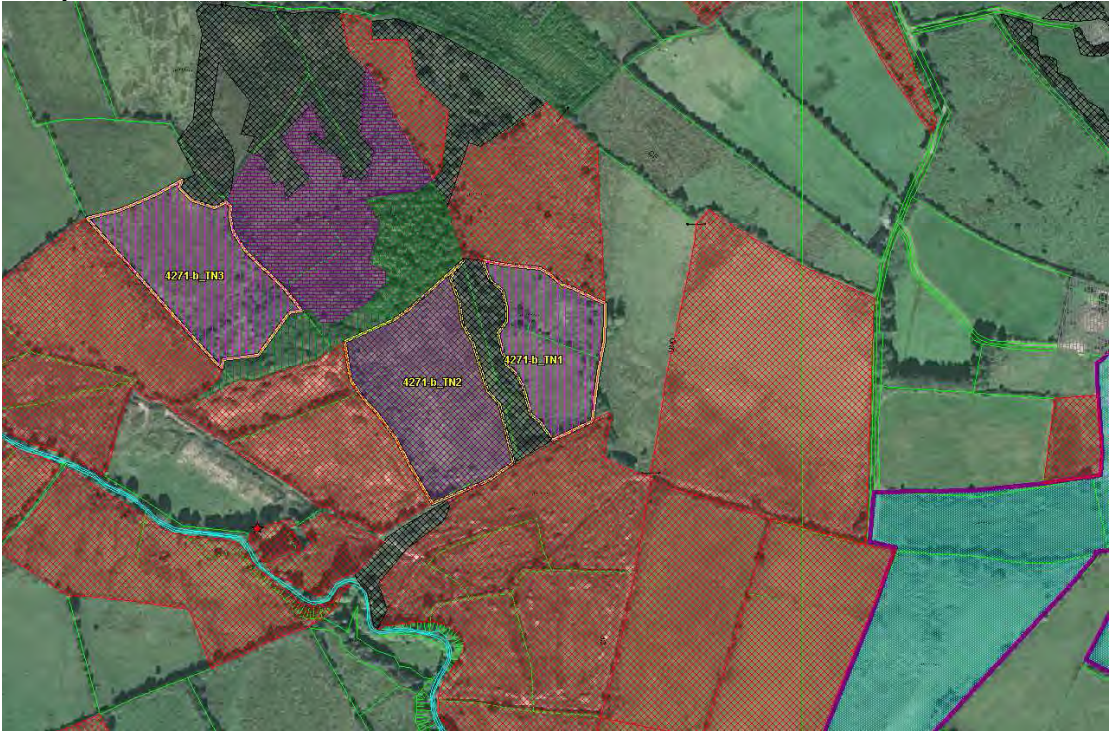


TARGET NOTES - ID No. 32																																																																																												
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<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare																																																																																										
<b>1:2,500 Sheet no:</b> 4271-b	<b>Townland:</b> Caherhurly	<b>Grid Ref:</b> 163779, 179952																																																																																										
<b>Target note no.:</b> TN1		<b>Area:</b> 0.9ha																																																																																										
<b>Ecological value:</b> Local Importance (Higher Value)																																																																																												
<b>Habitat code</b>  HH3/GS4	<p>Section of boggy ground. Fairly flat. A similar habitat lies adjacent to the west. Wet grassland (GS4) lies to the south. Close to the site to the north west beyond some bog woodland (WN7) lies some cutover bog (PB4). This site is a mosaic of heath (HH3), wet grassland (GS4) and scrub (WS1). The area is grazed by cattle.</p> <p><b>Species List</b></p> <p><b>HH3</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 5px;">Species (common name)</th> <th style="text-align: left; padding: 5px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Frequent</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Frequent</td></tr> <tr><td><i>Carex nigra</i></td><td>Common Sedge</td><td>Occasional</td></tr> <tr><td><i>Carex pulicaris</i></td><td>Flea Sedge</td><td>Occasional</td></tr> <tr><td><i>Erica tetralix</i></td><td>Cross-leaved Heather</td><td>Occasional</td></tr> <tr><td><i>Eriophorum angustifolium</i></td><td>Common Cottongrass</td><td>Frequent</td></tr> <tr><td><i>Eriophorum vaginatum</i></td><td>Hare's-tail Cottongrass</td><td>Frequent</td></tr> <tr><td><i>Festuca</i> sp.</td><td>Fescue</td><td>Occasional</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Occasional</td></tr> <tr><td><i>Juncus articulatus</i></td><td>Jointed Rush</td><td>Frequent</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Occasional</td></tr> <tr><td><i>Juncus squarrosus</i></td><td>Heath Rush</td><td>Occasional</td></tr> <tr><td><i>Lycopodium</i> sp.</td><td>Club Moss</td><td>Occasional</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Occasional</td></tr> <tr><td><i>Polygala serpyllifolia</i></td><td>Heath Milkwort</td><td>Occasional</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Frequent</td></tr> <tr><td><i>Sphagnum</i> sp.</td><td>Peat moss</td><td>Frequent</td></tr> <tr><td><i>Succisa pratensis</i></td><td>Devils-bit Scabious</td><td>Occasional</td></tr> <tr><td><i>Ulex europaeus</i></td><td>European Gorse</td><td>Occasional</td></tr> <tr><td><i>Vaccinium myrtillus</i></td><td>Bilberry</td><td>Frequent</td></tr> </tbody> </table> <p><b>GS4</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 5px;">Species (common name)</th> <th style="text-align: left; padding: 5px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Occasional</td></tr> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Frequent</td></tr> <tr><td><i>Galium saxatile</i></td><td>Heath Bedstraw</td><td>Occasional</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Frequent</td></tr> <tr><td><i>Juncus articulatus</i></td><td>Jointed Rush</td><td>Abundant</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Occasional</td></tr> <tr><td><i>Luzula multiflora</i></td><td>Heath Wood-rush</td><td>Occasional</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Frequent</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Bryophyte</i>	Moss spp	Frequent	<i>Calluna vulgaris</i>	Ling Heather	Frequent	<i>Carex nigra</i>	Common Sedge	Occasional	<i>Carex pulicaris</i>	Flea Sedge	Occasional	<i>Erica tetralix</i>	Cross-leaved Heather	Occasional	<i>Eriophorum angustifolium</i>	Common Cottongrass	Frequent	<i>Eriophorum vaginatum</i>	Hare's-tail Cottongrass	Frequent	<i>Festuca</i> sp.	Fescue	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Occasional	<i>Juncus articulatus</i>	Jointed Rush	Frequent	<i>Juncus effusus</i>	Soft Rush	Occasional	<i>Juncus squarrosus</i>	Heath Rush	Occasional	<i>Lycopodium</i> sp.	Club Moss	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Occasional	<i>Polygala serpyllifolia</i>	Heath Milkwort	Occasional	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Sphagnum</i> sp.	Peat moss	Frequent	<i>Succisa pratensis</i>	Devils-bit Scabious	Occasional	<i>Ulex europaeus</i>	European Gorse	Occasional	<i>Vaccinium myrtillus</i>	Bilberry	Frequent	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional	<i>Bryophyte</i>	Moss spp	Frequent	<i>Galium saxatile</i>	Heath Bedstraw	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Juncus articulatus</i>	Jointed Rush	Abundant	<i>Juncus effusus</i>	Soft Rush	Occasional	<i>Luzula multiflora</i>	Heath Wood-rush	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Frequent
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	<i>Poa</i> sp.	Meadow Grass	Occasional
	<i>Potentilla erecta</i>	Tormentil	Occasional
	<i>Ranunculus repens</i>	Creeping Buttercup	Occasional
	<i>Stellaria media</i>	Common Chickweed	Occasional
	<i>Succisa pratensis</i>	Devils-bit Scabious	Occasional
	<i>Trifolium</i> sp.	Clover	Occasional

Habitat Map



Photographic Record



Image 1: Overview of Wet heath habitat



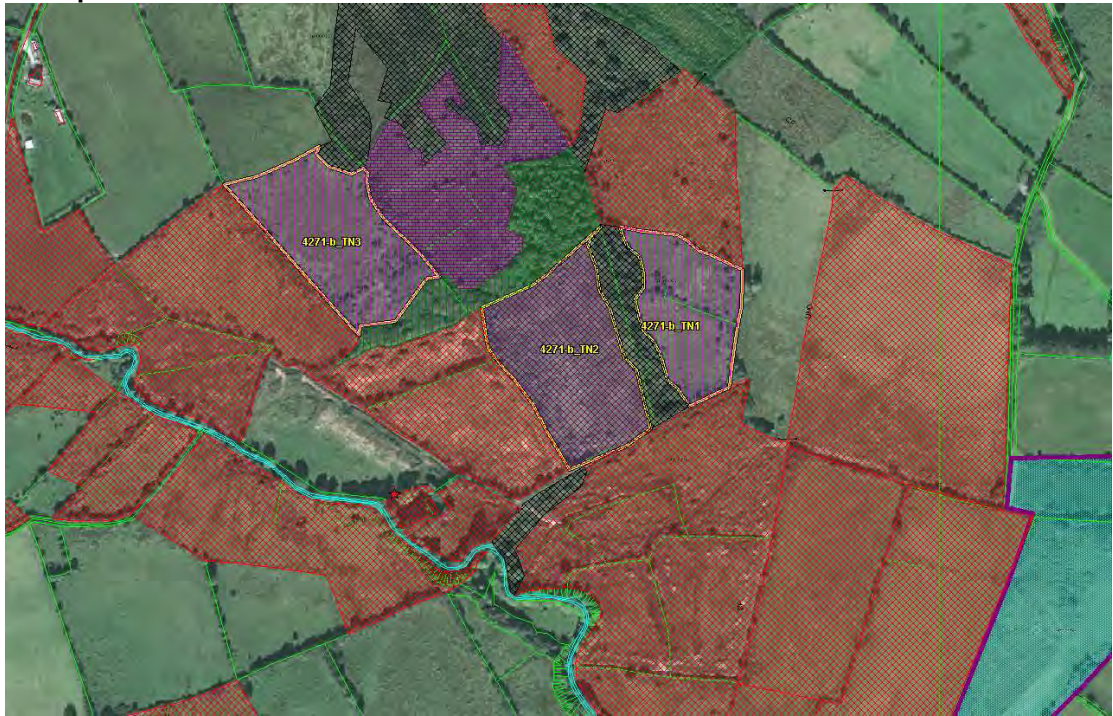


**Image 2: Overview of Wet grassland habitat**



TARGET NOTES - ID No. 33																																																																																								
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Surveyor: John Curtin		County name: Clare																																																																																						
1:2,500 Sheet no: 4271-b	Townland: Caherhurly	Grid Ref: 163695, 179933																																																																																						
Target note no.: TN2		Area: 1.4ha																																																																																						
Ecological value: <b>Local Importance (Higher Value)</b>																																																																																								
Habitat code  GS4	Unusual habitat adjacent to TN1. Cutover bog (PB4) lies directly to the north. The surface is flat and dry, with cattle grazing occurring recently.																																																																																							
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**Habitat Map****Photographic Record**

**Image 1: Close-up of Devil's-bit Scabious (*Succisa pratensis*)**





**Image 2: Overview of Wet grassland habitat**

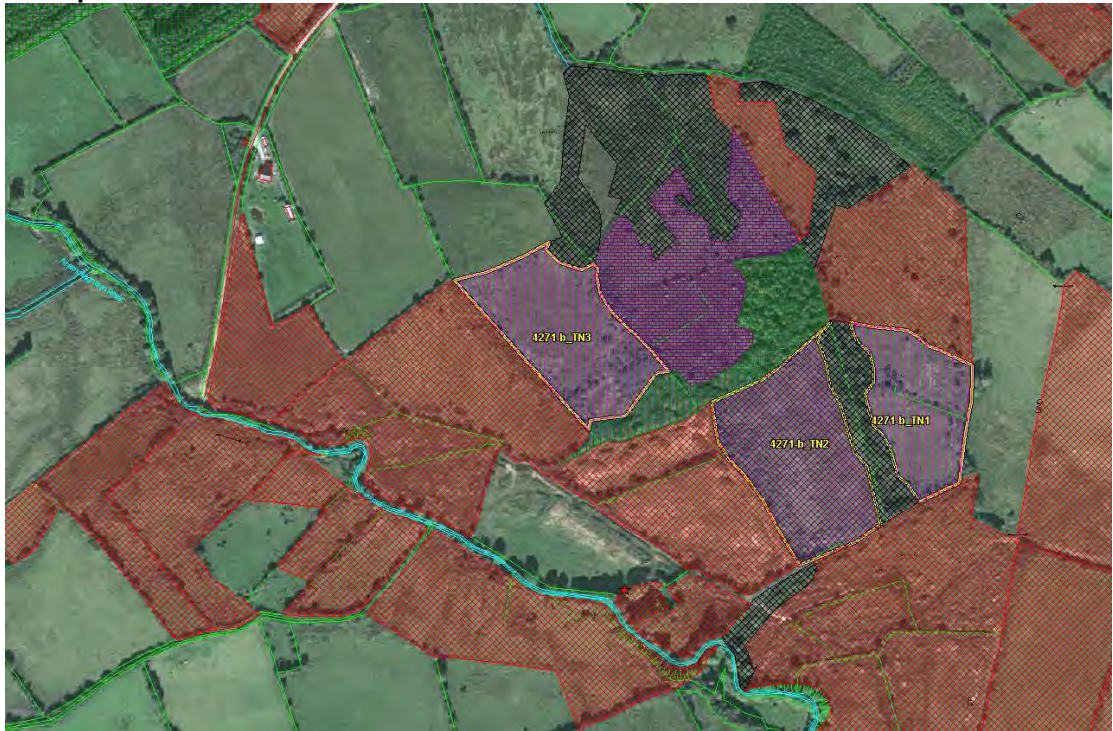


**Image 3: Close-up of lichen (*Peltigera hymenina*)**



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Target note no.: TN3		Area: 1.3ha																																																			
Ecological value: <b>Local Importance (Higher Value)</b>																																																					
Habitat code  HH3	<p>Section of heath with a short sward of up to 2ft. The site rises slightly to the north. The site has recently been cleared of some gorse scrub (WS1) which was piled up. The area is quite poached. Just to the east of the site lies a section of cutover bog (PB4). To the north are improved grasslands. To the west the site grades into wet grassland (GS4). The abundance of <i>Juncus squarrosus</i> (Heath rush) defines this site as wet heath (HH3).</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Achillea millefolium</i></td> <td>Yarrow</td> <td>Occasional</td> </tr> <tr> <td><i>Agrostis sp</i></td> <td>Bent grass</td> <td>Occasional</td> </tr> <tr> <td><i>Bryophyte</i></td> <td>Moss spp</td> <td>Frequent</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Abundant</td> </tr> <tr> <td><i>Carex pulicaris</i></td> <td>Flea Sedge</td> <td>Frequent</td> </tr> <tr> <td><i>Erica tetralix</i></td> <td>Cross-leaved Heather</td> <td>Occasional</td> </tr> <tr> <td><i>Eriophorum sp</i></td> <td>Cottongrass</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus articulatus</i></td> <td>Jointed Rush</td> <td>Frequent</td> </tr> <tr> <td><i>Juncus effusus</i></td> <td>Soft Rush</td> <td>Frequent</td> </tr> <tr> <td><i>Juncus squarrosus</i></td> <td>Heath Rush</td> <td>Abundant</td> </tr> <tr> <td><i>Lycopodium sp.</i></td> <td>Club Moss</td> <td>Frequent</td> </tr> <tr> <td><i>Molinia caerulea</i></td> <td>Purple Moor-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Occasional</td> </tr> <tr> <td><i>Sphagnum sp</i></td> <td>Peat moss</td> <td>Abundant</td> </tr> <tr> <td><i>Succisa pratensis</i></td> <td>Devils-bit Scabious</td> <td>Rare</td> </tr> <tr> <td><i>Ulex europaeus</i></td> <td>Gorse</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Achillea millefolium</i>	Yarrow	Occasional	<i>Agrostis sp</i>	Bent grass	Occasional	<i>Bryophyte</i>	Moss spp	Frequent	<i>Calluna vulgaris</i>	Ling Heather	Abundant	<i>Carex pulicaris</i>	Flea Sedge	Frequent	<i>Erica tetralix</i>	Cross-leaved Heather	Occasional	<i>Eriophorum sp</i>	Cottongrass	Occasional	<i>Juncus articulatus</i>	Jointed Rush	Frequent	<i>Juncus effusus</i>	Soft Rush	Frequent	<i>Juncus squarrosus</i>	Heath Rush	Abundant	<i>Lycopodium sp.</i>	Club Moss	Frequent	<i>Molinia caerulea</i>	Purple Moor-grass	Frequent	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Sphagnum sp</i>	Peat moss	Abundant	<i>Succisa pratensis</i>	Devils-bit Scabious	Rare	<i>Ulex europaeus</i>	Gorse	Occasional
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**Habitat Map****Photographic Record**

**Image 1: Overview of Wet heath area**

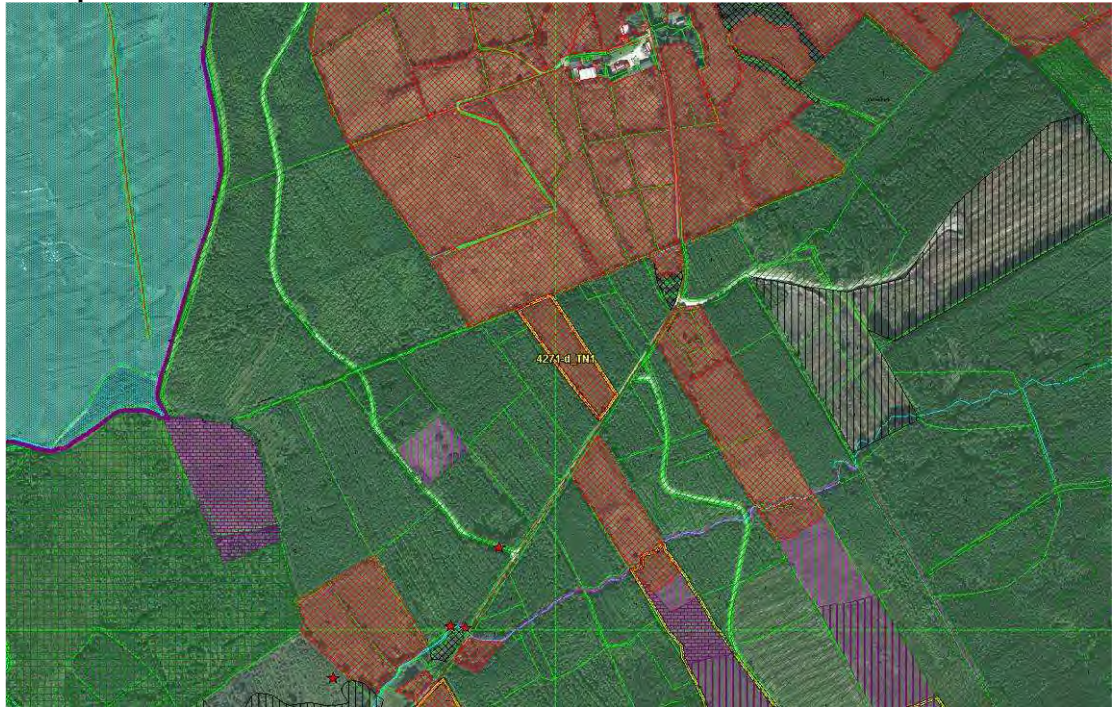


**Image 2: Wet heath with Bell heather, Compact rush and encroaching Bracken and Gorse**



TARGET NOTES - ID No. 35																																																																				
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 08/08/11																																																																		
Surveyor: John Curtin		County name: Clare																																																																		
1:2,500 Sheet no: 4271-d	Townland: Ballydonaghan	Grid Ref: 162019, 178450																																																																		
Target note no.: TN1		Area: 1.1ha																																																																		
Ecological value: <b>Local Importance (Higher Value)</b>																																																																				
Habitat code  GS4	<p>Nice wet grassland (GS4). Slopes downhill to the north west, away from the road. Forestry (WD4) borders the site on all sides but the north west which continues with more wet grassland.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Frequent</td></tr> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Abundant</td></tr> <tr><td><i>Carex nigra</i></td><td>Common Sedge</td><td>Occasional</td></tr> <tr><td><i>Carex pulicaris</i></td><td>Flea Sedge</td><td>Occasional</td></tr> <tr><td><i>Centaurea nigra</i></td><td>Common Knapweed</td><td>Occasional</td></tr> <tr><td><i>Dactylorhiza</i> sp.</td><td>Orchid (withered)</td><td>Frequent</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Frequent</td></tr> <tr><td><i>Juncus articulatus</i></td><td>Jointed Rush</td><td>Abundant</td></tr> <tr><td><i>Leontodon</i> sp.</td><td>Hawkbit</td><td>Frequent</td></tr> <tr><td><i>Lichen</i></td><td>Lichen</td><td>Occasional</td></tr> <tr><td><i>Lotus pendunculatus</i></td><td>Greater Bird's-foot-trefoil</td><td>Abundant</td></tr> <tr><td><i>Luzula campestris</i></td><td>Field Wood-rush</td><td>Frequent</td></tr> <tr><td><i>Lychnis flos-cuculi</i></td><td>Ragged-robin</td><td>Occasional</td></tr> <tr><td><i>Lycopodium</i> sp.</td><td>Club moss</td><td>Occasional</td></tr> <tr><td><i>Plantago lanceolata</i></td><td>Ribwort Plantain</td><td>Frequent</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Frequent</td></tr> <tr><td><i>Prunella vulgaris</i></td><td>Self-heal</td><td>Occasional</td></tr> <tr><td><i>Ranunculus repens</i></td><td>Creeping buttercup</td><td>Frequent</td></tr> <tr><td><i>Rumex acetosella</i></td><td>Sheep's Sorrel</td><td>Frequent</td></tr> <tr><td><i>Succisa pratensis</i></td><td>Devils-bit Scabious</td><td>Occasional</td></tr> <tr><td><i>Trifolium pratense</i></td><td>Red Clover</td><td>Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Bryophyte</i>	Moss spp	Abundant	<i>Carex nigra</i>	Common Sedge	Occasional	<i>Carex pulicaris</i>	Flea Sedge	Occasional	<i>Centaurea nigra</i>	Common Knapweed	Occasional	<i>Dactylorhiza</i> sp.	Orchid (withered)	Frequent	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Juncus articulatus</i>	Jointed Rush	Abundant	<i>Leontodon</i> sp.	Hawkbit	Frequent	<i>Lichen</i>	Lichen	Occasional	<i>Lotus pendunculatus</i>	Greater Bird's-foot-trefoil	Abundant	<i>Luzula campestris</i>	Field Wood-rush	Frequent	<i>Lychnis flos-cuculi</i>	Ragged-robin	Occasional	<i>Lycopodium</i> sp.	Club moss	Occasional	<i>Plantago lanceolata</i>	Ribwort Plantain	Frequent	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Prunella vulgaris</i>	Self-heal	Occasional	<i>Ranunculus repens</i>	Creeping buttercup	Frequent	<i>Rumex acetosella</i>	Sheep's Sorrel	Frequent	<i>Succisa pratensis</i>	Devils-bit Scabious	Occasional	<i>Trifolium pratense</i>	Red Clover	Occasional
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**Habitat Map****Photographic Record**

**Image 1: Overview of Wet grassland – Greater Bird's-foot Trefoil, Hawkbit and Sweet Vernal-grass**





**Image 2: Close-up of Selfheal, Creeping Buttercup and Sheep's Sorrel**



**Image 3: Wet grassland with tall sward – Cock's-foot, Yorkshire-fog and Sweet Vernal-grass**



TARGET NOTES - ID No. 36																																																																	
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 08/08/11																																																															
Surveyor: John Curtin		County name: Clare																																																															
1:2,500 Sheet no: 4271-d	Townland: Ballydonaghan	Grid Ref: 163085, 179020																																																															
Target note no.: TN2		Area: 0.7ha																																																															
Ecological value: <b>County Importance – linked to the priority habitat ‘6230 species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas’.</b>																																																																	
Habitat code  GS3	<p>Small area of acid grassland (GS3) surrounding old ruin. The site rises to the south as grassland meets forestry (WD4). To the north, east and west lies wet grassland (GS4). A small earthen cliff/drop-off splits the site. The area has been grazed by cattle.</p> <p>This habitat may be linked to the priority habitat ‘6230 species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas’ however the area is quite small so it is probably not an area of high ecological value at National level but at County level.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Achillea millefolium</i></td><td>Yarrow</td><td>Occasional</td></tr> <tr><td><i>Agrostis</i> sp.</td><td>Bent Grass</td><td>Frequent</td></tr> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Abundant</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Occasional</td></tr> <tr><td><i>Carex panicea</i></td><td>Carnation Sedge</td><td>Frequent</td></tr> <tr><td><i>Centaurea nigra</i></td><td>Common Knapweed</td><td>Frequent</td></tr> <tr><td><i>Festuca</i> sp.</td><td>Fescue</td><td>Occasional</td></tr> <tr><td><i>Galium saxatile</i></td><td>Heath Bedstraw</td><td>Frequent</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Frequent</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Occasional</td></tr> <tr><td><i>Juncus squarrosus</i></td><td>Heath Rush</td><td>Frequent</td></tr> <tr><td><i>Nardus stricta</i></td><td>Mat-grass</td><td>Abundant</td></tr> <tr><td><i>Pedicularis sylvatica</i></td><td>Lousewort</td><td>Occasional</td></tr> <tr><td><i>Polygala serpyllifolia</i></td><td>Heath Milkwort</td><td>Occasional</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Occasional</td></tr> <tr><td><i>Rumex acetosella</i></td><td>Sheep’s Sorrel</td><td>Occasional</td></tr> <tr><td><i>Stellaria media</i></td><td>Common Chickweed</td><td>Occasional</td></tr> <tr><td><i>Succisa pratensis</i></td><td>Devil’s-bit Scabious</td><td>Frequent</td></tr> <tr><td><i>Trifolium pratense</i></td><td>Red Clover</td><td>Frequent</td></tr> <tr><td><i>Trifolium repens</i></td><td>White Clover</td><td>Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Achillea millefolium</i>	Yarrow	Occasional	<i>Agrostis</i> sp.	Bent Grass	Frequent	<i>Bryophyte</i>	Moss spp	Abundant	<i>Calluna vulgaris</i>	Ling Heather	Occasional	<i>Carex panicea</i>	Carnation Sedge	Frequent	<i>Centaurea nigra</i>	Common Knapweed	Frequent	<i>Festuca</i> sp.	Fescue	Occasional	<i>Galium saxatile</i>	Heath Bedstraw	Frequent	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Juncus effusus</i>	Soft Rush	Occasional	<i>Juncus squarrosus</i>	Heath Rush	Frequent	<i>Nardus stricta</i>	Mat-grass	Abundant	<i>Pedicularis sylvatica</i>	Lousewort	Occasional	<i>Polygala serpyllifolia</i>	Heath Milkwort	Occasional	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Rumex acetosella</i>	Sheep’s Sorrel	Occasional	<i>Stellaria media</i>	Common Chickweed	Occasional	<i>Succisa pratensis</i>	Devil’s-bit Scabious	Frequent	<i>Trifolium pratense</i>	Red Clover	Frequent	<i>Trifolium repens</i>	White Clover	Occasional
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**Habitat Map****Photographic Record**

**Image 1: Close-up of Acid grassland vegetation with abundant non-Sphagnum mosses and needle-leaved grasses**



**Image 2: Acid grassland with short sward**





**TARGET NOTES - ID No. 37**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 08/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4271-d	<b>Townland:</b> Ballybroghan	<b>Grid Ref:</b> 163944, 178957
<b>Target note no.:</b> TN3		<b>Area:</b> 0.01ha
<b>Ecological value:</b> <b>Local Importance (Higher Value)</b>		

<b>Habitat code</b>  BL1	Wall dividing road from old quarry. It contained several dry gaps although no evidence was found of bats being present at time of survey. A good tree and shrub line runs from the site to the north-north-east. Good roost potential.	
	<b>Species List</b>	
	<b>Species (Latin name)</b>	<b>Species (common name)</b>
	<i>Agrostis stolonifera</i>	Creeping Bent
	<i>Asplenium trichomanes</i>	Maidenhair Spleenwort
	<i>Bryophyte</i>	Moss spp
	<i>Cirsium paluste</i>	Marsh Thistle
	<i>Epilobium sp</i>	Willowherb
	<i>Fragaria vesca</i>	Wild Strawberry
	<i>Holcus lanatus</i>	Yorkshire Fog
	<i>Phyllitis scolopendrium</i>	Hart's-tongue Fern
	<i>Rubus fruticosus agg</i>	Bramble
	<i>Stellaria media</i>	Common Chickweed

**Habitat Map**



## Photographic Record



**Image 1: Close-up of Maidenhair spleenwort growing on stonewall**



**Image 2: Overgrown stone wall**



**Image 3: Wild strawberries growing on stone wall**



**Image 4: Crevice in stone wall – provides roost potential for bats**

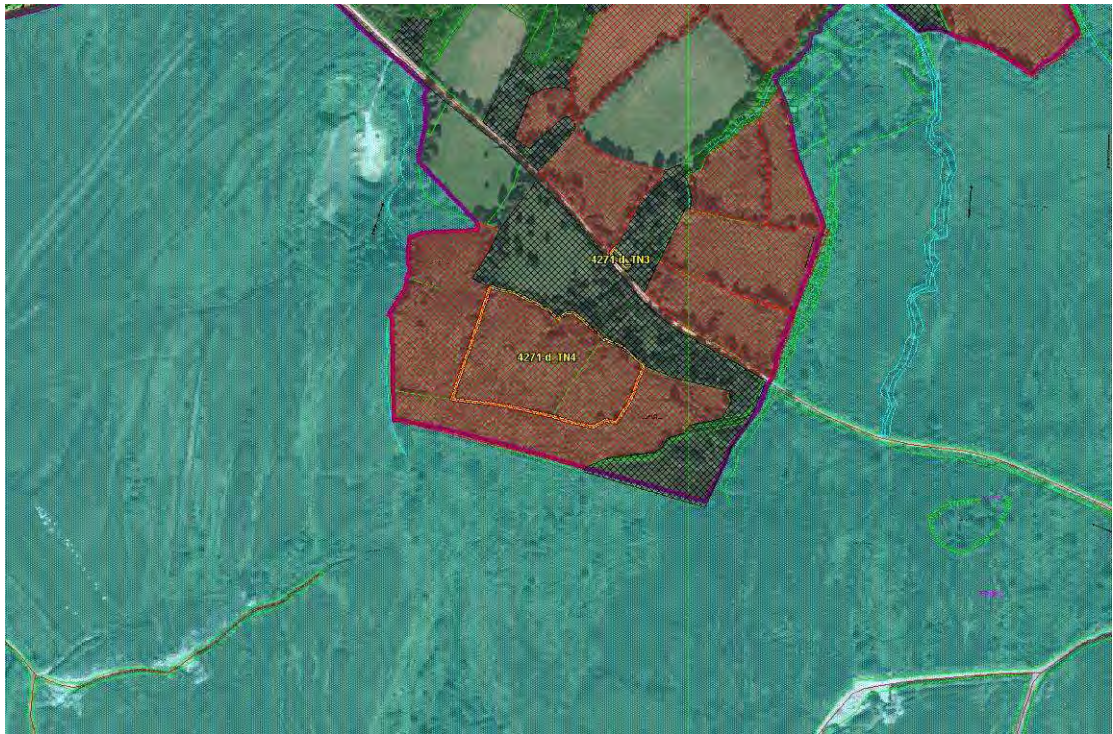


**Image 5: Close-up of fairly large crevice**





TARGET NOTES - ID No. 38																																																		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 08/08/11																																																
Surveyor: John Curtin		County name: Clare																																																
1:2,500 Sheet no: 4271-d	Townland: Ballybroghan	Grid Ref: 163884, 178876																																																
Target note no.: TN4		Area: 1.1ha																																																
Ecological value: <b>Local Importance (Higher Value)</b>																																																		
Habitat code  GS3	<p>Large field containing a mosaic of wet grassland (GS4), acid grassland (GS3) and <i>Ulex europaeus</i> (gorse) scrub (WS1). The species for the most interesting of these habitats; acid grassland are listed below.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Anthoxanthum odoratum</i></td> <td>Sweet Vernal-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Bryophyte</i></td> <td>Moss spp</td> <td>Abundant</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Occasional</td> </tr> <tr> <td><i>Cirsium paluste</i></td> <td>Marsh Thistle</td> <td>Occasional</td> </tr> <tr> <td><i>Festuca</i> sp.</td> <td>Fescue</td> <td>Frequent</td> </tr> <tr> <td><i>Galium saxatile</i></td> <td>Heath Bedstraw</td> <td>Frequent</td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire Fog</td> <td>Abundant</td> </tr> <tr> <td><i>Juncus effusus</i></td> <td>Soft Rush</td> <td>Frequent</td> </tr> <tr> <td><i>Luzula multiflora</i></td> <td>Heath Wood-rush</td> <td>Occasional</td> </tr> <tr> <td><i>Nardus stricta</i></td> <td>Mat-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Pedicularis sylvatica</i></td> <td>Lousewort</td> <td>Occasional</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Frequent</td> </tr> <tr> <td><i>Rumex acetosella</i></td> <td>Sheep's Sorrel</td> <td>Frequent</td> </tr> <tr> <td><i>Succisa pratensis</i></td> <td>Devil's-bit Scabious</td> <td>Frequent</td> </tr> <tr> <td><i>Trifolium</i> sp.</td> <td>Clover</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Bryophyte</i>	Moss spp	Abundant	<i>Calluna vulgaris</i>	Ling Heather	Occasional	<i>Cirsium paluste</i>	Marsh Thistle	Occasional	<i>Festuca</i> sp.	Fescue	Frequent	<i>Galium saxatile</i>	Heath Bedstraw	Frequent	<i>Holcus lanatus</i>	Yorkshire Fog	Abundant	<i>Juncus effusus</i>	Soft Rush	Frequent	<i>Luzula multiflora</i>	Heath Wood-rush	Occasional	<i>Nardus stricta</i>	Mat-grass	Frequent	<i>Pedicularis sylvatica</i>	Lousewort	Occasional	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Rumex acetosella</i>	Sheep's Sorrel	Frequent	<i>Succisa pratensis</i>	Devil's-bit Scabious	Frequent	<i>Trifolium</i> sp.	Clover	Occasional
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**Habitat Map****Photographic Record**

**Image 1: Overview of Acid grassland with occasional patches of rushes**



**Image 2: Close-up of vegetation – Tormentil, Heath Bedstraw, Fescues and mosses**





TARGET NOTES - ID No. 39																																																													
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 8/8/2011																																																											
Surveyor: Shane O'Neill		County name: Clare																																																											
1:2,500 Sheet no: 4328-b	Townland: Gortatrassa	Grid Ref.: 159723, 176667																																																											
Target note no.: TN1		Area: 6ha																																																											
Ecological value: <b>National Importance – linked to the priority habitat '7130 active blanket bog'</b>																																																													
Habitat code  PB4/ PB2	<p>This area of Cutover Bog PB4 is at the base of a steep slope. The slope is a mosaic of Cutover Bog and intact Upland Blanket Bog PB2 with an abundance of Purple Moor-grass (<i>Molinia caerulea</i>), <i>Sphagnum</i> and non-<i>Sphagnum</i> mosses. Therefore this bog is likely to be actively peat-forming and has links to the EU Priority habitat 7130 Active blanket bog. There are cutaway pools in the Cutover Bog PB4 area which appear to be active and contain White beaked-sedge (<i>Rhynchospora alba</i>), however, this species is rare here thus it is not linked to the EU Annex I Habitat 7150 Depressions on peat substrates of the Rhynchosporion. The area is used for grazing is somewhat poached.</p>																																																												
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### Habitat Map





## Photographic Record



**Image 1: Close-up of Upland Blanket Bog PB2**



**Image 2: Overview of Area**

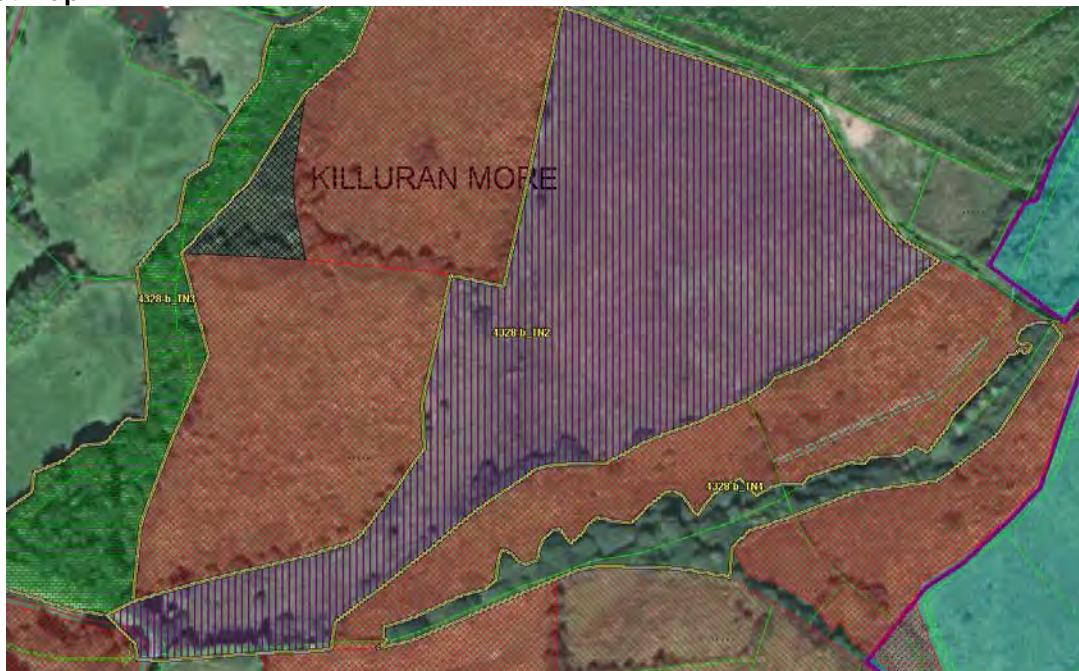


**TARGET NOTES - ID No. 40****Survey Title:** Survey and Mapping of Habitats in Mid Clare**Survey date:** 8/8/2011**Surveyor:** Shane O'Neill**County name:** Clare**1:2,500 Sheet no:** 4328-b**Townland:** Killuran More**Grid Ref.:** 158607, 177136**Target note no.:** TN 2**Area:** 3ha**Ecological value:** Local importance (Higher Value)**Habitat code****PB2**

Grassed over Upland Blanket Bog PB2 showing some signs of erosion. The vegetation is very short in places and peat is exposed in places. Two female Red Deer were seen as well as a dead male near the southern hedge.

**Species List:**

Species (Latin name)	Species (common name)	DAFOR Scale
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional
<i>Bryophyte</i>	Moss spp	Frequent
<i>Calluna vulgaris</i>	Ling Heather	Frequent
<i>Erica cinerea</i>	Bell Heather	Rare
<i>Erica tetralix</i>	Cross-leaved Heath	Occasional
<i>Holcus lanatus</i>	Yorkshire Fog	Occasional
<i>Juncus effusus</i>	Soft Rush	Frequent
<i>Molinia caerulea</i>	Purple Moor-grass	Abundant
<i>Potentilla erecta</i>	Tormentil	Occasional
<i>Sphagnum spp.</i>	Peat moss	Occasional
<i>Trichophorum cespitosum</i>	Deergrass	Dominant

**Habitat Map**

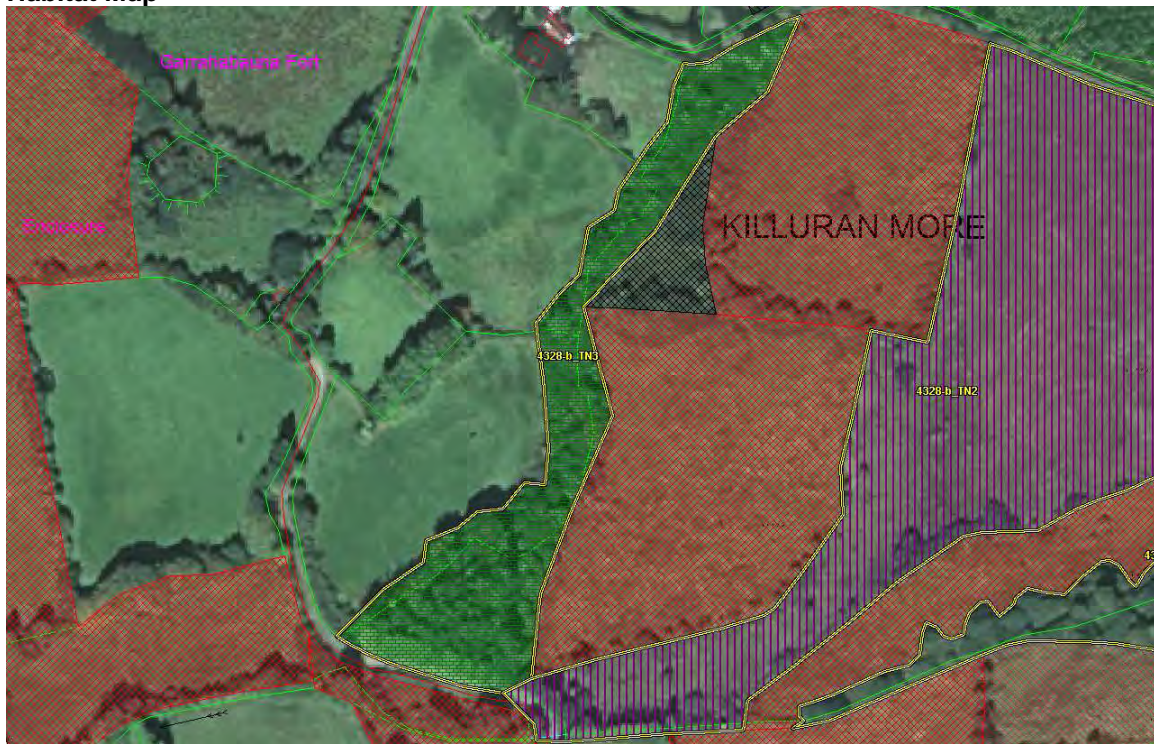


**Photographic Record**



**Image 1. Deergrass with exposed bare peat.**

<b>TARGET NOTES - ID No. 41</b>																																																								
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<b>Surveyor:</b> Shane O'Neill		<b>County name:</b> Clare																																																						
<b>1:2,500 Sheet no:</b> 4328-b	<b>Townland:</b> Killuran More	<b>Grid Ref.:</b> 158457, 177151																																																						
<b>Target note no.:</b> TN 3		<b>Area:</b> 0.85ha																																																						
<b>Ecological value:</b> <b>Local Importance (Higher Value)</b>																																																								
<b>Habitat code</b>  <b>WD2 / WL1 / HD1</b>	<p>A small section of Mixed Broadleaved/conifer woodland WD2 expands out from a section of Hedgerow WL1 which is approximately 15 meters deep in places. There is a small stream on the Eastern edge partially vegetated by dense Bracken HD1. A freshly dug animal hole was found - this could be a new Badger sett or a Fox hole.</p> <p><b>Species List: WL1</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;"><i>Fraxinus excelsior</i></td><td style="padding: 2px;">Ash</td><td style="padding: 2px;">Abundant</td></tr> <tr><td style="padding: 2px;"><i>Crataegus monogyna</i></td><td style="padding: 2px;">Hawthorn</td><td style="padding: 2px;">Abundant</td></tr> <tr><td style="padding: 2px;"><i>Ilex aquifolium</i></td><td style="padding: 2px;">Holly</td><td style="padding: 2px;">Abundant</td></tr> <tr><td style="padding: 2px;"><i>Salix cinerea</i></td><td style="padding: 2px;">Willow</td><td style="padding: 2px;">Abundant</td></tr> <tr><td style="padding: 2px;"><i>Prunus spinosa</i></td><td style="padding: 2px;">Blackthorn</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Betula pubescens</i></td><td style="padding: 2px;">Downy Birch</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Hedera helix</i></td><td style="padding: 2px;">Ivy</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Rubus fruticosus</i> agg.</td><td style="padding: 2px;">Bramble</td><td style="padding: 2px;">Frequent</td></tr> </tbody> </table> <p><b>Species List: WD2</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;"><i>Aesculus hippocastanum</i></td><td style="padding: 2px;">Horse Chestnut</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Fagus sylvatica</i></td><td style="padding: 2px;">Beech</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Acer pseudoplatanus</i></td><td style="padding: 2px;">Sycamore</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Pinus sylvestris</i></td><td style="padding: 2px;">Scot's pine</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Prunella vulgaris</i></td><td style="padding: 2px;">Self-heal</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Geranium robertianum</i></td><td style="padding: 2px;">Herb Robert</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Urtica dioica</i></td><td style="padding: 2px;">Nettle</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Pteridium aquilinum</i></td><td style="padding: 2px;">Bracken</td><td style="padding: 2px;">Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Fraxinus excelsior</i>	Ash	Abundant	<i>Crataegus monogyna</i>	Hawthorn	Abundant	<i>Ilex aquifolium</i>	Holly	Abundant	<i>Salix cinerea</i>	Willow	Abundant	<i>Prunus spinosa</i>	Blackthorn	Frequent	<i>Betula pubescens</i>	Downy Birch	Occasional	<i>Hedera helix</i>	Ivy	Frequent	<i>Rubus fruticosus</i> agg.	Bramble	Frequent	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Aesculus hippocastanum</i>	Horse Chestnut	Occasional	<i>Fagus sylvatica</i>	Beech	Frequent	<i>Acer pseudoplatanus</i>	Sycamore	Occasional	<i>Pinus sylvestris</i>	Scot's pine	Frequent	<i>Prunella vulgaris</i>	Self-heal	Occasional	<i>Geranium robertianum</i>	Herb Robert	Frequent	<i>Urtica dioica</i>	Nettle	Occasional	<i>Pteridium aquilinum</i>	Bracken	Occasional
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**Habitat Map****Photographic Record**

**Image 1. View of Mixed Broadleaved/conifer woodland from adjacent field.**





**Image 2: View of Mixed Broadleaved/conifer woodland**

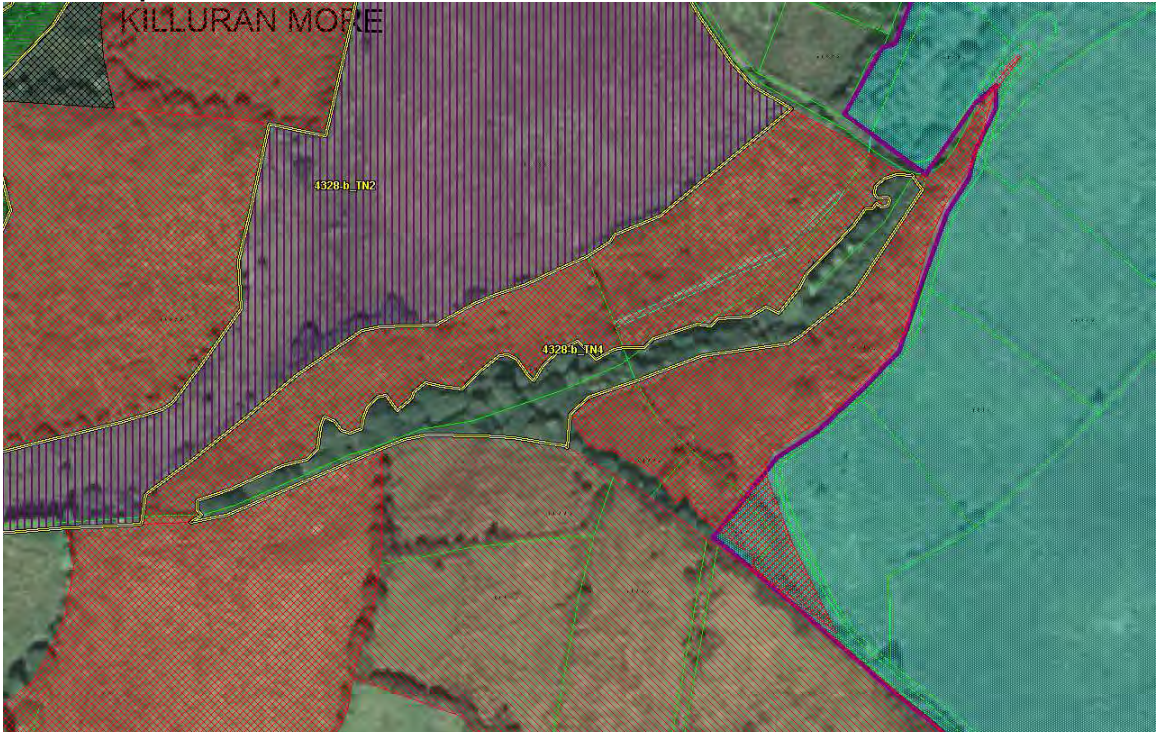


**Image 3: View of Mixed Broadleaved/conifer woodland**



**Image 4: Recently dug hole**



TARGET NOTES - ID No. 42																																						
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 9/8/2011																																				
<b>Surveyor:</b> Shane O'Neill		<b>County name:</b> Clare																																				
<b>1:2,500 Sheet no:</b> 4328-b	<b>Townland:</b> Killuran More	<b>Grid Ref.:</b> 158697, 177072																																				
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<b>Ecological value:</b> Local Importance (Higher Value)																																						
<b>Habitat code</b>  <b>WL1/WD1</b>	<p>This Hedgerow WL1 is located on a slope in between two fields of Wet Grassland GS4. It is about 5-10 meters thick and appears to be well used by Badgers, Deer and Fox. This Hedgerow WL1 joins a stand of Birch and that continues into a Conifer plantation WD4.</p> <p><b>Species List: WL1</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Species (Latin name)</th> <th style="text-align: left;">Species (common name)</th> <th style="text-align: left;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Betula pubescens</i></td><td>Birch</td><td>Frequent</td></tr> <tr><td><i>Crataegus monogyna</i></td><td>Hawthorn</td><td>Frequent</td></tr> <tr><td><i>Fraxinus excelsior</i></td><td>Ash</td><td>Occasional</td></tr> <tr><td><i>Geranium robertianum</i></td><td>Herb Robert</td><td>Frequent</td></tr> <tr><td><i>Ilex aquifolium</i></td><td>Holly</td><td>Occasional</td></tr> <tr><td><i>Lonicera periclymenum</i></td><td>Honeysuckle</td><td>Occasional</td></tr> <tr><td><i>Oxalis acetosella</i></td><td>Wood sorrel</td><td>Frequent</td></tr> <tr><td><i>Polystichum setiferum</i></td><td>Soft Shield fern</td><td>Occasional</td></tr> <tr><td><i>Prunus spinosa</i></td><td>Blackthorn</td><td>Frequent</td></tr> <tr><td><i>Rubus fruticosus</i> agg.</td><td>Bramble</td><td>Frequent</td></tr> <tr><td><i>Salix cinerea</i></td><td>Willow</td><td>Dominant</td></tr> </tbody> </table>		Species (Latin name)	Species (common name)	DAFOR Scale	<i>Betula pubescens</i>	Birch	Frequent	<i>Crataegus monogyna</i>	Hawthorn	Frequent	<i>Fraxinus excelsior</i>	Ash	Occasional	<i>Geranium robertianum</i>	Herb Robert	Frequent	<i>Ilex aquifolium</i>	Holly	Occasional	<i>Lonicera periclymenum</i>	Honeysuckle	Occasional	<i>Oxalis acetosella</i>	Wood sorrel	Frequent	<i>Polystichum setiferum</i>	Soft Shield fern	Occasional	<i>Prunus spinosa</i>	Blackthorn	Frequent	<i>Rubus fruticosus</i> agg.	Bramble	Frequent	<i>Salix cinerea</i>	Willow	Dominant
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<i>Ilex aquifolium</i>	Holly	Occasional																																				
<i>Lonicera periclymenum</i>	Honeysuckle	Occasional																																				
<i>Oxalis acetosella</i>	Wood sorrel	Frequent																																				
<i>Polystichum setiferum</i>	Soft Shield fern	Occasional																																				
<i>Prunus spinosa</i>	Blackthorn	Frequent																																				
<i>Rubus fruticosus</i> agg.	Bramble	Frequent																																				
<i>Salix cinerea</i>	Willow	Dominant																																				
<b>Habitat Map</b> 																																						



## Photographic Record



**Image 1. Hedgerow with Hawthorn and Willow**



**Image 2. Birch-dominant patch of Hedgerow with Bracken in front**



**Image 3. Overview of Upland Blanket Bog adjacent to Hedgerow**





**TARGET NOTES - ID No. 43**

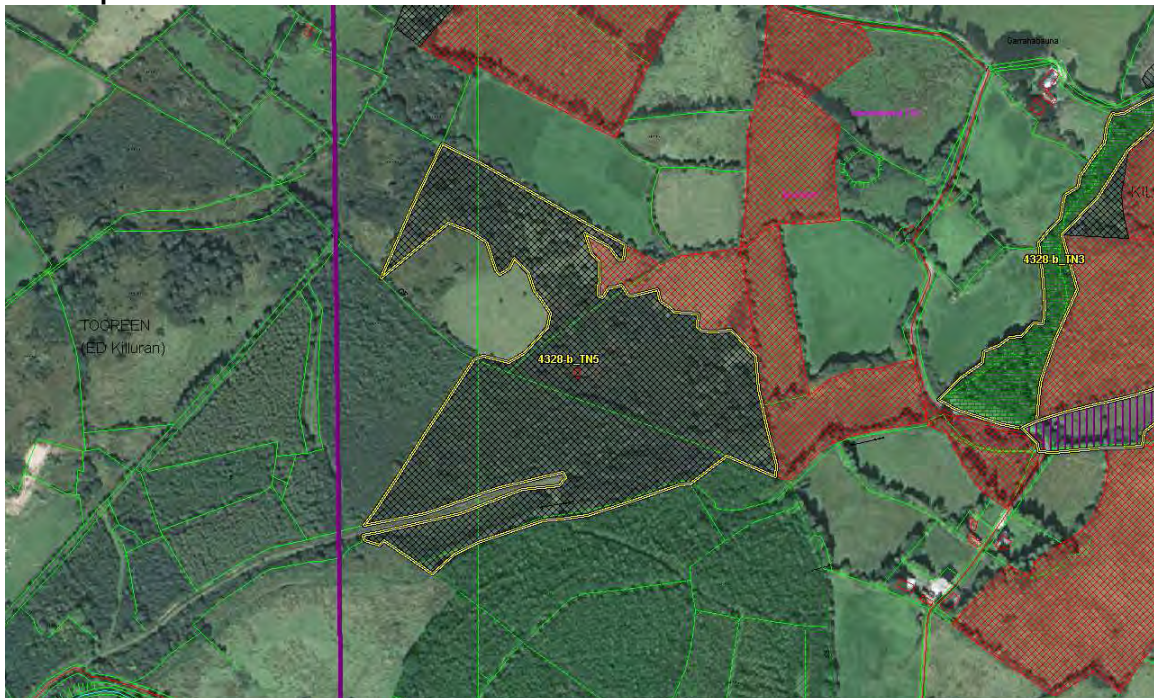
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 9/8/2011
<b>Surveyor:</b> Shane O'Neill		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4328-b	<b>Townland:</b> Killuran More	<b>Grid Ref.:</b> 158072, 177072
<b>Target note no.:</b> TN 5		<b>Area:</b> 0.5ha
<b>Ecological value:</b> <b>Local Importance (Higher Value)</b>		

**Habitat code****WS1**

A large area of very dense Scrub WS1 composed of Gorse (*Ulex europaeus*), Bramble (*Rubus fruticosus* agg.) and Bracken (*Pteridium aquilinum*) on a steep slope. There are Willow (*Salix* sp.), Holly (*Ilex aquifolium*), Hawthorn (*Crataegus mongyna*) and Birch (*Betula* sp.) throughout - these may be remnants of old Hedgerows WL1 but it is impossible to tell. There is evidence of Badgers and Deer.

**Species List: WS1**

Species (Latin name)	Species (common name)	DAFOR Scale
<i>Ilex aquifolium</i>	Holly	Abundant
<i>Crataegus monogyna</i>	Hawthorn	Abundant
<i>Betula pubescens</i>	Birch	Frequent
<i>Salix cinerea</i>	Willow	Abundant
<i>Acer pseudoplatanus</i>	Sycamore	Rare
<i>Rubus fruticosus</i> agg.	Bramble	Abundant
<i>Ulex europaeus</i>	Gorse	Abundant
<i>Prunus spinosa</i>	Blackthorn	Frequent
<i>Pteridium aquilinum</i>	Bracken	Abundant

**Habitat Map**



## Photographic Record



**Image 1: Overview of Scrub WS1 habitat**



**Image 2: Close up of Scrub WS1 with abundant Brambles**

TARGET NOTES - ID No. 44																																																		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 9/8/2011																																																
<b>Surveyor:</b> Shane O'Neill		<b>County name:</b> Clare																																																
<b>1:2,500 Sheet no:</b> 4328-b	<b>Townland:</b> Killuran More	<b>Grid Ref.:</b> 158359, 177643																																																
<b>Target note no.:</b> TN 6		<b>Area:</b> 1.6ha																																																
<b>Ecological value:</b> <span style="color: red;">County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.</span>																																																		
<b>Habitat code</b>  <b>WN4</b>	<p>An old woodland with dominant Hazel (<i>Corylus avellana</i>) and frequent Ash (<i>Fraxinus excelsior</i>) situated on the slopes of a small steep valley with an Eroding/Upland River FW1 at the bottom.</p> <p>This habitat is best described by Wet pedunculate oak-ash woodland WN4; however there are elements of the woodland that could be categorised as Oak-ash-hazel woodland WN2.</p> <p><b>Tree Layer Species List:</b></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><i>Betula pubescens</i></td> <td style="padding: 2px;">Birch</td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;"><i>Corylus avellana</i></td> <td style="padding: 2px;">Hazel</td> <td style="padding: 2px;">Dominant</td> </tr> <tr> <td style="padding: 2px;"><i>Fraxinus excelsior</i></td> <td style="padding: 2px;">Ash</td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;"><i>Ilex aquifolium</i></td> <td style="padding: 2px;">Holly</td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;"><i>Quercus petraea</i></td> <td style="padding: 2px;">Sessile Oak</td> <td style="padding: 2px;">Occasional</td> </tr> </tbody> </table> <p><b>Ground Flora Species List:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><i>Hedera helix</i></td> <td style="padding: 2px;">Ivy</td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;"><i>Athyrium filix-femina</i></td> <td style="padding: 2px;">Lady fern</td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;"><i>Bryophyte</i></td> <td style="padding: 2px;">Moss</td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;"><i>Circaea lutetiana</i></td> <td style="padding: 2px;">Enchanter's-nightshade</td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;"><i>Geranium robertianum</i></td> <td style="padding: 2px;">Herb-Robert</td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;"><i>Hyacinthoides non-scripta</i></td> <td style="padding: 2px;">Bluebell</td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;"><i>Lysimachia nemorum</i></td> <td style="padding: 2px;">Yellow Pimpernel</td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;"><i>Ranunculus repens</i></td> <td style="padding: 2px;">Creeping Buttercup</td> <td style="padding: 2px;">Rare</td> </tr> <tr> <td style="padding: 2px;"><i>Rubus fruticosus</i> agg.</td> <td style="padding: 2px;">Bramble</td> <td style="padding: 2px;">Abundant</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Betula pubescens</i>	Birch	Occasional	<i>Corylus avellana</i>	Hazel	Dominant	<i>Fraxinus excelsior</i>	Ash	Frequent	<i>Ilex aquifolium</i>	Holly	Occasional	<i>Quercus petraea</i>	Sessile Oak	Occasional	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Hedera helix</i>	Ivy	Occasional	<i>Athyrium filix-femina</i>	Lady fern	Frequent	<i>Bryophyte</i>	Moss	Abundant	<i>Circaea lutetiana</i>	Enchanter's-nightshade	Occasional	<i>Geranium robertianum</i>	Herb-Robert	Abundant	<i>Hyacinthoides non-scripta</i>	Bluebell	Occasional	<i>Lysimachia nemorum</i>	Yellow Pimpernel	Occasional	<i>Ranunculus repens</i>	Creeping Buttercup	Rare	<i>Rubus fruticosus</i> agg.	Bramble	Abundant
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**Habitat Map****Photographic Record**

**Image 1: Woodland on steep slope with moss- and fern-covered rocks and abundant Hazel**

TARGET NOTES - ID No. 45																																												
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 9/8/2011																																										
<b>Surveyor:</b> Shane O Neill		<b>County name:</b> Clare																																										
<b>1:2,500 Sheet no:</b> 4328-b	<b>Townland:</b> Killuran More	<b>Grid Ref.:</b> 157995, 177557																																										
<b>Target note no.:</b> TN7		<b>Area:</b> 2.2ha																																										
<b>Ecological value:</b> County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.																																												
<b>Habitat code</b>  <b>WN4</b>	<p>This area of woodland is joined to 4328-b_TN6 by a network of Hedgerows WL1 (see TN5) and is encroaching on some of the Improved agricultural grasslands GA1s. It is similar to TN6 but the banks are not as steep and it has what look like old terraces. It is not as wet as TN6, only in places. This woodland best fits the Wet Pendunculate Oak-Ash woodland WN4 category, however with some elements which correspond to Oak Ash Hazel Woodland WN2.</p> <p><b>Tree Layer Species List: WN4</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><i>Corylus avellana</i></td> <td style="padding: 2px;">Hazel</td> <td style="padding: 2px;">Dominant</td> </tr> <tr> <td style="padding: 2px;"><i>Fraxinus excelsior</i></td> <td style="padding: 2px;">Ash</td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;"><i>Prunus spinosa</i></td> <td style="padding: 2px;">Blackthorn</td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;"><i>Quercus petraea</i></td> <td style="padding: 2px;">Sessile Oak</td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;"><i>Salix cinerea</i></td> <td style="padding: 2px;">Willow</td> <td style="padding: 2px;">Occasional</td> </tr> </tbody> </table> <p><b>Ground Flora Species List: WN4</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><i>Hedera helix</i></td> <td style="padding: 2px;">Ivy</td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;"><i>Athyrium filix-femina</i></td> <td style="padding: 2px;">Lady fern</td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;"><i>Bryophyte</i></td> <td style="padding: 2px;">Moss spp</td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;"><i>Geranium robertianum</i></td> <td style="padding: 2px;">Herb-Robert</td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;"><i>Oxalis acetosella</i></td> <td style="padding: 2px;">Wood Sorrel</td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;"><i>Polypodium vulgare</i></td> <td style="padding: 2px;">Polypody fern</td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;"><i>Rubus fruticosus agg.</i></td> <td style="padding: 2px;">Bramble</td> <td style="padding: 2px;">Frequent</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Corylus avellana</i>	Hazel	Dominant	<i>Fraxinus excelsior</i>	Ash	Frequent	<i>Prunus spinosa</i>	Blackthorn	Occasional	<i>Quercus petraea</i>	Sessile Oak	Occasional	<i>Salix cinerea</i>	Willow	Occasional	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Hedera helix</i>	Ivy	Occasional	<i>Athyrium filix-femina</i>	Lady fern	Abundant	<i>Bryophyte</i>	Moss spp	Abundant	<i>Geranium robertianum</i>	Herb-Robert	Frequent	<i>Oxalis acetosella</i>	Wood Sorrel	Abundant	<i>Polypodium vulgare</i>	Polypody fern	Frequent	<i>Rubus fruticosus agg.</i>	Bramble	Frequent
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### Habitat Map



### Photographic Record



Image 1: Overview of woodland habitat





**Image 2: View within woodland habitat**

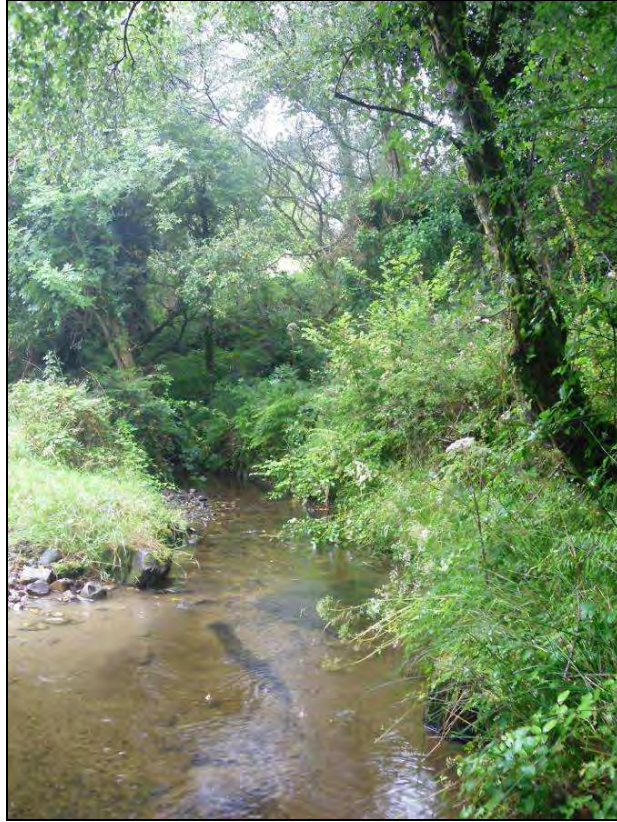


TARGET NOTES - ID No. 46																																																														
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 10/8/2011																																																												
<b>Surveyor:</b> Shane O'Neill		<b>County name:</b> Clare																																																												
<b>1:2,500 Sheet no:</b> 4328-d	<b>Townland:</b> Gortatrassa	<b>Grid Ref.:</b> 158121, 176358																																																												
<b>Target note no.:</b> TN 1		<b>Area:</b> 0.04ha																																																												
<b>Ecological value:</b> County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.																																																														
<b>Habitat code</b>  <b>WN1/FW1</b>	<p>An area of Birch-dominated woodland with frequent Willow (<i>Salix</i> sp.), on sloping banks (steep in places) either side of an Upland/Eroding river FW1. The river fords the road, then drops about twenty or thirty foot and continues on other side of the road.</p> <p>This woodland best fits the Oak-birch-holly woodland WN1 classification although Oak is not present.</p> <p><b>Tree Layer Species List:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;"><i>Betula pubescens</i></td><td style="padding: 2px;">Birch</td><td style="padding: 2px;">Dominant</td></tr> <tr><td style="padding: 2px;"><i>Salix cinerea</i></td><td style="padding: 2px;">Willow</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Crataegus monogyna</i></td><td style="padding: 2px;">Hawthorn</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Corylus avellana</i></td><td style="padding: 2px;">Hazel</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Ilex aquifolium</i></td><td style="padding: 2px;">Holly</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Malus sylvestris</i></td><td style="padding: 2px;">Crab-apple</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Fraxinus excelsior</i></td><td style="padding: 2px;">Ash</td><td style="padding: 2px;">Occasional</td></tr> </tbody> </table> <p><b>Ground Flora Species List:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;"><i>Pteridium aquilinum</i></td><td style="padding: 2px;">Bracken</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Rubus fruticosus agg</i></td><td style="padding: 2px;">Bramble</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Urtica dioica</i></td><td style="padding: 2px;">Nettle</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Geranium robertianum</i></td><td style="padding: 2px;">Herb Robert</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Filipendula ulmaria</i></td><td style="padding: 2px;">Meadowsweet</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Angelica sylvestris</i></td><td style="padding: 2px;">Wild Angelica</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Vicia cracca</i></td><td style="padding: 2px;">Tufted Vetch</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Potentilla erecta</i></td><td style="padding: 2px;">Tormentil</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Prunella vulgaris</i></td><td style="padding: 2px;">Selfheal</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Asplenium scolopendrium</i></td><td style="padding: 2px;">Hart's tongue Fern</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Blechnum spicant</i></td><td style="padding: 2px;">Hard Fern</td><td style="padding: 2px;">Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Betula pubescens</i>	Birch	Dominant	<i>Salix cinerea</i>	Willow	Frequent	<i>Crataegus monogyna</i>	Hawthorn	Frequent	<i>Corylus avellana</i>	Hazel	Occasional	<i>Ilex aquifolium</i>	Holly	Occasional	<i>Malus sylvestris</i>	Crab-apple	Occasional	<i>Fraxinus excelsior</i>	Ash	Occasional	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Pteridium aquilinum</i>	Bracken	Frequent	<i>Rubus fruticosus agg</i>	Bramble	Frequent	<i>Urtica dioica</i>	Nettle	Frequent	<i>Geranium robertianum</i>	Herb Robert	Frequent	<i>Filipendula ulmaria</i>	Meadowsweet	Occasional	<i>Angelica sylvestris</i>	Wild Angelica	Occasional	<i>Vicia cracca</i>	Tufted Vetch	Occasional	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Prunella vulgaris</i>	Selfheal	Occasional	<i>Asplenium scolopendrium</i>	Hart's tongue Fern	Occasional	<i>Blechnum spicant</i>	Hard Fern	Occasional
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**Habitat Map****Photographic Record**

**Image 1: View of Birch Woodland Area**

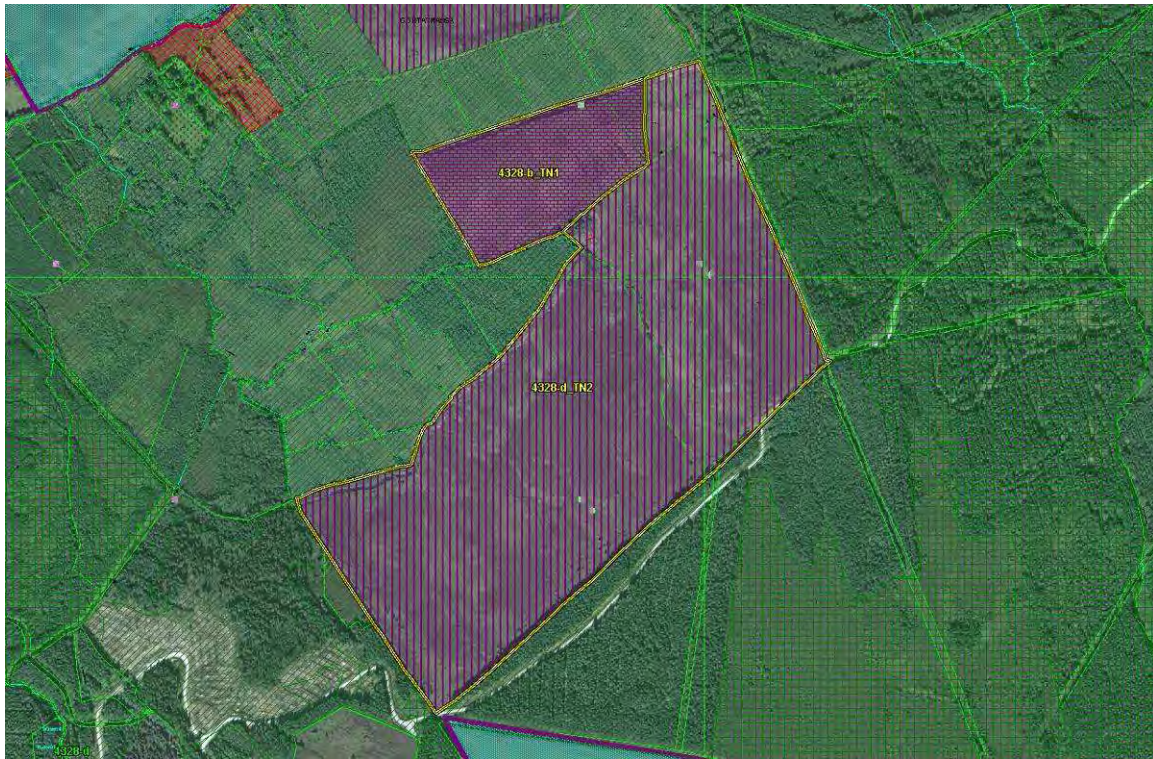


**Image 2: Stream running through Birch Woodland**





TARGET NOTES - ID No. 47																																															
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 11/8/2011																																													
<b>Surveyor:</b> Shane O Neill		<b>County name:</b> Clare																																													
<b>1:2,500 Sheet no:</b> 4328-d	<b>Townland:</b> Gortatrassa	<b>Grid Ref.:</b> 159776, 176327																																													
<b>Target note no.:</b> TN2		<b>Area:</b> 35ha																																													
<b>Ecological value:</b> <span style="color: red;">National Importance</span>																																															
<b>Habitat code</b>  <b>PB2</b>	<p>This area is an Upland Blanket Bog PB2 with abundant to dominant dwarf shrubs of Heather and abundant Purple Moor-grass (<i>Molina caerulea</i>) and Sphagnum moss. Birch (<i>Betula</i> sp.) and Rowan (<i>Sorbus aucuparia</i>) have begun to move into some areas, this may begin developing into Bog Woodland in the absence of disturbance. The bog slopes down to a Conifer plantation WD4 on northern edge and there is an area of Cutover Bog PB4 on north eastern corner (outside the study area).</p> <p>This habitat is under threat from invading Spruce and Rhododendron is also just beginning to colonise some areas.</p> <p><b>Ground Flora Species List: PB2/Molina meadow</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Species (<i>Latin name</i>)</th> <th style="text-align: left;">Species (common name)</th> <th style="text-align: left;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Dominant</td></tr> <tr><td><i>Erica cinerea</i></td><td>Bell Heather</td><td>Abundant</td></tr> <tr><td><i>Erica tetralix</i></td><td>Cross-leaved heath</td><td>Abundant</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor grass</td><td>Abundant</td></tr> <tr><td><i>Narthecium ossifragum</i></td><td>Bog Asphodel</td><td>Abundant</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Frequent</td></tr> <tr><td><i>Sphagnum</i> sp.</td><td>Sphagnum</td><td>Abundant</td></tr> <tr><td><i>Trichophorum cespitosum</i></td><td>Deergrass</td><td>Abundant</td></tr> <tr><td><i>Vaccinium myrtillus</i></td><td>Bilberry</td><td>Frequent</td></tr> </tbody> </table> <p><b>Tree Species List: PB2/Molina meadow</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Species (<i>Latin name</i>)</th> <th style="text-align: left;">Species (common name)</th> <th style="text-align: left;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Picea</i> sp.</td><td>Spruce sp</td><td>Occasional</td></tr> <tr><td><i>Betula pubescens</i></td><td>Birch</td><td>Rare</td></tr> <tr><td><i>Rhododendron</i></td><td>Rhododendron sp</td><td>Rare</td></tr> <tr><td><i>Sorbus aucuparia</i></td><td>Rowan</td><td>Rare</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Calluna vulgaris</i>	Ling Heather	Dominant	<i>Erica cinerea</i>	Bell Heather	Abundant	<i>Erica tetralix</i>	Cross-leaved heath	Abundant	<i>Molinia caerulea</i>	Purple Moor grass	Abundant	<i>Narthecium ossifragum</i>	Bog Asphodel	Abundant	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Sphagnum</i> sp.	Sphagnum	Abundant	<i>Trichophorum cespitosum</i>	Deergrass	Abundant	<i>Vaccinium myrtillus</i>	Bilberry	Frequent	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Picea</i> sp.	Spruce sp	Occasional	<i>Betula pubescens</i>	Birch	Rare	<i>Rhododendron</i>	Rhododendron sp	Rare	<i>Sorbus aucuparia</i>	Rowan	Rare
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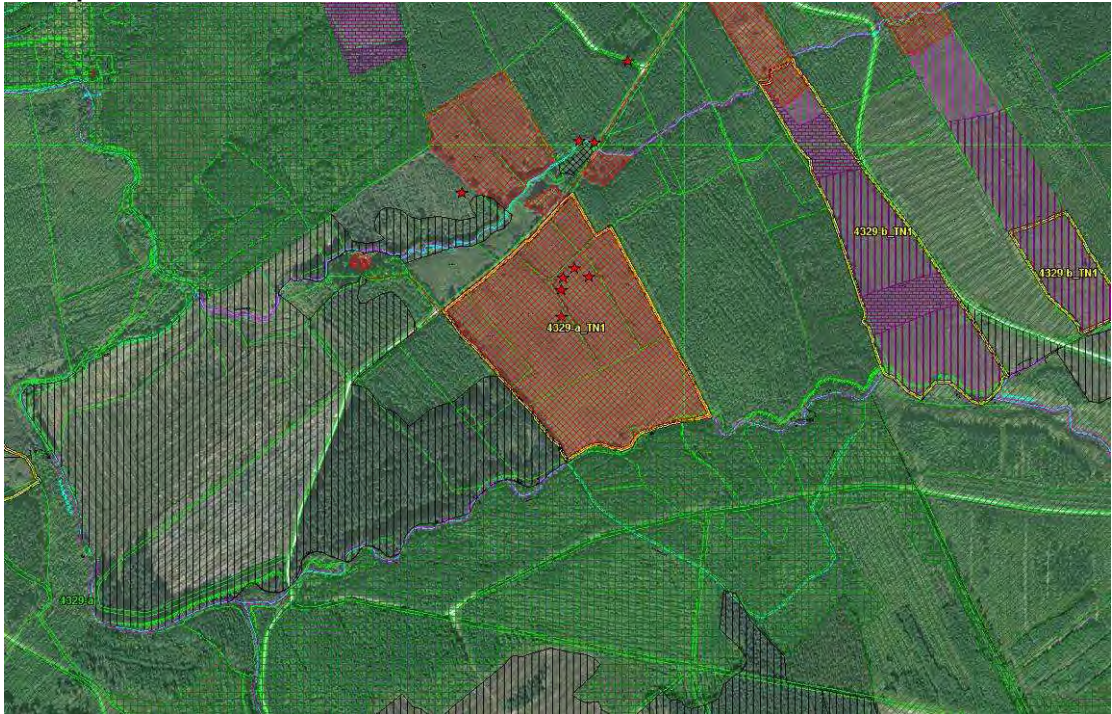
**Habitat Map****Photographic Record****Image 1: View of Upland Blanket Bog**

TARGET NOTES - ID No. 48																																																																																									
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 08/08/11																																																																																							
Surveyor: John Curtin		County name: Clare																																																																																							
1:2,500 Sheet no: 4329-a	Townland: Inchalughoge	Grid Ref: 161822, 177700																																																																																							
Target note no.: TN1		Area: 9.8ha																																																																																							
Ecological value: <b>International Importance – linked to the Annex I habitat '4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>'.</b>																																																																																									
Habitat code  GS4 with HH3 elements	<p>Nice, large wet grassland with wet heath (HH3) elements. The site has a very gentle slope uphill to the south east. Forestry (WD4) surrounds the site except for a similar smaller habitat across the road to the north west.</p> <p>To the east of this lies a field of <i>Fallopia japonica</i> (Japanese Knotweed). The invasive plant; <i>Rhododendron ponticum</i> (Rhododendron) was present on the site. This area is under significant threat from invading species.</p> <p><b>Species List</b></p> <table> <tr> <th>Species (<i>Latin name</i>)</th><th>Species (common name)</th><th>DAFOR Scale</th></tr> <tr><td><i>Agrostis stolonifera</i></td><td>Creeping bent</td><td>Occasional</td></tr> <tr><td><i>Angelica sylvestris</i></td><td>Wild Angelica</td><td>Occasional</td></tr> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Frequent</td></tr> <tr><td><i>Blechnum spicant</i></td><td>Hard Fern</td><td>Occasional</td></tr> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Abundant</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling</td><td>Abundant</td></tr> <tr><td><i>Carex nigra</i></td><td>Common Sedge</td><td>Frequent</td></tr> <tr><td><i>Carex panicea</i></td><td>Carnation Sedge</td><td>Occasional</td></tr> <tr><td><i>Carex pulicaris</i></td><td>Flea Sedge</td><td>Abundant</td></tr> <tr><td><i>Centaurea nigra</i></td><td>Common Knapweed</td><td>Occasional</td></tr> <tr><td><i>Cirsium paluste</i></td><td>Marsh Thistle</td><td>Occasional</td></tr> <tr><td><i>Epilobium palustre</i></td><td>Marsh Willowherb</td><td>Occasional</td></tr> <tr><td><i>Erica tetralix</i></td><td>Cross-leaved Heather</td><td>Rare</td></tr> <tr><td><i>Eriophorum vaginatum</i></td><td>Hare's-tail Cottongrass</td><td>Occasional</td></tr> <tr><td><i>Hieracium</i> sp.</td><td>Hawkweed</td><td>Frequent</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Occasional</td></tr> <tr><td><i>Juncus articulatus/ acutiflorus</i></td><td>Jointed Rush</td><td>Abundant</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Frequent</td></tr> <tr><td><i>Luzula campestris</i></td><td>Field Wood-rush</td><td>Occasional</td></tr> <tr><td><i>Luzula multiflora</i></td><td>Heath Wood-rush</td><td>Occasional</td></tr> <tr><td><i>Lycopodium</i></td><td>Club moss</td><td>Occasional</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Frequent</td></tr> <tr><td></td><td>(Withered) orchid</td><td>Occasional</td></tr> <tr><td><i>Plantago lanceolata</i></td><td>Ribwort Plantain</td><td>Occasional</td></tr> <tr><td><i>Poa</i> sp.</td><td>Meadow grass</td><td>Occasional</td></tr> <tr><td><i>Polygala serpyllifolia</i></td><td>Heath Milkwort</td><td>Rare</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Abundant</td></tr> <tr><td><i>Rhododendron ponticum</i></td><td>Rhododendron</td><td>Frequent</td></tr> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Agrostis stolonifera</i>	Creeping bent	Occasional	<i>Angelica sylvestris</i>	Wild Angelica	Occasional	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Blechnum spicant</i>	Hard Fern	Occasional	<i>Bryophyte</i>	Moss spp	Abundant	<i>Calluna vulgaris</i>	Ling	Abundant	<i>Carex nigra</i>	Common Sedge	Frequent	<i>Carex panicea</i>	Carnation Sedge	Occasional	<i>Carex pulicaris</i>	Flea Sedge	Abundant	<i>Centaurea nigra</i>	Common Knapweed	Occasional	<i>Cirsium paluste</i>	Marsh Thistle	Occasional	<i>Epilobium palustre</i>	Marsh Willowherb	Occasional	<i>Erica tetralix</i>	Cross-leaved Heather	Rare	<i>Eriophorum vaginatum</i>	Hare's-tail Cottongrass	Occasional	<i>Hieracium</i> sp.	Hawkweed	Frequent	<i>Holcus lanatus</i>	Yorkshire Fog	Occasional	<i>Juncus articulatus/ acutiflorus</i>	Jointed Rush	Abundant	<i>Juncus effusus</i>	Soft Rush	Frequent	<i>Luzula campestris</i>	Field Wood-rush	Occasional	<i>Luzula multiflora</i>	Heath Wood-rush	Occasional	<i>Lycopodium</i>	Club moss	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Frequent		(Withered) orchid	Occasional	<i>Plantago lanceolata</i>	Ribwort Plantain	Occasional	<i>Poa</i> sp.	Meadow grass	Occasional	<i>Polygala serpyllifolia</i>	Heath Milkwort	Rare	<i>Potentilla erecta</i>	Tormentil	Abundant	<i>Rhododendron ponticum</i>	Rhododendron	Frequent
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	<i>Rumex acetosella</i>	Sheep's Sorrel	Occasional
	<i>Rumex</i> sp.	Dock	Frequent
	<i>Sphagnum</i> sp.	Peat moss	Occasional
	<i>Succisa pratensis</i>	Devil's-bit Scabious	Frequent
	<i>Trichophorum cespitosum</i>	Deergrass	Frequent
	<i>Ulex europaeus</i>	Gorse	Occasional
	<i>Vaccinium myrtillus</i>	Bilberry	Occasional

Habitat Map



Photographic Record



Image 1: Overview of Wet grassland





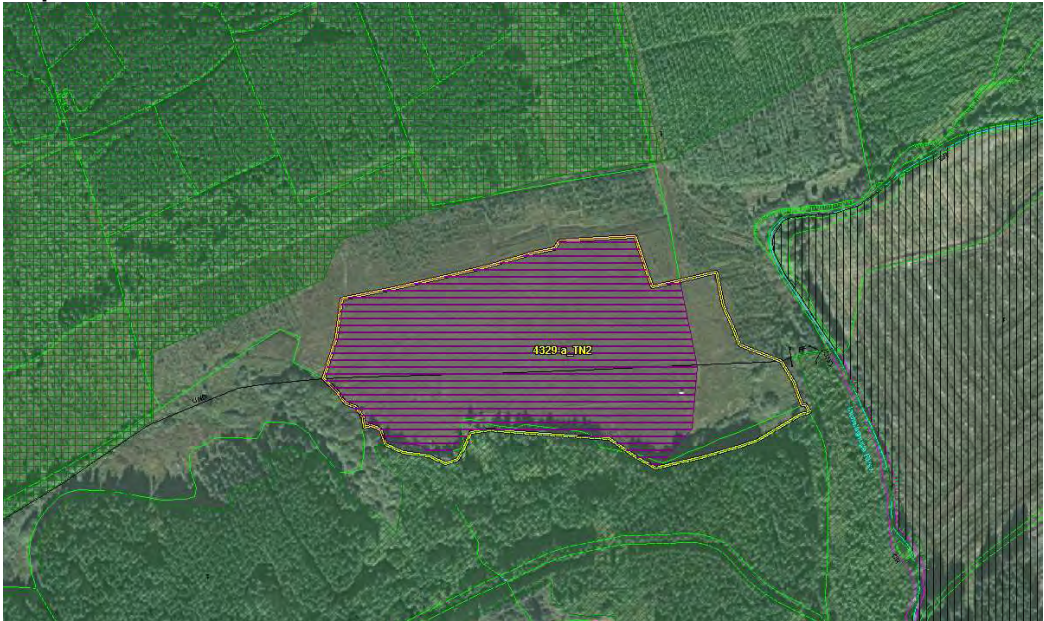
**Image 2: Close-up of Wet heath vegetation – Cross-leaved heath, Heath rush**



**Image 3: Close-up of Wet heath vegetation – Ling, Devil's-bit Scabious and sedges**





TARGET NOTES - ID No. 49																																									
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 08/08/11																																							
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare																																							
<b>1:2,500 Sheet no:</b> 4329-a	<b>Townland:</b> Inchalughoge	<b>Grid Ref:</b> 160733, 177495																																							
<b>Target note no.:</b> TN2		<b>Area:</b> 5ha																																							
<b>Ecological value:</b> <span style="color: red;">National Importance</span>																																									
<b>Habitat code</b>  PB2	<p>Section of Upland Blanket Bog (PB2). Wet and spongy surface underfoot. The sward height generally reached to 1.5ft. <i>Rhynchospora alba</i> (White Beaked-sedge) and <i>Drosera rotundifolia</i> (Sundew) where present. The site is surrounded by forestry (WD4), with a section of recently felled woodland (WS5) to the south. A timber cabin, long disused by forestry workers is located on the bog. A line from this shed to the west seems the only drain/ access or man-made interference to the site. This has mostly recolonised with vegetation. Deer graze the site.</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 5px;">Species (common name)</th> <th style="text-align: left; padding: 5px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;"><i>Andromeda polifolia</i></td><td style="padding: 5px;">Bog Rosemary</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Bryophyte</i></td><td style="padding: 5px;">Moss spp</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Calluna vulgaris</i></td><td style="padding: 5px;">Ling Heather</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Cladonia</i> sp.</td><td style="padding: 5px;">Reindeer Lichen</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Drosera rotundifolia</i></td><td style="padding: 5px;">Sundew</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Erica tetralix</i></td><td style="padding: 5px;">Cross-leaved Heather</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Eriophorum vaginatum</i></td><td style="padding: 5px;">Hare's-tail Cottongrass</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Narthecium ossifragum</i></td><td style="padding: 5px;">Bog Asphodel</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Rhynchospora alba</i></td><td style="padding: 5px;">White Beaked-sedge</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Sphagnum</i> sp.</td><td style="padding: 5px;">Peat moss</td><td style="padding: 5px;">Dominant</td></tr> <tr><td style="padding: 5px;"><i>Trichophorum cespitosum</i></td><td style="padding: 5px;">Deergrass</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Vaccinium myrtillus</i></td><td style="padding: 5px;">Bilberry</td><td style="padding: 5px;">Rare</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Andromeda polifolia</i>	Bog Rosemary	Occasional	<i>Bryophyte</i>	Moss spp	Abundant	<i>Calluna vulgaris</i>	Ling Heather	Abundant	<i>Cladonia</i> sp.	Reindeer Lichen	Occasional	<i>Drosera rotundifolia</i>	Sundew	Abundant	<i>Erica tetralix</i>	Cross-leaved Heather	Abundant	<i>Eriophorum vaginatum</i>	Hare's-tail Cottongrass	Rare	<i>Narthecium ossifragum</i>	Bog Asphodel	Frequent	<i>Rhynchospora alba</i>	White Beaked-sedge	Frequent	<i>Sphagnum</i> sp.	Peat moss	Dominant	<i>Trichophorum cespitosum</i>	Deergrass	Abundant	<i>Vaccinium myrtillus</i>	Bilberry	Rare
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<b>Habitat Map</b> 																																									

## Photographic Record



**Image 1: Overview of Raised bog with adjacent Conifer plantation**



**Image 2: Raised bog vegetation – Deergass, Cottongrass and heathers**





**Image 3: Old forester's hut**



**Image 4: White Beaked-sedge**

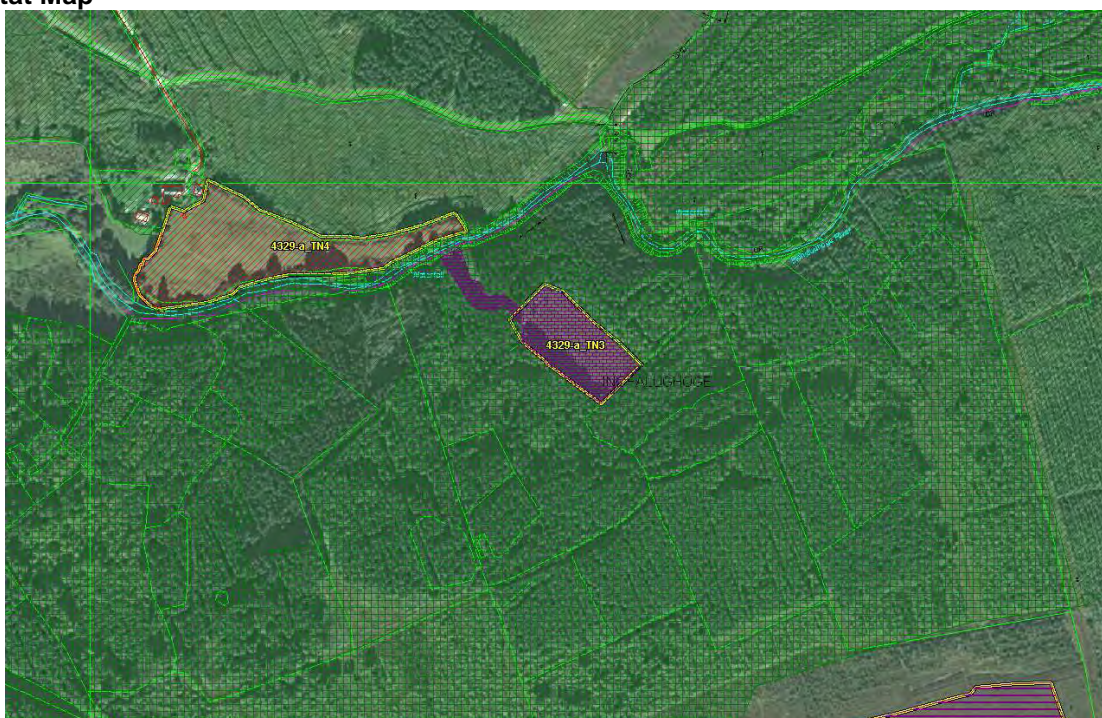




**TARGET NOTES - ID No. 50**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 08/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4329-a	<b>Townland:</b> Inchalughoge	<b>Grid Ref:</b> 160400, 177868
<b>Target note no.:</b> TN3		<b>Area:</b> 0.5ha
<b>Ecological value:</b> <b>County Importance</b>		

<b>Habitat code</b>  PB4	Small section of recovering cutover blanket bog (PB4). Surrounded by forestry (WD4).	
	<b>Species List</b>	
	<b>Species (Latin name)</b>	<b>Species (common name)</b>
	<i>Calluna vulgaris</i>	Ling Heather
	<i>Cladonia</i> sp.	Raindeer Lichen
	<i>Erica tetralix</i>	Cross-leaved Heather
	<i>Molinia caerulea</i>	Purple Moor-grass
	<i>Myrica gale</i>	Bog Myrtle
	<i>Narthecium ossifragum</i>	Bog Asphodel
	<i>Potentilla erecta</i>	Tormentil
	<i>Sphagnum</i> sp.	Peat moss
	<i>Trichophorum cespitosum</i>	Deergrass

**Habitat Map**

## Photographic Record



**Image 1: Cutover bog surrounded by Conifer plantation**




**Image 2: Purple Moor-grass is dominant with abundant Ling**



TARGET NOTES - ID No. 51																																																																	
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 08/08/11																																																															
Surveyor: John Curtin		County name: Clare																																																															
1:2,500 Sheet no: 4329-a	Townland: Inchalughoge	Grid Ref: 160174, 177949																																																															
Target note no.: TN4		Area: 1.2ha																																																															
Ecological Importance: <b>Local Importance (Higher Value)</b>																																																																	
Habitat code  GS2	<p>Dry meadow which has not been fertilized in ten years. Shows no signs of grazing. Sward height was up to 4ft. A stream (FW1 ) borders the site to the south beyond which lies forestry (WD4)</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (Latin name)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Achillea millefolium</i></td> <td>Yarrow</td> <td>Occasional</td> </tr> <tr> <td><i>Anthoxanthum odoratum</i></td> <td>Sweet Vernal-grass</td> <td>Abundant</td> </tr> <tr> <td><i>Centaurea nigra</i></td> <td>Common Knapweed</td> <td>Occasional</td> </tr> <tr> <td><i>Dactylis glomerata</i></td> <td>Cock's-foot</td> <td>Frequent</td> </tr> <tr> <td><i>Heracleum sphondylium</i></td> <td>Hogweed</td> <td>occasional</td> </tr> <tr> <td><i>Hieracium</i> sp.</td> <td>Hawkweed</td> <td>Frequent</td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire Fog</td> <td>Frequent</td> </tr> <tr> <td><i>Juncus articulatus/ acutiflorus</i></td> <td>Jointed Rush</td> <td>Occasional</td> </tr> <tr> <td><i>Lathyrus pratensis</i></td> <td>Meadow-vetchling</td> <td>Occasional</td> </tr> <tr> <td><i>Lolium perenne</i></td> <td>Rye-grass, perennial</td> <td>Occasional</td> </tr> <tr> <td><i>Lotus pendunculatus</i></td> <td>Greater Birds-foot-trefoil</td> <td>Occasional</td> </tr> <tr> <td><i>Phleum pratense</i></td> <td>Timothy Grass</td> <td>Occasional</td> </tr> <tr> <td><i>Plantago lanceolata</i></td> <td>Ribwort Plantain</td> <td>Frequent</td> </tr> <tr> <td><i>Poa</i> sp.</td> <td>Meadow grass</td> <td>Occasional</td> </tr> <tr> <td><i>Ranunculus repens</i></td> <td>Creeping Buttercup</td> <td>Occasional</td> </tr> <tr> <td><i>Rumex acetosella</i></td> <td>Sheep's Sorrel</td> <td>Occasional</td> </tr> <tr> <td><i>Rumex</i> sp.</td> <td>Dock</td> <td>Frequent</td> </tr> <tr> <td><i>Stellaria media</i></td> <td>Common Chickweed</td> <td>Occasional</td> </tr> <tr> <td><i>Trifolium pratense</i></td> <td>Red Clover</td> <td>Occasional</td> </tr> <tr> <td><i>Vicicia sepium</i></td> <td>Bush Vetch</td> <td>Occasional</td> </tr> </tbody> </table>		Species (Latin name)	Species (common name)	DAFOR Scale	<i>Achillea millefolium</i>	Yarrow	Occasional	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Abundant	<i>Centaurea nigra</i>	Common Knapweed	Occasional	<i>Dactylis glomerata</i>	Cock's-foot	Frequent	<i>Heracleum sphondylium</i>	Hogweed	occasional	<i>Hieracium</i> sp.	Hawkweed	Frequent	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Juncus articulatus/ acutiflorus</i>	Jointed Rush	Occasional	<i>Lathyrus pratensis</i>	Meadow-vetchling	Occasional	<i>Lolium perenne</i>	Rye-grass, perennial	Occasional	<i>Lotus pendunculatus</i>	Greater Birds-foot-trefoil	Occasional	<i>Phleum pratense</i>	Timothy Grass	Occasional	<i>Plantago lanceolata</i>	Ribwort Plantain	Frequent	<i>Poa</i> sp.	Meadow grass	Occasional	<i>Ranunculus repens</i>	Creeping Buttercup	Occasional	<i>Rumex acetosella</i>	Sheep's Sorrel	Occasional	<i>Rumex</i> sp.	Dock	Frequent	<i>Stellaria media</i>	Common Chickweed	Occasional	<i>Trifolium pratense</i>	Red Clover	Occasional	<i>Vicicia sepium</i>	Bush Vetch	Occasional
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<i>Vicicia sepium</i>	Bush Vetch	Occasional																																																															

**Habitat Map**

TARGET NOTES - ID No. 52																																						
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 17/08/11																																				
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare																																				
<b>1:2,500 Sheet no:</b> 4329-b	<b>Townland:</b> Coumnagun	<b>Grid Ref:</b> 162328, 177858 162633, 177790																																				
<b>Target note no.:</b> TN1		<b>Area:</b> 6.7ha and 1.8ha																																				
<b>Ecological value:</b> <span style="color: red;">National importance – may be linked to the EU priority habitat ‘7130 active blanket bogs’.</span>																																						
<b>Habitat code</b>  PB2	<p>Section of Upland Blanket Bog PB2 in good condition. <i>Sphagnum</i> moss is abundant, as is Ling Heather (<i>Calluna vulgaris</i>) - it is likely that this bog is still peat-forming. The surface is quite hummocky with a sward height reaching up to 3ft. Forestry (WD4) borders the site to the west and south, and a section of recently felled forestry (WS5) borders the site to the east. There is a gentle slope downhill to the north. A frog (<i>Rana temporaria</i>) was spotted on the site.</p> <p>This habitat may have links to the priority habitat ‘active blanket bog 7130’.</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Species (<i>Latin name</i>)</th> <th style="text-align: left;">Species (common name)</th> <th style="text-align: left;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Abundant</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Abundant</td></tr> <tr><td><i>Cladonia sp</i></td><td>Lichen</td><td>Occasional</td></tr> <tr><td><i>Erica tetralix</i></td><td>Cross-leaved Heath</td><td>Frequent</td></tr> <tr><td><i>Eriophorum vaginatum</i></td><td>Hares-tail Cottongrass</td><td>Rare</td></tr> <tr><td><i>Fungi sp</i></td><td></td><td>Rare</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Occasional</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Rare</td></tr> <tr><td><i>Sphagnum sp</i></td><td>Peat moss</td><td>Abundant</td></tr> <tr><td><i>Trichophorum cespitosum</i></td><td>Deergrass</td><td>Abundant</td></tr> <tr><td><i>Vaccinium myrtillus</i></td><td>Bilberry</td><td>Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Bryophyte</i>	Moss spp	Abundant	<i>Calluna vulgaris</i>	Ling Heather	Abundant	<i>Cladonia sp</i>	Lichen	Occasional	<i>Erica tetralix</i>	Cross-leaved Heath	Frequent	<i>Eriophorum vaginatum</i>	Hares-tail Cottongrass	Rare	<i>Fungi sp</i>		Rare	<i>Molinia caerulea</i>	Purple Moor-grass	Occasional	<i>Potentilla erecta</i>	Tormentil	Rare	<i>Sphagnum sp</i>	Peat moss	Abundant	<i>Trichophorum cespitosum</i>	Deergrass	Abundant	<i>Vaccinium myrtillus</i>	Bilberry	Occasional
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<b>Habitat Map</b> 																																						



## Photographic Record



**Image 1: Upland blanket bog - overview**



**Image 2: Close-up of blanket bog vegetation – Ling and Cross-leaved heather**



**Image 3: Close-up of *Sphagnum* sp. and unknown fungus**



**Image 4: Unknown fungus from above**





**TARGET NOTES - ID No. 53**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 11/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4330-a	<b>Townland:</b> Carrownakilly	<b>Grid Ref:</b> 164917, 176517
<b>Target note no.:</b> TN1		<b>Area:</b> 6ha

**Ecological value:** County Importance

<b>Habitat code</b>	This site is an area of upland blanket bog (PB2) in good condition and is moderately wet underfoot. The site slopes uphill to the south. Conifer forestry (WD4) adjoins site to the north. The sward height is quite short at 1ft. Deer grazing is evident by numerous droppings.
PB2	

**Species List**

Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale
<i>Calluna vulgaris</i>	Ling Heather	Abundant
<i>Cladonia sp</i>	Raindeer Lichen	Occasional
<i>Erica cinerea</i>	Bell heather	Frequent
<i>Erica tetralix</i>	Cross-leaved Heather	Frequent
<i>Molinia caerulea</i>	Purple Moor-grass	Abundant
<i>Narthecium ossifragum</i>	Bog Asphodel	Frequent
<i>Sphagnum sp</i>	Peat moss	Abundant
<i>Trichophorum cespitosum</i>	Deergrass	Frequent
<i>Vaccinium myrtillus</i>	Bilberry	Rare

**Habitat Map**

### Photographic Record



**Image 1: Upland blanket bog – abundant Purple Moor-grass**



**Image 2: Bog Asphodel is frequent in patches**





**Image 3: Close-up of Bog Asphodel, Purple Moor-grass and Ling**





**TARGET NOTES - ID No. 54**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 11/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4330-a	<b>Townland:</b> Carrownakilly	<b>Grid Ref:</b> 165061, 176530
<b>Target note no.:</b> TN2		<b>Area:</b> 1.8ha
<b>Ecological value:</b> <b>Local Importance (Higher Value)</b>		

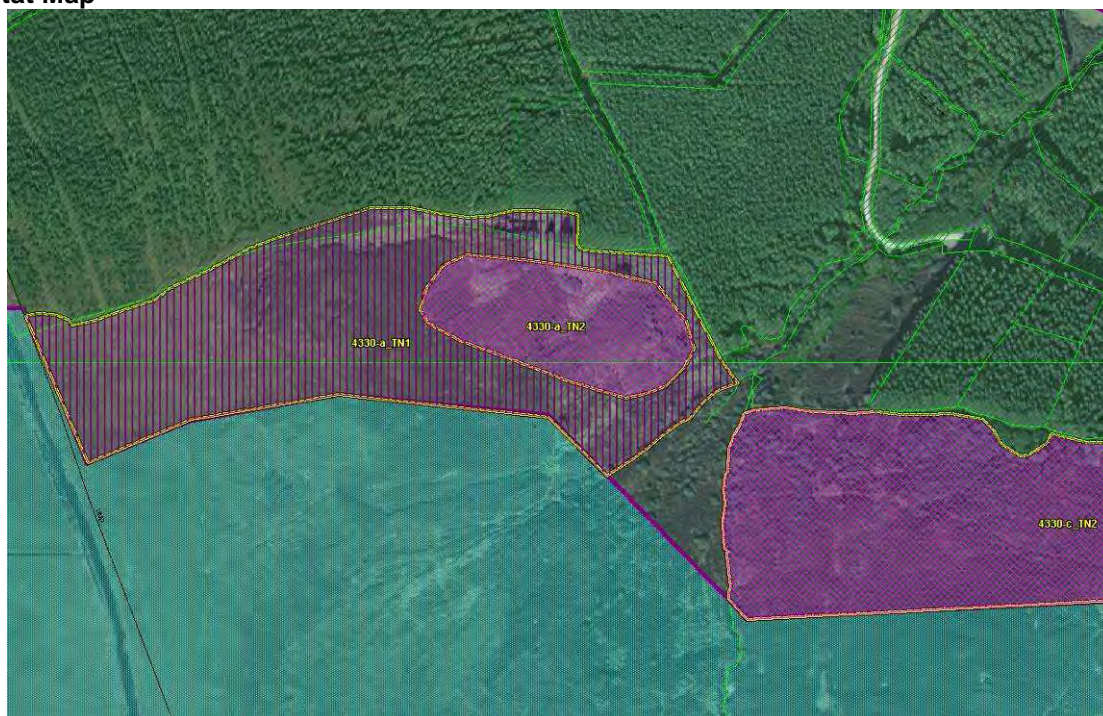
Habitat code

HH3

Wet Heath HH3 on steep slope with a downhill slope to the east. The site is adjoined by upland blanket bog (PB2) to the west and forestry (WD4) to the north and east. The sward height reaches to a maximum of 2ft. The *Molinia caerulea* (Purple Moor-grass) and *Trichophorum cespitosum* (Deergrass) found on site only existed in hollows thus was not characteristic of the habitat.

**Species List**

Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale
<i>Bryophyte</i>	Moss spp	Abundant
<i>Calluna vulgaris</i>	Ling Heather	Dominant
<i>Erica tetralix</i>	Cross-leaved Heath	Occasional
<i>Luzula sylvatica</i>	Great Wood-rush	Occasional
<i>Molinia caerulea</i>	Purple Moor-grass	Occasional
<i>Potentilla erecta</i>	Tormentil	Rare
<i>Sphagnum sp</i>	Peat moss	Occasional
<i>Trichophorum cespitosum</i>	Deergrass	Occasional
<i>Vaccinium myrtillus</i>	Bilberry	Abundant

**Habitat Map**



## Photographic Record



**Image 1: View over Lough Derg from Wet heath habitat**



**Image 2: Close-up of vegetation – Bilberry, Bell heather and Ling**





**Image 3: Wet heath vegetation on hillside**



## TARGET NOTES - ID No. 55

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 11/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4330-a	<b>Townland:</b> Carrownakilly	<b>Grid Ref:</b> 165851, 176501
<b>Target note no.:</b> TN3		<b>Area:</b> 0.3ha

**Ecological value:** **Local Importance (Higher Value)**

<b>Habitat code</b>  WS1	Unusual area of <i>Crataegus monogyna</i> (Hawthorn) scrub with a grassy understory.	
	<b>Species List</b>	
	<b>Species (Latin name)</b>	<b>Species (common name)</b>
	<b>DAFOR Scale</b>	
	<i>Agrostis</i> sp.	Bent grass
	<i>Bryophyte</i>	Moss spp
	<i>Crataegus monogyna</i>	Hawthorn
	<i>Holcus lanatus</i>	Yorkshire Fog
	<i>Poa</i> sp.	Meadow Grass
	<i>Potentilla erecta</i>	Tormentil
	<i>Pteridium aquilinum</i>	Bracken
	<i>Ranunculus repens</i>	Creeping Buttercup
	<i>Rubus fruticosus</i> agg.	Bramble
	<i>Rumex acetosella</i>	Sheep's Sorrel
	<i>Sorbus aucuparia</i>	Rowan
	<i>Stellaria media</i>	Common Chickweed
	<i>Ulex</i> sp.	Gorse
		Occasional

## Habitat Map





## Photographic Record



**Image 1: Area of Low-growing Hawthorn shrubs with grass-dominant field layer**



**Image 2: Low-growing Hawthorn shrubs**

TARGET NOTES - ID No. 56																																																											
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 11/08/11																																																									
Surveyor: John Curtin		County name: Clare																																																									
1:2,500 Sheet no: 4330-c	Townland: Carrownakilly	Grid Ref: 165742, 176307																																																									
Target note no.: TN1		Area: 1.6ha																																																									
Ecological value: <b>Local Importance (Higher Value)</b>																																																											
Habitat code  HH3	<p>Wet Heath located on a steep slope. Looks wetter than heath above in SAC. Site seems to form following course of runoff off the hill to the south west. Some exposed rock was present. The sward reached a height of up to 4ft.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Agrostis stolonifera</i></td> <td>Creeping bent</td> <td>Occasional</td> </tr> <tr> <td><i>Blechnum spicant</i></td> <td>Hard Fern</td> <td>Occasional</td> </tr> <tr> <td><i>Bryophyte</i></td> <td>Moss spp</td> <td>Abundant</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Abundant</td> </tr> <tr> <td><i>Carex pulicaris</i></td> <td>Flea sedge</td> <td>Frequent</td> </tr> <tr> <td><i>Erica cinerea</i></td> <td>Bell heather</td> <td>Occasional</td> </tr> <tr> <td><i>Erica tetralix</i></td> <td>Cross-leaved Heath</td> <td>Occasional</td> </tr> <tr> <td><i>Festuca sp</i></td> <td>Fescue</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus effusus</i></td> <td>Soft Rush</td> <td>Occasional</td> </tr> <tr> <td><i>Luzula sylvatica</i></td> <td>Great Wood-rush</td> <td>Occasional</td> </tr> <tr> <td><i>Lycopodium sp.</i></td> <td>Club moss</td> <td>Occasional</td> </tr> <tr> <td><i>Molinia caerulea</i></td> <td>Purple Moor-grass</td> <td>Abundant</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Frequent</td> </tr> <tr> <td><i>Pteridium aquilinum</i></td> <td>Bracken</td> <td>Occasional</td> </tr> <tr> <td><i>Salix cinerea</i></td> <td>Sally</td> <td>Occasional</td> </tr> <tr> <td><i>Sphagnum sp.</i></td> <td>Peat moss</td> <td>Frequent</td> </tr> <tr> <td><i>Stellaria media</i></td> <td>Common Chickweed</td> <td>Occasional</td> </tr> <tr> <td><i>Vaccinium myrtillus</i></td> <td>Bilberry</td> <td>Frequent</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Agrostis stolonifera</i>	Creeping bent	Occasional	<i>Blechnum spicant</i>	Hard Fern	Occasional	<i>Bryophyte</i>	Moss spp	Abundant	<i>Calluna vulgaris</i>	Ling Heather	Abundant	<i>Carex pulicaris</i>	Flea sedge	Frequent	<i>Erica cinerea</i>	Bell heather	Occasional	<i>Erica tetralix</i>	Cross-leaved Heath	Occasional	<i>Festuca sp</i>	Fescue	Occasional	<i>Juncus effusus</i>	Soft Rush	Occasional	<i>Luzula sylvatica</i>	Great Wood-rush	Occasional	<i>Lycopodium sp.</i>	Club moss	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Abundant	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Pteridium aquilinum</i>	Bracken	Occasional	<i>Salix cinerea</i>	Sally	Occasional	<i>Sphagnum sp.</i>	Peat moss	Frequent	<i>Stellaria media</i>	Common Chickweed	Occasional	<i>Vaccinium myrtillus</i>	Bilberry	Frequent
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**Habitat Map****Photographic Record**

**Image 1: Overview of Wet heath area**





**Image 2: Close-up of vegetation with *Polytrichum* moss, Ling and Tormentil**



**Image 3: Wet heath with abundant dwarf shrubs**





**TARGET NOTES - ID No. 57**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 11/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4330-c	<b>Townland:</b> Carrownakilly	<b>Grid Ref:</b> 165484, 176368
<b>Target note no.:</b> TN2		<b>Area:</b> 7.4ha

**Ecological value:** **Local Importance (Higher Value)**

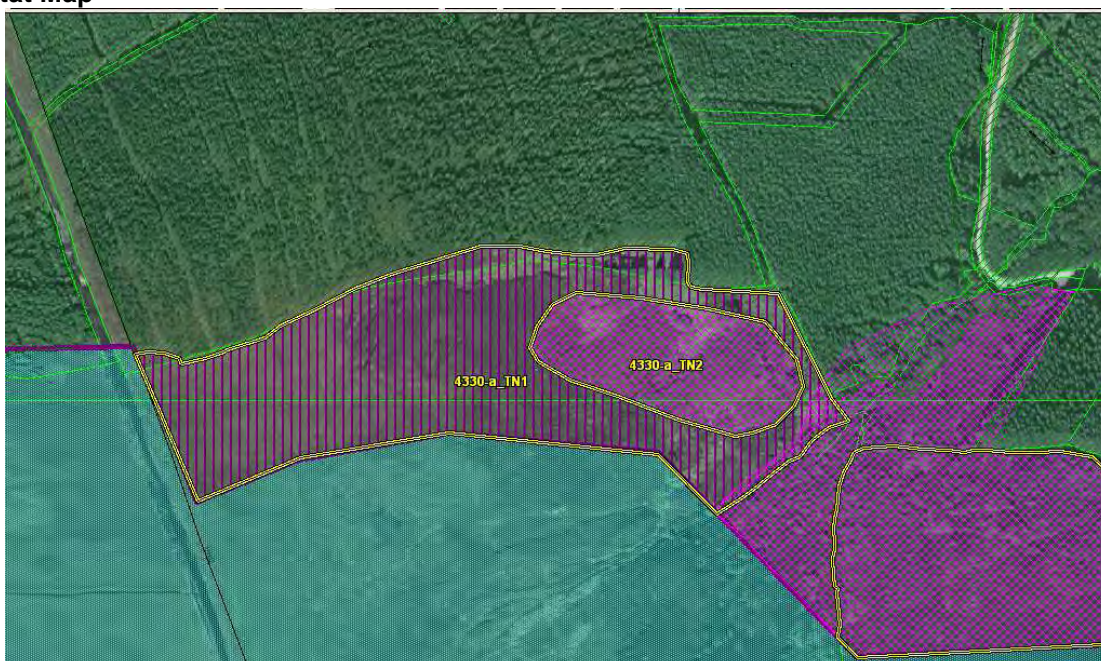
**Habitat code**  
HH1

Dry Siliceous Heath HH1 located adjacent and to the west of TN1. This heath is drier, has a lower sward height of 2ft and has a different species composition than the previous site. Ling heather (*Calluna vulgaris*) is dominant.

This habitat does not link to the EU Annex I habitat 4030 European dry heaths.

**Species List**

Species ( <i>Latin name</i> )	Species ( <i>common name</i> )	DAFOR Scale
<i>Bryophyte</i>	Moss spp	Abundant
<i>Calluna vulgaris</i>	Ling heather	Dominant
<i>Erica cinerea</i>	Bell heather	Frequent
<i>Molinia caerulea</i>	Purple Moor-grass	Occasional
<i>Potentilla erecta</i>	Tormentil	Occasional
<i>Pteridium aquilinum</i>	Bracken	Occasional
<i>Sphagnum sp</i>	Peat moss	Occasional
<i>Trichophorum cespitosum</i>	Deergrass	Occasional
<i>Vaccinium myrtillus</i>	Bilberry	Abundant

**Habitat Map**



## Photographic Record



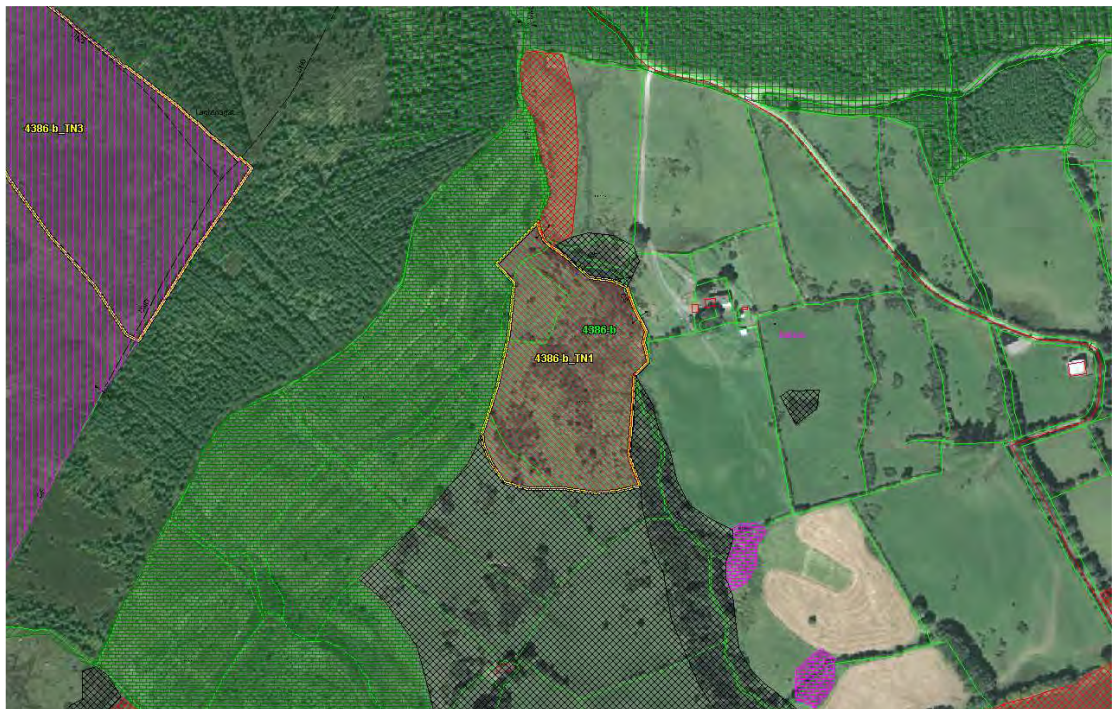
**Image 1: Dry heath – overview of habitat with view of Lough Derg from hillside**



**Image 2: Dry Siliceous heath vegetation – Ling and Bell heathers**

TARGET NOTES - ID No. 58																																																											
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 18/08/11																																																									
Surveyor: John Curtin		County name: Clare																																																									
1:2,500 Sheet no: 4386-b	Townland: Cloongaheen West	Grid Ref: 158970, 174227																																																									
Target note no.: TN1		Area: 2.11ha																																																									
Ecological value: <b>Local Importance (Higher Value)</b>																																																											
<b>Habitat code</b>  <b>GS3 / GA1 / WS1</b>	Mosaic of improved grassland (GA1), bramble and gorse scrub (WS1) and acid grassland (GS3). The acid grassland is confined to the slopes of hummocks and small hills dotted throughout the site. The site is bordered to the north and west by forestry.																																																										
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**Habitat Map****Photographic Record**

**Image 1: Acid grassland with dense short sward**





**Image 2: Overview of Acid grassland habitat**



**Image 3: Close-up of Acid grassland vegetation – Tormentil, Heath Bedstraw**



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Surveyor: John Curtin		County name: Clare																																																																					
1:2,500 Sheet no: 4386-b	Townland: Cloongaheen West	Grid Ref: 158195, 173916																																																																					
Target note no.: TN2		Area: 6.9ha																																																																					
Ecological value: <b>International Importance – linked to the Annex I habitat 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i></b> .																																																																							
Habitat code  HH3 / GS4	<p>Mosaic of wet grassland (GS4) and wet heath (HH3) at summit of hill. The area is quite wet and the wet grassland grades out towards the bottom of the hill with only wet heath downhill to the north east.</p> <p>This habitat may be linked to the Annex I habitat '4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>' and therefore is of International ecological importance.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Occasional</td></tr> <tr><td><i>Blechnum spicant</i></td><td>Hard fern</td><td>Rare</td></tr> <tr><td><i>Bryophyte</i></td><td>Moss spp</td><td>Frequent</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling heather</td><td>Abundant</td></tr> <tr><td><i>Carex nigra</i></td><td>Common sedge</td><td>Occasional</td></tr> <tr><td><i>Carex panicea</i></td><td>Carnation sedge</td><td>Occasional</td></tr> <tr><td><i>Carex pulicaris</i></td><td>Flea sedge</td><td>Occasional</td></tr> <tr><td><i>Erica cinerea</i></td><td>Bell heather</td><td>Occasional</td></tr> <tr><td><i>Erica tetralix</i></td><td>Cross-leaved heath</td><td>Occasional</td></tr> <tr><td><i>Eriophorum angustifolium</i></td><td>Common cottongrass</td><td>Occasional</td></tr> <tr><td><i>Eriophorum vaginatum</i></td><td>Hare's-tail cottongrass</td><td>Frequent</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft rush</td><td>Frequent</td></tr> <tr><td><i>Juncus squarrosus</i></td><td>Heath rush</td><td>Frequent</td></tr> <tr><td><i>Luzula multiflora</i></td><td>Heath wood-rush</td><td>Occasional</td></tr> <tr><td><i>Lycopodium sp.</i></td><td>Club moss</td><td>Occasional</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Occasional</td></tr> <tr><td><i>Narthecium ossifragum</i></td><td>Bog asphodel</td><td>Occasional</td></tr> <tr><td><i>Polygala serpyllifolia</i></td><td>Heath milkwort</td><td>Occasional</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Occasional</td></tr> <tr><td><i>Sphagnum sp.</i></td><td>Peat moss</td><td>Frequent</td></tr> <tr><td><i>Stellaria media</i></td><td>Common chickweed</td><td>Rare</td></tr> <tr><td><i>Ulex gallii</i></td><td>Western gorse</td><td>Frequent</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional	<i>Blechnum spicant</i>	Hard fern	Rare	<i>Bryophyte</i>	Moss spp	Frequent	<i>Calluna vulgaris</i>	Ling heather	Abundant	<i>Carex nigra</i>	Common sedge	Occasional	<i>Carex panicea</i>	Carnation sedge	Occasional	<i>Carex pulicaris</i>	Flea sedge	Occasional	<i>Erica cinerea</i>	Bell heather	Occasional	<i>Erica tetralix</i>	Cross-leaved heath	Occasional	<i>Eriophorum angustifolium</i>	Common cottongrass	Occasional	<i>Eriophorum vaginatum</i>	Hare's-tail cottongrass	Frequent	<i>Juncus effusus</i>	Soft rush	Frequent	<i>Juncus squarrosus</i>	Heath rush	Frequent	<i>Luzula multiflora</i>	Heath wood-rush	Occasional	<i>Lycopodium sp.</i>	Club moss	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Occasional	<i>Narthecium ossifragum</i>	Bog asphodel	Occasional	<i>Polygala serpyllifolia</i>	Heath milkwort	Occasional	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Sphagnum sp.</i>	Peat moss	Frequent	<i>Stellaria media</i>	Common chickweed	Rare	<i>Ulex gallii</i>	Western gorse	Frequent
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**Habitat Map****Photographic Record**

**Image 1: Wet heath vegetation – Ling heather, rushes and abundant *sphagnum* mosses**



**Image 2: Close-up of vegetation – Ling heather, Sweet Vernal-grass and Cottongrasses**







## Photographic Record



**Image 1: Upland blanket bog vegetation – Ling heather and Cottongrasses**



**Image 2: Ling heather is dominant in this area**



**TARGET NOTES - ID No. 61**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 18/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4386-b	<b>Townland:</b> Cloongaheen West	<b>Grid Ref:</b> 158342, 173712
<b>Target note no.:</b> TN4		<b>Area:</b> 0.23ha

**Ecological value:** Local Importance (Higher Value)

<b>Habitat code</b>  GS3	Small section of species-poor acid grassland (GS3) surrounded by Gorse scrub (WS1). Improved grassland (GA1) can be found adjacent to the site to the south and west. To the north lies wet heath (HH3).	
	<b>Species List</b>	
	<b>Species (Latin name)</b>	<b>Species (common name)</b>
	<i>Achillea millefolium</i>	Yarrow
	<i>Agrostis</i> sp.	Bent grass
	<i>Bryophyte</i>	Moss
	<i>Calluna vulgaris</i>	Ling
	<i>Carex panicea</i>	Carnation sedge
	<i>Hieracium</i> sp.	Hawkweed
	<i>Juncus effusus</i>	Soft Rush
	<i>Nardus stricta</i>	Mat-grass
	<i>Polygala serpyllifolia</i>	Heath milkwort
	<i>Potentilla erecta</i>	Tormentil
	<i>Rumex acetosella</i>	Sheep's Sorrel
	<i>Succisa pratensis</i>	Devil's-bit Scabious

**Habitat Map**



## Photographic Record



**Image 1: Acid grassland with short dense sward and abundant non-*Sphagnum* mosses**



**Image 2: Overview of Acid grassland habitat**



**Image 3: Acid grassland with encroaching Gorse scrub**





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<b>Surveyor:</b> Shane O'Neill		<b>County name:</b> Clare																																																																					
<b>1:2,500 Sheet no:</b> 4387-a	<b>Townland:</b> Kilbane	<b>Grid Ref.:</b> 160882, 173785																																																																					
<b>Target note no.:</b> TN1		<b>Area:</b> 0.85ha																																																																					
<b>Ecological value:</b> Local Importance (Higher Value)																																																																							
<b>Habitat code</b>  <b>WL1 / WS1</b>	<p>A nice Hedgerow WL1 on the banks of an Upland/Eroding river FW1. The banks are steep and densely vegetated in places. On the south-western edge it grades from a Hedgerow WL1 into Scrub WS1 of Gorse (<i>Ulex europaeus</i>) and Bramble (<i>Rubus fruticosus</i> agg.).</p> <p><b>Tree Layer Species List: WL1</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (Latin name)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;"><i>Corylus avellana</i></td><td style="padding: 2px;">Hazel</td><td style="padding: 2px;">Dominant</td></tr> <tr><td style="padding: 2px;"><i>Fraxinus excelsior</i></td><td style="padding: 2px;">Ash</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Crataegus monogyna</i></td><td style="padding: 2px;">Hawthorn</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Salix cinerea</i></td><td style="padding: 2px;">Willow</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Sambucus nigra</i></td><td style="padding: 2px;">Elder</td><td style="padding: 2px;">Occasional</td></tr> </tbody> </table> <p><b>Species List: WL1</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (Latin name)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;"><i>Pteridium aquilinum</i></td><td style="padding: 2px;">Bracken</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Rubus fruticosus</i> agg</td><td style="padding: 2px;">Bramble</td><td style="padding: 2px;">Abundant</td></tr> <tr><td style="padding: 2px;"><i>Rumex obtusifolius</i></td><td style="padding: 2px;">Broad-leaf Dock</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Trifolium pratense</i></td><td style="padding: 2px;">Red Clover</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Geranium robertianum</i></td><td style="padding: 2px;">Herb Robert</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Vicia sepium</i></td><td style="padding: 2px;">Bush Vetch</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Holcus lanatus</i></td><td style="padding: 2px;">Yorkshire Fog</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Dactylis glomerata</i></td><td style="padding: 2px;">Cocks-foot</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Lolium perenne</i></td><td style="padding: 2px;">Perennial Rye-grass</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Filipendula ulmaria</i></td><td style="padding: 2px;">Meadowsweet</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Senecio jacobaea</i></td><td style="padding: 2px;">Ragwort</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Angelica sylvestris</i></td><td style="padding: 2px;">Wild Angelica</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Potentilla erecta</i></td><td style="padding: 2px;">Tormentil</td><td style="padding: 2px;">Rare</td></tr> <tr><td style="padding: 2px;"><i>Urtica dioica</i></td><td style="padding: 2px;">Nettle</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Fuchsia magellanica</i></td><td style="padding: 2px;">Fuchsia</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Lonicera periclymenum</i></td><td style="padding: 2px;">Honeysuckle</td><td style="padding: 2px;">Occasional</td></tr> </tbody> </table>		Species (Latin name)	Species (common name)	DAFOR Scale	<i>Corylus avellana</i>	Hazel	Dominant	<i>Fraxinus excelsior</i>	Ash	Frequent	<i>Crataegus monogyna</i>	Hawthorn	Frequent	<i>Salix cinerea</i>	Willow	Frequent	<i>Sambucus nigra</i>	Elder	Occasional	Species (Latin name)	Species (common name)	DAFOR Scale	<i>Pteridium aquilinum</i>	Bracken	Frequent	<i>Rubus fruticosus</i> agg	Bramble	Abundant	<i>Rumex obtusifolius</i>	Broad-leaf Dock	Frequent	<i>Trifolium pratense</i>	Red Clover	Frequent	<i>Geranium robertianum</i>	Herb Robert	Frequent	<i>Vicia sepium</i>	Bush Vetch	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Dactylis glomerata</i>	Cocks-foot	Frequent	<i>Lolium perenne</i>	Perennial Rye-grass	Frequent	<i>Filipendula ulmaria</i>	Meadowsweet	Occasional	<i>Senecio jacobaea</i>	Ragwort	Occasional	<i>Angelica sylvestris</i>	Wild Angelica	Occasional	<i>Potentilla erecta</i>	Tormentil	Rare	<i>Urtica dioica</i>	Nettle	Occasional	<i>Fuchsia magellanica</i>	Fuchsia	Occasional	<i>Lonicera periclymenum</i>	Honeysuckle	Occasional
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<i>Urtica dioica</i>	Nettle	Occasional																																																																					
<i>Fuchsia magellanica</i>	Fuchsia	Occasional																																																																					
<i>Lonicera periclymenum</i>	Honeysuckle	Occasional																																																																					

## Habitat Map



## Photographic Record



Plate 1: View of Hedgerow

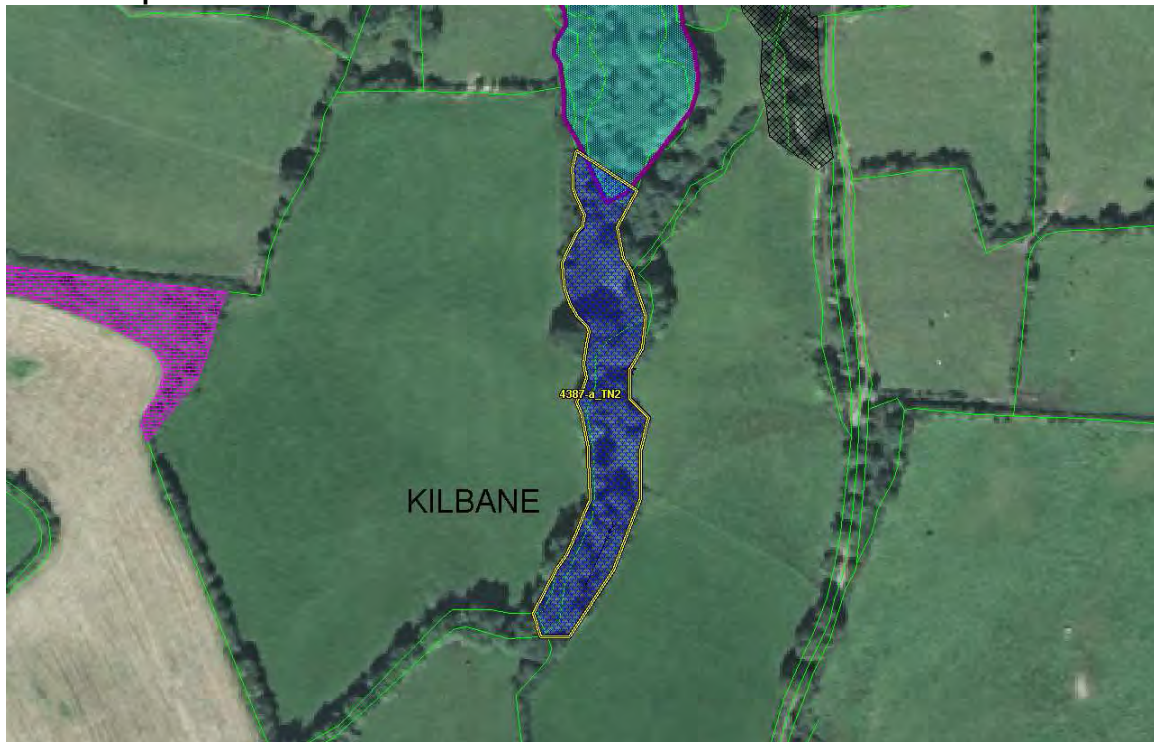


Plate 2: View of Hedgerow

TARGET NOTES - ID No. 63																																															
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 15/8/2011																																													
<b>Surveyor:</b> Shane O'Neill		<b>County name:</b> Clare																																													
<b>1:2,500 Sheet no:</b> 4387-a	<b>Townland:</b> Kilbane	<b>Grid Ref.:</b> 161742, 173757																																													
<b>Target note no.:</b> TN2		<b>Area:</b> 0.4ha																																													
<b>Ecological value:</b> Local Importance (Higher Value)																																															
<b>Habitat code</b>  <b>WL2</b>	<p>A Lowland/depositing river FW2 occurs here, lined on either side by a mixed composition of trees, up to twenty meters wide in places. This Treeline WL2 contains native and non native trees, but even the native trees appear to have been planted. This is a good wildlife corridor with signs of Fox and Badger. There may have been a house on this Treeline at one time.</p> <p>The invasive species Japanese Knotweed (<i>Fallopia japonica</i>) is abundant here.</p> <p><b>Tree Species List: WL2</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><i>Fraxinus excelsior</i></td> <td style="padding: 2px;">Ash</td> <td style="padding: 2px;">Dominant</td> </tr> <tr> <td style="padding: 2px;"><i>Crataegus monogyna</i></td> <td style="padding: 2px;">Hawthorn</td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;"><i>Salix</i> sp.</td> <td style="padding: 2px;">Willow</td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;"><i>Acer pseudoplatanus</i></td> <td style="padding: 2px;">Sycamore</td> <td style="padding: 2px;">Rare</td> </tr> <tr> <td style="padding: 2px;"><i>Picea</i> sp.</td> <td style="padding: 2px;">Spruce</td> <td style="padding: 2px;">Rare</td> </tr> </tbody> </table> <p><b>Ground Flora Species List: WL2</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><i>Fallopia japonica</i></td> <td style="padding: 2px;">Japanese Knotweed</td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;"><i>Rubus fruticosus</i> agg.</td> <td style="padding: 2px;">Bramble</td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;"><i>Urtica dioica</i></td> <td style="padding: 2px;">Nettle</td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;"><i>Geranium robertianum</i></td> <td style="padding: 2px;">Herb Robert</td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;"><i>Fuchsia magellanica</i></td> <td style="padding: 2px;">Fuchsia</td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;"><i>Circaea lutetiana</i></td> <td style="padding: 2px;">Enchanter's-nightshade</td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;"><i>Pteridium aquilinum</i></td> <td style="padding: 2px;">Bracken</td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;"><i>Buxus sempervirens</i></td> <td style="padding: 2px;">Box hedge</td> <td style="padding: 2px;">Rare</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Fraxinus excelsior</i>	Ash	Dominant	<i>Crataegus monogyna</i>	Hawthorn	Abundant	<i>Salix</i> sp.	Willow	Frequent	<i>Acer pseudoplatanus</i>	Sycamore	Rare	<i>Picea</i> sp.	Spruce	Rare	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Fallopia japonica</i>	Japanese Knotweed	Abundant	<i>Rubus fruticosus</i> agg.	Bramble	Abundant	<i>Urtica dioica</i>	Nettle	Abundant	<i>Geranium robertianum</i>	Herb Robert	Frequent	<i>Fuchsia magellanica</i>	Fuchsia	Occasional	<i>Circaea lutetiana</i>	Enchanter's-nightshade	Frequent	<i>Pteridium aquilinum</i>	Bracken	Frequent	<i>Buxus sempervirens</i>	Box hedge	Rare
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### Habitat Map



## Photographic Record



Image 1: View from field side of vegetation lining river

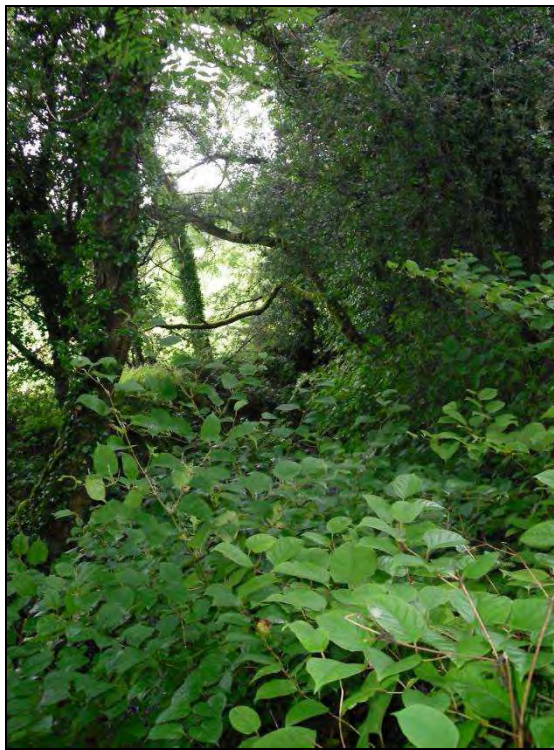


Image 2: Japanese Knotweed growing along the river





**TARGET NOTES - ID No. 64**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 16/8/2011
<b>Surveyor:</b> Shane O'Neill		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4387-b	<b>Townland:</b> Killeagy	<b>Grid Ref.:</b> 162345, 173645
<b>Target note no.:</b> TN1		<b>Area:</b> 2.1ha

**Ecological value:** Local Importance (Higher Value)**Habitat code****GS2**

A Dry Meadow GS2 that had been left uncut (all other fields surrounding it had been cut for silage at the time of surveying). From the road the meadow sloped gently down to an area of Dense Bracken HD1 and dropped off steeply after that to a river.

**Species List: GS2**

Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale
<i>Holcus lanatus</i>	Yorkshire Fog	Dominant
<i>Dactylis glomerata</i>	Cock's-foot	Abundant
<i>Alopecurus pratensis</i>	Meadow Foxtail	Occasional
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent
<i>Rhinanthus minor</i>	Yellow Rattle	Frequent
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	Frequent
<i>Rumex obtusifolius</i>	Broad-leaved Dock	Frequent
<i>Trifolium pratense</i>	Red Clover	Abundant
<i>Cirsium palustre</i>	Marsh Thistle	Occasional
<i>Cirsium dissectum</i>	Meadow Thistle	Occasional
<i>Rumex acetosa</i>	Common Sorrel	Abundant
<i>Conopodium majus</i>	Pignut	Occasional
<i>Stellaria graminea</i>	Lesser Stitchwort	Frequent
<i>Ranunculus acris</i>	Meadow Buttercup	Frequent
<i>Hypochaeris radicata</i>	Common Cat's-ear	Frequent

**Habitat Map**

## Photographic Record



**Image 1: Overview of Dry Meadow GS2**



**Image 2: Close up of vegetation**



TARGET NOTES - ID No. 65																																																																																
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 17/8/2011																																																																														
<b>Surveyor:</b> Shane O Neill		<b>County name:</b> Clare																																																																														
<b>1:2,500 Sheet no:</b> 4387-b	<b>Townland:</b> Killeagy	<b>Grid Ref.:</b> 162984, 173492																																																																														
<b>Target note no.:</b> TN2		<b>Area:</b> 1.8ha																																																																														
<b>Ecological value:</b> Local Importance (Higher Value)																																																																																
<b>Habitat code</b>  <b>GS2 / GS3 / GS4 / WS1</b>	<p>This area is a mosaic of Dry Meadow and Grassy Verge GS2, Dry-humid Acid Grassland GS3, Wet Grassland GS4 and Scrub WS1. It is very difficult to access as it is located on a steep hillside with dense Scrub WS1 (Gorse, Brambles and some Bracken) and Conifer Plantations WD4 on either side. There are patches of abundant Purple Moor-grass throughout with scrub encroaching at the base of the hill. There are no signs of grazing apart from deer.</p> <p><b>Species List: GS2</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Abundant</td></tr> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Abundant</td></tr> <tr><td><i>Cynosurus cristatus</i></td><td>Crested Dog's-tail</td><td>Abundant</td></tr> <tr><td><i>Hypochaeris radicata</i></td><td>Cat's-ear</td><td>Frequent</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Frequent</td></tr> <tr><td><i>Prunella vulgaris</i></td><td>Selfheal</td><td>Frequent</td></tr> <tr><td><i>Trifolium pratense</i></td><td>Red Clover</td><td>Occasional</td></tr> <tr><td><i>Trifolium repens</i></td><td>White Clover</td><td>Occasional</td></tr> <tr><td><i>Cirsium palustre</i></td><td>Marsh Thistle</td><td>Occasional</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Occasional</td></tr> <tr><td><i>Stellaria graminea</i></td><td>Lesser Stitchwort</td><td>Occasional</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Occasional</td></tr> </tbody> </table> <p><b>Species List: GS3</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Frequent</td></tr> <tr><td><i>Juncus articulatus</i></td><td>Jointed Rush</td><td>Frequent</td></tr> <tr><td><i>Deschampsia flexuosa</i></td><td>Wavy Hair-grass</td><td>Frequent</td></tr> <tr><td><i>Agrostis capillaris</i></td><td>Common Bent</td><td>Abundant</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Occasional</td></tr> <tr><td><i>Nardus stricta</i></td><td>Mat-grass</td><td>Frequent</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Abundant</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Frequent</td></tr> <tr><td><i>Bryophyte</i></td><td>Moss</td><td>Abundant</td></tr> <tr><td><i>Ulex europaeus</i></td><td>Gorse</td><td>Occasional</td></tr> <tr><td><i>Erica cinerea</i></td><td>Bell Heather</td><td>Rare</td></tr> <tr><td><i>Vaccinium myrtillus</i></td><td>Bilberry</td><td>Rare</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Holcus lanatus</i>	Yorkshire Fog	Abundant	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Abundant	<i>Cynosurus cristatus</i>	Crested Dog's-tail	Abundant	<i>Hypochaeris radicata</i>	Cat's-ear	Frequent	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Prunella vulgaris</i>	Selfheal	Frequent	<i>Trifolium pratense</i>	Red Clover	Occasional	<i>Trifolium repens</i>	White Clover	Occasional	<i>Cirsium palustre</i>	Marsh Thistle	Occasional	<i>Juncus effusus</i>	Soft Rush	Occasional	<i>Stellaria graminea</i>	Lesser Stitchwort	Occasional	<i>Calluna vulgaris</i>	Ling Heather	Occasional	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Juncus effusus</i>	Soft Rush	Frequent	<i>Juncus articulatus</i>	Jointed Rush	Frequent	<i>Deschampsia flexuosa</i>	Wavy Hair-grass	Frequent	<i>Agrostis capillaris</i>	Common Bent	Abundant	<i>Molinia caerulea</i>	Purple Moor-grass	Occasional	<i>Nardus stricta</i>	Mat-grass	Frequent	<i>Potentilla erecta</i>	Tormentil	Abundant	<i>Calluna vulgaris</i>	Ling Heather	Frequent	<i>Bryophyte</i>	Moss	Abundant	<i>Ulex europaeus</i>	Gorse	Occasional	<i>Erica cinerea</i>	Bell Heather	Rare	<i>Vaccinium myrtillus</i>	Bilberry	Rare
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**Habitat Map****Photographic Record**

**Image 1: View of Habitat Mosaic with Conifer plantation**



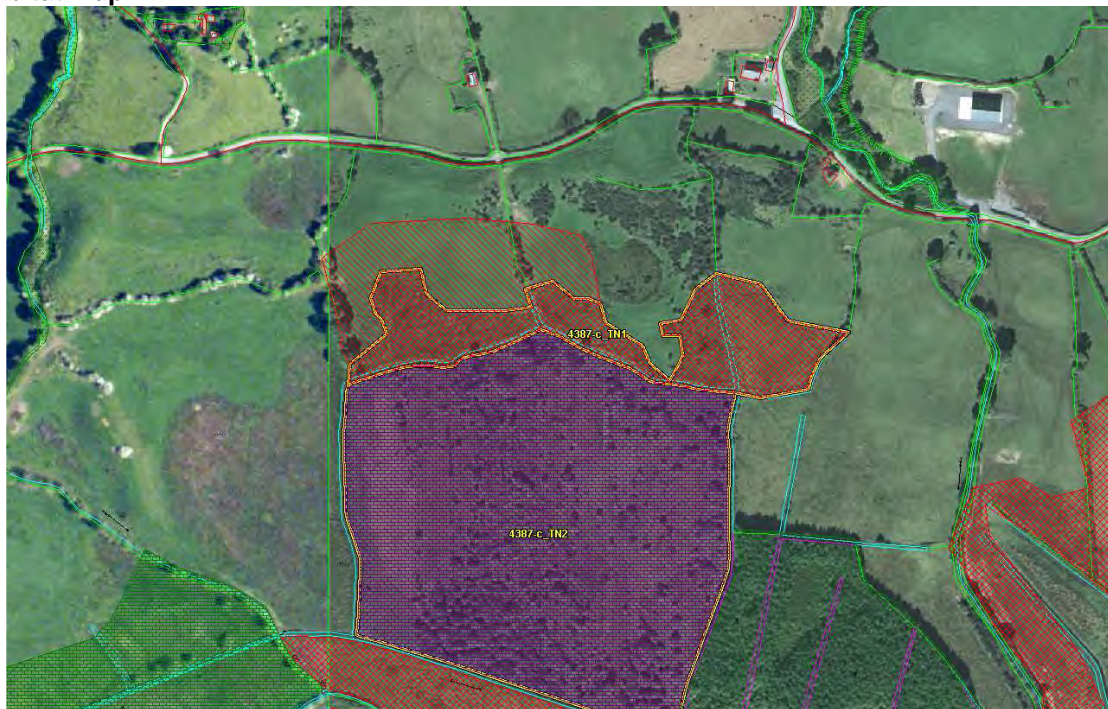
**Image 2: View of Dry Meadow**





TARGET NOTES - ID No. 66																																																																																						
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 10/08/11																																																																																				
<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare																																																																																				
<b>1:2,500 Sheet no:</b> 4387-c	<b>Townland:</b> Cloongaheen East	<b>Grid Ref:</b> 160222, 172784																																																																																				
<b>Target note no.:</b> TN1		<b>Area:</b> 2ha																																																																																				
<b>Ecological Value:</b> Local Importance (Higher Value)																																																																																						
<b>Habitat code</b>  GS4	<p>Relatively species rich Wet grassland GS4 with varied topography and water regime. On lower ground rushes are extremely abundant to dominant, herbs and grasses are also abundant in these areas and the occasional Willow tree. On higher ground it is drier and there is an absence of rushes, grasses are dominant with abundant Silverweed (<i>Potentilla anserina</i>).</p> <p>Full species list given below.</p> <p>Rushy area:</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Species (<i>Latin name</i>)</th> <th style="padding: 5px;">Species (common name)</th> <th style="padding: 5px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;"><i>Juncus effusus</i></td><td style="padding: 5px;">Soft rush</td><td style="padding: 5px;">Dominant</td></tr> <tr><td style="padding: 5px;"><i>J. conglomeratus</i></td><td style="padding: 5px;">Compact rush</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>J. acutiflorus</i></td><td style="padding: 5px;">Sharp-flowered rush</td><td style="padding: 5px;">Dominant</td></tr> <tr><td style="padding: 5px;"><i>J. articulatus</i></td><td style="padding: 5px;">Jointed rush</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Holcus lanatus</i></td><td style="padding: 5px;">Yorkshire fog</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Cirsium palustre</i></td><td style="padding: 5px;">Marsh thistle</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Stachys palustris</i></td><td style="padding: 5px;">Marsh woundwort</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Angelica sylvestris</i></td><td style="padding: 5px;">Wild angelica</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Ranunculus repens</i></td><td style="padding: 5px;">Creeping buttercup</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Filipendula ulmaria</i></td><td style="padding: 5px;">Meadowsweet</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Lotus pedunculatus</i></td><td style="padding: 5px;">Greater Bird's-foot-trefoil</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Rumex acetosella</i></td><td style="padding: 5px;">Sheep's sorrel</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Stellaria media</i></td><td style="padding: 5px;">Common chickweed</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Valeriana officinale</i></td><td style="padding: 5px;">Common valerian</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Galium palustre</i></td><td style="padding: 5px;">Marsh Bedstraw</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Agrostis stolonifera</i></td><td style="padding: 5px;">Creeping bent grass</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Salix</i> sp.</td><td style="padding: 5px;">Willow</td><td style="padding: 5px;">Occasional</td></tr> </tbody> </table> <p>Non-rushy areas:</p> <table border="1" style="width: 100%; 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	<i>Ranunculus repens</i>	Creeping buttercup	
	<i>Achillea millefolium</i>	Yarrow	
	<i>Leontodon</i> sp.	Hawkbit	
	<i>Lotus pedunculatus</i>	Greater bird's-foot-trefoil	
	<i>Rumex crispus</i>	Curled dock	
	<i>Dactylis glomeratus</i>	Cock's foot	
	<i>Odontites vernus</i>	Red bartsia	

**Habitat Map****Photographic Record**

**Image 1. Wet grassland with abundant rushes, occasional Marsh thistle and Wild Angelica.**






**Image 2: More diverse Wet grassland with Silverweed, Red Bartsia, Common Knapweed, Red Clover, Ribwort Plantain.**





TARGET NOTES - ID No. 67		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 10/08/11
Surveyor: Sarah O'Loughlin Irwin		County name: Clare
1:2,500 Sheet no: 4387-c	Townland: Cloongaheen East	Grid Ref: 160173, 172619
Target note no.: TN2		Area: 8.08ha
Ecological value: Local Importance (Higher Value)		
Habitat code	<p>Scrub WS1 encroaching on previously cutover blanket bog habitat which has recolonised to form a mosaic of scrub, heath, grassland and flush communities. The area was observed from an adjacent peat bank as the margins are extremely wet, probably an old drain which has now recolonised with Poor flush and fen PF2 type of vegetation dominated by Bog bean (<i>Menyanthes trifoliata</i>) and is abundant in <i>Sphagnum</i> moss and rushes. Open grassland/heath areas appear to be abundant in Purple moor grass (<i>Molinia caerulea</i>), Deergrass (<i>Trichophorum cespitosum</i>), Cottongrasses (<i>Eriophorum</i> sp.) and <i>Sphagnum</i> moss, occasional Ling heather (<i>Calluna vulgaris</i>) and rarely Royal fern (<i>Osmunda regalis</i>). Scrub is mainly Willows (<i>Salix</i> sp.) with occasional Gorse (<i>Ulex europaea</i>) and Birch (<i>Betula</i> sp.), appears to be developing into Bog woodland WN7.</p>	
WS1 / PF2 / (WN7)		
Habitat Map		
		

## Photographic Record



**Image 1. Willow and Gorse scrub with occasional Birch on recolonised cutover bog.**



**Image 2. Wet margins with abundant Bog bean (probably an old drain).**



## TARGET NOTES - ID No. 68

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 17/8/2011
<b>Surveyor:</b> Shane O Neill		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4387-d	<b>Townland:</b> Killeagy	<b>Grid Ref.:</b> 163303, 172784
<b>Target note no.:</b> TN1		<b>Area:</b> 2.6ha

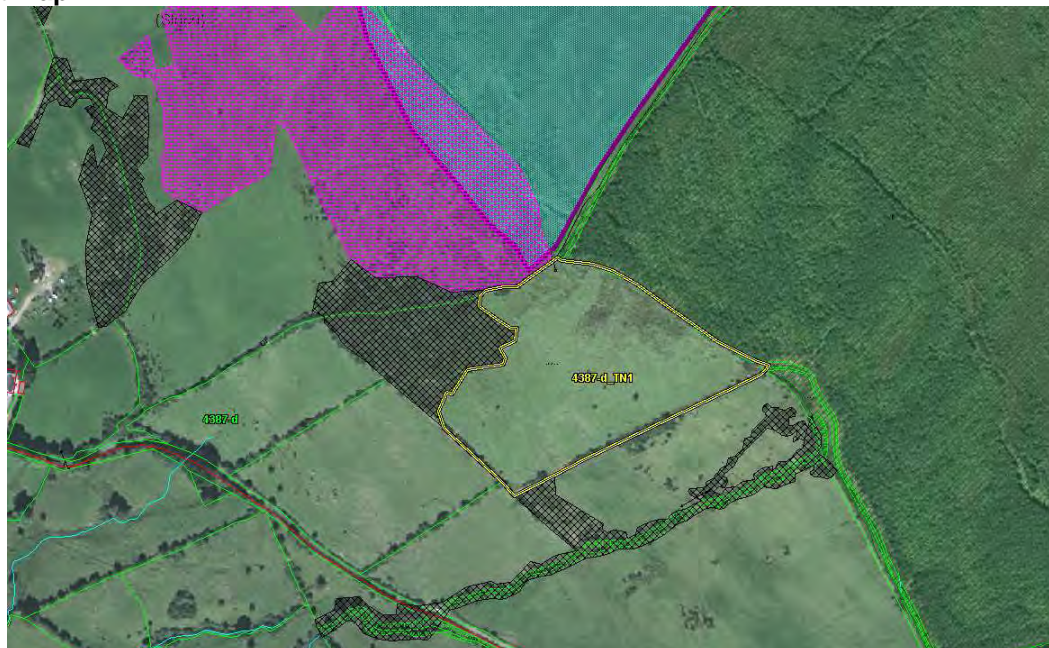
**Ecological value:** Local Importance (Lower Value)

**Habitat code****GA1**

This Improved agricultural grassland GA1 appears not to have been reseeded recently (it may be a field left for REPS). Rye-grass (*Lolium* spp.) was not present but it contained White Clover (*Trifolium repens*), Yorkshire-fog (*Holcus lanatus*), and common agricultural herbs.

**Species List: GA1**

Species (Latin name)	Species (common name)	DAFOR Scale
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional
<i>Cirsium palustre</i>	Marsh Thistle	Frequent
<i>Crataegus monogyna</i>	Hawthorn	Occasional
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	Frequent
<i>Holcus lanatus</i>	Yorkshire Fog	Dominant
<i>Rumex acetosa</i>	Common Sorrel	Abundant
<i>Rumex obtusifolius</i>	Broadleaved Dock	Occasional
<i>Senecio jacobaea</i>	Ragwort	Occasional
<i>Stellaria graminea</i>	Stitchwort	Occasional
<i>Stellaria media</i>	Common Chickweed	Occasional
<i>Trifolium repens</i>	White Clover	Frequent
<i>Ulex europaeus</i>	Gorse	Occasional

**Habitat Map**

### Photographic Record



**Image 1: Improved agricultural grassland with occasional Hawthorn**




**Image 2: Improved agricultural grassland with White Clover and Yorkshire-fog**

TARGET NOTES - ID No. 69																																																																							
<b>Survey Title:</b> Surveying and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 12/08/11																																																																					
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare																																																																					
<b>1:2,500 Sheet no:</b> 4388-a	<b>Townland:</b> Classagh	<b>Grid Ref:</b> 164926, 174094																																																																					
<b>Target note no.:</b> TN1		<b>Area:</b> 1.9ha																																																																					
<b>Ecological value:</b> Local Importance (Higher Value)																																																																							
<b>Habitat code</b>  <b>WS1 / HD1 / GS3</b>	Mosaic habitat of Scrub WS1, Dense Bracken HD1 and Dry-humid Acid grassland GS3 on steep slope adjacent to a small Upland/Eroding river FW1.																																																																						
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**Habitat Map****Photographic Record**

**Image 1. Scrub WS1 and Dense Bracken HD1**

TARGET NOTES - ID No.70		
<b>Survey Title:</b> Surveying and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 16/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4388-a	<b>Townland:</b> Coumbrack	<b>Grid Ref:</b> 164758, 173637
<b>Target note no.:</b> TN2		<b>Area:</b> 0.2ha
<b>Ecological value:</b> <b>Local Importance (Higher Value)</b>		
<b>Habitat code</b>  BL3	Abandoned house with a slated roof. Gaps in roof give possible entrance ways for bats. Some tree and shrub lines surround the house. Has good roost potential.	
<b>Habitat Map</b> 		



## Photographic Record



**Image 1: Abandoned homestead**



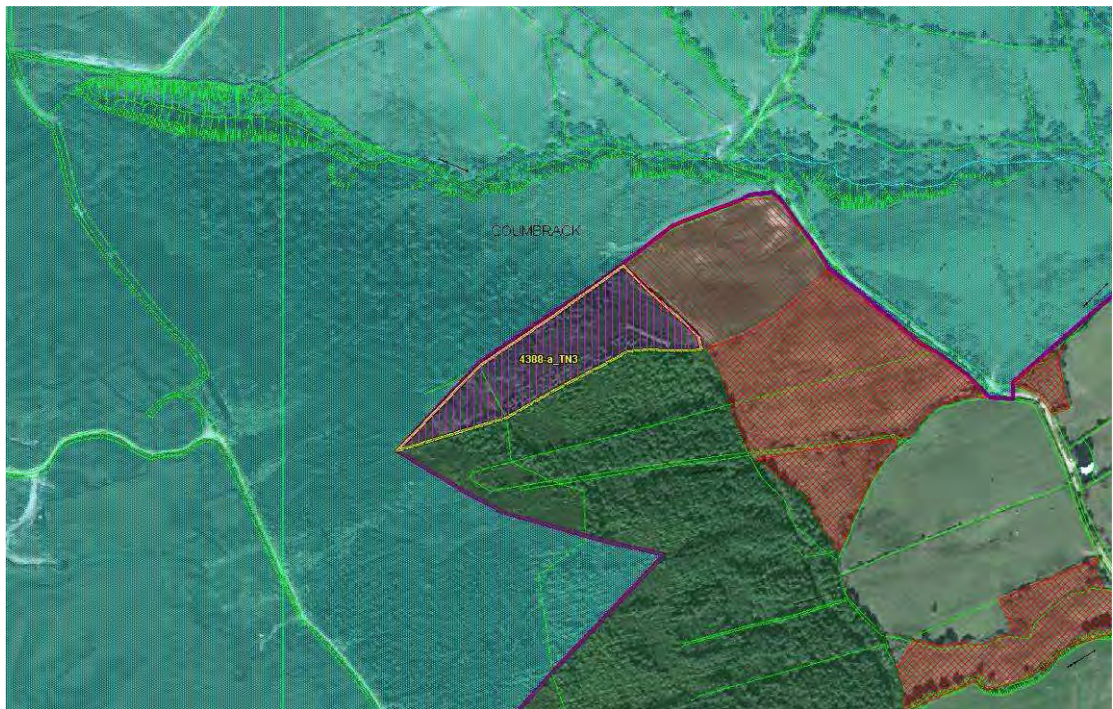
**Image 2: Loose slates on roof offer potential entry to bats**



**Image 3: Loose slates at edge of roof**



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<b>Target note no.:</b> TN3		<b>Area:</b> 1.15ha																																																																	
<b>Ecological value:</b> County Importance																																																																			
<b>Habitat code</b>  <b>PB2</b>	Area of heath-dominant Upland Blanket Bog PB2 located on the side of a steeply sloped hill running downhill to the north east. This area is adjacent to Slieve Bernagh cSAC. Scrub borders the site to the north west with forestry to the south. The site is grazed by deer, with droppings found on site.																																																																		
	<b>Species List</b> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Agrostis</i> sp.</td> <td>Bent Grass</td> <td>Frequent</td> </tr> <tr> <td><i>Anthoxanthum odoratum</i></td> <td>Sweet Vernal-grass</td> <td>Occasional</td> </tr> <tr> <td><i>Blechnum spicant</i></td> <td>Hard Fern</td> <td>Occasional</td> </tr> <tr> <td><i>Bryophyte</i></td> <td>Moss</td> <td>Abundant</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Abundant</td> </tr> <tr> <td><i>Carex echinata</i></td> <td>Star Sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Carex pulicaris</i></td> <td>Flea Sedge</td> <td>Frequent</td> </tr> <tr> <td><i>Drepanocladus</i> sp.</td> <td>Drepanocladus Moss</td> <td>Frequent</td> </tr> <tr> <td><i>Erica cinerea</i></td> <td>Bell Heather</td> <td>Occasional</td> </tr> <tr> <td><i>Festuca</i> sp.</td> <td>Fescue</td> <td>Occasional</td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire Fog</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus articulatus</i></td> <td>Jointed Rush</td> <td>Frequent</td> </tr> <tr> <td><i>Juncus effusus</i></td> <td>Soft Rush</td> <td>Frequent</td> </tr> <tr> <td><i>Lycopodium</i> sp.</td> <td>Club Moss</td> <td>Occasional</td> </tr> <tr> <td><i>Molinia caerulea</i></td> <td>Purple Moor-grass</td> <td>Occasional</td> </tr> <tr> <td><i>Nardus stricta</i></td> <td>Mat-grass</td> <td>Occasional</td> </tr> <tr> <td><i>Poa</i> sp.</td> <td>Meadow Grass</td> <td>Occasional</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Frequent</td> </tr> <tr> <td><i>Sphagnum</i> sp.</td> <td>Peat Moss</td> <td>Frequent</td> </tr> <tr> <td><i>Succisa pratensis</i></td> <td>Devil's-bit Scabious</td> <td>Occasional</td> </tr> <tr> <td><i>Vaccinium myrtillus</i></td> <td>Bilberry</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Agrostis</i> sp.	Bent Grass	Frequent	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional	<i>Blechnum spicant</i>	Hard Fern	Occasional	<i>Bryophyte</i>	Moss	Abundant	<i>Calluna vulgaris</i>	Ling Heather	Abundant	<i>Carex echinata</i>	Star Sedge	Occasional	<i>Carex pulicaris</i>	Flea Sedge	Frequent	<i>Drepanocladus</i> sp.	Drepanocladus Moss	Frequent	<i>Erica cinerea</i>	Bell Heather	Occasional	<i>Festuca</i> sp.	Fescue	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Occasional	<i>Juncus articulatus</i>	Jointed Rush	Frequent	<i>Juncus effusus</i>	Soft Rush	Frequent	<i>Lycopodium</i> sp.	Club Moss	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Occasional	<i>Nardus stricta</i>	Mat-grass	Occasional	<i>Poa</i> sp.	Meadow Grass	Occasional	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Sphagnum</i> sp.	Peat Moss	Frequent	<i>Succisa pratensis</i>	Devil's-bit Scabious	Occasional	<i>Vaccinium myrtillus</i>	Bilberry
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<i>Vaccinium myrtillus</i>	Bilberry	Occasional																																																																	

**Habitat Map****Photographic Record**

**Image 1: Upland Blanket bog with dwarf shrubs dominating the vegetation**





**Image 2: Upland blanket bog on steep hillside**





**TARGET NOTES - ID No. 72**

<b>Survey Title:</b> Surveying and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 17/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4388-a	<b>Townland:</b> Classagh	<b>Grid Ref:</b> 166238, 173825
<b>Target note no.:</b> TN4		<b>Area:</b> 2.8ha

**Ecological value:** **Local Importance (Higher Value)**

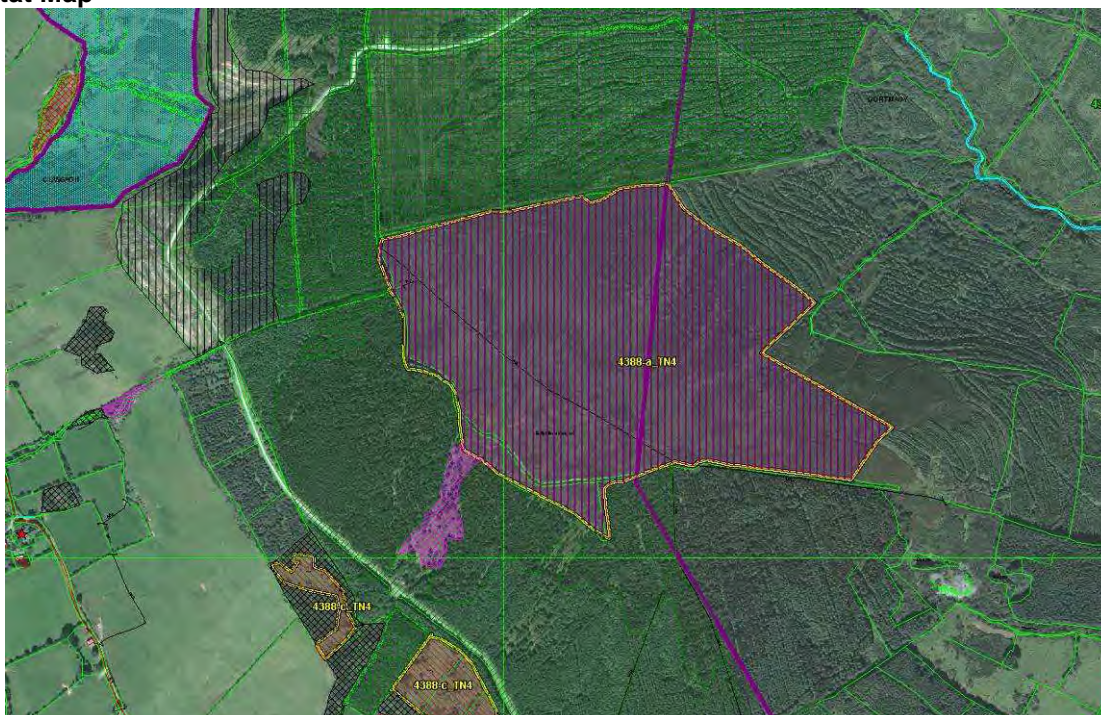
**Habitat code**  
**PB2**

Section of bog on summit of hill. The sward height reaches a maximum of 3ft. Although Sphagnum moss is abundant the area appears to have been drained extensively and Conifer plantations surround site to the north, south and west thus the bog is unlikely to be actively peat-forming therefore it is not linked to the EU priority habitat '7130 active blanket bog'.

This habitat is under threat from afforestation.

**Species List**

Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale
<i>Bryophyte</i>	Moss	Frequent
<i>Calluna vulgaris</i>	Ling heather	Abundant
<i>Erica cinerea</i>	Bell heather	Occasional
<i>Molinia caerulea</i>	Purple Moor-grass	Abundant
<i>Potentilla erecta</i>	Tormentil	Occasional
<i>Salix</i> sp.	Willow	Rare
<i>Sphagnum</i> sp.	Peat moss	Abundant
<i>Trichophorum cespitosum</i>	Deergrass	Occasional
<i>Vaccinium myrtillus</i>	Bilberry	Occasional

**Habitat Map**

## Photographic Record



**Image 1: Upland blanket bog with what looks like old drains running parallel down the hill**



**Image 2: As above parallel linear features observed here are overgrown – probably old drains**





**Image 3: Blanket bog vegetation dominated by Ling heather**



**TARGET NOTES - ID No. 73**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 17/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4388-a	<b>Townland:</b> Classagh	<b>Grid Ref:</b> 165764, 174804
<b>Target note no.:</b> TN5		<b>Area:</b> 6.3ha

**Ecological value:** County Importance

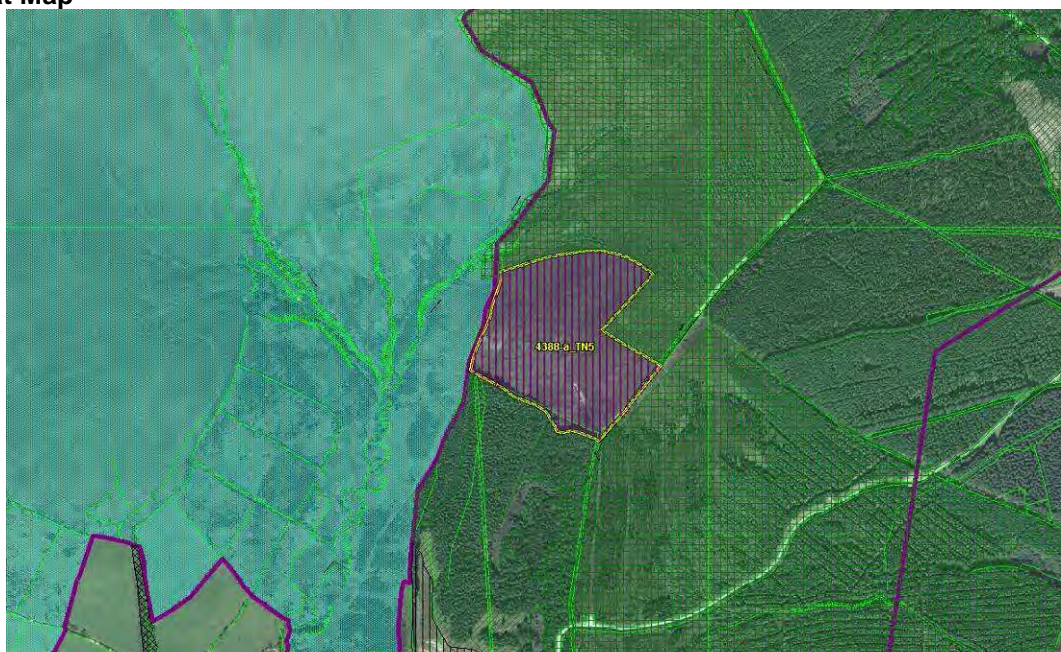
**Habitat code**  
**PB2**

Upland Blanket Bog PB2 located on a sharp slope of hill. Quite spongy underfoot. Some channels have been dug. One such channel shows a peat dept of 7ft. This would have a considerable effect on the hydrology of the site. The typical sward height is approx 1ft. Forestry surrounds this area to the southwest, southeast and northeast.

This area is under threat from drainage and afforestation.

**Species List**

Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale
<i>Bryophyte</i>	Moss	Occasional
<i>Calluna vulgaris</i>	Ling heather	Abundant
<i>Erica cinerea</i>	Bell heather	Occasional
<i>Erica tetralix</i>	Cross-leaved heath	Frequent
<i>Eriophorum</i> sp.	Cottongrass	Frequent
<i>Lycopodium</i> sp.	Club moss	Occasional
<i>Molinia caerulea</i>	Purple Moor-grass	Frequent
<i>Potentilla erecta</i>	Tormentil	Occasional
<i>Salix</i> sp.	Willow	Occasional
<i>Sphagnum</i> sp.	Peat moss	Abundant
<i>Ulex europaeus</i>	Gorse	Occasional
<i>Vaccinium myrtillus</i>	Bilberry	Occasional

**Habitat Map**



## Photographic Record



**Image 1: Tall peat bank where channel has been dug**



**Image 2: Channel from above**



**Image 3: Blanket bog vegetation**



**Image 4: Blanket bog vegetation - Ling and Sweet Vernal-grass**





**TARGET NOTES - ID No. 74**

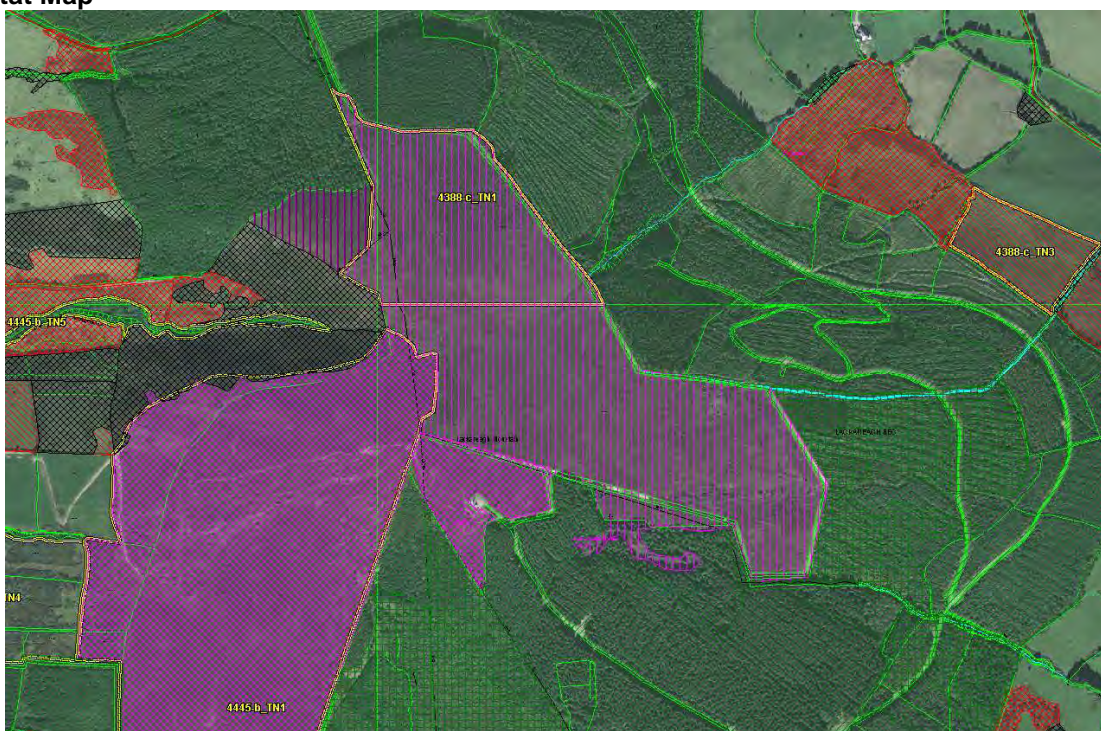
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 16/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4388-c	<b>Townland:</b> Magherareagh	<b>Grid Ref:</b> 164150, 172178
<b>Target note no.:</b> TN1		<b>Area:</b> 8.5ha

**Ecological value:** County Importance

<b>Habitat code</b>	<p>This area has an abundance of heath on summit of hill. However, there was an absence of Heath Rush (<i>Juncus squarrosus</i>) so this habitat is best categorised as Upland Blanket Bog PB2. It is unlikely that this area of bog is active as Sphagnum moss cover is not extensive, therefore it is not linked to the EU priority habitat 'active blanket bog 7130'. Sward height reached up to 2ft. Hummocky. Some Spruce seedlings have self seeded from nearby forestry to North and East. A fair slope occurs to the North, West and East. More boggy hills occur to the south.</p>
PB2	

**Species List**

Species (Latin name)	Species (common name)	DAFOR Scale
<i>Bryophyte</i>	Moss	Frequent
<i>Calluna vulgaris</i>	Ling heather	Dominant
<i>Cladonia</i> sp.	Lichen	Occasional
<i>Erica cinerea</i>	Bell heather	Frequent
<i>Erica tetralix</i>	Cross-leaved Heath	Occasional
<i>Lycopodium</i> sp.	Club Moss	Occasional
<i>Molinia caerulea</i>	Purple Moor-grass	Abundant
<i>Potentilla erecta</i>	Tormentil	Frequent
<i>Sphagnum</i> sp.	Peat moss	Frequent
<i>Trichophorum cespitosum</i>	Deergrass	Occasional
<i>Vaccinium myrtillus</i>	Bilberry	Frequent

**Habitat Map**

## Photographic Record



**Image 1: Upland blanket bog PB2**



**Image 2: Close-up of blanket bog vegetation – abundant Purple Moor-grass and Ling**





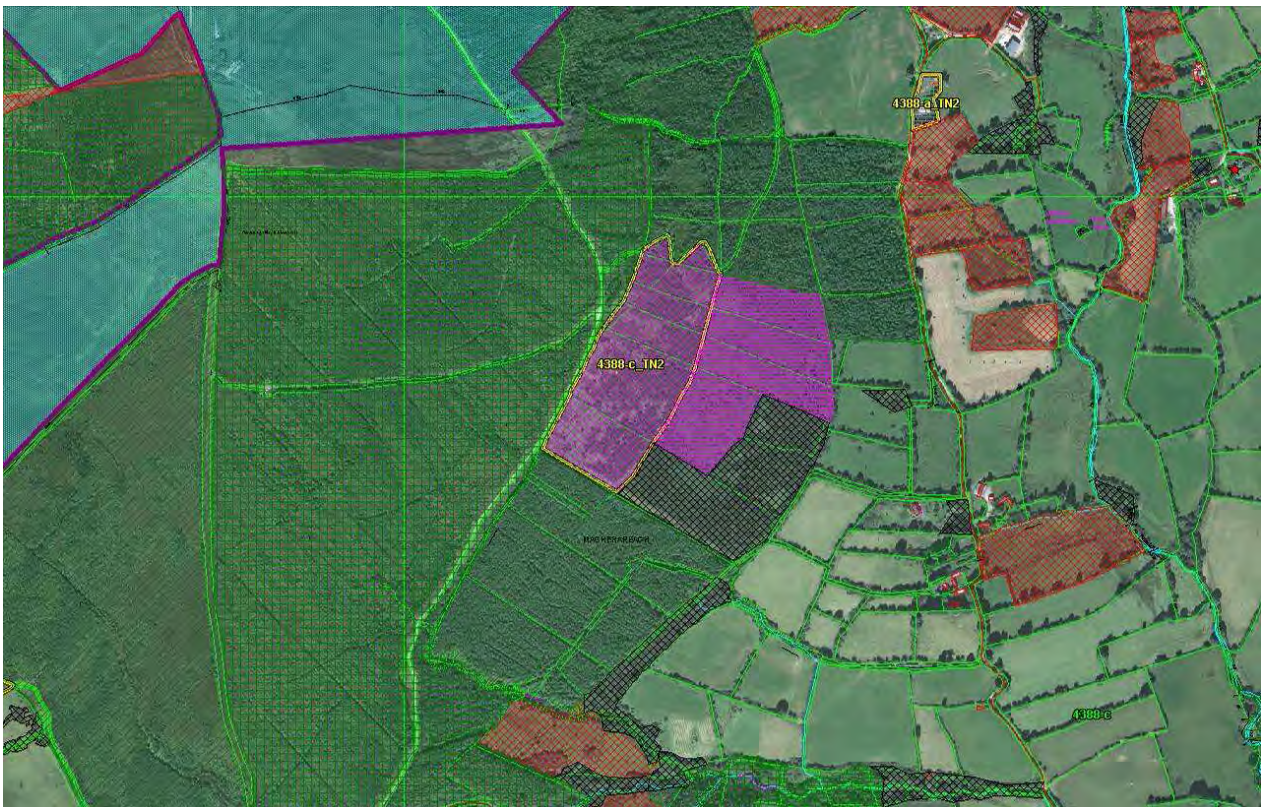
**Image 3: Close-up of blanket bog vegetation – abundant Purple Moor-grass and Ling**





## TARGET NOTES - ID No. 75

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 16/08/11																																																																										
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare																																																																										
<b>1:2,500 Sheet no:</b> 4388-c	<b>Townland:</b> Magherareagh	<b>Grid Ref:</b> 164330, 173259																																																																										
<b>Target note no.:</b> TN2		<b>Area:</b> 4.7ha																																																																										
<b>Ecological value:</b> Local Importance (Higher Value)																																																																												
<b>Habitat code</b>  <b>HH3 / GS3 / WS1</b>	<p>Mosaic of Wet Heath (HH3), Dry-humid Acid grassland (GS3) and Scrub (WS1). Until its recent burning, gorse scrub would have been the main component of this area. Patches of acid grassland can be found mostly to the North West of the site. Adjacent to the site in the South East is an area of grassland with forestry surrounding on all other sides. The site slopes downhill to the South East. Cattle have grazed the site recently.</p>																																																																											
	<p>Dry-humid Acid grassland</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Achillea millefolium</i></td> <td>Yarrow</td> <td>Occasional</td> </tr> <tr> <td><i>Agrostis sp</i></td> <td>Bent grass</td> <td>Frequent</td> </tr> <tr> <td><i>Anthoxanthum odoratum</i></td> <td>Sweet Vernal-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Bryophyte</i></td> <td>Moss</td> <td>Frequent</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Frequent</td> </tr> <tr> <td><i>Carex nigra</i></td> <td>Common Sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Carex panicea</i></td> <td>Carnation Sedge</td> <td>Frequent</td> </tr> <tr> <td><i>Festuca sp</i></td> <td>Fescue</td> <td>Frequent</td> </tr> <tr> <td><i>Galium saxatile</i></td> <td>Heath Bedstraw</td> <td>Frequent</td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire Fog</td> <td>Frequent</td> </tr> <tr> <td><i>Nardus stricta</i></td> <td>Mat-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Frequent</td> </tr> <tr> <td><i>Succisa pratensis</i></td> <td>Devil's-bit Scabious</td> <td>Frequent</td> </tr> </tbody> </table> <p>Wet Heath</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Bryophyte</i></td> <td>Moss</td> <td>Frequent</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Abundant</td> </tr> <tr> <td><i>Erica cinerea</i></td> <td>Bell Heather</td> <td>Occasional</td> </tr> <tr> <td><i>Eriophorum sp</i></td> <td>Cottongrass</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus effusus</i></td> <td>Soft Rush</td> <td>Frequent</td> </tr> <tr> <td><i>Juncus squarrosus</i></td> <td>Heath Rush</td> <td>Occasional</td> </tr> <tr> <td><i>Molinia caerulea</i></td> <td>Purple Moor-grass</td> <td>Abundant</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Frequent</td> </tr> <tr> <td><i>Sphagnum sp.</i></td> <td>Peat moss</td> <td>Occasional</td> </tr> <tr> <td><i>Ulex europaeus</i></td> <td>Gorse</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Achillea millefolium</i>	Yarrow	Occasional	<i>Agrostis sp</i>	Bent grass	Frequent	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Bryophyte</i>	Moss	Frequent	<i>Calluna vulgaris</i>	Ling Heather	Frequent	<i>Carex nigra</i>	Common Sedge	Occasional	<i>Carex panicea</i>	Carnation Sedge	Frequent	<i>Festuca sp</i>	Fescue	Frequent	<i>Galium saxatile</i>	Heath Bedstraw	Frequent	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Nardus stricta</i>	Mat-grass	Frequent	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Succisa pratensis</i>	Devil's-bit Scabious	Frequent	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Bryophyte</i>	Moss	Frequent	<i>Calluna vulgaris</i>	Ling Heather	Abundant	<i>Erica cinerea</i>	Bell Heather	Occasional	<i>Eriophorum sp</i>	Cottongrass	Occasional	<i>Juncus effusus</i>	Soft Rush	Frequent	<i>Juncus squarrosus</i>	Heath Rush	Occasional	<i>Molinia caerulea</i>	Purple Moor-grass	Abundant	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Sphagnum sp.</i>	Peat moss	Occasional	<i>Ulex europaeus</i>	Gorse
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**Habitat Map****Photographic Record****Image 1: Acid grassland GS3**





**Image 2: Acid grassland GS3**



**Image 3: Wet heath HH3**



**Image 4: Wet heath HH3**





**TARGET NOTES - ID No. 76**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 16/08/11
<b>Surveyor:</b> John Curtin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4212-a	<b>Townland:</b> Magherareagh	<b>Grid Ref:</b> 165071, 172088
<b>Target note no.:</b> TN3		<b>Area:</b> 2.5ha

**Ecological value:** Local Importance (Higher Value)**Habitat code****GS3**

Section of Acid Grassland (GS3) recently grazed, on steep slope at top of field. Forestry is located to the South and West

**Species List**

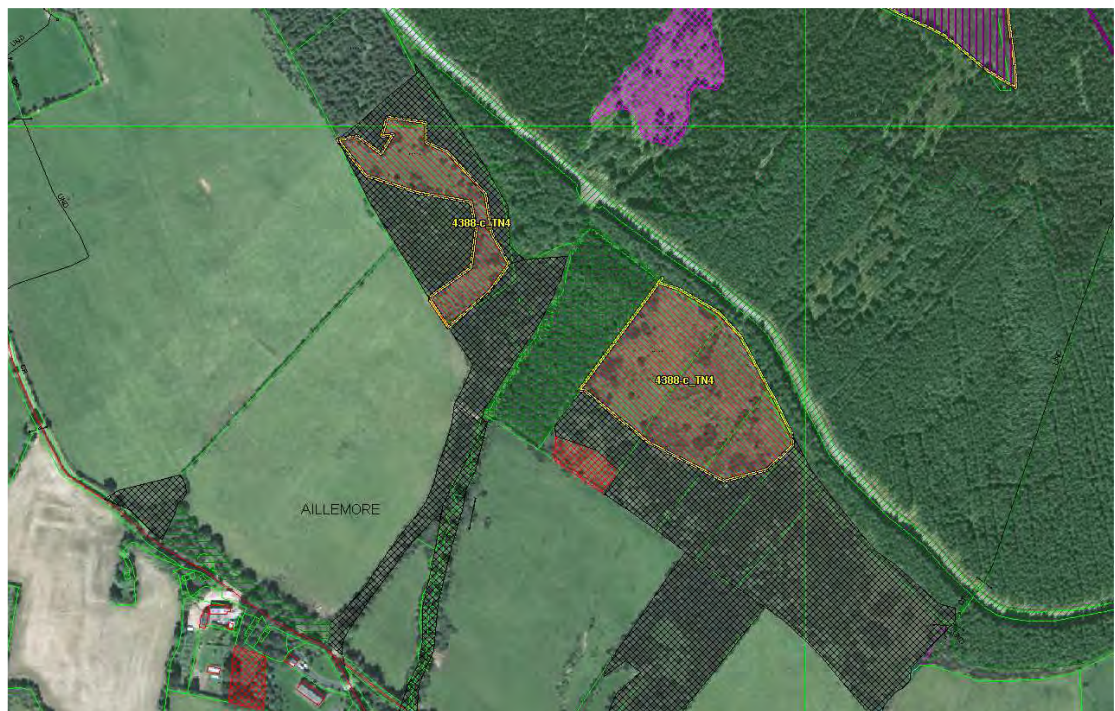
Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale
<i>Agrostis</i> sp.	Bent grass	Frequent
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional
<i>Bryophyte</i>	Moss	Abundant
<i>Carex panicea</i>	Carnation sedge	Frequent
<i>Galium saxatile</i>	Heath Bedstraw	Frequent
<i>Holcus lanatus</i>	Yorkshire-fog	Frequent
<i>Juncus effusus</i>	Soft Rush	Frequent
<i>Luzula</i> sp (veg)	Wood-rush	Rare
<i>Nardus stricta</i>	Mat-grass	Frequent
<i>Potentilla erecta</i>	Tormentil	Frequent
<i>Pteridium aquilinum</i>	Bracken	Frequent
<i>Trifolium repens</i>	White clover	Occasional

**Habitat Map**





TARGET NOTES - ID No. 77																																															
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 16/08/11																																													
Surveyor: John Curtin		County name: Clare																																													
1:2,500 Sheet no: 4388-c	Townland: Aillemore	Grid Ref: 165901, 173291 165733, 173420																																													
Target note no.: TN4		Area: 1.64ha and 0.65ha																																													
Ecological value: <b>National Importance – linked to the EU priority habitat ‘6230 Species-rich <i>Nardus</i> grassland on siliceous substrates in mountain areas’.</b>																																															
Habitat code  <b>GS3 / GS4 / WS1</b>	<p>Mosaic of wet grassland (GS4), Scrub (WS1) and acid grassland (GS3). Forestry is located to the north and west. Scrub borders the site to the south. The site slopes downhill to the south.</p> <p>This habitat is linked to the EU priority habitat ‘6230 Species-rich <i>Nardus</i> grassland on siliceous substrates in mountain areas’. However it is a small area so can be classified as being of National ecological importance.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Achillea millefolium</i></td> <td>Yarrow</td> <td>Occasional</td> </tr> <tr> <td><i>Agrostis</i> sp.</td> <td>Bent grass</td> <td>Occasional</td> </tr> <tr> <td><i>Anthoxanthum odoratum</i></td> <td>Sweet Vernal-grass</td> <td>Occasional</td> </tr> <tr> <td><i>Bryophyte</i></td> <td>Moss</td> <td>Frequent</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Frequent</td> </tr> <tr> <td><i>Carex hostiana</i></td> <td>Tawny sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Carex panicea</i></td> <td>Carnation sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Drepanocladus</i> sp</td> <td>Drepanocladus moss</td> <td>Frequent</td> </tr> <tr> <td><i>Galium saxatile</i></td> <td>Heath Bedstraw</td> <td>Frequent</td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire-fog</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus articulatus</i></td> <td>Jointed Rush</td> <td>Occasional</td> </tr> <tr> <td><i>Nardus stricta</i></td> <td>Mat-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Frequent</td> </tr> <tr> <td><i>Succisa pratensis</i></td> <td>Devils-bit Scabious</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Achillea millefolium</i>	Yarrow	Occasional	<i>Agrostis</i> sp.	Bent grass	Occasional	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Occasional	<i>Bryophyte</i>	Moss	Frequent	<i>Calluna vulgaris</i>	Ling Heather	Frequent	<i>Carex hostiana</i>	Tawny sedge	Occasional	<i>Carex panicea</i>	Carnation sedge	Occasional	<i>Drepanocladus</i> sp	Drepanocladus moss	Frequent	<i>Galium saxatile</i>	Heath Bedstraw	Frequent	<i>Holcus lanatus</i>	Yorkshire-fog	Occasional	<i>Juncus articulatus</i>	Jointed Rush	Occasional	<i>Nardus stricta</i>	Mat-grass	Frequent	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Succisa pratensis</i>	Devils-bit Scabious	Occasional
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**Habitat Map**



TARGET NOTES - ID No. 78																																																																	
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 17/08/11																																																															
Surveyor: John Curtin		County name: Clare																																																															
1:2,500 Sheet no: 4388-d	Townland: Garraunboy	Grid Ref: 166906, 172214																																																															
Target note no.: TN1		Area: 3.07ha																																																															
Ecological value: <b>Local Importance (Higher Value)</b>																																																																	
Habitat code  GS2	<p>Large field. Southern slope dominated by Cock's-foot (<i>Dactylis glomerata</i>). Some Bracken and Bramble encroachment. Sward height reached a maximum of 3ft. There was no evidence of grazing. The slope of the field increased to the north. The surrounding fields have been improved.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Achillea millefolium</i></td> <td>Yarrow</td> <td>Occasional</td> </tr> <tr> <td><i>Agrostis</i> sp.</td> <td>Bent grass</td> <td>Frequent</td> </tr> <tr> <td><i>Anthoxanthum odoratum</i></td> <td>Sweet Vernal-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Centaurea nigra</i></td> <td>Common Knapweed</td> <td>Occasional</td> </tr> <tr> <td><i>Cirsium vulgare</i></td> <td>Spear Thistle</td> <td>Occasional</td> </tr> <tr> <td><i>Dactylis glomerata</i></td> <td>Cock's-foot</td> <td>Abundant</td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire Fog</td> <td>Frequent</td> </tr> <tr> <td><i>Lathyrus pratensis</i></td> <td>Meadow-vetchling</td> <td>Occasional</td> </tr> <tr> <td><i>Lotus pendunculatus</i></td> <td>Greater Bird's-foot-trefoil</td> <td>Occasional</td> </tr> <tr> <td><i>Plantago lanceolata</i></td> <td>Ribwort Plantain</td> <td>Frequent</td> </tr> <tr> <td><i>Poa</i> sp.</td> <td>Meadow grass</td> <td>Frequent</td> </tr> <tr> <td><i>Potentilla anserina</i></td> <td>Silverweed</td> <td>Occasional</td> </tr> <tr> <td><i>Pteridium aquilinum</i></td> <td>Bracken</td> <td>Frequent</td> </tr> <tr> <td><i>Ranunculus repens</i></td> <td>Creeping Buttercup</td> <td>Occasional</td> </tr> <tr> <td><i>Rumex acetosella</i></td> <td>Sheep's Sorrel</td> <td>Occasional</td> </tr> <tr> <td><i>Stellaria media</i></td> <td>Common Chickweed</td> <td>Occasional</td> </tr> <tr> <td><i>Trifolium pratense</i></td> <td>Red Clover</td> <td>Occasional</td> </tr> <tr> <td><i>Trifolium repens</i></td> <td>White Clover</td> <td>Occasional</td> </tr> <tr> <td><i>Veronica officinalis</i></td> <td>Heath Speedwell</td> <td>Frequent</td> </tr> <tr> <td><i>Veronica</i> sp.</td> <td>Speedwell</td> <td>Frequent</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Achillea millefolium</i>	Yarrow	Occasional	<i>Agrostis</i> sp.	Bent grass	Frequent	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Centaurea nigra</i>	Common Knapweed	Occasional	<i>Cirsium vulgare</i>	Spear Thistle	Occasional	<i>Dactylis glomerata</i>	Cock's-foot	Abundant	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Lathyrus pratensis</i>	Meadow-vetchling	Occasional	<i>Lotus pendunculatus</i>	Greater Bird's-foot-trefoil	Occasional	<i>Plantago lanceolata</i>	Ribwort Plantain	Frequent	<i>Poa</i> sp.	Meadow grass	Frequent	<i>Potentilla anserina</i>	Silverweed	Occasional	<i>Pteridium aquilinum</i>	Bracken	Frequent	<i>Ranunculus repens</i>	Creeping Buttercup	Occasional	<i>Rumex acetosella</i>	Sheep's Sorrel	Occasional	<i>Stellaria media</i>	Common Chickweed	Occasional	<i>Trifolium pratense</i>	Red Clover	Occasional	<i>Trifolium repens</i>	White Clover	Occasional	<i>Veronica officinalis</i>	Heath Speedwell	Frequent	<i>Veronica</i> sp.	Speedwell	Frequent
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**Habitat Map****Photographic Record**

**Image 1: Large field of Dry meadow GS2**



**Image 2: Close-up of grasses – Cock's-foot is dominant**



**Image 3: Dry meadow GS2**

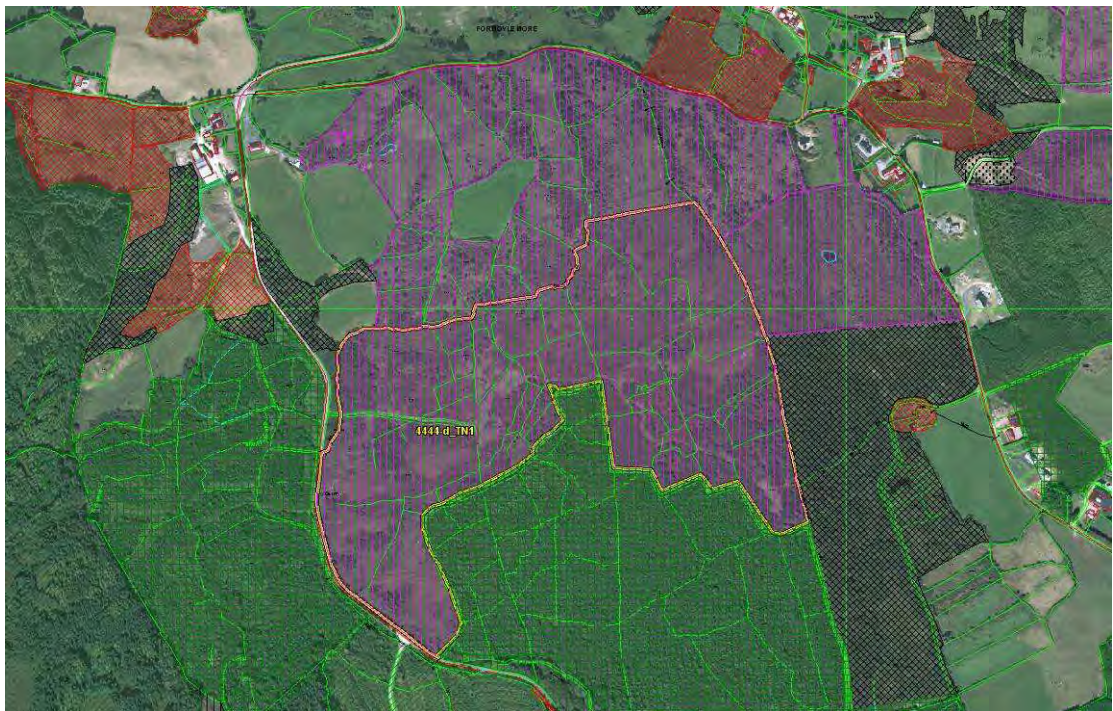




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<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 26/07/11																																																																														
<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare																																																																														
<b>1:2,500 Sheet no:</b> 4444-d	<b>Townland:</b> Formoyle More	<b>Grid Ref:</b> 159339, 170299																																																																														
<b>Target note no.:</b> TN1		<b>Area:</b> 28ha																																																																														
<b>Ecological value:</b> <span style="color: red;">International Importance – linked to the Annex I Habitat 'Northern Atlantic Wet Heaths with <i>Erica tetralix</i> (4010)'</span>																																																																																
<b>Habitat code</b>  HH3	<p>Area of low-lying Wet Heath HH3, bordered by conifer plantations, with abundant Deer-grass and Purple Moor-grass. Sphagna and other mosses are also abundant. There is a slight slope and sandstone outcrops. The ground is somewhat poached and there is a mosaic of dry and wet areas. Gorse and Willow scrub are encroaching on the heath.</p> <p>This area is under threat of being afforested by conifers.</p> <p>Full species list below.</p> <p>Dry areas:</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 5px;">Species (common name)</th> <th style="text-align: left; padding: 5px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Trichophorum cespitosum</i></td><td>Deer-grass</td><td>Abundant</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Abundant</td></tr> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Frequent</td></tr> <tr><td><i>Juncus acutiflorus</i></td><td>Sharp-flowered Rush</td><td>Frequent</td></tr> <tr><td><i>Carex panicea</i></td><td>Carnation Sedge</td><td>Frequent</td></tr> <tr><td><i>Carex echinata</i></td><td>Star Sedge</td><td>Frequent</td></tr> <tr><td><i>Juncus squarrosus</i></td><td>Heath Rush</td><td>Occasional</td></tr> <tr><td><i>Carex</i> spp.</td><td>Sedges</td><td>Frequent</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Abundant</td></tr> <tr><td><i>Erica tetralix</i></td><td>Cross-leaved Heather</td><td>Frequent</td></tr> <tr><td><i>Erica cinerea</i></td><td>Bell Heather</td><td>Occasional</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Occasional</td></tr> <tr><td><i>Eriophorum angustifolium</i></td><td>Common Cottongrass</td><td>Rare</td></tr> <tr><td><i>Vaccinium myrtillus</i></td><td>Bilberry</td><td>Rare</td></tr> <tr><td><i>Cladonia</i> spp.</td><td>Cladonia lichen</td><td>Frequent</td></tr> <tr><td><i>Sphagnum</i> spp.</td><td>Sphagnum moss</td><td>Abundant</td></tr> <tr><td><i>Salix</i> sp.</td><td>Willows</td><td>Occasional</td></tr> <tr><td><i>Ulex europaea</i></td><td>Gorse</td><td>Occasional</td></tr> </tbody> </table> <p>Wet areas:</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 5px;">Species (common name)</th> <th style="text-align: left; padding: 5px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Trichophorum cespitosum</i></td><td>Deer-grass</td><td>Abundant</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Abundant</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Abundant</td></tr> <tr><td><i>Potentilla palustris</i></td><td>Creeping Cinquefoil</td><td>Frequent</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling Heather</td><td>Frequent</td></tr> <tr><td><i>Narthecium ossifragum</i></td><td>Bog Asphodel</td><td>Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Trichophorum cespitosum</i>	Deer-grass	Abundant	<i>Molinia caerulea</i>	Purple Moor-grass	Abundant	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Juncus acutiflorus</i>	Sharp-flowered Rush	Frequent	<i>Carex panicea</i>	Carnation Sedge	Frequent	<i>Carex echinata</i>	Star Sedge	Frequent	<i>Juncus squarrosus</i>	Heath Rush	Occasional	<i>Carex</i> spp.	Sedges	Frequent	<i>Calluna vulgaris</i>	Ling Heather	Abundant	<i>Erica tetralix</i>	Cross-leaved Heather	Frequent	<i>Erica cinerea</i>	Bell Heather	Occasional	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Eriophorum angustifolium</i>	Common Cottongrass	Rare	<i>Vaccinium myrtillus</i>	Bilberry	Rare	<i>Cladonia</i> spp.	Cladonia lichen	Frequent	<i>Sphagnum</i> spp.	Sphagnum moss	Abundant	<i>Salix</i> sp.	Willows	Occasional	<i>Ulex europaea</i>	Gorse	Occasional	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Trichophorum cespitosum</i>	Deer-grass	Abundant	<i>Molinia caerulea</i>	Purple Moor-grass	Abundant	<i>Potentilla erecta</i>	Tormentil	Abundant	<i>Potentilla palustris</i>	Creeping Cinquefoil	Frequent	<i>Calluna vulgaris</i>	Ling Heather	Frequent	<i>Narthecium ossifragum</i>	Bog Asphodel	Occasional
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<i>Galium palustre</i>	Marsh Bedstraw	Rare
<i>Juncus effusus</i>	Soft Rush	Frequent
<i>Juncus conglomeratus</i>	Compact Rush	Frequent
<i>Mentha aquatica</i>	Water mint	Occasional
<i>Ranunculus acris</i>	Meadow Buttercup	Frequent
<i>Polygala serpyllifolia</i>	Thyme-leaved Milkwort	Rare
<i>Carex panicea</i>	Carnation Sedge	Frequent
<i>Vaccinium myrtillus</i>	Bilberry	Occasional
<i>Juncus acutiflorus</i>	Sharp-flowered Rush	Abundant
<i>Luzula multiflora</i>	Heath Wood Rush	Occasional
<i>Eriophorum vaginatum</i>	Hare's-Tail Cottongrass	Occasional
<i>Polytrichum</i> sp.		Abundant
<i>Sphagnum</i> sp.		Abundant

### Habitat Map





### Photographic Record



**Image 1. Wet heath HH3 with abundant Deer-grass and scrub encroaching.**



**Image 2. Close-up of heath flora with Purple Moor-grass, Cross-leaved Heather and Gorse scrub invading.**



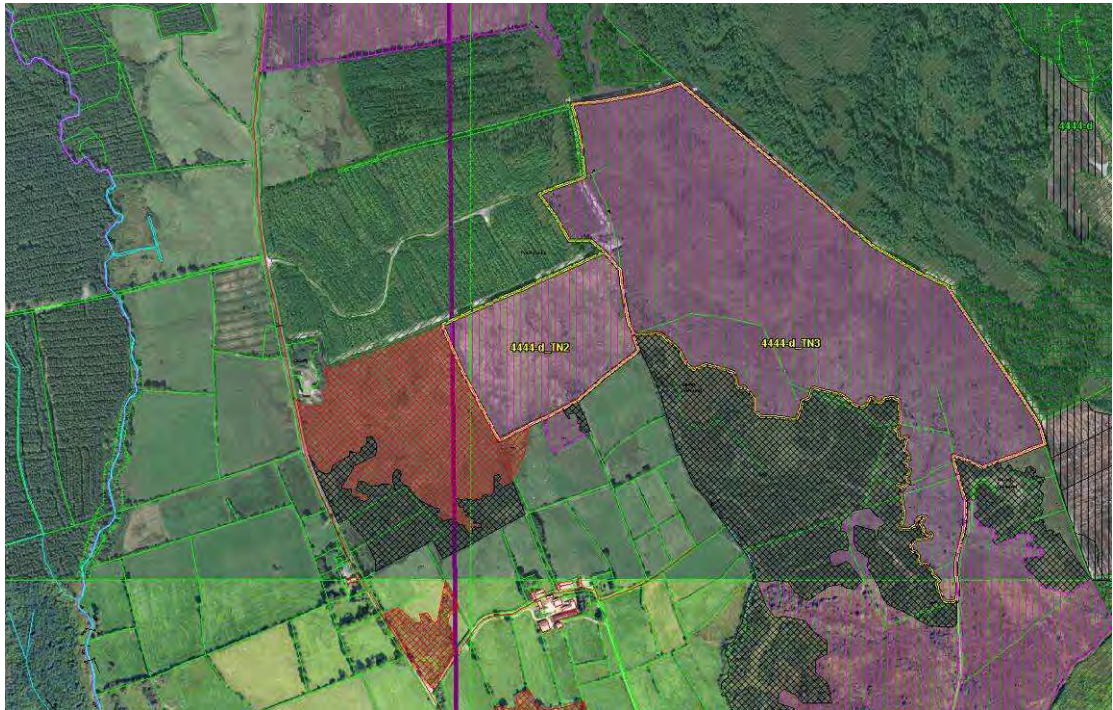
**Image 3. Wet area of Heath with abundant rushes and Creeping Cinquefoil in foreground.**

<b>TARGET NOTES - ID No. 80</b>																																																																																									
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<b>Ecological value:</b> <span style="color: red;">County Importance</span>																																																																																									
<b>Habitat code</b>  HH3 PF2	<p>Undulating to flat area of Wet heath HH3 interspersed with Poor fen and flush PF2 areas with encroaching Goat Willow (<i>Salix caprea</i>).</p> <p>Poor Fen and Flush is not linked to any annexed habitat but is of limited extent in Ireland and therefore is considered to be of conservation importance.</p> <p>Wet heath:</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Species (<i>Latin name</i>)</th> <th style="text-align: left;">Species (common name)</th> <th style="text-align: left;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Agrostis sp</i></td><td>Bent grass</td><td>Frequent</td></tr> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Frequent</td></tr> <tr><td><i>Calluna vulgaris</i></td><td>Ling</td><td>Frequent</td></tr> <tr><td><i>Carex spp.</i></td><td>Sedges</td><td>Frequent</td></tr> <tr><td><i>Cladonia sp.</i></td><td>Raindeer Lichen</td><td>Occasional</td></tr> <tr><td><i>Erica tetralix</i></td><td>Cross-leaved heath</td><td>Frequent</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Dominant</td></tr> <tr><td><i>Juncus acutiflorus</i></td><td>Sharp-flowered Rush</td><td>Dominant</td></tr> <tr><td><i>Juncus squarrosus</i></td><td>Heath Rush</td><td>Occasional</td></tr> <tr><td><i>Luzula multiflora</i></td><td>Heath Wood-rush</td><td>Occasional</td></tr> <tr><td><i>Polygala serpyllifolia</i></td><td>Thyme-leaved Milkwort</td><td>Occasional</td></tr> <tr><td><i>Sphagnum sp.</i></td><td>Peat moss</td><td>Frequent</td></tr> <tr><td><i>Polytrichum sp.</i></td><td></td><td>Occasional</td></tr> <tr><td>(cf.) <i>Succisa pratensis</i></td><td>Devil's-bit Scabious</td><td>Frequent</td></tr> </tbody> </table> <p>Poor flush:</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Species (<i>Latin name</i>)</th> <th style="text-align: left;">Species (common name)</th> <th style="text-align: left;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Menyanthes trifoliata</i></td><td>Bog bean</td><td>Abundant</td></tr> <tr><td><i>Equisetum sp.</i></td><td>Horsetails</td><td>Occasional</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Occasional</td></tr> <tr><td><i>Carex spp.</i></td><td>Sedges</td><td>Frequent</td></tr> <tr><td><i>Carex nigra</i></td><td>Black Sedge</td><td>Occasional</td></tr> <tr><td><i>Ranunculus flammula</i></td><td>Lesser Spearwort</td><td>Frequent</td></tr> <tr><td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Abundant</td></tr> <tr><td><i>Juncus acutiflorus</i></td><td>Sharp-flowered Rush</td><td>Abundant</td></tr> <tr><td><i>Juncus articulatus</i></td><td>Jointed Rush</td><td>Occasional</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Frequent</td></tr> <tr><td><i>Juncus conglomeratus</i></td><td>Compact Rush</td><td>Frequent</td></tr> <tr><td><i>Rumex acetosella</i></td><td>Sheep's Sorrel</td><td>Rare</td></tr> <tr><td><i>Galium saxatile</i></td><td>Heath Bedstraw</td><td>Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Agrostis sp</i>	Bent grass	Frequent	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Calluna vulgaris</i>	Ling	Frequent	<i>Carex spp.</i>	Sedges	Frequent	<i>Cladonia sp.</i>	Raindeer Lichen	Occasional	<i>Erica tetralix</i>	Cross-leaved heath	Frequent	<i>Molinia caerulea</i>	Purple Moor-grass	Dominant	<i>Juncus acutiflorus</i>	Sharp-flowered Rush	Dominant	<i>Juncus squarrosus</i>	Heath Rush	Occasional	<i>Luzula multiflora</i>	Heath Wood-rush	Occasional	<i>Polygala serpyllifolia</i>	Thyme-leaved Milkwort	Occasional	<i>Sphagnum sp.</i>	Peat moss	Frequent	<i>Polytrichum sp.</i>		Occasional	(cf.) <i>Succisa pratensis</i>	Devil's-bit Scabious	Frequent	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Menyanthes trifoliata</i>	Bog bean	Abundant	<i>Equisetum sp.</i>	Horsetails	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Occasional	<i>Carex spp.</i>	Sedges	Frequent	<i>Carex nigra</i>	Black Sedge	Occasional	<i>Ranunculus flammula</i>	Lesser Spearwort	Frequent	<i>Molinia caerulea</i>	Purple Moor-grass	Abundant	<i>Juncus acutiflorus</i>	Sharp-flowered Rush	Abundant	<i>Juncus articulatus</i>	Jointed Rush	Occasional	<i>Juncus effusus</i>	Soft Rush	Frequent	<i>Juncus conglomeratus</i>	Compact Rush	Frequent	<i>Rumex acetosella</i>	Sheep's Sorrel	Rare	<i>Galium saxatile</i>	Heath Bedstraw	Occasional
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	<i>Viola palustre</i>	Marsh Violet	Occasional
	<i>Sphagnum</i> spp.	Peat moss	Frequent
	<i>Polytrichum</i> sp.		Occasional

**Habitat Map**



**Photographic Record**



**Image 1. Wet heath HH3 with undulating land, abundant Sweet Vernal-grass and Ling Heather. Encroaching Willow can be observed in the distance.**





**Image 2. Close up of Wet Heath vegetation: *Sphagnum* sp., *Polytrichum* sp., Purple Moor-grass and (cf.) Devil's-bit Scabious.**

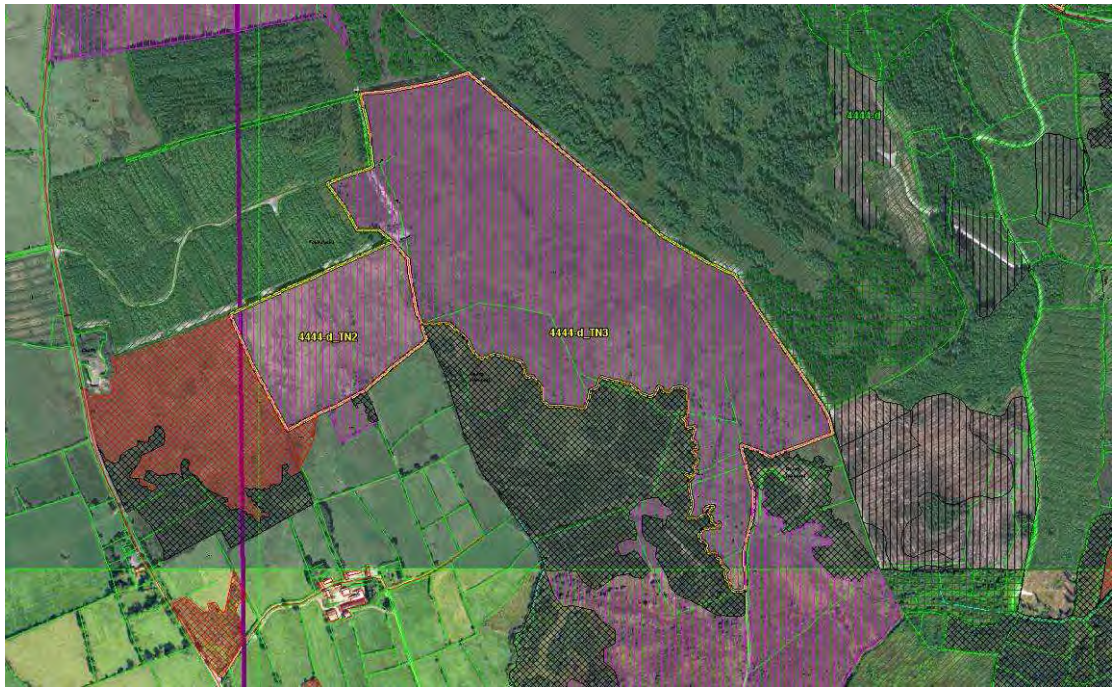


**Image 3. Poor Flush with abundant Bog bean and rushes.**





TARGET NOTES - ID No. 81																																																																				
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Surveyor: Sarah O'Loughlin Irwin		County name: Clare																																																																		
1:2,500 Sheet no: 4444-d	Townland: Kyleglass	Grid Ref: 158530, 169392																																																																		
Target note no.: TN3		Area: 25.5ha																																																																		
Ecological value: <b>International Importance - linked to the Annex I Habitat 'Northern Atlantic Wet Heaths with <i>Erica tetralix</i> (4010)'</b>																																																																				
Habitat code  HH3	<p>Undulating to flat upland area of Wet heath HH3 bordered by forestry to the north and east and farmland to the west. The area is somewhat poached as it is grazed by cattle and wild goats.</p> <p>This habitat is under threat of being planted by conifers.</p> <p>Wet heath:</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Trichophorum cespitosum</i></td> <td>Deer-grass</td> <td>Dominant</td> </tr> <tr> <td><i>Erica cinerea</i></td> <td>Bell Heather</td> <td>Occasional</td> </tr> <tr> <td><i>Calluna vulgaris</i></td> <td>Ling Heather</td> <td>Abundant</td> </tr> <tr> <td><i>Carex</i> spp.</td> <td>Sedges</td> <td>Frequent</td> </tr> <tr> <td><i>Carex nigra</i></td> <td>Black Sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Carex flacca</i></td> <td>Glaucous Sedge</td> <td>Occasional</td> </tr> <tr> <td><i>Cladonia</i> sp.</td> <td>Raindeer Lichen</td> <td>Occasional</td> </tr> <tr> <td><i>Erica tetralix</i></td> <td>Cross-leaved Heather</td> <td>Frequent</td> </tr> <tr> <td><i>Molinia caerulea</i></td> <td>Purple Moor-grass</td> <td>Abundant</td> </tr> <tr> <td><i>Eriophorum</i> spp.</td> <td>Cottongrasses</td> <td>Frequent</td> </tr> <tr> <td><i>Eriophorum latifolium</i></td> <td>Broad-leaved Cottongrass</td> <td>Rare</td> </tr> <tr> <td><i>Juncus squarrosus</i></td> <td>Heath Rush</td> <td>Occasional to Frequent</td> </tr> <tr> <td><i>Luzula multiflora</i> ssp. <i>congesta</i></td> <td>Dense-headed Heath Wood-rush</td> <td>Rare</td> </tr> <tr> <td><i>Luzula multiflora</i></td> <td>Heath Wood-rush</td> <td>Occasional</td> </tr> <tr> <td><i>Vaccinium myrtillus</i></td> <td>Bilberry</td> <td>Occasional</td> </tr> <tr> <td><i>Polygala serpyllifolia</i></td> <td>Thyme-leaved Milkwort</td> <td>Occasional</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Frequent</td> </tr> <tr> <td><i>Juncus articulatus</i></td> <td>Jointed Rush</td> <td>Occasional</td> </tr> <tr> <td><i>Sphagnum</i> spp.</td> <td>Peat moss</td> <td>Abundant</td> </tr> <tr> <td><i>Polytrichum</i> sp.</td> <td></td> <td>Occasional</td> </tr> <tr> <td><i>Narthecium ossifragum</i></td> <td>Bog Asphodel</td> <td>Frequent in wet patches</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Trichophorum cespitosum</i>	Deer-grass	Dominant	<i>Erica cinerea</i>	Bell Heather	Occasional	<i>Calluna vulgaris</i>	Ling Heather	Abundant	<i>Carex</i> spp.	Sedges	Frequent	<i>Carex nigra</i>	Black Sedge	Occasional	<i>Carex flacca</i>	Glaucous Sedge	Occasional	<i>Cladonia</i> sp.	Raindeer Lichen	Occasional	<i>Erica tetralix</i>	Cross-leaved Heather	Frequent	<i>Molinia caerulea</i>	Purple Moor-grass	Abundant	<i>Eriophorum</i> spp.	Cottongrasses	Frequent	<i>Eriophorum latifolium</i>	Broad-leaved Cottongrass	Rare	<i>Juncus squarrosus</i>	Heath Rush	Occasional to Frequent	<i>Luzula multiflora</i> ssp. <i>congesta</i>	Dense-headed Heath Wood-rush	Rare	<i>Luzula multiflora</i>	Heath Wood-rush	Occasional	<i>Vaccinium myrtillus</i>	Bilberry	Occasional	<i>Polygala serpyllifolia</i>	Thyme-leaved Milkwort	Occasional	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Juncus articulatus</i>	Jointed Rush	Occasional	<i>Sphagnum</i> spp.	Peat moss	Abundant	<i>Polytrichum</i> sp.		Occasional	<i>Narthecium ossifragum</i>	Bog Asphodel	Frequent in wet patches
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**Habitat Map****Photographic Record**

**Image 1. Wet heath HH3 with abundant Heather and Deer-grass. Conifer plantation observed in the distance.**





**Image 2. Close up of Wet Heath vegetation: Cladonia lichen and Ling heather dominate.**



**Image 3. Wet area with abundant *Sphagnum* moss and Cottongrasses and frequent Bog Asphodel.**





TARGET NOTES - ID No. 82																																																																										
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 02/08/11																																																																								
<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare																																																																								
<b>1:2,500 Sheet no:</b> 4445-a	<b>Townland:</b> Cloonconry Beg	<b>Grid Ref:</b> 161380, 170943																																																																								
<b>Target note no.:</b> TN1		<b>Area:</b> 1.9ha																																																																								
<b>Ecological value:</b> Local Importance (Higher Value)																																																																										
<b>Habitat code</b>  GS3	<p>Dry-humid acid grassland GS3 on very steep east-facing slope. The field is poached and cattle ridges have developed. There are frequent patches of bare ground. Vegetation is composed of a low dense sward with abundant grasses such as Fescues, Meadow grasses and Sweet vernal grass. Moss cover is also quite high and abundant broadleaved herbs include Tormentil (<i>Potentilla erecta</i>) and Eyebright (<i>Euphrasia</i> sp.). Species list below.</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 5px;">Species (common name)</th> <th style="text-align: left; padding: 5px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;"><i>Festuca</i> sp.</td><td style="padding: 5px;">Fescue</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Poa</i> spp.</td><td style="padding: 5px;">Meadow grasses</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Anthoxanthum odoratum</i></td><td style="padding: 5px;">Sweet vernal grass</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Nardus stricta</i></td><td style="padding: 5px;">Mat grass</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Cynosurus cristatus</i></td><td style="padding: 5px;">Crested dog's-tail</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Plantago lanceolata</i></td><td style="padding: 5px;">Ribwort plantain</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Euphrasia</i> sp.</td><td style="padding: 5px;">Eyebright</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Potentilla erecta</i></td><td style="padding: 5px;">Tormentil</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Trifolium repens</i></td><td style="padding: 5px;">White clover</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>T. pratense</i></td><td style="padding: 5px;">Red clover</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Viola</i> sp.</td><td style="padding: 5px;">Violets</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Ranunculus acris</i></td><td style="padding: 5px;">Meadow buttercup</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Potentilla sterilis</i></td><td style="padding: 5px;">Barren strawberry</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Centaurea nigra</i></td><td style="padding: 5px;">Common knapweed</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Hypochaeris radicata</i></td><td style="padding: 5px;">Cat's ear</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Leontodon autumnalis</i></td><td style="padding: 5px;">Autumn hawkbit</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Rumex acetosella</i></td><td style="padding: 5px;">Sheep's sorrel</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Senecio jacobaea</i></td><td style="padding: 5px;">Ragwort</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Prunella vulgaris</i></td><td style="padding: 5px;">Selfheal</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Cirsium palustre</i></td><td style="padding: 5px;">Marsh thistle</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Lysimachia nemorum</i></td><td style="padding: 5px;">Yellow pimpernel</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"><i>Lotus corniculatus</i></td><td style="padding: 5px;">Bird's-foot-trefoil</td><td style="padding: 5px;">Rare</td></tr> <tr><td style="padding: 5px;"></td><td style="padding: 5px;">Mosses</td><td style="padding: 5px;">Abundant</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Festuca</i> sp.	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<i>Poa</i> spp.	Meadow grasses	Abundant																																																																								
<i>Anthoxanthum odoratum</i>	Sweet vernal grass	Abundant																																																																								
<i>Nardus stricta</i>	Mat grass	Rare																																																																								
<i>Cynosurus cristatus</i>	Crested dog's-tail	Frequent																																																																								
<i>Plantago lanceolata</i>	Ribwort plantain	Frequent																																																																								
<i>Euphrasia</i> sp.	Eyebright	Abundant																																																																								
<i>Potentilla erecta</i>	Tormentil	Abundant																																																																								
<i>Trifolium repens</i>	White clover	Occasional																																																																								
<i>T. pratense</i>	Red clover	Abundant																																																																								
<i>Viola</i> sp.	Violets	Frequent																																																																								
<i>Ranunculus acris</i>	Meadow buttercup	Rare																																																																								
<i>Potentilla sterilis</i>	Barren strawberry	Rare																																																																								
<i>Centaurea nigra</i>	Common knapweed	Occasional																																																																								
<i>Hypochaeris radicata</i>	Cat's ear	Occasional																																																																								
<i>Leontodon autumnalis</i>	Autumn hawkbit	Frequent																																																																								
<i>Rumex acetosella</i>	Sheep's sorrel	Rare																																																																								
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<i>Cirsium palustre</i>	Marsh thistle	Frequent																																																																								
<i>Lysimachia nemorum</i>	Yellow pimpernel	Rare																																																																								
<i>Lotus corniculatus</i>	Bird's-foot-trefoil	Rare																																																																								
	Mosses	Abundant																																																																								

**Habitat Map****Photographic Record**

**Image 1. Dry-humid acid grassland GS3 on steep slope.**





**Image 2. Close up of vegetation with patches of bare ground.**



TARGET NOTES - ID No. 83																																																																							
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 09/08/11																																																																					
Surveyor: Sarah O'Loughlin Irwin		County name: Clare																																																																					
1:2,500 Sheet no: 4445-a	Townland: Cloonconry Beg	Grid Ref: 161186, 171411																																																																					
Target note no.: TN2		Area: 1.3ha																																																																					
Ecological value: <b>Local Importance (Higher Value)</b>																																																																							
Habitat code  GS4	<p>Wet grassland GS4 on north-facing slope. The field is dominated by rushes and is very wet underfoot – streams run either side of it – grasses and broadleaved herbs are also abundant. Vegetation is generally &gt;1m tall. Species list below.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Juncus effusus</i></td><td>Soft rush</td><td>Dominant</td></tr> <tr><td><i>J. articulatus</i></td><td>Jointed rush</td><td>Abundant</td></tr> <tr><td><i>J. acutiflorus</i></td><td>Sharp-flowered rush</td><td>Abundant</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire fog</td><td>Abundant</td></tr> <tr><td><i>Deschampsia cespitosa</i></td><td>Tufted hair-grass</td><td>Occasional</td></tr> <tr><td><i>Lotus pedunculatus</i></td><td>Greater bird's-foot-trefoil</td><td>Frequent</td></tr> <tr><td><i>Ranunculus repens</i></td><td>Creeping buttercup</td><td>Occasional</td></tr> <tr><td><i>Rumex acetosella</i></td><td>Sheep's sorrel</td><td>Frequent</td></tr> <tr><td><i>Cirsium palustre</i></td><td>Marsh thistle</td><td>Occasional</td></tr> <tr><td><i>Epilobium palustre</i></td><td>Marsh willowherb</td><td>Rare</td></tr> <tr><td><i>Lythrum salicaria</i></td><td>Purple-loosestrife</td><td>Rare</td></tr> <tr><td><i>Galium palustre</i></td><td>Marsh bedstraw</td><td>Occasional</td></tr> <tr><td><i>Juncus conglomeratus</i></td><td>Compact rush</td><td>Frequent</td></tr> <tr><td><i>Urtica dioica</i></td><td>Stinging nettle</td><td>Occasional</td></tr> <tr><td><i>Rubus fruticosus</i> agg.</td><td>Bramble</td><td>Occasional</td></tr> <tr><td><i>Stellaria media</i></td><td>Common chickweed</td><td>Rare</td></tr> <tr><td><i>Potentilla anserina</i></td><td>Silverweed</td><td>Rare</td></tr> <tr><td><i>P. erecta</i></td><td>Tormentil</td><td>Rare</td></tr> <tr><td><i>Senecio jacobaea</i></td><td>Ragwort</td><td>Frequent</td></tr> <tr><td><i>Prunella vulgaris</i></td><td>Selfheal</td><td>Occasional</td></tr> <tr><td><i>Trifolium pratense</i></td><td>Red clover</td><td>Occasional</td></tr> <tr><td><i>Angelica sylvestris</i></td><td>Wild angelica</td><td>Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Juncus effusus</i>	Soft rush	Dominant	<i>J. articulatus</i>	Jointed rush	Abundant	<i>J. acutiflorus</i>	Sharp-flowered rush	Abundant	<i>Holcus lanatus</i>	Yorkshire fog	Abundant	<i>Deschampsia cespitosa</i>	Tufted hair-grass	Occasional	<i>Lotus pedunculatus</i>	Greater bird's-foot-trefoil	Frequent	<i>Ranunculus repens</i>	Creeping buttercup	Occasional	<i>Rumex acetosella</i>	Sheep's sorrel	Frequent	<i>Cirsium palustre</i>	Marsh thistle	Occasional	<i>Epilobium palustre</i>	Marsh willowherb	Rare	<i>Lythrum salicaria</i>	Purple-loosestrife	Rare	<i>Galium palustre</i>	Marsh bedstraw	Occasional	<i>Juncus conglomeratus</i>	Compact rush	Frequent	<i>Urtica dioica</i>	Stinging nettle	Occasional	<i>Rubus fruticosus</i> agg.	Bramble	Occasional	<i>Stellaria media</i>	Common chickweed	Rare	<i>Potentilla anserina</i>	Silverweed	Rare	<i>P. erecta</i>	Tormentil	Rare	<i>Senecio jacobaea</i>	Ragwort	Frequent	<i>Prunella vulgaris</i>	Selfheal	Occasional	<i>Trifolium pratense</i>	Red clover	Occasional	<i>Angelica sylvestris</i>	Wild angelica	Occasional
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**Habitat Map****Photographic Record**


**Image 1. Wet grassland GS4 with dominant rushes, abundant Yorkshire fog and frequent patches of Greater bird's-foot-trefoil. Wild angelica can be seen at the far edge of the field.**



**Image 2. Close up of vegetation with dominant rushes (e.g. Soft rush and Jointed rush), abundant Yorkshire fog and frequent dense patches of Greater bird's-foot-trefoil.**





TARGET NOTES - ID No. 84		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 03/08/11
Surveyor: Jean Hamilton		County name: Clare
Sheet no: 4445-b	Townland: Ballymoloney	Grid Ref: 163733, 171103
Target note no.: TN1		Area: 35ha
Ecological Value: <b>International Importance - linked to Annexed Habitat, 'European dry heaths (4030)'</b>		
Habitat code	Dry Siliceous Heath HH1 in an upland area. Dominated by Ling ( <i>Calluna vulgaris</i> ), with abundant Bell Heather ( <i>Erica cinerea</i> ), Purple Moor-grass ( <i>Molinia caerulea</i> ) and low-growing Western Gorse ( <i>Ulex gallii</i> ). Tormentil ( <i>Potentilla erecta</i> ), Heath Rush ( <i>Juncus squarrosus</i> ), Creeping Bent ( <i>Agrostis stolonifera</i> ) and Common Gorse ( <i>Ulex europaea</i> ) are occasional. Gorse ( <i>Ulex</i> spp.) is dominant and forms the main structural component of the vegetation in some areas, forming a Dry Siliceous Heath / Gorse Scrub mosaic.	
HH1/WS1		
Habitat Map		
		



## Photographic Record



**Image 1: Dry Siliceous Heath HH1 Vegetation**



**Image 2: Close-up of Dry Siliceous Heath HH1 Vegetation**



**TARGET NOTES - ID No. 85**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 03/08/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4445-b	<b>Townland:</b> Ballymoloney	<b>Grid Ref:</b> 163706, 170892
<b>Target note no.:</b> TN2		<b>Area:</b> 0.16ha

**Ecological Value:** Local Importance (Higher Value)**Habitat code****GS3**

Heath/Scrub has been cleared here – looks like it may have been burned in the past. Has become recolonised with Acid Grassland GS3 vegetation with a low dense sward of grasses.

<b>Scientific Name</b>	<b>Common Name</b>	<b>DAFOR</b>
<i>Agrostis stolonifera</i>	Creeping Bent	Dominant
<i>Anthoxanthum odoratum</i>	Sweet Vernal	Abundant
<i>Calluna vulgaris</i>	Ling	Abundant
<i>Carex</i> spp.	Sedges	Abundant
<i>Erica cinerea</i>	Bell Heather	Frequent
<i>Festuca</i> spp.	Fescues	Frequent
<i>Molinia caerulea</i>	Purple Moor-grass	Occasional
<i>Polygala serpyllifolia</i>	Heath Milkwort	Frequent
<i>Potentilla erecta</i>	Tormentil	Frequent
<i>Vaccinium myrtillus</i>	Bilberry	Frequent

**Habitat Map**



## Photographic Record



**Image 1: Acid Grassland in Area Cleared of Scrub/Heath**



**Image 2: Close-up of Acid Grassland Vegetation**



**TARGET NOTES - ID No.86**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 03/08/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4445-b	<b>Townland:</b> Ballymoloney	<b>Grid Ref:</b> 163705, 170895
<b>Target note no.:</b> TN3		<b>Area:</b> 0.16ha
<b>Ecological Value:</b> <b>Local Importance (Higher Value)</b>		

<b>Habitat code</b>	Acid grassland in an upland area. Dominated by Sweet Vernal ( <i>Anthoxanthum odoratum</i> ) with abundant rushes ( <i>Juncus</i> spp.), bents ( <i>Agrostis</i> spp.), sedges ( <i>Carex</i> spp.). Thick carpet of mosses with occasional patches of <i>Sphagnum</i> ..
<b>GS3</b>	

Scientific Name	Common Name	DAFOR
<i>Agrostis</i> spp.	Bents	Abundant
<i>Anthoxanthum odoratum</i>	Sweet Vernal	Dominant
<i>Carex nigra</i>	Common Sedge	Frequent
<i>Carex echinata</i>	Star Sedge	Abundant
<i>Luzula multiflora</i> ssp. <i>congesta</i>	Heath Woodrush	Frequent
<i>Pedicularis sylvatica</i> ssp. <i>sylvatica</i>	Lousewort	Abundant
<i>Molinia caerulea</i>	Purple Moor-grass	Occasional
<i>Rhytidiadelphus loreus</i>	Little Shaggy Moss	Abundant
<i>Juncus articulatus/acutiflorus</i>	Jointed/Sharp-flowered Rush	Abundant
<i>Juncus effusus</i>	Soft Rush	Abundant
<i>Potentilla erecta</i>	Tormentil	Abundant
<i>Polytrichum commune</i>	Common Haircap Moss	Abundant
<i>Sphagnum</i> spp.	Bog mosses	Occasional

**Habitat Map**



## Photographic Record



**Image 1: Acid Grassland**



**Image 2: Close-up of Acid Grassland Vegetation**




TARGET NOTES - ID No. 87		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 03/08/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4445-b	<b>Townland:</b> Ballymoloney	<b>Grid Ref:</b> 163379, 171516
<b>Target note no.:</b> TN4		<b>Area:</b> 5.6ha
<b>Ecological Value:</b> Local Importance (Higher Value)		
<b>Habitat code</b> GS3 / HH1 / WS1	Several fields in an upland area, comprising a mosaic of Acid Grassland GS3, Dry Siliceous Heath HH1 and <i>Ulex</i> -dominated Scrub WS1.	
<b>Habitat Map</b> 		

## Photographic Record



**Image 1: Overview of area.**



TARGET NOTES - ID No. 88		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 03/08/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4445-b	<b>Townland:</b> Killeagy (Goonan)	<b>Grid Ref:</b> 163576, 171984
<b>Target note no.:</b> TN5		<b>Area:</b> 1.1ha
<b>Ecological Value:</b> <b>Local Importance (Higher Value)</b>		
<b>Habitat code</b>  FW1 / WN5	Eroding upland river (Ailleenagommaun River) FW1 in a deep ravine in the valley between Lackereagh and Lackereagh Beg peaks. The sides of the ravine consist of Riparian Woodland WN5, dominated by Willows ( <i>Salix</i> spp.). Unable to access the ground flora due to the steep sides of the ravine.	
<b>Habitat Map</b>		
		



## Photographic Record



**Image 1: Riparian Woodland in Ravine**



**Image 2: Abundant Willows (*Salix* spp.)**



**TARGET NOTES - ID No. 89**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 03/08/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4445-b	<b>Townland:</b> Ballymoloney	<b>Grid Ref:</b> 163172, 171487
<b>Target note no.:</b> TN6		<b>Area:</b> 0.7ha
<b>Ecological Value:</b> <b>Local Importance (Higher Value)</b>		

<b>Habitat code</b>	<b>GS3</b>	<p>This field is classified as an Acid Grassland. The sward is quite low, with Sweet Vernal (<i>Anthoxanthum odoratum</i>) dominant. Bents (<i>Agrostis</i> spp.) and fescues (<i>Festuca</i> spp.) are abundant. This area has been semi-improved, with species common to Improved Agricultural Grassland GA1 present in the sward (including Crested Dog's-tail and Clovers).</p>

Scientific Name	Common Name	DAFOR
<i>Agrostis</i> spp.	Bents	Abundant
<i>Anthoxanthum odoratum</i>	Sweet Vernal	Dominant
<i>Cynosurus cristatus</i>	Crested Dog's-tail	Frequent
<i>Plantago lanceolata</i>	Ribwort Plantain	Frequent
<i>Cirsium palustre</i>	Marsh Thistle	Frequent
<i>Trifolium repens</i>	White Clover	Abundant
<i>Succisa pratensis</i>	Devil's-bit Scabious	Occasional
<i>Prunella vulgaris</i>	Selfheal	Frequent
<i>Festuca</i> spp.	Fescues	Frequent
<i>Cynosurus cristatus</i>	Crested Dog's-tail	Frequent
<i>Cerastium fontanum</i>	Common Mouse-ear	Frequent
<i>Potentilla erecta</i>	Tormentil	Occasional
<i>Achillea millefolium</i>	Yarrow	Frequent
<i>Centaurea nigra</i>	Knapweed	Frequent

**Habitat Map**



## Photographic Record



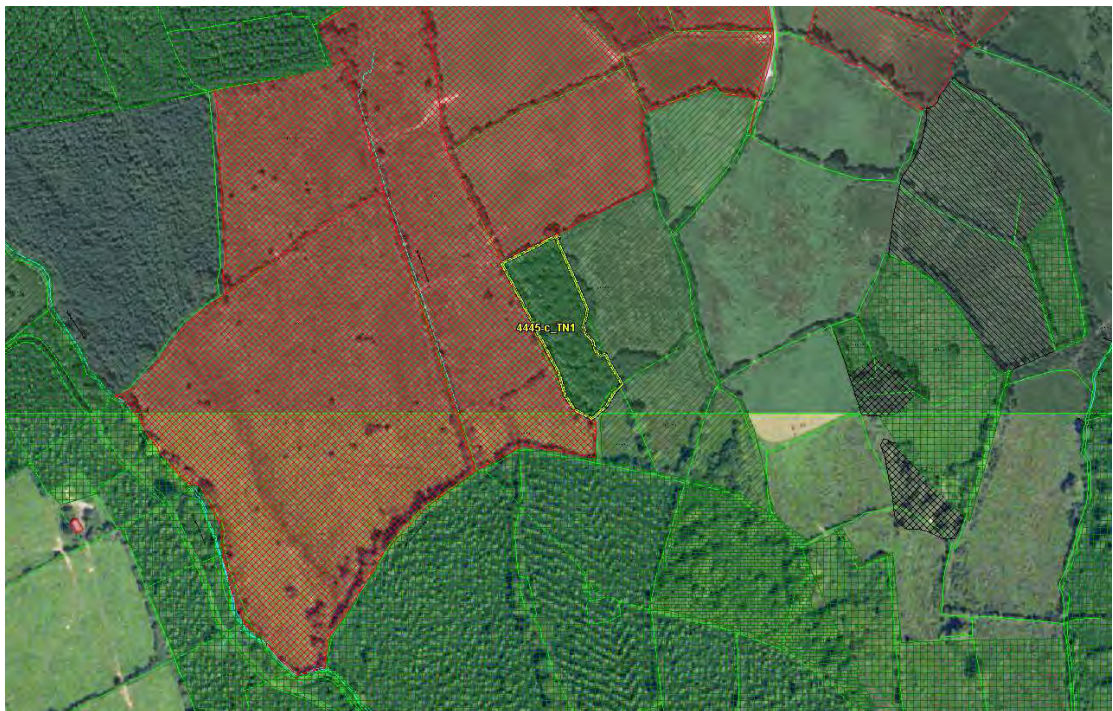
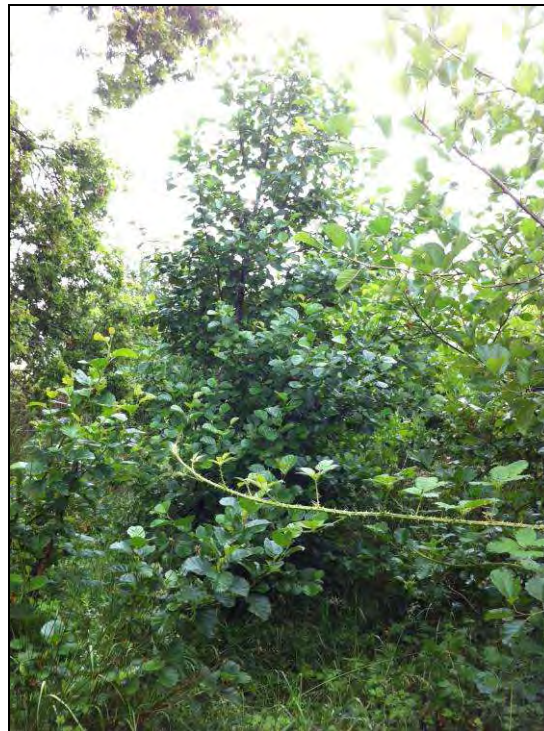
**Image 1: Semi-Improved Acid Grassland**



**Image 2: Close-up of Acid Grassland Vegetation with abundant *Anthoxanthum odoratum***



TARGET NOTES - ID No. 90																																																																	
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 27/07/11																																																															
<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare																																																															
<b>1:2,500 Sheet no:</b> 4445-c	<b>Townland:</b> Cappanashlish	<b>Grid Ref:</b> 161379, 170943																																																															
<b>Target note no.:</b> TN1		<b>Area:</b> 1.9ha																																																															
<b>Ecological value:</b> <b>Local Importance (Higher Value)</b>																																																																	
<b>Habitat code</b>  WN6	<p>Small very dense copse of woodland. Species present appear to correspond to Wet willow-alder-ash woodland WN6, although Ash was not observed at this site. Sessile oak (<i>Quercus petraea</i>) growing at the edges only, inside the copse Alder (<i>Alnus glutinosa</i>) is abundant, as is Blackthorn (<i>Prunus spinosa</i>) scrub. Willows (<i>Salix</i> sp.) and Birch (<i>Betula</i> sp.) are frequent and the ground layer is quite species-poor and overgrown with Brambles (<i>Rubus fruticosus</i> agg.) and rank tussocky grasses and rushes. Signs of deer observed (tracks and damage to tree bark). 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**Habitat Map****Photographic Record**

**Image 1. Alder is abundant and the area is densely vegetated with small trees and Brambles.**





**Image 2. Close up of field layer at woodland edge – grasses, Brambles, Creeping buttercup, Greater bird's-foot-trefoil and Bedstraw are all present.**

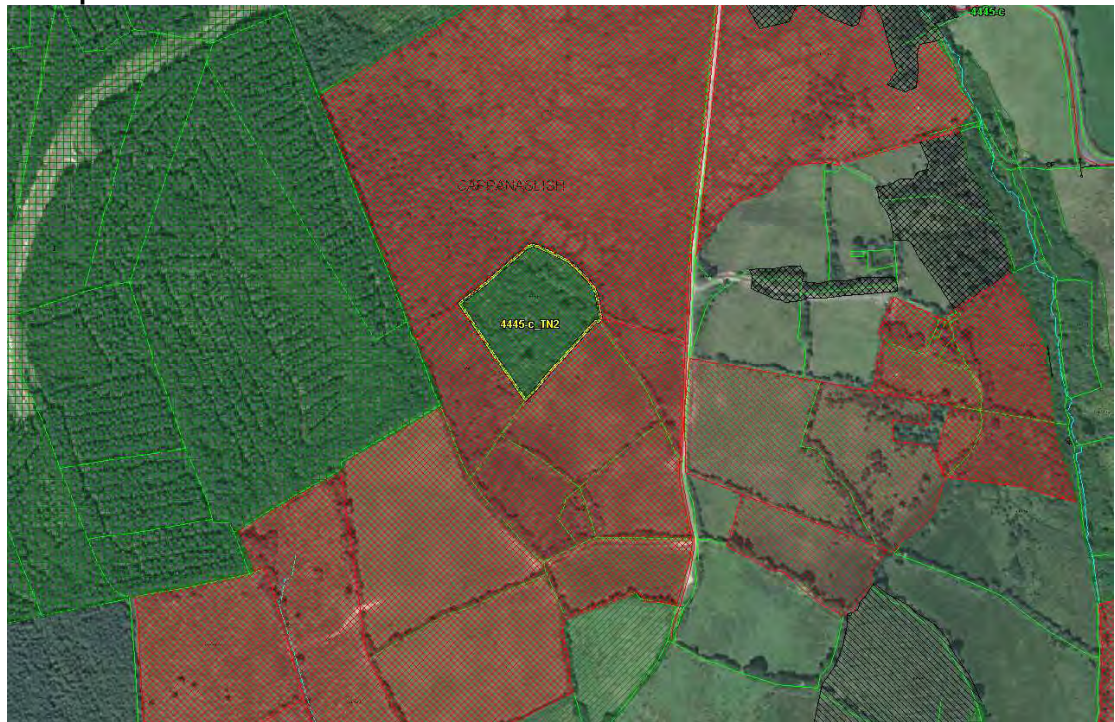


**Image 3. Young Alder tree with bark damage caused by deer.**





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<b>Target note no.:</b> TN2		<b>Area:</b> 1.3ha																																																			
<b>Ecological value:</b> County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.																																																					
<b>Habitat code</b>  WN6	<p>Woodland dominated by Willows on a slight slope. Deep brown soils – poached by horses. Ground flora is rich in grasses and broadleaved herbs. Species list below.</p> <p>This woodland seems to fit best into Bog Woodland WN7 for its tree species composition, however it appears to be seasonally waterlogged and its field layer does have a grassy appearance as described in Wet Willow-Alder-Ash Woodland WN6.</p> <p>Trees and shrubs:</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Salix</i> spp.</td> <td>Willows</td> <td>Dominant</td> </tr> <tr> <td><i>Salix aurita</i></td> <td>Eared willow</td> <td>Abundant</td> </tr> <tr> <td><i>Betula</i> sp.</td> <td>Birch</td> <td>Frequent</td> </tr> <tr> <td><i>Sorbus aucuparia</i></td> <td>Rowan</td> <td>Frequent</td> </tr> <tr> <td><i>Crataegus monogyna</i></td> <td>Hawthorn</td> <td>Occasional</td> </tr> <tr> <td><i>Ilex aquifolium</i></td> <td>Holly</td> <td>Occasional</td> </tr> </tbody> </table> <p>Ground flora:</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Prunella vulgaris</i></td> <td>Selfheal</td> <td>Occasional</td> </tr> <tr> <td><i>Ranunculus repens</i></td> <td>Creeping buttercup</td> <td>Frequent</td> </tr> <tr> <td><i>Thuidium tamariscinum</i></td> <td>Common Tamarisk-moss</td> <td>Frequent</td> </tr> <tr> <td><i>Oxalis acetosella</i></td> <td>Wood sorrel</td> <td>Occasional</td> </tr> <tr> <td><i>Rubus fruticosus</i> agg.</td> <td>Bramble</td> <td>Abundant</td> </tr> <tr> <td><i>Viola</i> sp.</td> <td>Violet</td> <td>Rare</td> </tr> <tr> <td><i>Agrostis</i> sp.</td> <td>Bent grass</td> <td>Abundant to Dominant</td> </tr> <tr> <td><i>Pteridium aquilinum</i></td> <td>Bracken</td> <td>Frequent</td> </tr> <tr> <td><i>Digitalis purpurea</i></td> <td>Foxglove</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Salix</i> spp.	Willows	Dominant	<i>Salix aurita</i>	Eared willow	Abundant	<i>Betula</i> sp.	Birch	Frequent	<i>Sorbus aucuparia</i>	Rowan	Frequent	<i>Crataegus monogyna</i>	Hawthorn	Occasional	<i>Ilex aquifolium</i>	Holly	Occasional	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Prunella vulgaris</i>	Selfheal	Occasional	<i>Ranunculus repens</i>	Creeping buttercup	Frequent	<i>Thuidium tamariscinum</i>	Common Tamarisk-moss	Frequent	<i>Oxalis acetosella</i>	Wood sorrel	Occasional	<i>Rubus fruticosus</i> agg.	Bramble	Abundant	<i>Viola</i> sp.	Violet	Rare	<i>Agrostis</i> sp.	Bent grass	Abundant to Dominant	<i>Pteridium aquilinum</i>	Bracken	Frequent	<i>Digitalis purpurea</i>	Foxglove	Occasional
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**Habitat Map****Photographic Record**

**Image 1. Willow dominated woodland with occasional Hawthorn, field layer is abundant in Bent grasses with frequent Brambles and Bracken.**





**Image 2. The ground is quite heavily poached in areas. Occasional Foxgloves are present.**



**Image 3. Close up of field layer with abundant Bent grass, Creeping buttercup, Wood sorrel and Brambles.**

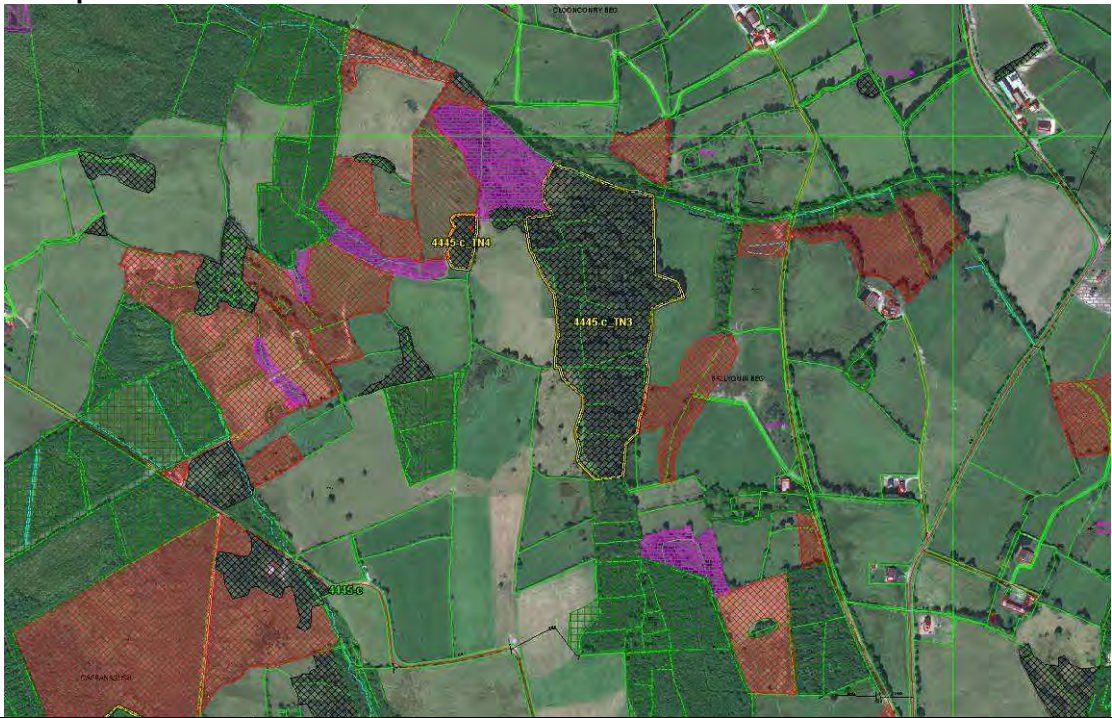


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<b>Target note no.:</b> TN3		<b>Area:</b> 7.3ha																																																																		
<b>Ecological value:</b> <b>Local Importance (Higher Value)</b>																																																																				
<b>Habitat code</b>  <b>WD1 / FW1</b>	<p>Woodland composed of planted/ornamental trees and native species, corresponds to (Mixed) Broadleaved woodland WD1. Ground flora is rich in grasses and broadleaved herbs. However, there are some patches where leaf litter/bare ground has considerably high cover i.e. under Beech trees. The area is heavily poached in areas where tracks run through the woodland, otherwise it is located on quite a steep slope. There is an Upland/eroding stream FW1 located at the Northern end of the woodland. Species list below.</p> <p>This woodland is best categorised as (Mixed) Broadleaved Woodland WD1 however, it does contain a large proportion of native species in the canopy and has a well-developed field layer and therefore has a high ecological value in a local context.</p> <p>Trees and shrubs:</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;"><i>Castanea sativa</i></td><td style="padding: 2px;">Sweet chestnut</td><td style="padding: 2px;">Abundant</td></tr> <tr><td style="padding: 2px;"><i>Quercus petraea</i></td><td style="padding: 2px;">Sessile oak</td><td style="padding: 2px;">Abundant</td></tr> <tr><td style="padding: 2px;"><i>Acer pseudoplatanus</i></td><td style="padding: 2px;">Sycamore</td><td style="padding: 2px;">Rare</td></tr> <tr><td style="padding: 2px;"><i>Sorbus aucuparia</i></td><td style="padding: 2px;">Rowan</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Crataegus monogyna</i></td><td style="padding: 2px;">Hawthorn</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Fagus sylvatica</i></td><td style="padding: 2px;">Beech</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Corylus avellana</i></td><td style="padding: 2px;">Hazel</td><td style="padding: 2px;">Rare</td></tr> <tr><td style="padding: 2px;"><i>Lonicera periclymenum</i></td><td style="padding: 2px;">Honeysuckle</td><td style="padding: 2px;">Occasional</td></tr> </tbody> </table> <p>Ground flora:</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Species (<i>Latin name</i>)</th> <th style="text-align: left; padding: 2px;">Species (common name)</th> <th style="text-align: left; padding: 2px;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;"><i>Stellaria holostea</i></td><td style="padding: 2px;">Greater chickweed</td><td style="padding: 2px;">Abundant in patches</td></tr> <tr><td style="padding: 2px;"><i>Lysimachia nemorum</i></td><td style="padding: 2px;">Yellow pimpernel</td><td style="padding: 2px;">Rare</td></tr> <tr><td style="padding: 2px;"><i>Hyacinthoides non-scripta</i></td><td style="padding: 2px;">Bluebell</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Oxalis acetosella</i></td><td style="padding: 2px;">Wood sorrel</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Rubus fruticosus</i> agg.</td><td style="padding: 2px;">Bramble</td><td style="padding: 2px;">Frequent</td></tr> <tr><td style="padding: 2px;"><i>Viola</i> sp.</td><td style="padding: 2px;">Violet</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Agrostis</i> sp.</td><td style="padding: 2px;">Bent grass</td><td style="padding: 2px;">Frequent to Abundant</td></tr> <tr><td style="padding: 2px;"><i>Pteridium aquilinum</i></td><td style="padding: 2px;">Bracken</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Geum urbanum</i></td><td style="padding: 2px;">Wood Aven</td><td style="padding: 2px;">Rare</td></tr> <tr><td style="padding: 2px;"><i>Geranium robertianum</i></td><td style="padding: 2px;">Herb Robert</td><td style="padding: 2px;">Rare</td></tr> <tr><td style="padding: 2px;"><i>Hedera helix</i></td><td style="padding: 2px;">Ivy</td><td style="padding: 2px;">Occasional</td></tr> <tr><td style="padding: 2px;"><i>Circaea lutiana</i></td><td style="padding: 2px;">Enchanter's-nightshade</td><td style="padding: 2px;">Occasional</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Castanea sativa</i>	Sweet chestnut	Abundant	<i>Quercus petraea</i>	Sessile oak	Abundant	<i>Acer pseudoplatanus</i>	Sycamore	Rare	<i>Sorbus aucuparia</i>	Rowan	Frequent	<i>Crataegus monogyna</i>	Hawthorn	Frequent	<i>Fagus sylvatica</i>	Beech	Frequent	<i>Corylus avellana</i>	Hazel	Rare	<i>Lonicera periclymenum</i>	Honeysuckle	Occasional	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Stellaria holostea</i>	Greater chickweed	Abundant in patches	<i>Lysimachia nemorum</i>	Yellow pimpernel	Rare	<i>Hyacinthoides non-scripta</i>	Bluebell	Frequent	<i>Oxalis acetosella</i>	Wood sorrel	Frequent	<i>Rubus fruticosus</i> agg.	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	<i>Blechnum spicant</i>	Hard fern	Occasional
		Ferns	Occasional to Frequent
		Mosses	Occasional to Frequent
		Grasses	Occasional to Frequent

Habitat Map



Photographic Record



Image 1. Sweet chestnut and Sessile oak are both abundant in the woodland canopy.





**Image 2. Field layer with Greater chickweed, Wood sorrel, Herb Robert and Bluebells (in seed).**



**Image 3. This area of the woodland has a Beech canopy, is rich in leaf litter and poor ground flora.**



**Image 4. At the Northern end of the woodland a stream forms a natural boundary between the woodland and adjacent farmland.**



**TARGET NOTES - ID No. 93**

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<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4445-c	<b>Townland:</b> Cappanaslish	<b>Grid Ref:</b> 161189, 170324
<b>Target note no.:</b> TN4		<b>Area:</b> 0.34ha

**Ecological value:** **Local Importance (Higher Value)**

<b>Habitat code</b>	Remnants of planted shubbery, now very overgrown with scrub and Bracken – follows an old stone wall and has a corrugated iron shed located within it. Although it is composed of a mix of native and non-native species it best corresponds to Ornamental/ non-native Shrubs WS3. Species list below.
WS3	

**Species List**

Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale
<i>Fuschia magellanica</i>	Fuschia	Abundant
<i>Quercus petraea</i>	Sessile oak	Abundant
<i>Fagus sylvatica</i>	Beech	Frequent
<i>Prunus spinosa</i>	Blackthorn	Abundant
<i>Pteridium aquilinum</i>	Bracken	Abundant
<i>Rubus fruticosus</i> agg.	Bramble	Frequent

**Habitat Map**

## Photographic Record



**Image 1. Fuschia is abundant and covers the old stone wall.**



**Image 2. Beech and Sessile oak are abundant here in the treeline.**



**TARGET NOTES - ID No. 94**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 03/08/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4445-d	<b>Townland:</b> Fahy More	<b>Grid Ref:</b> 163581, 169642
<b>Target note no.:</b> TN1		<b>Area:</b> 1.1ha

**Ecological Value:** Local Importance (Higher Value)

**Habitat code**  
GS2/GS4

Wet Grassland on gently sloping hillside which had just been mown at time of survey. Leftover edges indicate Wet Grassland vegetation with good species diversity. Quite mossy, with lots of grey lichen (see photos).

Small mammal tracks going across field and into drain – possibly otter.

**Species List**

Common Name	Latin Name	DAFOR
Jointed/Sharp-flowered Rush	<i>Juncus articulatus/acutiflorus</i>	Frequent
Compact Rush	<i>Juncus conglomeratus</i>	Abundant
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
False Oat-grass	<i>Arrhenatherum elatius</i>	Abundant
Dandelion	<i>Taraxacum officinale</i> agg.	Occasional
Devil's-bit Scabious	<i>Succisa pratensis</i>	Frequent
Mouse-ear Hawkweed	<i>Pilosella officinarum</i>	Abundant
Lousewort	<i>Pedicularis sylvatica</i> ssp. <i>sylvatica</i>	Abundant
Tormentil	<i>Potentilla erecta</i>	Abundant

**Habitat Map**



## Photographic Record



**Image 1: Recently-mown field**



**Image 2: Edge vegetation**





**Image 3: Close-up of mown area with grey lichen**



**Image 4: Mammal tracks through field**





TARGET NOTES - ID No. 95																																																																							
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 12/08/11																																																																					
Surveyor: Jean Hamilton		County name: Clare																																																																					
Sheet no: 4446-a	Townland: Lackereagh More	Grid Ref: 164932, 170634																																																																					
Target note no.: TN1		Area: 1.7ha																																																																					
Ecological Value: <b>Local Importance (Higher Value)</b>																																																																							
Habitat code  GS4	<p>Species-rich Wet Grassland GS4 on gently sloping ground with abundant Devil's-bit Scabious (<i>Succisa pratensis</i>).</p> <table border="1"> <thead> <tr> <th>Scientific Name</th> <th>Common Name</th> <th>DAFOR</th> </tr> </thead> <tbody> <tr><td><i>Agrostis stolonifera</i></td><td>Creeping Bent</td><td>Frequent</td></tr> <tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal</td><td>Frequent</td></tr> <tr><td><i>Carex echinata</i></td><td>Star Sedge</td><td>Frequent</td></tr> <tr><td><i>Carex panicea</i></td><td>Carnation Sedge</td><td>Abundant</td></tr> <tr><td><i>Cynosurus cristatus</i></td><td>Crested Dog's-tail</td><td>Occasional</td></tr> <tr><td><i>Euphrasia</i> sp.</td><td>Eyebright</td><td>Abundant</td></tr> <tr><td><i>Festuca</i> spp.</td><td>Fescues</td><td>Frequent</td></tr> <tr><td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Frequent</td></tr> <tr><td><i>Hypochaeris radicata</i></td><td>Cat's-ear</td><td>Occasional</td></tr> <tr><td><i>Juncus articulatus/acutiflorus</i></td><td>Jointed/Sharp-flowered Rush</td><td>Dominant</td></tr> <tr><td><i>Juncus effusus</i></td><td>Soft Rush</td><td></td></tr> <tr><td><i>Lotus pedunculatus</i></td><td>Greater Bird's-foot Trefoil</td><td>Frequent</td></tr> <tr><td><i>Luzula multiflora</i> ssp. <i>congesta</i></td><td>Heath Woodrush</td><td></td></tr> <tr><td><i>Pedicularis sylvatica</i> ssp. <i>sylvatica</i></td><td>Lousewort</td><td>Frequent</td></tr> <tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Occasional</td></tr> <tr><td><i>Prunella vulgaris</i></td><td>Selfheal</td><td>Frequent</td></tr> <tr><td><i>Ranunculus acris</i></td><td>Meadow Buttercup</td><td>Occasional</td></tr> <tr><td><i>Ranunculus flammula</i></td><td>Lesser Spearwort</td><td>Occasional</td></tr> <tr><td><i>Ranunculus repens</i></td><td>Creeping Buttercup</td><td>Occasional</td></tr> <tr><td><i>Rhinanthus minor</i></td><td>Yellow-rattle</td><td>Rare</td></tr> <tr><td><i>Succisa pratensis</i></td><td>Devil's-bit Scabious</td><td>Abundant</td></tr> <tr><td><i>Trifolium</i> spp.</td><td>Clovers</td><td>Frequent</td></tr> </tbody> </table>		Scientific Name	Common Name	DAFOR	<i>Agrostis stolonifera</i>	Creeping Bent	Frequent	<i>Anthoxanthum odoratum</i>	Sweet Vernal	Frequent	<i>Carex echinata</i>	Star Sedge	Frequent	<i>Carex panicea</i>	Carnation Sedge	Abundant	<i>Cynosurus cristatus</i>	Crested Dog's-tail	Occasional	<i>Euphrasia</i> sp.	Eyebright	Abundant	<i>Festuca</i> spp.	Fescues	Frequent	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Hypochaeris radicata</i>	Cat's-ear	Occasional	<i>Juncus articulatus/acutiflorus</i>	Jointed/Sharp-flowered Rush	Dominant	<i>Juncus effusus</i>	Soft Rush		<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	Frequent	<i>Luzula multiflora</i> ssp. <i>congesta</i>	Heath Woodrush		<i>Pedicularis sylvatica</i> ssp. <i>sylvatica</i>	Lousewort	Frequent	<i>Potentilla erecta</i>	Tormentil	Occasional	<i>Prunella vulgaris</i>	Selfheal	Frequent	<i>Ranunculus acris</i>	Meadow Buttercup	Occasional	<i>Ranunculus flammula</i>	Lesser Spearwort	Occasional	<i>Ranunculus repens</i>	Creeping Buttercup	Occasional	<i>Rhinanthus minor</i>	Yellow-rattle	Rare	<i>Succisa pratensis</i>	Devil's-bit Scabious	Abundant	<i>Trifolium</i> spp.	Clovers	Frequent
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**Habitat Map****Photographic Record**

**Image 1: Wet Grassland with abundant Devil's-bit Scabious**





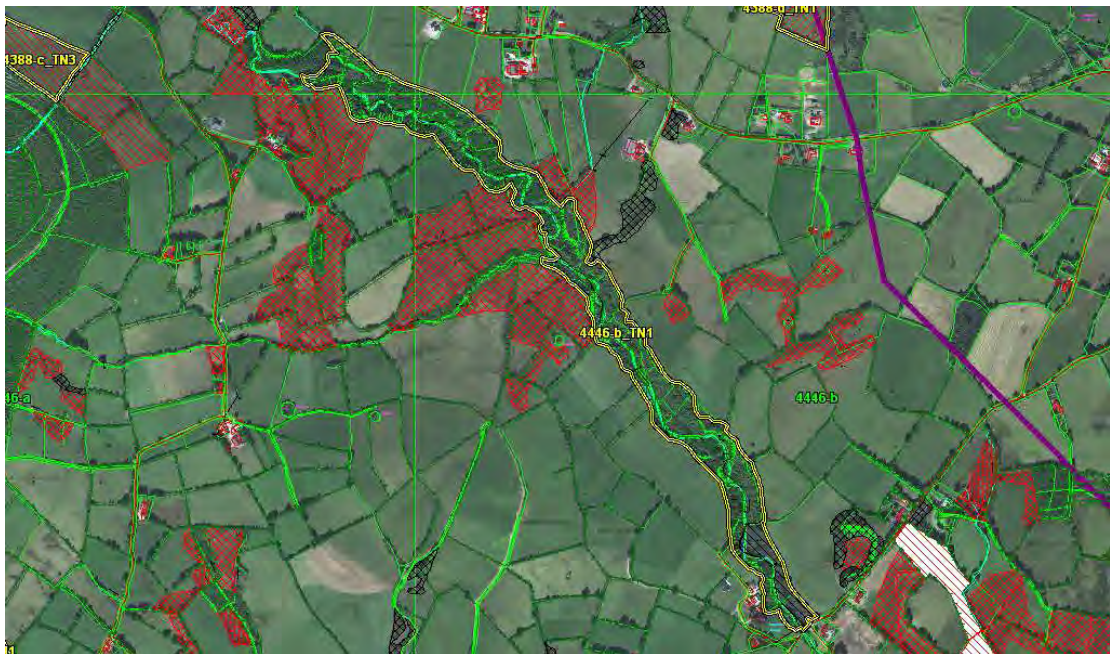
**Image 2: Close-up of Wet Grassland vegetation**



**Image 3: Orchid spike and Eyebright growing in Wet Grassland**





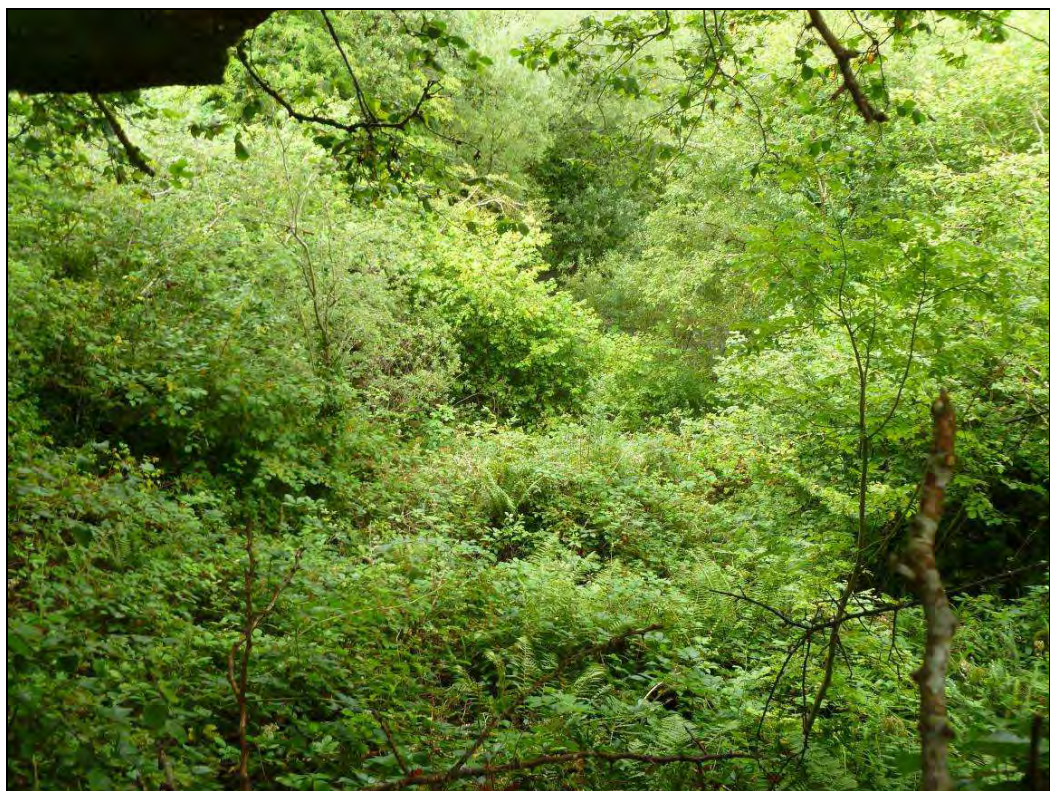
TARGET NOTES - ID No. 96		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 11/08/11
Surveyor: Jean Hamilton		County name: Clare
Sheet no: 4446-b	Townland: Knockaderreen	Grid Ref: 166494, 171423
Target note no.: TN1		Area: 17ha
Ecological Value: <b>County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.</b>		
Habitat code  WN2/WN5	Eroding Upland River FW1 in a deep ravine. Very rapid flow. Woodland on either side of the river composed mainly of Willows ( <i>Salix</i> spp.) with occasional Ash ( <i>Fraxinus excelsior</i> ) and Alder ( <i>Alnus glutinosa</i> ). Also abundant Hawthorn ( <i>Crataegus monogyna</i> ) and Hazel ( <i>Corylus avellana</i> ) on slopes of ravine. The woodland on the western side of the river is probably best described as Oak-Ash-Hazel woodland WN2; this occurs on the steep slopes of the ravine and quite dry, with a field layer dominated by Bramble ( <i>Rubus fruticosus</i> agg.) with abundant ferns. The woodland on the eastern side is on a gentler slope and is dominated by Willows ( <i>Salix</i> spp.) and best described as Riparian Woodland WN5. Some areas along the river have been planted with conifers, and are therefore classified as Conifer Plantation WD4.	
Habitat Map		
		



## Photographic Record



**Image 1: View of Woodland from top of slope**




**Image 2: Ash/Hazel woodland**





**Image 3: Hazel growing on top of slope**



TARGET NOTES - ID No. 97		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 28/07/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4446-c	<b>Townland:</b> Kilroughil	<b>Grid Ref:</b> 165555, 169479
<b>Target note no.:</b> TN1		<b>Area:</b> 0.9ha
<b>Ecological Value:</b> <b>Local Importance (Higher Value)</b>		
<b>Habitat code</b>  GS4	Grassland on flat ground, dominated by Yorkshire Fog ( <i>Holcus lanatus</i> ), Jointed/Sharp-flowered Rush ( <i>Juncus articulatus/acutiflorus</i> ) and Crested Dog's-tail ( <i>Cynosurus cristatus</i> ). Meadow Vetchling ( <i>Lathyrus pratensis</i> ) is abundant. Other species noted were Creeping Buttercup ( <i>Ranunculus repens</i> ), Meadow Foxtail ( <i>Alopecurus pratensis</i> ), Red Clover ( <i>Trifolium pratense</i> ), White Clover ( <i>Trifolium repens</i> ), Marsh Thistle ( <i>Cirsium palustre</i> ), Yarrow ( <i>Achillea millefolium</i> ), Common Mouse-ear ( <i>Cerastium fontanum</i> ), Sweet Vernal-grass ( <i>Anthoxanthum odoratum</i> ) and Curled Dock ( <i>Rumex crispus</i> ).	
<b>Habitat Map</b>		
		



## Photographic Record



**Image 1: Wet Grassland Overview**



**Image 2: Close-up of Wet Grassland Vegetation**



TARGET NOTES - ID No. 98

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 28/07/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4446-c	<b>Townland:</b> Kilroughil	<b>Grid Ref:</b> 165508, 169434
<b>Target note no.:</b> TN2		<b>Area:</b> 1.1ha

**Ecological Value: Local Importance (Higher Value)**

Habitat code

Similar to adjacent field (TN1) but drier, with rushes absent. Best classified as Dry Meadows and Grassy Verges GS2.

GS2

Scientific Name	Common Name	DAFOR
<i>Holcus lanatus</i>	Yorkshire Fog	Dominant
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Abundant
<i>Agrostis stolonifera</i>	Creeping Bent	Abundant
<i>Dactylis glomerata</i>	Cock's-foot	Occasional
<i>Cynosurus cristatus</i>	Crested Dog's-tail	Abundant
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	Abundant
<i>Trifolium pratense</i>	Red Clover	Abundant
<i>Trifolium repens</i>	White Clover	Occasional
<i>Vicia cracca</i>	Tufted Vetch	Occasional
<i>Achillea millefolium</i>	Yarrow	Rare
<i>Senecio jacobea</i>	Ragwort	Rare
<i>Cerastium fontanum</i>	Common Mouse-ear	Occasional
<i>Centaureum erythraea</i>	Common Centaury	Occasional

Habitat Map	
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## Photographic Record



**Image 1: Dry meadow GS2 with Tufted vetch and Bird's-foot Trefoil**



**Image 2: Common Centaury**



TARGET NOTES - ID No. 99																																																														
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 28/07/11																																																												
Surveyor: Jean Hamilton		County name: Clare																																																												
Sheet no: 4446-c	Townland: Kilroughil	Grid Ref: 165421, 169168																																																												
Target note no.: TN3		Area: 1.4ha																																																												
Ecological Value: <b>International Importance – linked to the EU Annex I habitat 6410 <i>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)</i></b>																																																														
Habitat code  GS4	<p><b>Description:</b> Wet Grassland on gently sloping ground, with Purple Moor-grass (<i>Molinia caerulea</i>) abundant – this is linked to the Annex I habitat 6410 <i>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)</i>. No signs of grazing or recent improvement.</p> <p><b>Threats:</b> Meadowsweet (<i>Filipendula</i>) is quite tall and rank in places, and is in danger of taking over.</p> <p><b>Species List:</b></p> <table> <tr> <th>Scientific Name</th><th>Common Name</th><th>DAFOR</th></tr> <tr> <td><i>Molinia caerulea</i></td><td>Purple Moor-grass</td><td>Abundant</td></tr> <tr> <td><i>Juncus articulatus/acutiflorus</i></td><td>Jointed/Sharp-flowered Rush</td><td>Abundant</td></tr> <tr> <td><i>Juncus conglomeratus</i></td><td>Compact Rush</td><td>Abundant</td></tr> <tr> <td><i>Luzula multiflora</i> ssp <i>multiflora</i></td><td>Heath Rush</td><td>Abundant</td></tr> <tr> <td><i>Succisa pratensis</i></td><td>Devil's-bit Scabious</td><td>Abundant</td></tr> <tr> <td><i>Filipendula ulmaria</i></td><td>Meadowsweet</td><td>Frequent</td></tr> <tr> <td><i>Carex echinata</i></td><td>Star Sedge</td><td>Frequent</td></tr> <tr> <td><i>Lotus pedunculatus</i></td><td>Greater Bird's-foot Trefoil</td><td>Abundant</td></tr> <tr> <td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Frequent</td></tr> <tr> <td><i>Dactylorhiza maculata</i></td><td>Heath Spotted-orchid</td><td>Frequent</td></tr> <tr> <td><i>Cirsium palustre</i></td><td>Marsh Thistle</td><td>Frequent</td></tr> <tr> <td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Abundant</td></tr> <tr> <td><i>Agrostis</i> spp.</td><td>Bents</td><td>Frequent</td></tr> <tr> <td><i>Ranunculus acris</i></td><td>Meadow Buttercup</td><td>Occasional</td></tr> <tr> <td><i>Juncus effusus</i></td><td>Soft Rush</td><td>Occasional</td></tr> <tr> <td><i>Carex panicea</i></td><td>Carnation Sedge</td><td>Frequent</td></tr> <tr> <td><i>Carex nigra</i></td><td>Common Sedge</td><td>Occasional</td></tr> <tr> <td><i>Galium palustre</i></td><td>Marsh Bedstraw</td><td>Occasional</td></tr> <tr> <td><i>Arrhenatherum elatius</i></td><td>False Oat-grass</td><td>Occasional</td></tr> </table>		Scientific Name	Common Name	DAFOR	<i>Molinia caerulea</i>	Purple Moor-grass	Abundant	<i>Juncus articulatus/acutiflorus</i>	Jointed/Sharp-flowered Rush	Abundant	<i>Juncus conglomeratus</i>	Compact Rush	Abundant	<i>Luzula multiflora</i> ssp <i>multiflora</i>	Heath Rush	Abundant	<i>Succisa pratensis</i>	Devil's-bit Scabious	Abundant	<i>Filipendula ulmaria</i>	Meadowsweet	Frequent	<i>Carex echinata</i>	Star Sedge	Frequent	<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	Abundant	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Dactylorhiza maculata</i>	Heath Spotted-orchid	Frequent	<i>Cirsium palustre</i>	Marsh Thistle	Frequent	<i>Potentilla erecta</i>	Tormentil	Abundant	<i>Agrostis</i> spp.	Bents	Frequent	<i>Ranunculus acris</i>	Meadow Buttercup	Occasional	<i>Juncus effusus</i>	Soft Rush	Occasional	<i>Carex panicea</i>	Carnation Sedge	Frequent	<i>Carex nigra</i>	Common Sedge	Occasional	<i>Galium palustre</i>	Marsh Bedstraw	Occasional	<i>Arrhenatherum elatius</i>	False Oat-grass	Occasional
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**Habitat Map****Photographic Record****Image 1: Wet Grassland GS4**






**Image 2: Close-up of Wet Grassland vegetation**





TARGET NOTES - ID No. 100																																																		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 28/07/11																																																
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare																																																
<b>Sheet no:</b> 4446-c	<b>Townland:</b> Kilroughil	<b>Grid Ref:</b> 165170, 169262																																																
<b>Target note no.:</b> TN4		<b>Area:</b> 0.5ha																																																
<b>Ecological Value:</b> <span style="color: red;">International Importance – linked to the EU Annex I habitat 6410 <i>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)</i></span>																																																		
<b>Habitat code</b>  <b>GS4</b>	<p>Wet Grassland on flat ground. Purple Moor-grass (<i>Molinia caerulea</i>) is dominant. The vegetation is quite tall and rank, with no evidence of cutting or grazing.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #d3d3d3;"> <th style="padding: 5px;">Scientific Name</th> <th style="padding: 5px;">Common Name</th> <th style="padding: 5px;">DAFOR</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;"><i>Agrostis capillaris</i></td><td style="padding: 5px;">Bents</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Dactylorhiza maculata</i></td><td style="padding: 5px;">Heath Spotted-Orchid</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Carex nigra</i></td><td style="padding: 5px;">Common Sedge</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Carex echinata</i></td><td style="padding: 5px;">Star Sedge</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Carex panicea</i></td><td style="padding: 5px;">Carnation Sedge</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Luzula multiflora</i> ssp. <i>congesta</i></td><td style="padding: 5px;">Heath Woodrush</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Luzula multiflora</i> ssp. <i>multiflora</i></td><td style="padding: 5px;">Heath Woodrush</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Succisa pratensis</i></td><td style="padding: 5px;">Devil's-bit Scabious</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Molinia caerulea</i></td><td style="padding: 5px;">Purple Moor-grass</td><td style="padding: 5px;">Dominant</td></tr> <tr><td style="padding: 5px;"><i>Juncus conglomeratus</i></td><td style="padding: 5px;">Compact Rush</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Juncus effusus</i></td><td style="padding: 5px;">Soft Rush</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Potentilla erecta</i></td><td style="padding: 5px;">Tormentil</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Lotus pedunculatus</i></td><td style="padding: 5px;">Greater Bird's-foot Trefoil</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Arrhenatherum elatius</i></td><td style="padding: 5px;">False Oat-grass</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Vicia cracca</i></td><td style="padding: 5px;">Tufted Vetch</td><td style="padding: 5px;">Occasional</td></tr> </tbody> </table>		Scientific Name	Common Name	DAFOR	<i>Agrostis capillaris</i>	Bents	Frequent	<i>Dactylorhiza maculata</i>	Heath Spotted-Orchid	Occasional	<i>Carex nigra</i>	Common Sedge	Frequent	<i>Carex echinata</i>	Star Sedge	Abundant	<i>Carex panicea</i>	Carnation Sedge	Frequent	<i>Luzula multiflora</i> ssp. <i>congesta</i>	Heath Woodrush	Occasional	<i>Luzula multiflora</i> ssp. <i>multiflora</i>	Heath Woodrush	Occasional	<i>Succisa pratensis</i>	Devil's-bit Scabious	Frequent	<i>Molinia caerulea</i>	Purple Moor-grass	Dominant	<i>Juncus conglomeratus</i>	Compact Rush	Frequent	<i>Juncus effusus</i>	Soft Rush	Frequent	<i>Potentilla erecta</i>	Tormentil	Abundant	<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	Frequent	<i>Arrhenatherum elatius</i>	False Oat-grass	Occasional	<i>Vicia cracca</i>	Tufted Vetch	Occasional
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## Photographic Record

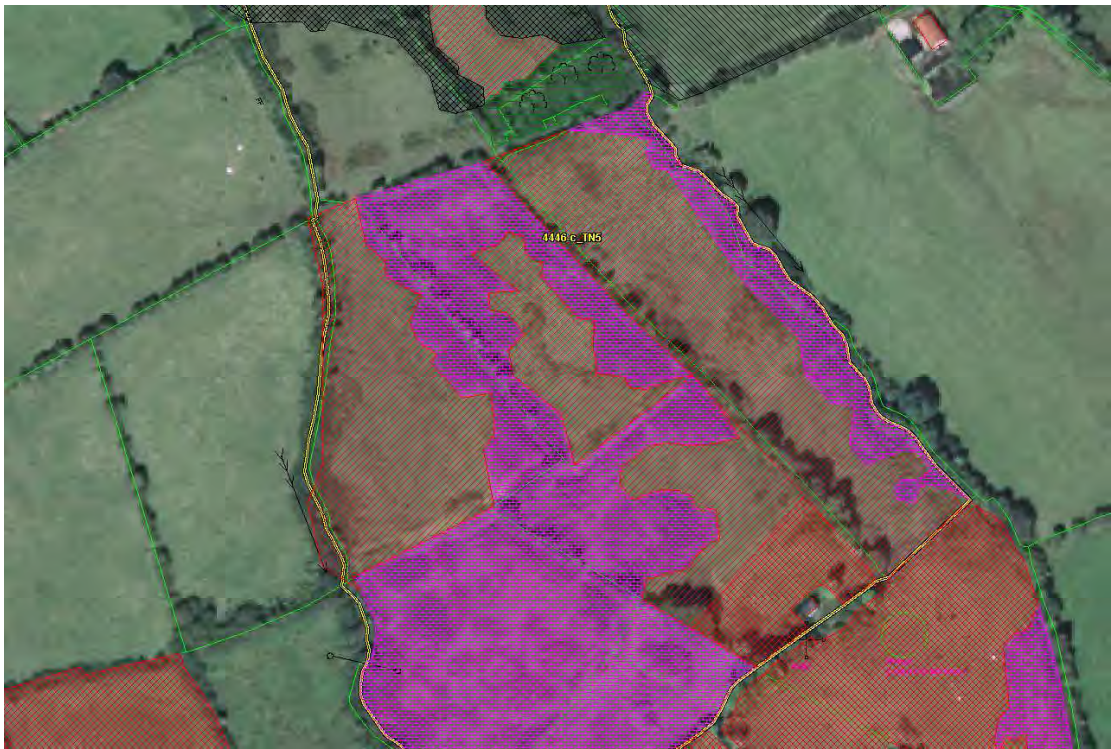


**Image 1: Wet Grassland with *Molina caerulea* dominant**



**Image 2: Close-up of Wet Grassland**



TARGET NOTES - ID No.101																																									
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 28/07/11																																							
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare																																							
<b>Sheet no:</b> 4446-c	<b>Townland:</b> Kilroughil	<b>Grid Ref:</b> 164802, 170286																																							
<b>Target note no.:</b> TN5		<b>Area:</b> 8ha																																							
<b>Ecological Value:</b> <span style="color: red;">Local Importance (Higher Value)</span>																																									
<b>Habitat code</b>  <b>GS2/HD1</b>	<p><b>Description:</b> Abandoned farmland on gently sloping ground. Has been taken over mostly by tall ruderals and rank grasses and is similar to Dry Meadows and Grassy Verges habitat, though there does not appear to be any cutting being carried out. Hare forms were noted here.</p> <p><b>Threats:</b> Dense Bracken is encroaching and will most likely eventually take over, if cutting or grazing is not carried out.</p> <p><b>Species List:</b></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Scientific Name</th> <th style="text-align: left; padding: 5px;">Common Name</th> <th style="text-align: left; padding: 5px;">DAFOR</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;"><i>Centaurea nigra</i></td><td style="padding: 5px;">Knapweed</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Anthoxanthum odoratum</i></td><td style="padding: 5px;">Sweet Vernal-grass</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Holcus lanatus</i></td><td style="padding: 5px;">Yorkshire Fog</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Agrostis</i> spp.</td><td style="padding: 5px;">Bents</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Euphrasia</i> sp.</td><td style="padding: 5px;">Eyebright</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Plantago lanceolata</i></td><td style="padding: 5px;">Ribwort Plantain</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Rhinanthus minor</i></td><td style="padding: 5px;">Yellow Rattle</td><td style="padding: 5px;">Frequent</td></tr> <tr><td style="padding: 5px;"><i>Lotus corniculatus</i></td><td style="padding: 5px;">Bird's-foot Trefoil</td><td style="padding: 5px;">Abundant</td></tr> <tr><td style="padding: 5px;"><i>Achillea millefolium</i></td><td style="padding: 5px;">Yarrow</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Cerastium fontanum</i></td><td style="padding: 5px;">Common Mouse-ear</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Juncus articulatus/acutiflorus</i></td><td style="padding: 5px;">Jointed/Sharp-flowered Rush</td><td style="padding: 5px;">Occasional</td></tr> <tr><td style="padding: 5px;"><i>Trifolium pratense</i></td><td style="padding: 5px;">Red Clover</td><td style="padding: 5px;">Frequent</td></tr> </tbody> </table>		Scientific Name	Common Name	DAFOR	<i>Centaurea nigra</i>	Knapweed	Abundant	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Abundant	<i>Holcus lanatus</i>	Yorkshire Fog	Frequent	<i>Agrostis</i> spp.	Bents	Abundant	<i>Euphrasia</i> sp.	Eyebright	Abundant	<i>Plantago lanceolata</i>	Ribwort Plantain	Frequent	<i>Rhinanthus minor</i>	Yellow Rattle	Frequent	<i>Lotus corniculatus</i>	Bird's-foot Trefoil	Abundant	<i>Achillea millefolium</i>	Yarrow	Occasional	<i>Cerastium fontanum</i>	Common Mouse-ear	Occasional	<i>Juncus articulatus/acutiflorus</i>	Jointed/Sharp-flowered Rush	Occasional	<i>Trifolium pratense</i>	Red Clover	Frequent
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## Photographic Record



**Image 1: Abandoned Farmland with GS2-type vegetation**



**Image 2: Close-up of Vegetation with Abundant Eyebright and Yellow Rattle**





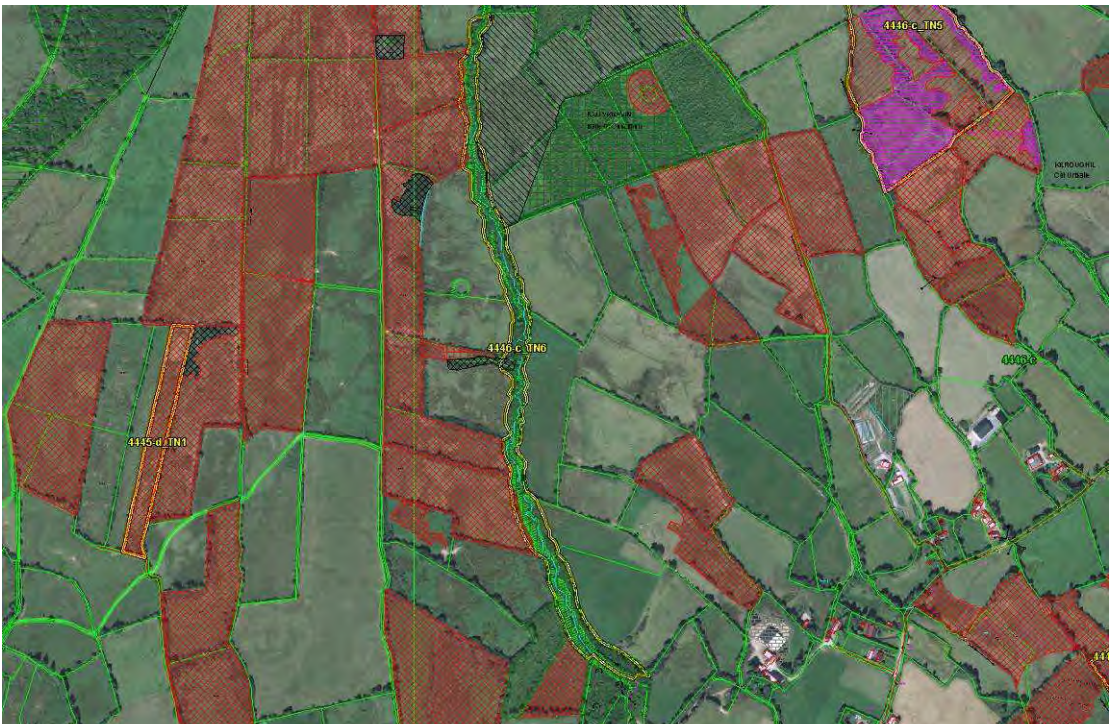
**Image 3: Hare Forms in Long Grass**



**Image 4: Overview of Area with Bracken Invading**





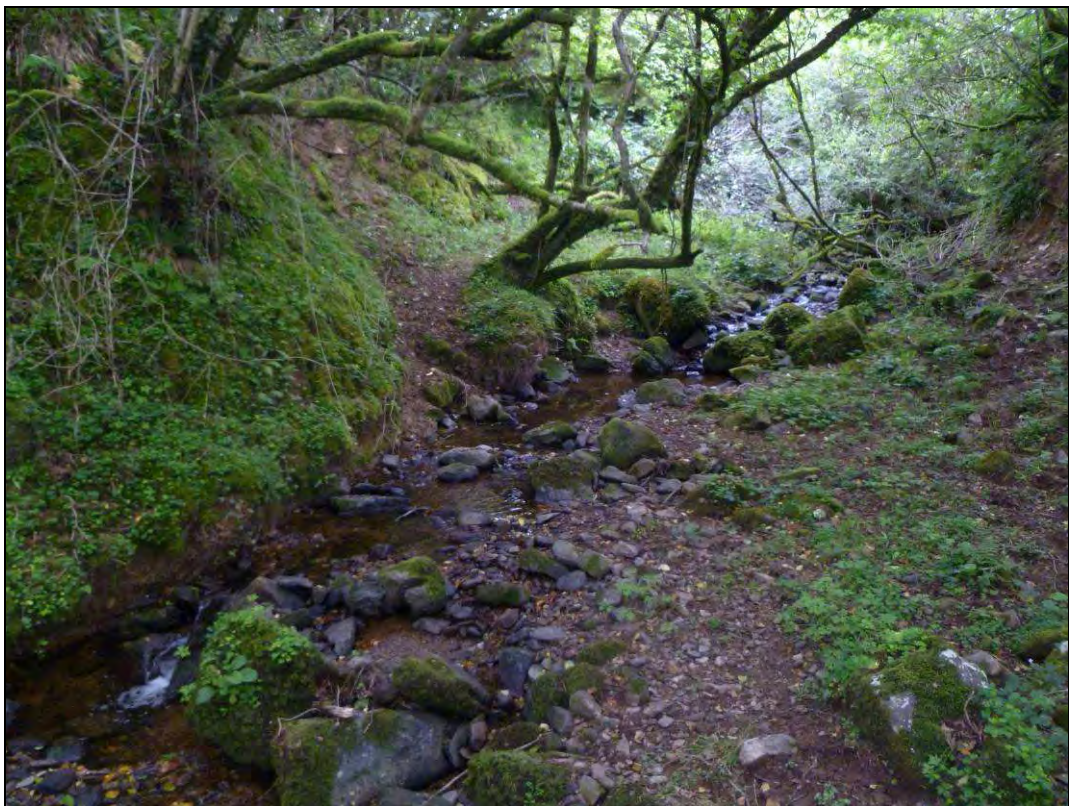
TARGET NOTES - ID No. 102																												
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 28/07/11																										
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare																										
<b>Sheet no:</b> 4446-c	<b>Townland:</b> Kilroughil	<b>Grid Ref:</b> 164160, 169753																										
<b>Target note no.:</b> TN6		<b>Area:</b> 3.5ha																										
<b>Ecological Value:</b> County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.																												
<b>Habitat code</b>  <b>FW1 / WN2</b>	<p>Small stream flowing down a hillside set into a ravine, best classified as an Eroding Upland River FW1. Bordered on both sides by a strip of Hazel woodland, best classified as an Oak-Ash-Hazel Woodland WN2.</p> <p>The woodland has a species-rich field layer (see species list below).</p> <p>A possible badger sett was found in this woodland.</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Scientific Name</th> <th style="text-align: left; padding: 2px;">Common Name</th> </tr> </thead> <tbody> <tr><td><i>Oxalis acetosella</i></td><td>Wood Sorrel</td></tr> <tr><td><i>Viola</i> sp.</td><td>Violet sp. (not in flower)</td></tr> <tr><td><i>Geum urbanum</i></td><td>Wood Aven</td></tr> <tr><td><i>Lysimachia nemorum</i></td><td>Yellow Pimpernel</td></tr> <tr><td><i>Geranium robertianum</i></td><td>Herb Robert</td></tr> <tr><td><i>Circaea lutetiana</i></td><td>Enchanter's Nightshade</td></tr> <tr><td><i>Glechoma hederacea</i></td><td>Ground-Ivy</td></tr> <tr><td><i>Urtica dioeca</i></td><td>Nettle</td></tr> <tr><td><i>Rubus fruticosus</i> agg.</td><td>Brambles</td></tr> <tr><td><i>Epilobium</i> sp.</td><td>Willowherb</td></tr> <tr><td><i>Stellaria media</i></td><td>Common Chickweed</td></tr> <tr><td><i>Politrychum commune</i></td><td>Common Haircap Moss</td></tr> </tbody> </table>		Scientific Name	Common Name	<i>Oxalis acetosella</i>	Wood Sorrel	<i>Viola</i> sp.	Violet sp. (not in flower)	<i>Geum urbanum</i>	Wood Aven	<i>Lysimachia nemorum</i>	Yellow Pimpernel	<i>Geranium robertianum</i>	Herb Robert	<i>Circaea lutetiana</i>	Enchanter's Nightshade	<i>Glechoma hederacea</i>	Ground-Ivy	<i>Urtica dioeca</i>	Nettle	<i>Rubus fruticosus</i> agg.	Brambles	<i>Epilobium</i> sp.	Willowherb	<i>Stellaria media</i>	Common Chickweed	<i>Politrychum commune</i>	Common Haircap Moss
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## Photographic Record



**Image 1: Hazel Woodland beside Stream**



**Image 2: Stream (Eroding Upland River FW1)**





**Image 3: Ground Flora with *Oxalis acetosella***



TARGET NOTES - ID No. 103																																																														
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 10/08/11																																																												
Surveyor: Jean Hamilton		County name: Clare																																																												
Sheet no: 4446-d	Townland: Ross	Grid Ref: 166903, 170148																																																												
Target note no.: TN1		Area: 1.2ha																																																												
Ecological Value: <b>Local Importance (Higher Value)</b>																																																														
Habitat code  GS2	<p>Dry meadow on gently sloping ground. Dominated by tall, tussocky grasses. Looks like it hasn't been cut in a while. Bracken (<i>Pteridium aquilinum</i>) and Hedge Bindweed (<i>Calystegia sepium ssp. sepium</i>) are starting to invade. There are some areas where gravel has been deposited, which are becoming recolonised with mosses, Eyebright (<i>Euphrasia</i> spp.), Bents (<i>Agrostis</i> spp.), Sweet Vernal (<i>Anthoxanthum odoratum</i>) and some conifer saplings (conifer plantation adjacent).</p> <table border="1"> <thead> <tr> <th>Scientific Name</th> <th>Common Name</th> <th>DAFOR</th> </tr> </thead> <tbody> <tr> <td><i>Achillea millefolium</i></td> <td>Yarrow</td> <td>Occasional</td> </tr> <tr> <td><i>Agrostis</i> sp.</td> <td>Bents</td> <td>Abundant</td> </tr> <tr> <td><i>Anthoxanthum odoratum</i></td> <td>Sweet Vernal-grass</td> <td>Frequent</td> </tr> <tr> <td><i>Arrhenatherum elatius</i></td> <td>False Oat-grass</td> <td>Abundant</td> </tr> <tr> <td><i>Calystegia sepium ssp. sepium</i></td> <td>Hedge Bindweed</td> <td>Occasional</td> </tr> <tr> <td><i>Centaurea nigra</i></td> <td>Knapweed</td> <td>Frequent</td> </tr> <tr> <td><i>Centaureum erythraea</i></td> <td>Common Centaury</td> <td>Occasional</td> </tr> <tr> <td><i>Crocsmia x crocosmiflora</i></td> <td>Montbretia</td> <td>Occasional</td> </tr> <tr> <td><i>Dactylis glomerata</i></td> <td>Cock's-foot</td> <td>Abundant</td> </tr> <tr> <td><i>Euphrasia</i> sp.</td> <td>Eyebright</td> <td>Occasional</td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire Fog</td> <td>Abundant</td> </tr> <tr> <td><i>Hypochaeris radicata</i></td> <td>Cat's-ear</td> <td>Abundant</td> </tr> <tr> <td><i>Leucanthemum vulgare</i></td> <td>Ox-eye Daisy</td> <td>Frequent</td> </tr> <tr> <td><i>Lotus corniculatus</i></td> <td>Bird's-foot Trefoil</td> <td>Frequent</td> </tr> <tr> <td><i>Lotus pedunculatus</i></td> <td>Greater Bird's-foot Trefoil</td> <td>Frequent</td> </tr> <tr> <td><i>Pteridium aquilinum</i></td> <td>Bracken</td> <td>Occasional</td> </tr> <tr> <td><i>Rhinanthus minor</i></td> <td>Yellow Rattle</td> <td>Frequent</td> </tr> <tr> <td><i>Vicia cracca</i></td> <td>Tufted Vetch</td> <td>Occasional</td> </tr> <tr> <td><i>Vicia sepium</i></td> <td>Bush Vetch</td> <td>Occasional</td> </tr> </tbody> </table>		Scientific Name	Common Name	DAFOR	<i>Achillea millefolium</i>	Yarrow	Occasional	<i>Agrostis</i> sp.	Bents	Abundant	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Frequent	<i>Arrhenatherum elatius</i>	False Oat-grass	Abundant	<i>Calystegia sepium ssp. sepium</i>	Hedge Bindweed	Occasional	<i>Centaurea nigra</i>	Knapweed	Frequent	<i>Centaureum erythraea</i>	Common Centaury	Occasional	<i>Crocsmia x crocosmiflora</i>	Montbretia	Occasional	<i>Dactylis glomerata</i>	Cock's-foot	Abundant	<i>Euphrasia</i> sp.	Eyebright	Occasional	<i>Holcus lanatus</i>	Yorkshire Fog	Abundant	<i>Hypochaeris radicata</i>	Cat's-ear	Abundant	<i>Leucanthemum vulgare</i>	Ox-eye Daisy	Frequent	<i>Lotus corniculatus</i>	Bird's-foot Trefoil	Frequent	<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	Frequent	<i>Pteridium aquilinum</i>	Bracken	Occasional	<i>Rhinanthus minor</i>	Yellow Rattle	Frequent	<i>Vicia cracca</i>	Tufted Vetch	Occasional	<i>Vicia sepium</i>	Bush Vetch	Occasional
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**Habitat Map****Photographic Record****Image 1: Hay Meadow**





**Image 2: Close-up of Hay Meadow habitat with False Oat-grass, Knapweed and Tufted Vetch**




**Image 3: Deposited gravel recolonising with mosses, grasses, etc.**





**Image 4: Bracken invading**



TARGET NOTES - ID No. 104			
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 10/08/11	
Surveyor: Jean Hamilton		County name: Clare	
Sheet no: 4446-d	Townland: Ross		Grid Ref: 166951, 170073
Target note no.: TN2		Area: 1ha	
Ecological Value: Local Importance (Higher Value)			
Habitat code	<p>Riparian woodland dominated by Willows. The water table is very high here with some pooling, probably fed by a small stream flowing through the woodland. The ground flora is dominated by Tufted Hair-grass (<i>Deschampsia cespitosa</i>) with frequent Yellow Iris (<i>Iris pseudacorus</i>), Soft Rush (<i>Juncus effusus</i>), Ragged Robin (<i>Lychnis flos-cuculi</i>), Wild Angelica (<i>Angelica sylvestris</i>), Great Horsetail (<i>Equisetum telmateia</i>), Marsh Bedstraw (<i>Galium palustre</i>), Enchanter's Nightshade (<i>Circaea lutetiana</i>), Creeping Bent (<i>Agrostis stolonifera</i>) and Bramble (<i>Rubus fruticosus</i> agg.).</p>		
WN5			
Habitat Map			
			



## Photographic Record



**Image 1: Wet Woodland dominated by Willows**



**Image 2: Ground flora with Tufted Hair-grass (*Deschampsia cespitosa*)**





**Image 3: Small stream in woodland**





**TARGET NOTES - ID No. 105**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 25/07/11																																												
<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare																																												
<b>1:2,500 Sheet no:</b> 4503-b	<b>Townland:</b> Drumsillagh / Sallybank	<b>Grid Ref:</b> 158833, 168505																																												
<b>Target note no.:</b> TN1		<b>Area:</b> 2.6ha																																												
<b>Ecological value:</b> <b>Local Importance (Higher Value)</b>																																														
<b>Habitat code</b>  <b>GS4 / BL1</b>	Wet grassland GS4 on west-facing slope with co-dominant Sharp-flowered Rush ( <i>Juncus acutiflorus</i> ) and Sweet Vernal-grass ( <i>Anthoxanthum odoratum</i> ). There is an old stone cottage in ruins covered by Blackthorn scrub within the field, classified as Stone Walls and other Stonework BL1. Grassland species include:																																													
	<b>Species List</b> <table border="1"> <thead> <tr> <th>Species (Latin name)</th><th>Species (common name)</th><th>DAFOR Scale</th></tr> </thead> <tbody> <tr> <td><i>Anthoxanthum odoratum</i></td><td>Sweet Vernal-grass</td><td>Dominant</td></tr> <tr> <td><i>Juncus acutiflorus</i></td><td>Sharp-flowered Rush</td><td>Dominant</td></tr> <tr> <td><i>Holcus lanatus</i></td><td>Yorkshire Fog</td><td>Abundant</td></tr> <tr> <td><i>Agrostis</i> sp.</td><td>Bent grass</td><td>Abundant</td></tr> <tr> <td><i>Plantago lanceolata</i></td><td>Ribwort Plantain</td><td>Frequent</td></tr> <tr> <td><i>Rumex acetosella</i></td><td>Sheep's Sorrel</td><td>Occasional</td></tr> <tr> <td><i>Cynosurus cristatus</i></td><td>Crested Dog's tail</td><td>Occasional</td></tr> <tr> <td><i>Rhinanthus minor</i></td><td>Yellow Rattle</td><td>Occasional</td></tr> <tr> <td><i>Euphrasia</i> sp.</td><td>Eyebright</td><td>Abundant in patches</td></tr> <tr> <td><i>Prunella vulgaris</i></td><td>Self heal</td><td>Occasional</td></tr> <tr> <td><i>Ranunculus repens</i></td><td>Creeping Buttercup</td><td>Frequent</td></tr> <tr> <td><i>Ranunculus acris</i></td><td>Meadow Buttercup</td><td>Frequent</td></tr> <tr> <td><i>Trifolium repens</i></td><td>White Clover</td><td>Occasional</td></tr> <tr> <td><i>Trifolium pratense</i></td><td>Red Clover</td><td>Occasional</td></tr> </tbody> </table>		Species (Latin name)	Species (common name)	DAFOR Scale	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Dominant	<i>Juncus acutiflorus</i>	Sharp-flowered Rush	Dominant	<i>Holcus lanatus</i>	Yorkshire Fog	Abundant	<i>Agrostis</i> sp.	Bent grass	Abundant	<i>Plantago lanceolata</i>	Ribwort Plantain	Frequent	<i>Rumex acetosella</i>	Sheep's Sorrel	Occasional	<i>Cynosurus cristatus</i>	Crested Dog's tail	Occasional	<i>Rhinanthus minor</i>	Yellow Rattle	Occasional	<i>Euphrasia</i> sp.	Eyebright	Abundant in patches	<i>Prunella vulgaris</i>	Self heal	Occasional	<i>Ranunculus repens</i>	Creeping Buttercup	Frequent	<i>Ranunculus acris</i>	Meadow Buttercup	Frequent	<i>Trifolium repens</i>	White Clover	Occasional	<i>Trifolium pratense</i>	Red Clover
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**Habitat Map**

## Photographic Record



Image 1. Wet grassland GS4.



Image 2. Close-up of flora with Sweet Vernal-grass, White Clover and Meadow Buttercup.





**Image 3. Ruined cottage with Blackthorn scrub.**



TARGET NOTES - ID No. 106			
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 25/07/11	
<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare	
<b>1:2,500 Sheet no:</b> 4503-b	<b>Townland:</b> Drumsillagh or Sallybank	<b>Grid Ref:</b> 158767, 168393	
<b>Target note no.:</b> TN2		<b>Area:</b> 0.5ha	
<b>Ecological value:</b> Local Importance (Higher Value)			
<b>Habitat code</b>  <b>GS4</b>	Wet grassland GS4 on west-facing slope, similar to that described in Target Note 4503-b_TN1 but with dominant Yorkshire Fog ( <i>Holcus lanatus</i> ). Grassland species include:		
	<b>Species List</b>		
	<b>Species (Latin name)</b>	<b>Species (common name)</b>	<b>DAFOR Scale</b>
	<i>Juncus effusus</i>	Soft Rush	Abundant
	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Abundant
	<i>Juncus acutiflorus</i>	Sharp-flowered Rush	Abundant
	<i>Holcus lanatus</i>	Yorkshire Fog	Dominant
	<i>Agrostis</i> sp.	Bent grass	Frequent
	<i>Juncus bufonius</i>	Toad Rush	Frequent in patches
	<i>Cerastium fontanum</i>	Common Mouse-ear	Occasional
	<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	Occasional
	<i>Alopecurus pratensis</i>	Meadow Foxtail	Frequent
	<i>Alopecurus geniculatus</i>	Marsh Foxtail	Occasional
	<i>Poa</i> sp.	Meadow grass	Occasional
	<i>Ranunculus repens</i>	Creeping Buttercup	Frequent
<i>Ranunculus acris</i>	Meadow Buttercup	Frequent	
<i>Trifolium repens</i>	White Clover	Occasional	
<i>Trifolium pratense</i>	Red Clover	Occasional	



**Habitat Map****Photographic Record**

**Image 1. Wet grassland GS4.**



**Image 2. Close-up of flora with Yorkshire Fog, Greater Bird's-foot Trefoil and Marsh Foxtail.**





TARGET NOTES - ID No. 107																																																																	
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 28/07/11																																																															
Surveyor: Sarah O'Loughlin Irwin		County name: Clare																																																															
1:2,500 Sheet no: 4503-d	Townland: Aharinaghbeg	Grid Ref: 159706, 167100																																																															
Target note no.: TN1		Area: 1ha																																																															
Ecological value: <b>Local Importance (Higher Value)</b>																																																																	
Habitat code  GS4	<p>Wet grassland GS4 surrounded by tree-lines composed of a mix of broadleaved and coniferous species. Field is highest at its centre and slopes away to the sides. Vegetation is &gt;50cm tall with dominant Sweet vernal grass and abundant Bent grasses. Species list below.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Agrostis</i> sp.</td> <td>Bent grass</td> <td>Abundant</td> </tr> <tr> <td><i>Anthoxanthum odoratum</i></td> <td>Sweet vernal grass</td> <td>Dominant</td> </tr> <tr> <td><i>Luzula multiflora</i> ssp. <i>Congesta</i></td> <td>Dense-headed heath wood-rush</td> <td></td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire fog</td> <td>Frequent</td> </tr> <tr> <td></td> <td>Hawkbait</td> <td>Frequent</td> </tr> <tr> <td><i>Lotus pedunculatus</i></td> <td>Greater bird's-foot-trefoil</td> <td>Abundant in patches</td> </tr> <tr> <td><i>Plantago lanceolata</i></td> <td>Ribwort plantain</td> <td>Occasional</td> </tr> <tr> <td><i>Potentilla erecta</i></td> <td>Tormentil</td> <td>Frequent</td> </tr> <tr> <td><i>Prunella vulgaris</i></td> <td>Selfheal</td> <td>Rare</td> </tr> <tr> <td><i>Cerastium fontanum</i></td> <td>Common mouse ear</td> <td>Occasional</td> </tr> <tr> <td><i>Rumex acetosella</i></td> <td>Sheep's sorrel</td> <td>Occasional</td> </tr> <tr> <td><i>Urtica dioica</i></td> <td>Stinging nettle</td> <td>Occasional</td> </tr> <tr> <td><i>Rhinanthus minor</i></td> <td>Yellow rattle</td> <td>Rare</td> </tr> <tr> <td><i>Ranunculus acris</i></td> <td>Meadow buttercup</td> <td>Rare</td> </tr> <tr> <td><i>Cirsium palustre</i></td> <td>Marsh thistle</td> <td>Occasional patches</td> </tr> <tr> <td><i>Trifolium pratense</i></td> <td>Red clover</td> <td>Rare</td> </tr> <tr> <td><i>Juncus inflexus</i></td> <td>Hard rush</td> <td>Occasional patches</td> </tr> <tr> <td><i>Euphrasia</i> sp.</td> <td>Eyebright</td> <td>Abundant in patches</td> </tr> <tr> <td><i>Rubus fruticosus</i> agg.</td> <td>Brambles</td> <td>Frequent patches</td> </tr> <tr> <td><i>Rumex</i> sp.</td> <td>Docks</td> <td>Frequent patches</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Agrostis</i> sp.	Bent grass	Abundant	<i>Anthoxanthum odoratum</i>	Sweet vernal grass	Dominant	<i>Luzula multiflora</i> ssp. <i>Congesta</i>	Dense-headed heath wood-rush		<i>Holcus lanatus</i>	Yorkshire fog	Frequent		Hawkbait	Frequent	<i>Lotus pedunculatus</i>	Greater bird's-foot-trefoil	Abundant in patches	<i>Plantago lanceolata</i>	Ribwort plantain	Occasional	<i>Potentilla erecta</i>	Tormentil	Frequent	<i>Prunella vulgaris</i>	Selfheal	Rare	<i>Cerastium fontanum</i>	Common mouse ear	Occasional	<i>Rumex acetosella</i>	Sheep's sorrel	Occasional	<i>Urtica dioica</i>	Stinging nettle	Occasional	<i>Rhinanthus minor</i>	Yellow rattle	Rare	<i>Ranunculus acris</i>	Meadow buttercup	Rare	<i>Cirsium palustre</i>	Marsh thistle	Occasional patches	<i>Trifolium pratense</i>	Red clover	Rare	<i>Juncus inflexus</i>	Hard rush	Occasional patches	<i>Euphrasia</i> sp.	Eyebright	Abundant in patches	<i>Rubus fruticosus</i> agg.	Brambles	Frequent patches	<i>Rumex</i> sp.	Docks	Frequent patches
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**Habitat Map****Photographic Record**

**Image 1. Wet grassland GS4 – Sweet vernal grass is abundant, Brambles occur in frequent patches, as do rushes and docks. Tree-line is observed in the distance.**





**Image 2. Close up of tall vegetation with abundant Sweet vernal grass and Greater bird's-foot-trefoil.**

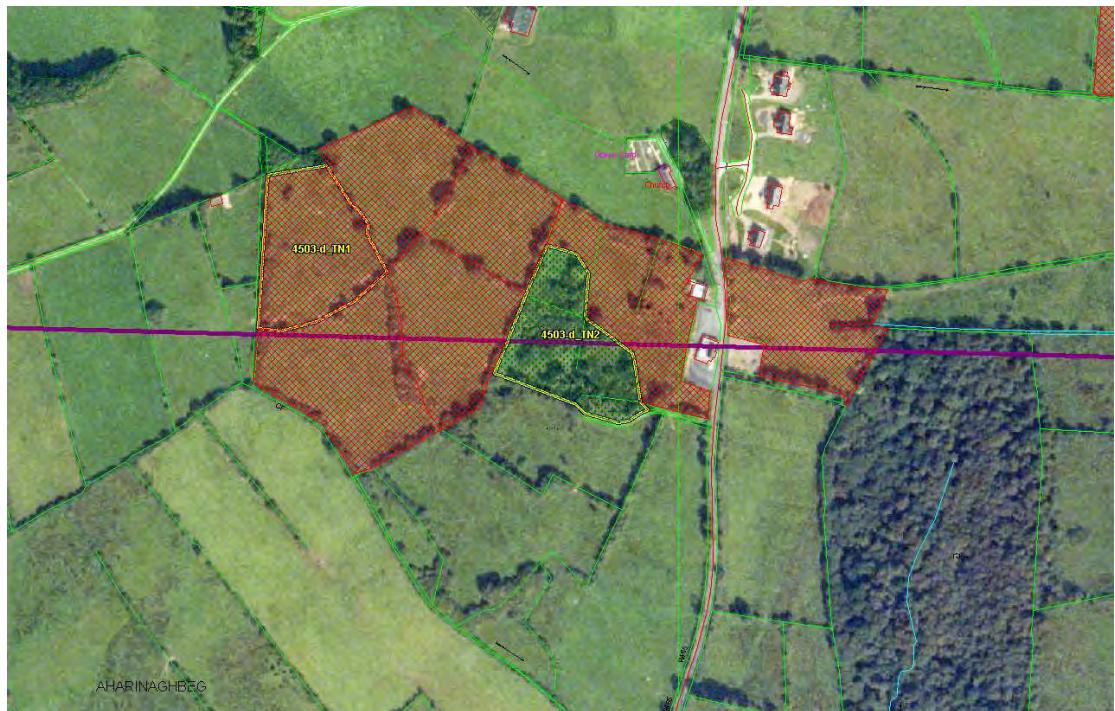


**Image 3. Close up of shorter vegetation with Hawkbits, Selfheal and Common knapweed.**





TARGET NOTES - ID No. 108																																																														
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 28/07/11																																																												
<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare																																																												
<b>1:2,500 Sheet no:</b> 4503-d	<b>Townland:</b> Aharinaghbeg	<b>Grid Ref:</b> 159911, 167030																																																												
<b>Target note no.:</b> TN2		<b>Area:</b> 0.95ha																																																												
<b>Ecological value:</b> <b>National Importance – linked to the Annex I habitat '91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British isles.'</b>																																																														
<b>Habitat code</b>  WN1	<p>Oak-birch-holly woodland WN1 located on a rocky slope with scattered moss-covered (<i>Thuidium tamariscinum</i> and <i>Rhytidiadelphus loreus</i>) sandstone boulders. Sessile oak (<i>Quercus petraea</i>) is the dominant canopy tree and there are occasional seedlings also, Hazel (<i>Corylus avellana</i>) and Downy birch (<i>Betula pubescens</i>) are abundant. The field layer is relatively species rich with abundant ferns and mosses and frequent broadleaved herbs, vegetated areas are interspersed with frequent patches of leaf litter. Some illegal dumping issues. Species list below.</p> <p>This area is linked to the annexed habitat 'Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British isles (91A0)' though the area it cover is small so may only be of high ecological importance at a national level.</p> <p>Trees and shrubs:</p> <p><b>Species List</b></p> <table> <tr> <th>Species (<i>Latin</i> name)</th><th>Species (common name)</th><th>DAFOR Scale</th></tr> <tr> <td><i>Quercus petraea</i></td><td>Sessile oak</td><td>Dominant</td></tr> <tr> <td><i>Corulus avellana</i></td><td>Hazel</td><td>Abundant</td></tr> <tr> <td><i>Betula pubescens</i></td><td>Downy birch</td><td>Abundant</td></tr> <tr> <td><i>Ilex aquifolium</i></td><td>Holly</td><td>Occasional to Frequent</td></tr> <tr> <td><i>Salix caprea</i></td><td>Goat willow</td><td>Frequent at wet margins</td></tr> <tr> <td><i>Lonicera periclymenum</i></td><td>Honeysuckle</td><td>Frequent</td></tr> <tr> <td><i>Hedera helix</i></td><td>Ivy</td><td>Frequent</td></tr> <tr> <td><i>Rubus fruticosus</i> agg.</td><td>Bramble</td><td>Frequent</td></tr> <tr> <td><i>Polypodium vulgare</i></td><td>Polypody fern</td><td>Frequent</td></tr> <tr> <td><i>Blechnum spicant</i></td><td>Hard fern</td><td>Occasional</td></tr> <tr> <td><i>Oxalis acetosella</i></td><td>Wood sorrel</td><td>Frequent</td></tr> <tr> <td><i>Vaccinium myrtillis</i></td><td>Bilberry</td><td>Rare</td></tr> <tr> <td><i>Geranium robertianum</i></td><td>Herb robert</td><td>Rare</td></tr> <tr> <td><i>Lysimachia nemorum</i></td><td>Yellow pimpernel</td><td>Rare</td></tr> <tr> <td><i>Luzula sylvatica</i></td><td>Great wood-rush</td><td>Rare patches</td></tr> <tr> <td><i>Polytrichum</i> sp.</td><td>Moss</td><td>Frequent on rocks</td></tr> <tr> <td><i>Thuidium tamariscinum</i></td><td>Moss</td><td>Frequent on rocks &amp; trees</td></tr> <tr> <td><i>Rhytidiadelphus loreus</i></td><td>Moss</td><td>Frequent on rocks &amp; trees</td></tr> <tr> <td><i>Stellaria holostea</i></td><td>Greater stitchwort</td><td>Rare</td></tr> </table>		Species ( <i>Latin</i> name)	Species (common name)	DAFOR Scale	<i>Quercus petraea</i>	Sessile oak	Dominant	<i>Corulus avellana</i>	Hazel	Abundant	<i>Betula pubescens</i>	Downy birch	Abundant	<i>Ilex aquifolium</i>	Holly	Occasional to Frequent	<i>Salix caprea</i>	Goat willow	Frequent at wet margins	<i>Lonicera periclymenum</i>	Honeysuckle	Frequent	<i>Hedera helix</i>	Ivy	Frequent	<i>Rubus fruticosus</i> agg.	Bramble	Frequent	<i>Polypodium vulgare</i>	Polypody fern	Frequent	<i>Blechnum spicant</i>	Hard fern	Occasional	<i>Oxalis acetosella</i>	Wood sorrel	Frequent	<i>Vaccinium myrtillis</i>	Bilberry	Rare	<i>Geranium robertianum</i>	Herb robert	Rare	<i>Lysimachia nemorum</i>	Yellow pimpernel	Rare	<i>Luzula sylvatica</i>	Great wood-rush	Rare patches	<i>Polytrichum</i> sp.	Moss	Frequent on rocks	<i>Thuidium tamariscinum</i>	Moss	Frequent on rocks & trees	<i>Rhytidiadelphus loreus</i>	Moss	Frequent on rocks & trees	<i>Stellaria holostea</i>	Greater stitchwort	Rare
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**Habitat Map****Photographic Record**

**Image 1. Woodland with abundant Downy birch and Hazel. Rock boulders covered with moss frequent the woodland floor, as do patches of leaf litter, and ferns are frequent.**





**Image 2. Close up of sandstone boulders covered with *Polytrichum* sp. moss, Ivy, Honeysuckle and Wood sorrel. Grasses and ferns are growing around the boulders.**

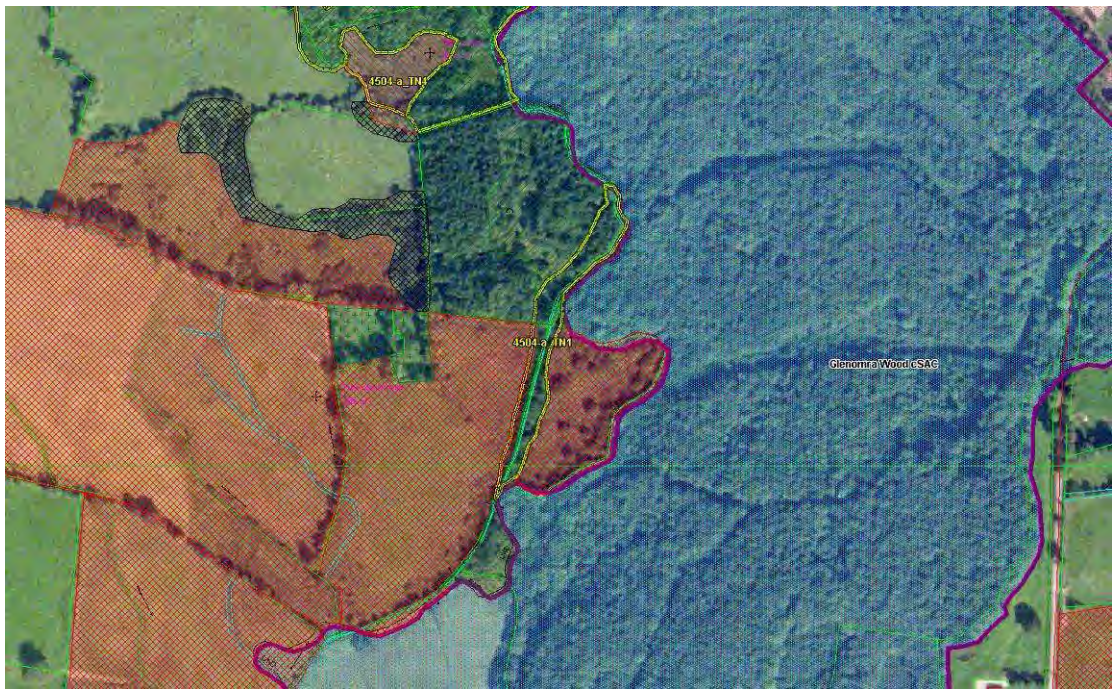


**Image 3. Close up of Great wood-rush, Bent grasses and abundant Wood sorrel.**

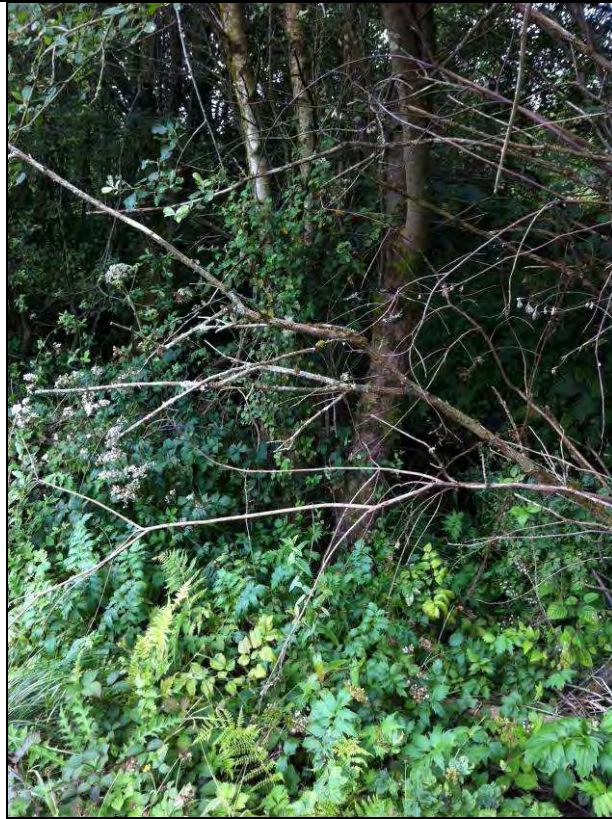


TARGET NOTES - ID No. 109																																																								
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 28/07/11																																																						
<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare																																																						
<b>1:2,500 Sheet no:</b> 4504-a	<b>Townland:</b> Kilmore	<b>Grid Ref:</b> 160741, 167603																																																						
<b>Target note no.:</b> TN1		<b>Area:</b> 0.5ha																																																						
<b>Ecological value:</b> County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.																																																								
<b>Habitat code</b>  WN5	<p>Riparian woodland WN5 adjacent to Glenomra Woods SAC. Sparrowhawks were heard from the nearby Conifer plantation.</p> <p>This woodland and river offer connectivity between Glenomra Woods and the adjacent habitats.</p> <p>Trees and shrubs:</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Salix</i> spp.</td> <td>Willows</td> <td>Dominant</td> </tr> <tr> <td><i>Acer pseudoplatanus</i></td> <td>Sycamore</td> <td>Rare</td> </tr> <tr> <td><i>Fraxinus excelsior</i></td> <td>Ash</td> <td>Occasional</td> </tr> <tr> <td><i>Betula</i> sp.</td> <td>Birch</td> <td>Rare</td> </tr> <tr> <td><i>Corylus avellana</i></td> <td>Hazel</td> <td>Occasional</td> </tr> <tr> <td><i>Ilex aquifolium</i></td> <td>Holly</td> <td>Occasional</td> </tr> <tr> <td><i>Ulex europaeus</i></td> <td>Gorse</td> <td>Occasional</td> </tr> </tbody> </table> <p>Ground flora:</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Species (<i>Latin name</i>)</th> <th>Species (common name)</th> <th>DAFOR Scale</th> </tr> </thead> <tbody> <tr> <td><i>Angelica sylvestris</i></td> <td>Wild Angelica</td> <td>Frequent</td> </tr> <tr> <td><i>Filipendula ulmaria</i></td> <td>Meadowsweet</td> <td>Occasional</td> </tr> <tr> <td><i>Valeriana officinale</i></td> <td>Common Valerian</td> <td>Abundant</td> </tr> <tr> <td><i>Urtica dioica</i></td> <td>Nettle</td> <td>Rare</td> </tr> <tr> <td><i>Geum urbanum</i></td> <td>Wood Aven</td> <td>Occasional</td> </tr> <tr> <td><i>Veronica</i> spp.</td> <td>Speedwell</td> <td>Occasional</td> </tr> <tr> <td><i>Circaea lutetiana</i></td> <td>Enchanter's-nightshade</td> <td>Abundant</td> </tr> <tr> <td><i>Rubus fruticosus</i> agg.</td> <td>Brambles</td> <td>Frequent</td> </tr> <tr> <td></td> <td>Ferns</td> <td>Occasional</td> </tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Salix</i> spp.	Willows	Dominant	<i>Acer pseudoplatanus</i>	Sycamore	Rare	<i>Fraxinus excelsior</i>	Ash	Occasional	<i>Betula</i> sp.	Birch	Rare	<i>Corylus avellana</i>	Hazel	Occasional	<i>Ilex aquifolium</i>	Holly	Occasional	<i>Ulex europaeus</i>	Gorse	Occasional	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Angelica sylvestris</i>	Wild Angelica	Frequent	<i>Filipendula ulmaria</i>	Meadowsweet	Occasional	<i>Valeriana officinale</i>	Common Valerian	Abundant	<i>Urtica dioica</i>	Nettle	Rare	<i>Geum urbanum</i>	Wood Aven	Occasional	<i>Veronica</i> spp.	Speedwell	Occasional	<i>Circaea lutetiana</i>	Enchanter's-nightshade	Abundant	<i>Rubus fruticosus</i> agg.	Brambles	Frequent		Ferns	Occasional
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**Habitat Map****Photographic Record**

**Image 1. Riparian woodland alongside Eroding/Upland river.**



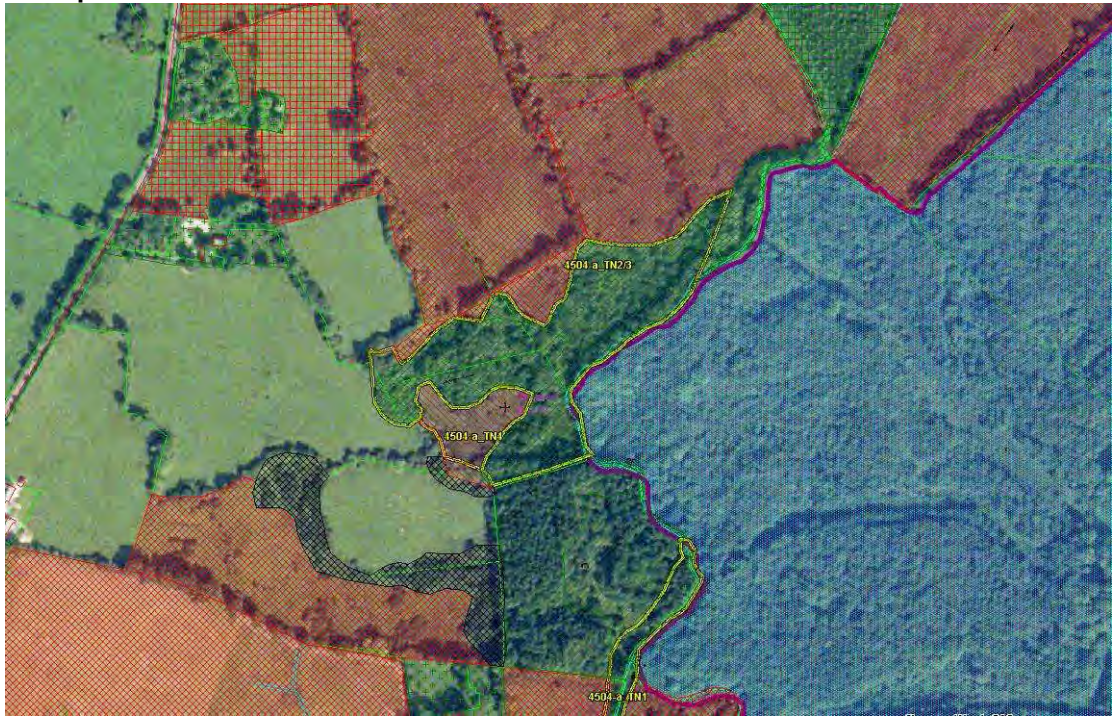
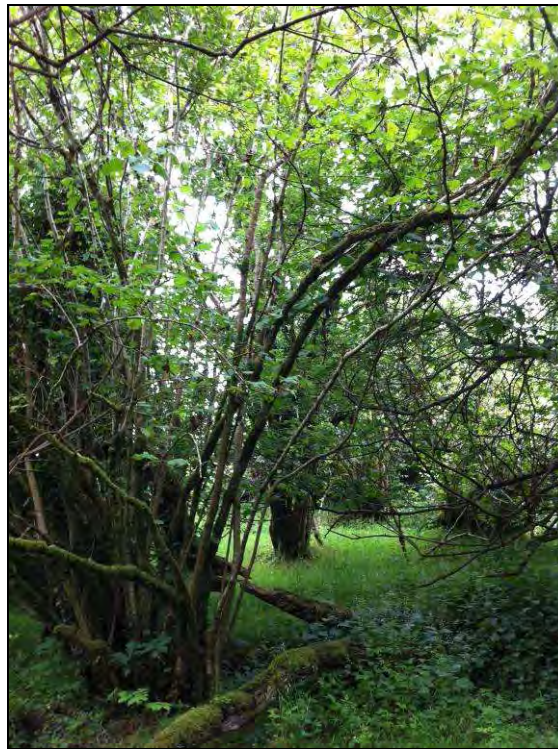
**Image 2. Ground flora at woodland edge.**





TARGET NOTES - ID No. 110																																																																							
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 03/08/11																																																																					
<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare																																																																					
<b>1:2,500 Sheet no:</b> 4504-a	<b>Townland:</b> Kilmore	<b>Grid Ref:</b> 160725, 167960																																																																					
<b>Target note no.:</b> TN2–TN3		<b>Area:</b> 2.3ha																																																																					
<b>Ecological value:</b> County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.																																																																							
<b>Habitat code</b>  <b>WN4 / FP2</b>	<p>Small Wet Pedunculate Oak-Ash Woodland WN4 copse dominated by Hazel (<i>Corylus avellana</i>) with abundant Willows, such as the Eared Willow (<i>Salix aurita</i>), on a slight slope with a non-calcareous spring FP2 arises in its centre and flowing down the slope to form a small stream. The ground is somewhat poached by cattle and horses however it retains substantial vegetation cover in the field layer with abundant bryophytes, grasses and broadleaved herbs. A small bee's nest was observed within the woods next to the stream bank. There is an earthen mound with small mammal burrows with a scattering of broken hazelnut shells at the entrance which appear to have been nibbled by Wood mice.</p> <p>This woodland is very diverse for its small size and there is an absence of non-native species. Consider upgrading its Ecological value to National Importance.</p> <p>Trees and shrubs:</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Species (<i>Latin name</i>)</th> <th style="text-align: left;">Species (common name)</th> <th style="text-align: left;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Corylus avellana</i></td><td>Hazel</td><td>Dominant</td></tr> <tr><td><i>Quercus petraea</i></td><td>Sessile oak</td><td>Rare</td></tr> <tr><td><i>Fraxinus excelsior</i></td><td>Ash</td><td>Occasional</td></tr> <tr><td><i>Sorbus aucuparia</i></td><td>Rowan</td><td>Rare</td></tr> <tr><td><i>Salix aurita</i></td><td>Eared Willow</td><td>Abundant</td></tr> <tr><td><i>Ilex aquifolium</i></td><td>Holly</td><td>Rare</td></tr> </tbody> </table> <p>Ground flora:</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Species (<i>Latin name</i>)</th> <th style="text-align: left;">Species (common name)</th> <th style="text-align: left;">DAFOR Scale</th> </tr> </thead> <tbody> <tr><td><i>Ranunculus repens</i></td><td>Creeping buttercup</td><td>Abundant</td></tr> <tr><td><i>Geranium robertianum</i></td><td>Herb Robert</td><td>Frequent</td></tr> <tr><td><i>Prunella vulgaris</i></td><td>Selfheal</td><td>Occasional</td></tr> <tr><td><i>Rubus fruticosus</i> agg.</td><td>Bramble</td><td>Occasional</td></tr> <tr><td><i>Oxalis acetosella</i></td><td>Wood Sorrel</td><td>Abundant in patches</td></tr> <tr><td><i>Lysimachia nemorum</i></td><td>Yellow Pimpernel</td><td>Occasional</td></tr> <tr><td><i>Circaea lutetiana</i></td><td>Enchanter's Nightshade</td><td>Abundant in patches</td></tr> <tr><td><i>Galium uliginosum</i></td><td>Fen Bedstraw</td><td>Frequent</td></tr> <tr><td><i>Viola</i> sp.</td><td>Violet</td><td>Occasional</td></tr> <tr><td><i>Hedera helix</i></td><td>Ivy</td><td>Occasional</td></tr> <tr><td><i>Hyacinthoides non-scripta</i></td><td>Bluebell</td><td>Rare</td></tr> <tr><td><i>Dactylorhiza incarnata</i></td><td>Early Marsh-orchid</td><td>Rare</td></tr> <tr><td><i>Carex remota</i></td><td>Remote Sedge</td><td>Occasional</td></tr> <tr><td><i>Lonicera periclymenum</i></td><td>Honeysuckle</td><td>Rare</td></tr> <tr><td><i>Urtica dioica</i></td><td>Nettle</td><td>Abundant in patches</td></tr> </tbody> </table>		Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Corylus avellana</i>	Hazel	Dominant	<i>Quercus petraea</i>	Sessile oak	Rare	<i>Fraxinus excelsior</i>	Ash	Occasional	<i>Sorbus aucuparia</i>	Rowan	Rare	<i>Salix aurita</i>	Eared Willow	Abundant	<i>Ilex aquifolium</i>	Holly	Rare	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Ranunculus repens</i>	Creeping buttercup	Abundant	<i>Geranium robertianum</i>	Herb Robert	Frequent	<i>Prunella vulgaris</i>	Selfheal	Occasional	<i>Rubus fruticosus</i> agg.	Bramble	Occasional	<i>Oxalis acetosella</i>	Wood Sorrel	Abundant in patches	<i>Lysimachia nemorum</i>	Yellow Pimpernel	Occasional	<i>Circaea lutetiana</i>	Enchanter's Nightshade	Abundant in patches	<i>Galium uliginosum</i>	Fen Bedstraw	Frequent	<i>Viola</i> sp.	Violet	Occasional	<i>Hedera helix</i>	Ivy	Occasional	<i>Hyacinthoides non-scripta</i>	Bluebell	Rare	<i>Dactylorhiza incarnata</i>	Early Marsh-orchid	Rare	<i>Carex remota</i>	Remote Sedge	Occasional	<i>Lonicera periclymenum</i>	Honeysuckle	Rare	<i>Urtica dioica</i>	Nettle	Abundant in patches
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<p>Further down the slope from TN2 the woodland canopy changes, with taller spindley trees and a more open canopy. The ground is undulating and has a varying degree of bare ground (due to poaching) and leaf litter as well as occasional Sphagnum hummocks. An earth mound within the woods contains small mammal holes with evidence of wood mouse in the form of gnawed hazel nuts.</p> <p>Trees and shrubs:</p> <p><b>Species List</b></p> <table><tr><th>Species (<i>Latin name</i>)</th><th>Species (common name)</th><th>DAFOR Scale</th></tr><tr><td><i>Betula pubescens</i></td><td>Downy birch</td><td>Dominant</td></tr><tr><td><i>Salix caprea</i></td><td>Goat willow</td><td>Occasional</td></tr><tr><td><i>Corylus avellana</i></td><td>Hazel</td><td>Frequent</td></tr><tr><td><i>Fagus sylvatica</i></td><td>Beech</td><td>Rare</td></tr><tr><td><i>Salix aurita</i></td><td>Eared Willow</td><td>Occasional</td></tr><tr><td><i>Ilex aquifolium</i></td><td>Holly</td><td>Frequent</td></tr></table> <p>Ground flora:</p> <p><b>Species List</b></p> <table><tr><th>Species (<i>Latin name</i>)</th><th>Species (common name)</th><th>DAFOR Scale</th></tr><tr><td><i>Sphagnum</i> spp.</td><td>Moss</td><td>Occasional</td></tr><tr><td><i>Agrostis stolonifera</i></td><td>Creeping bent grass</td><td>Abundant</td></tr><tr><td><i>Carex remota</i></td><td>Remote sedge</td><td>Occasional</td></tr><tr><td><i>Blechnum spicant</i></td><td>Hard fern</td><td>Occasional</td></tr><tr><td><i>Vaccinium myrtillus</i></td><td>Bilberry</td><td>Occasional</td></tr><tr><td><i>Potentilla erecta</i></td><td>Tormentil</td><td>Rare</td></tr><tr><td><i>Polytrichum</i> spp.</td><td>Moss</td><td>Occasional</td></tr><tr><td><i>Hedera helix</i></td><td>Ivy</td><td>Frequent</td></tr><tr><td><i>Thuidium tamariscinum</i></td><td>Common Tamarisk moss</td><td>Frequent</td></tr><tr><td><i>Carex echinata</i></td><td>Star sedge</td><td>Occasional</td></tr><tr><td><i>Rubus fruticosus</i> agg.</td><td>Bramble</td><td>Frequent</td></tr><tr><td><i>Holcus lanatus</i></td><td>Yorkshire fog</td><td>Occasional</td></tr><tr><td><i>Anthoxanthum odoratum</i></td><td>Sweet vernal grass</td><td>Rare</td></tr><tr><td><i>Calluna vulgaris</i></td><td>Ling heather</td><td>Rare patches</td></tr><tr><td><i>Erica tetralix</i></td><td>Cross-leaved heather</td><td>Rare</td></tr><tr><td><i>Carex</i> spp.</td><td>Sedges</td><td>Occasional</td></tr><tr><td></td><td>Ferns</td><td>Occasional</td></tr></table>				Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Betula pubescens</i>	Downy birch	Dominant	<i>Salix caprea</i>	Goat willow	Occasional	<i>Corylus avellana</i>	Hazel	Frequent	<i>Fagus sylvatica</i>	Beech	Rare	<i>Salix aurita</i>	Eared Willow	Occasional	<i>Ilex aquifolium</i>	Holly	Frequent	Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale	<i>Sphagnum</i> spp.	Moss	Occasional	<i>Agrostis stolonifera</i>	Creeping bent grass	Abundant	<i>Carex remota</i>	Remote sedge	Occasional	<i>Blechnum spicant</i>	Hard fern	Occasional	<i>Vaccinium myrtillus</i>	Bilberry	Occasional	<i>Potentilla erecta</i>	Tormentil	Rare	<i>Polytrichum</i> spp.	Moss	Occasional	<i>Hedera helix</i>	Ivy	Frequent	<i>Thuidium tamariscinum</i>	Common Tamarisk moss	Frequent	<i>Carex echinata</i>	Star sedge	Occasional	<i>Rubus fruticosus</i> agg.	Bramble	Frequent	<i>Holcus lanatus</i>	Yorkshire fog	Occasional	<i>Anthoxanthum odoratum</i>	Sweet vernal grass	Rare	<i>Calluna vulgaris</i>	Ling heather	Rare patches	<i>Erica tetralix</i>	Cross-leaved heather	Rare	<i>Carex</i> spp.	Sedges	Occasional		Ferns	Occasional
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**Habitat Map****Photographic Record**

**Image 1. Wet pedunculate oak-ash woodland WN4. Hazel dominates the canopy layer with Ash and Oak are also present – seedlings occur here. An abundance of Creeping Bent grass and Enchanter's Nightshade can be seen here.**





**Image 2. Creeping Bent grass is dominant in the field layer with Enchanter's-nightshade, Wood Sorrel, Creeping Buttercup, Herb Robert and Early Marsh Orchid.**



**Image 3. Small mammal holes in an earth mound with scattered gnawed hazel nuts.**



**Image 4. Stream with over-hanging trees covered with mosses and Ivy. Field layer has patches of leaf litter and dominant Creeping bent grass.**



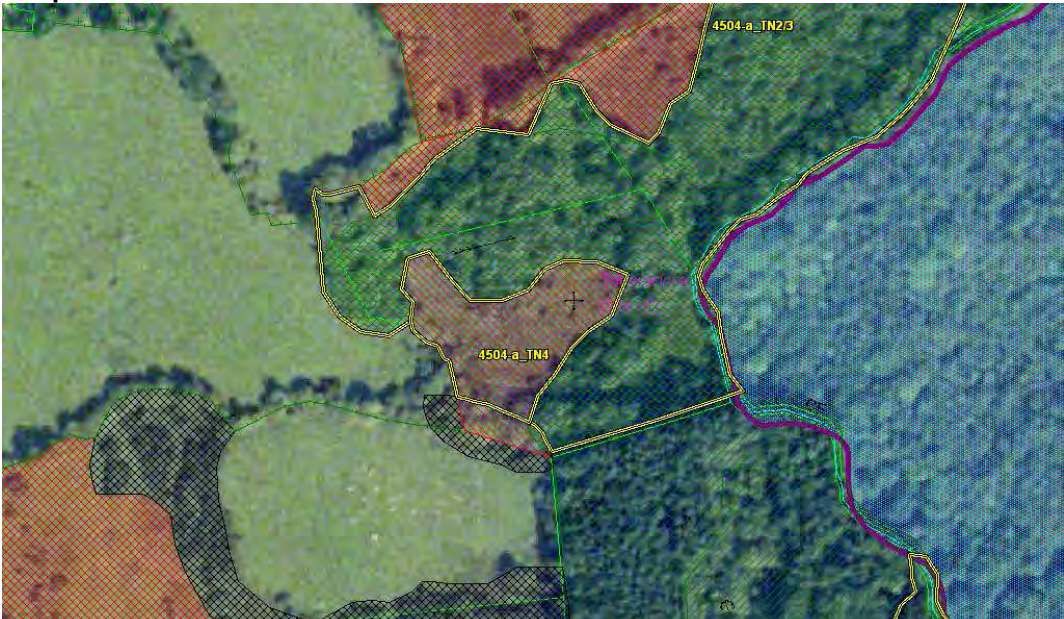
**Image 5. Tall spindley Birch trees.**





**Image 6. Bees nest partially torn apart and scattered on the ground.**



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<b>Ecological value:</b> <span style="color: red;">Local Importance (Higher Value)</span>																																																														
<b>Habitat code</b>  GS3	Acid grassland GS3 with abundant non- <i>Sphagnum</i> mosses, short needle-leaved grasses, sedges and broadleaved herbs. Sharp-flowered rush is abundant in places. Gorse and Willow scrub are encroaching. Species list below.																																																													
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**Photographic Record**

**Image 1. Acid grassland GS3 – Sweet vernal grass, Eyebright and Common knapweed are abundant with frequent Marsh lousewort – scrub is encroaching.**



**Image 2. Close up of vegetation. Non-*Sphagnum* mosses, short needle-leaved grasses, Glaucous sedge and cf. Devil's-bit scabious are abundant with occasional Lousewort and Meadow buttercup.**



TARGET NOTES - ID No. 112																																																								
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 04/08/11																																																						
Surveyor: Jean Hamilton		County name: Clare																																																						
Sheet no: 4504-b	Townland: Ballynamona	Grid Ref: 163486, 168092																																																						
Target note no.: TN1		Area: 3.8ha																																																						
Ecological Value: <b>National Importance (very limited in extent in Ireland)</b>																																																								
Habitat code	<p>Mosaic of wetland habitats on gently undulating ground, adjacent to a small stream. Comprising Marsh GM1, Transition Mire and Quaking Bog PF3 and Reed and Large Sedge Swamp FS1.</p>																																																							
GM1/PF3/FS1	<p>The flush area has a species composition which is intermediate between poor and rich fens and is quite wet and spongy underfoot. For this reason it is classified as Transition Mire and Quaking Bog PF3. This site lies between an area of sandstone bedrock (acidic) to the west and an area of limestone (basic) to the east, which would explain the intermediate nature of the fen/flush habitat. Bogbean (<i>Menyanthes trifoliata</i>) is the dominant species, with abundant sedges (particularly <i>Carex flacca</i>) and Marsh Cinquefoil (<i>Potentilla palustre</i>). A broad range of other broadleaved species was noted, including Lesser Spearwort (<i>Ranunculus flammula</i>), Marsh Lousewort (<i>Pedicularis palustre</i>) and Water Forget-me-not (<i>Myosotis scorpiodes</i>). The area also has an extensive carpet of (non-<i>Sphagnum</i>) mosses.</p> <p>The Marsh habitat is dominated by rushes and Meadowsweet (<i>Filipendula ulmaria</i>), with a good diversity of herbaceous species, including Ragged Robin (<i>Lychnis flos-cuculi</i>), Devil's-bit Scabious (<i>Succisa pratensis</i>) and Marsh Lousewort (<i>Pedicularis palustre</i>).</p> <p>Some areas are dominated by Reedmace (<i>Typha latifolia</i>), with very few other species. These areas may be described as Reed and Large Sedge Swamp FS1, but are too limited in extent to denote on the habitat map.</p> <p>Two species of damselfly were recorded here – Common Blue (<i>Enallagma cyathigerum</i>) and Azure Blue (<i>Coenagrion puella</i>) (see <b>Image 4</b> below).</p> <p><b>Transition Mire and Quaking Bog PF3 Species List</b></p> <table border="1"> <thead> <tr> <th>Latin Name</th> <th>Common Name</th> <th>DAFOR</th> </tr> </thead> <tbody> <tr> <td><i>Carex flacca</i></td> <td>Glaucous Sedge</td> <td>Abundant</td> </tr> <tr> <td><i>Carex</i> spp.</td> <td>Other small sedges</td> <td>Abundant</td> </tr> <tr> <td><i>Epilobium</i> sp.</td> <td>Willowherb</td> <td>Occasional</td> </tr> <tr> <td><i>Dactylorhiza</i> sp.</td> <td>Dactylorchid sp.</td> <td>Rare</td> </tr> <tr> <td><i>Equisetum fluviatile</i></td> <td>Water Horsetail</td> <td></td> </tr> <tr> <td><i>Filipendula ulmaria</i></td> <td>Meadowsweet</td> <td>Rare</td> </tr> <tr> <td><i>Galium palustre</i></td> <td>Marsh Bedstraw</td> <td>Abundant</td> </tr> <tr> <td><i>Holcus lanatus</i></td> <td>Yorkshire Fog</td> <td>Rare</td> </tr> <tr> <td><i>Iris pseudacorus</i></td> <td>Yellow Iris</td> <td>Occasional</td> </tr> <tr> <td><i>Juncus articulatus/acutiflorus</i></td> <td>Jointed/Sharp-flowered Rush</td> <td>Dominant</td> </tr> <tr> <td><i>Juncus bufonius</i></td> <td>Toad Rush</td> <td>Occasional</td> </tr> <tr> <td><i>Lotus pedunculatus</i></td> <td>Greater Bird's-foot Trefoil</td> <td>Abundant</td> </tr> <tr> <td><i>Mentha aquatica</i></td> <td>Watermint</td> <td>Frequent</td> </tr> <tr> <td><i>Menyanthes trifoliata</i></td> <td>Bogbean</td> <td>Dominant</td> </tr> <tr> <td><i>Pedicularis palustre</i></td> <td>Marsh Lousewort</td> <td>Frequent</td> </tr> <tr> <td><i>Potentilla palustre</i></td> <td>Marsh Cinquefoil</td> <td>Frequent</td> </tr> <tr> <td><i>Triglochin palustris</i></td> <td>Marsh Arrowgrass</td> <td>Rare</td> </tr> </tbody> </table>		Latin Name	Common Name	DAFOR	<i>Carex flacca</i>	Glaucous Sedge	Abundant	<i>Carex</i> spp.	Other small sedges	Abundant	<i>Epilobium</i> sp.	Willowherb	Occasional	<i>Dactylorhiza</i> sp.	Dactylorchid sp.	Rare	<i>Equisetum fluviatile</i>	Water Horsetail		<i>Filipendula ulmaria</i>	Meadowsweet	Rare	<i>Galium palustre</i>	Marsh Bedstraw	Abundant	<i>Holcus lanatus</i>	Yorkshire Fog	Rare	<i>Iris pseudacorus</i>	Yellow Iris	Occasional	<i>Juncus articulatus/acutiflorus</i>	Jointed/Sharp-flowered Rush	Dominant	<i>Juncus bufonius</i>	Toad Rush	Occasional	<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	Abundant	<i>Mentha aquatica</i>	Watermint	Frequent	<i>Menyanthes trifoliata</i>	Bogbean	Dominant	<i>Pedicularis palustre</i>	Marsh Lousewort	Frequent	<i>Potentilla palustre</i>	Marsh Cinquefoil	Frequent	<i>Triglochin palustris</i>	Marsh Arrowgrass	Rare
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**Marsh Species List**

<b>Latin Name</b>	<b>Common Name</b>	<b>DAFOR</b>
<i>Angelica sylvestris</i>	Wild Angelica	Frequent
<i>Carex panicea</i>	Carnation Sedge	Frequent
<i>Cirsium palustre</i>	Marsh Thistle	Occasional
<i>Dactylorhiza maculata</i>	Heath Spotted-Orchid	Rare
<i>Filipendula ulmaria</i>	Meadowsweet	Abundant
<i>Glyceria maxima</i>	Reed Sweet Grass	Occasional
<i>Juncus articulatus/acutiflorus</i>	Jointed/Sharp-flowered Rush	Dominant
<i>Juncus effusus</i>	Soft Rush	Abundant
<i>Lathyrus pratensis</i>	Meadow Vetchling	Occasional
<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	Occasional
<i>Lychnis flos-cuculi</i>	Ragged Robin	Occasional
<i>Lythrum salicaria</i>	Purple-Loosestrife	Frequent
<i>Mentha aquatica</i>	Watermint	Frequent
<i>Prunella vulgaris</i>	Selfheal	Frequent
<i>Succisa pratensis</i>	Devil's-bit Scabious	Occasional

**Habitat Map**



**Photographic Record**

**Image 1: View of area showing mosaic of Marsh GM1 (foreground), Reed and Large Sedge Swamp FS1 with *Typha latifolia* dominant (back left) and Transition Mire and Quaking Bog PF3 (back right).**



**Image 2: Area of Flush / Transition Mire and Quaking Bog PF3**





**Image 3: Close-up of Flush / Transition Mire and Quaking Bog PF3 vegetation**



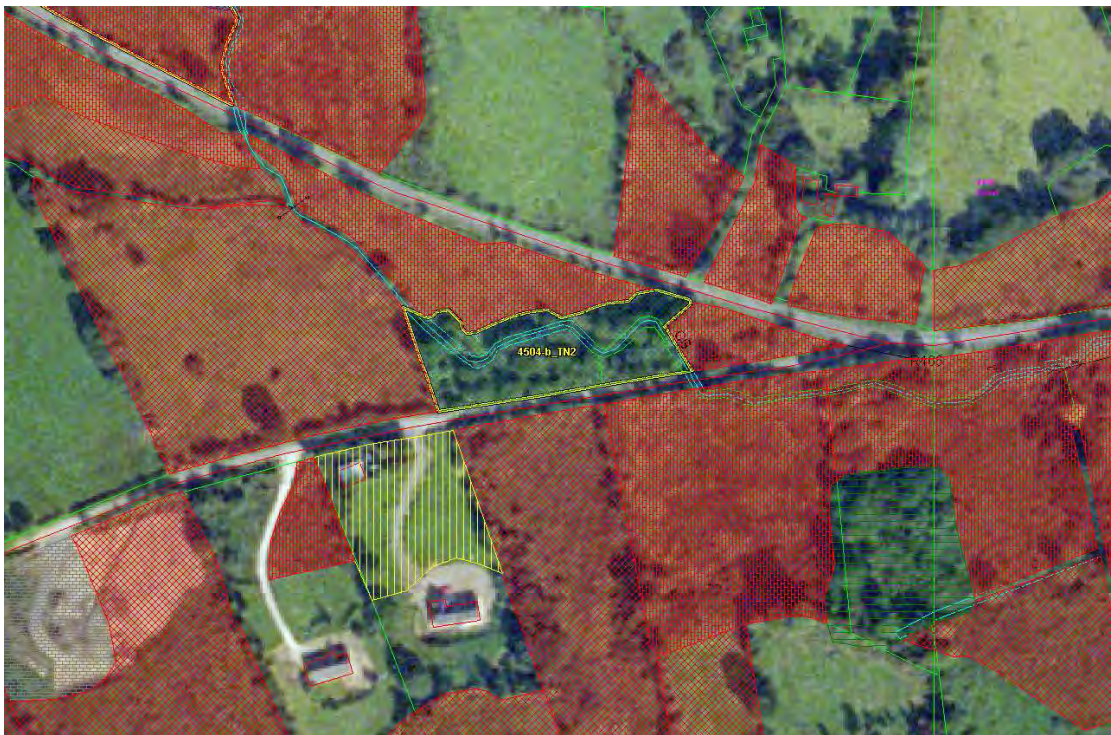
**Image 4: Azure Blue Damselfly (*Coenagrion puella*) in Flush / Transition Mire and Quaking Bog PF3 habitat**





**Image 5: Dactylorchid spike in Transition Mire and Quaking Bog PF3 habitat (probably *Dactylorhiza maculata*)**



TARGET NOTES - ID No. 113		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 04/08/11
Surveyor: Jean Hamilton		County name: Clare
Sheet no: 4504-b	Townland: Bridgetown	Grid Ref: 163838, 167810
Target note no.: TN2		Area: 0.36ha
Ecological Value: <b>Local Importance (Higher Value)</b>		
Habitat code  WN5	Woodland surrounding stream (classified as an Eroding Upland River FW1). Dominated by Ash and Willows with occasional Hybrid Oak ( <i>Quercus robur x. petraea</i> ) and Hawthorn ( <i>Crataegus monogyna</i> ). Field layer dominated by Brambles ( <i>Rubus fruticosus</i> agg.), with abundant Remote Sedge ( <i>Carex remota</i> ), frequent Meadowsweet ( <i>Filipendula ulmaria</i> ), Purple Loosestrife ( <i>Lythrum salicaria</i> ), Horsetails ( <i>Equisetum</i> sp) and Marsh Bedstraw ( <i>Galium palustre</i> ). Other species noted included Ground Ivy ( <i>Glechoma hederacea</i> ), Violet ( <i>Viola</i> sp.), Soft Rush ( <i>Juncus effusus</i> ), Herb Robert ( <i>Geranium robertianum</i> ) and Yellow Iris ( <i>Iris pseudacorus</i> ).	
Habitat Map		
		



## Photographic Record




**Image 1: Riparian Woodland**



**Image 2: Ground Flora of Riparian Woodland**



TARGET NOTES - ID No. 114																																																																										
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<b>Sheet no:</b> 4504-b	<b>Townland:</b> Leitrim	<b>Grid Ref:</b> 162423, 168211																																																																								
<b>Target note no.:</b> TN3		<b>Area:</b> 3.2ha																																																																								
<b>Ecological Value:</b> Local Importance (Higher Value)																																																																										
<b>Habitat code</b>  GS4/WS1/ HH3	Mosaic of habitats. Probably best described as Wet Grassland GS4, but with some elements of heath and scrub.																																																																									
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## Photographic Record



**Image 1: Overview of Area**



**Image 2: Wet Grassland**





**Image 3: Close-up of Wet Grassland/Heath vegetation**



**Image 4: *Sphagnum* spp.**





## TARGET NOTES - ID No. 115

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 03/08/11
<b>Surveyor:</b> Sarah O'Loughlin Irwin		<b>County name:</b> Clare
<b>1:2,500 Sheet no:</b> 4504-c	<b>Townland:</b> Fahy More (South)	<b>Grid Ref:</b> 161233, 167241
<b>Target note no.:</b> TN1		<b>Area:</b> 0.4ha
<b>Ecological value:</b> County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.		

**Habitat code**  
WN1

Small area of Oak-birch-holly woodland WN1 on acid soil (species poor). Birch and Hawthorn are abundant with frequent Rowan and Holly. Sessile Oak seedlings are present and a single mature tree. The field layer is species poor with a high proportion of bare ground and leaf litter and otherwise has dominant Brambles. Species list below.

This area is not linked to the annexed habitat 'Old sessile oak woods with *Ilex* and *Blechnum* in the British isles (91A0)'.

**Species List**

Species ( <i>Latin name</i> )	Species (common name)	DAFOR Scale
<i>Betula pubescens</i>	Downy birch	Abundant
<i>Sorbus aucuparia</i>	Rowan	Frequent
<i>Fraxinus excelsior</i>	Ash	Occasional
<i>Quercus petraea</i>	Sessile oak	Rare
<i>Crataegus monogyna</i>	Hawthorn	Abundant
<i>Ilex aquifolium</i>	Holly	Frequent
<i>Salix</i> sp.	Willow	Rare
<i>Hedera helix</i>	Ivy	Frequent
<i>Lonicera periclymenum</i>	Honeysuckle	Occasional
<i>Ulex europaea</i>	Gorse	Occasional
<i>Rubus fruticosus</i> agg.	Brambles	Dominant
	Ferns	Occasional

**Habitat Map**



## Photographic Record



**Image 1. Canopy layer with abundant Downy birch.**




**Image 2. Understory with Hawthorn and Holly.**



**Image 3. Species poor filed layer with Brambles and leaf litter.**



TARGET NOTES - ID No. 116		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 05/08/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4504-d	<b>Townland:</b> Ardataggle	<b>Grid Ref:</b> 162802, 167074
<b>Target note no.:</b> TN1		<b>Area:</b> 3.4ha
<b>Ecological Value:</b> <b>Local Importance (Higher Value)</b>		
<b>Habitat code</b>  WS2	Young Pendunculate Oak / Scot's Pine plantation – probably planted as part of the Native Woodlands Scheme. The leaves of the Oak trees appear to be affected by oak mildew (caused by the fungus <i>Erysiphe alphitoides</i> – see Image). The ground is very wet, with abundant rushes.	
<b>Habitat Map</b>		
		



## Photographic Record

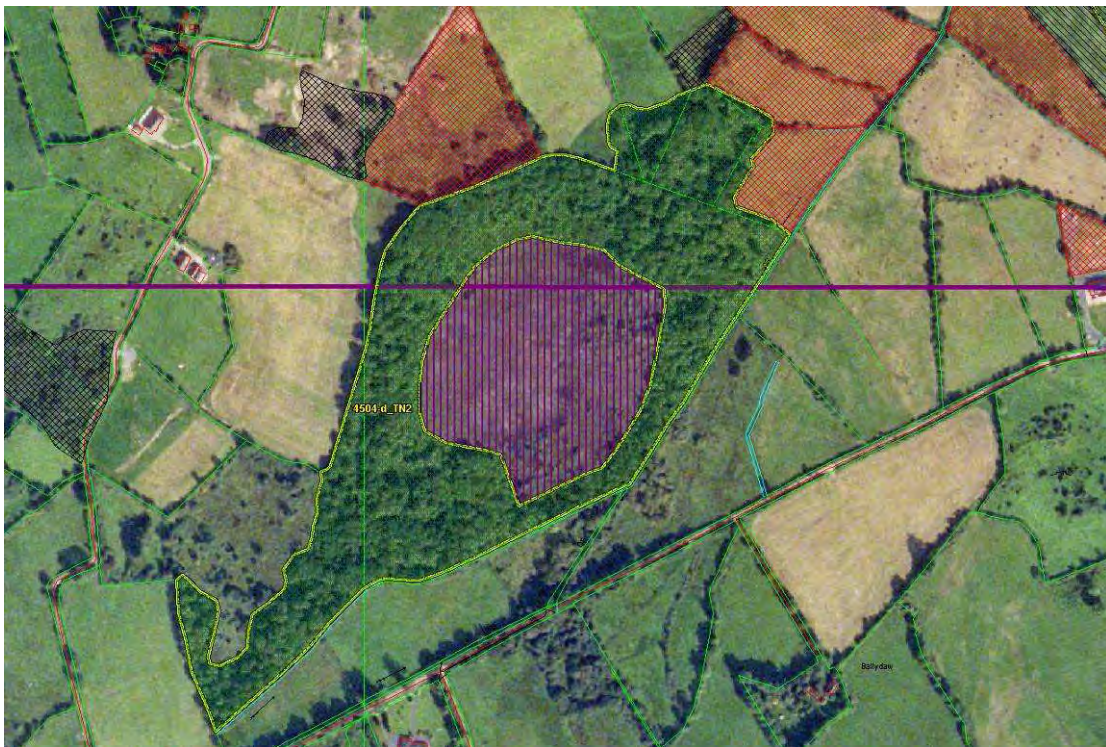


**Image 1: Immature Woodland WS2**



**Image 2: Oak Mildew on Pedunculate Oak leaves**



TARGET NOTES - ID No. 117		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 09/08/11
Surveyor: Jean Hamilton		County name: Clare
Sheet no: 4504-d	Townland: Fahy More	Grid Ref: 162227, 167057
Target note no.: TN2		Area: 7.2ha
Ecological Value: <b>County Importance</b>		
Habitat code  WN7/WD1	<p>Mature Birch Woodland surrounding bog. This habitat does not have links to the Annex I Habitat 'Bog Woodland (91D0)'. Dominated by Downy Birch (<i>Betula pubescens</i>), with occasional Ash (<i>Fraxinus excelsior</i>), Willows (<i>Salix</i> spp.) and Holly (<i>Ilex aquifolium</i>). The field layer is dominated by Brambles (<i>Rubus fruticosus</i> agg.), with abundant Bracken (<i>Pteridium aquilinum</i>) and some Ivy (<i>Hedera helix</i>) and abundant (non-<i>Sphagnum</i>) mosses. No bog species were noted in the field layer.</p>	
Habitat Map		
		



## Photographic Record



**Image 1: Mature Birch Woodland**



**Image 2: Field Layer with abundant Brambles**

TARGET NOTES - ID No. 118																																																																																									
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 22/07/11																																																																																							
Surveyor: Jean Hamilton/Sarah O'Loughlin/John Curtin/Shane O'Neill		County name: Clare																																																																																							
Sheet no: 4505-a	Townland: O'Briensbridge	Grid Ref: 165203, 167717																																																																																							
Target note no.: TN1		Area: 0.6ha																																																																																							
Ecological Value: <b>Local Importance (Higher Value)</b>																																																																																									
Habitat code  PB4/HH3	<p>Highly modified bog habitat. Bog vegetation persists, but Sphagnum is rare, and common agricultural grasses such as Perennial Rye-grass (<i>Lolium perenne</i>) are widespread. Gorse is beginning to invade. The ground is somewhat poached, with evidence of burning (Gorse branches blackened). Some drains have been dug.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Common Name</th> <th>Latin Name</th> <th>DAFOR</th> </tr> </thead> <tbody> <tr><td>Bent sp.</td><td><i>Agrostis</i> sp.</td><td>Occasional</td></tr> <tr><td>Sweet Vernal Grass</td><td><i>Anthoxanthum odoratum</i></td><td>Frequent</td></tr> <tr><td>Ling</td><td><i>Calluna vulgaris</i></td><td>Abundant</td></tr> <tr><td>Common Sedge</td><td><i>Carex nigra</i></td><td>Abundant</td></tr> <tr><td>Carnation Sedge</td><td><i>Carex panacea</i></td><td>Rare</td></tr> <tr><td>Bearded Lichen</td><td><i>Cladonia</i> sp.</td><td>Occasional</td></tr> <tr><td>Round-leaved Sundew</td><td><i>Drosera rotundifolia</i></td><td>Occasional</td></tr> <tr><td>Cross-leaved Heath</td><td><i>Erica tetralix</i></td><td>Occasional</td></tr> <tr><td>Common Cottongrass</td><td><i>Eriophorum angustifolium</i></td><td>Occasional</td></tr> <tr><td>Yorkshire Fog</td><td><i>Holcus lanatus</i></td><td>Occasional</td></tr> <tr><td>Cat's-ear</td><td><i>Hypochaeris radicata</i></td><td>Occasional</td></tr> <tr><td>Jointed/Sharp-flowered Rush</td><td><i>Juncus articulatus/acutiflorus</i></td><td>Frequent</td></tr> <tr><td>Soft Rush</td><td><i>Juncus effusus</i></td><td>Abundant</td></tr> <tr><td>Heath Rush</td><td><i>Juncus squarrosus</i></td><td>Occasional</td></tr> <tr><td>Greater Bird's-foot Trefoil</td><td><i>Lotus pedunculatus</i></td><td>Frequent</td></tr> <tr><td>Heath Wood-rush</td><td><i>Luzula multiflora</i> ssp. <i>congesta</i></td><td>Occasional</td></tr> <tr><td>Purple Moor-grass</td><td><i>Molinia caerulea</i></td><td>Abundant</td></tr> <tr><td>Bog Asphodel</td><td><i>Narthecium ossifragum</i></td><td>Rare</td></tr> <tr><td>Common Lousewort</td><td><i>Pedicularis sylvatica</i></td><td>Occasional</td></tr> <tr><td>Tormentil</td><td><i>Potentilla erecta</i></td><td>Frequent</td></tr> <tr><td>Creeping Buttercup</td><td><i>Ranunculus repens</i></td><td>Occasional</td></tr> <tr><td>Brambles</td><td><i>Rubus fruticosus</i> agg.</td><td>Rare</td></tr> <tr><td>Common Sorrel</td><td><i>Rumex acetosa</i></td><td>Rare</td></tr> <tr><td>Willows</td><td><i>Salix</i> sp.</td><td>Rare</td></tr> <tr><td>Bog Mosses</td><td><i>Sphagnum</i> spp.</td><td>Occasional</td></tr> <tr><td>Deergrass</td><td><i>Trichophorum cespitosum</i></td><td>Occasional</td></tr> <tr><td>White Clover</td><td><i>Trifolium repens</i></td><td>Frequent</td></tr> <tr><td>Common Gorse</td><td><i>Ulex europaea</i></td><td>Frequent</td></tr> </tbody> </table>		Common Name	Latin Name	DAFOR	Bent sp.	<i>Agrostis</i> sp.	Occasional	Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>	Frequent	Ling	<i>Calluna vulgaris</i>	Abundant	Common Sedge	<i>Carex nigra</i>	Abundant	Carnation Sedge	<i>Carex panacea</i>	Rare	Bearded Lichen	<i>Cladonia</i> sp.	Occasional	Round-leaved Sundew	<i>Drosera rotundifolia</i>	Occasional	Cross-leaved Heath	<i>Erica tetralix</i>	Occasional	Common Cottongrass	<i>Eriophorum angustifolium</i>	Occasional	Yorkshire Fog	<i>Holcus lanatus</i>	Occasional	Cat's-ear	<i>Hypochaeris radicata</i>	Occasional	Jointed/Sharp-flowered Rush	<i>Juncus articulatus/acutiflorus</i>	Frequent	Soft Rush	<i>Juncus effusus</i>	Abundant	Heath Rush	<i>Juncus squarrosus</i>	Occasional	Greater Bird's-foot Trefoil	<i>Lotus pedunculatus</i>	Frequent	Heath Wood-rush	<i>Luzula multiflora</i> ssp. <i>congesta</i>	Occasional	Purple Moor-grass	<i>Molinia caerulea</i>	Abundant	Bog Asphodel	<i>Narthecium ossifragum</i>	Rare	Common Lousewort	<i>Pedicularis sylvatica</i>	Occasional	Tormentil	<i>Potentilla erecta</i>	Frequent	Creeping Buttercup	<i>Ranunculus repens</i>	Occasional	Brambles	<i>Rubus fruticosus</i> agg.	Rare	Common Sorrel	<i>Rumex acetosa</i>	Rare	Willows	<i>Salix</i> sp.	Rare	Bog Mosses	<i>Sphagnum</i> spp.	Occasional	Deergrass	<i>Trichophorum cespitosum</i>	Occasional	White Clover	<i>Trifolium repens</i>	Frequent	Common Gorse	<i>Ulex europaea</i>	Frequent
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**Habitat Map****Photographic Record****Image 1: Overview of area**






**Image 2: Close-up of vegetation**



**Image 3: Close-up of vegetation**





TARGET NOTES - ID No. 119																																																					
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 22/07/11																																																			
<b>Surveyor:</b> Jean Hamilton/Sarah O'Loughlin/John Curtin/Shane O'Neill		<b>County name:</b> Clare																																																			
<b>Sheet no:</b> 4505-a	<b>Townland:</b> O'Briensbridge	<b>Grid Ref:</b> 165884, 167936																																																			
<b>Target note no.:</b> TN2		<b>Area:</b> 90ha																																																			
<b>Ecological Value:</b> <span style="color: red;">County Importance</span>																																																					
<b>Habitat code</b>  PB4	<p>Cutover Bog which is regenerating, with abundant bog mosses (<i>Sphagnum</i> spp.). No peat banks are visible here but peat banks further in indicated that the entire area has been cut. This area appears to be grazed with some poaching. Signs of hare were noted here. Rhododendron is invading. No examples of the EU Annex I habitat 7150 'Depressions on peat substrates of the Rhynchosporion' were found here.</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Common Name</th> <th style="text-align: left;">Latin Name</th> <th style="text-align: left;">DAFOR</th> </tr> </thead> <tbody> <tr><td>Bog Rosemary</td><td><i>Andromeda polifolia</i></td><td>Rare</td></tr> <tr><td>Ling</td><td><i>Calluna vulgaris</i></td><td>Abundant</td></tr> <tr><td>Common Sedge</td><td><i>Carex nigra</i></td><td>Rare</td></tr> <tr><td>Bearded Lichen</td><td><i>Cladonia</i> sp.</td><td>Occasional</td></tr> <tr><td>Round-leaved Sundew</td><td><i>Drosera rotundifolia</i></td><td>Occasional</td></tr> <tr><td>Cross-leaved Heath</td><td><i>Erica tetralix</i></td><td>Occasional</td></tr> <tr><td>Hare's-tail Cottongrass</td><td><i>Eriophorum vaginatum</i></td><td>Frequent</td></tr> <tr><td>Heath Rush</td><td><i>Juncus squarrosus</i></td><td>Occasional</td></tr> <tr><td>Purple Moor-grass</td><td><i>Molinia caerulea</i></td><td>Rare</td></tr> <tr><td>Bog Asphodel</td><td><i>Narthecium ossifragum</i></td><td>Occasional</td></tr> <tr><td>White Beak-sedge</td><td><i>Rhynchospora alba</i></td><td>Frequent</td></tr> <tr><td>Oak sapling</td><td><i>Quercus</i> sp.</td><td>Rare</td></tr> <tr><td>Bog Mosses</td><td><i>Sphagnum</i> spp.</td><td>Occasional</td></tr> <tr><td>Deergrass</td><td><i>Trichophorum cespitosum</i></td><td>Abundant</td></tr> <tr><td>Bilberry</td><td><i>Vaccinium myrtillus</i></td><td>Rare</td></tr> <tr><td>Cranberry</td><td><i>Vaccinium oxycoccus</i></td><td>Frequent</td></tr> </tbody> </table>		Common Name	Latin Name	DAFOR	Bog Rosemary	<i>Andromeda polifolia</i>	Rare	Ling	<i>Calluna vulgaris</i>	Abundant	Common Sedge	<i>Carex nigra</i>	Rare	Bearded Lichen	<i>Cladonia</i> sp.	Occasional	Round-leaved Sundew	<i>Drosera rotundifolia</i>	Occasional	Cross-leaved Heath	<i>Erica tetralix</i>	Occasional	Hare's-tail Cottongrass	<i>Eriophorum vaginatum</i>	Frequent	Heath Rush	<i>Juncus squarrosus</i>	Occasional	Purple Moor-grass	<i>Molinia caerulea</i>	Rare	Bog Asphodel	<i>Narthecium ossifragum</i>	Occasional	White Beak-sedge	<i>Rhynchospora alba</i>	Frequent	Oak sapling	<i>Quercus</i> sp.	Rare	Bog Mosses	<i>Sphagnum</i> spp.	Occasional	Deergrass	<i>Trichophorum cespitosum</i>	Abundant	Bilberry	<i>Vaccinium myrtillus</i>	Rare	Cranberry	<i>Vaccinium oxycoccus</i>	Frequent
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## Photographic Record



**Image 1: Overview of Cutover Bog**



**Image 2: Cutover bog vegetation with abundant *Sphagnum* and Deergrass**





**Image 3: Close-up of Cutover bog vegetation with abundant *Sphagnum***





TARGET NOTES - ID No. 120																																																																				
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 25/07/11																																																																		
Surveyor: Jean Hamilton		County name: Clare																																																																		
Sheet no: 4505-a	Townland: Fahy Beg	Grid Ref: 164424, 168248																																																																		
Target note no.: TN3		Area: --																																																																		
Ecological Value: <b>Local Importance (Higher Value)</b>																																																																				
<b>Habitat code</b>  <b>WL1/WL2/BL2/GS2</b>	<p>Species and structurally-diverse hedgerows on both sides of the road here, typical of hedgerows in the area which are generally of high ecological value with good connectivity. The hedgerow is dominated by Hawthorn (<i>Crataegus monogyna</i>) with some mature Ash (<i>Fraxinus excelsior</i>), developing in to a treeline WL2 in places. The hedgerow occurs in conjunction with an earth bank and a grassy verge.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Common Name</th> <th>Latin Name</th> </tr> </thead> <tbody> <tr><td>Creeping Bent</td><td><i>Agrostis capillaries</i></td></tr> <tr><td>False Oat-grass</td><td><i>Arrhenatherum eliatum</i></td></tr> <tr><td>Maidenhair Spleenwort</td><td><i>Asplenium trichomanes</i></td></tr> <tr><td>Common Mouse-ear</td><td><i>Cerastium fontanum</i></td></tr> <tr><td>Cock's-foot</td><td><i>Dactylis glomerata</i></td></tr> <tr><td>Foxglove</td><td><i>Digitalis purpurea</i></td></tr> <tr><td>American Willowherb</td><td><i>Epilobium ciliatum</i></td></tr> <tr><td>Wild Strawberry</td><td><i>Fragaria vesca</i></td></tr> <tr><td>Cleaver</td><td><i>Galium aparine</i></td></tr> <tr><td>Herb Robert</td><td><i>Geranium robertianum</i></td></tr> <tr><td>Wood Aven</td><td><i>Geum urbanum</i></td></tr> <tr><td>Ground Ivy</td><td><i>Glechoma hederacea</i></td></tr> <tr><td>Ivy</td><td><i>Hedera helix</i></td></tr> <tr><td>Yorkshire Fog</td><td><i>Holcus lanatus</i></td></tr> <tr><td>Perforate St. John's-wort</td><td><i>Hypericum perforatum</i></td></tr> <tr><td>Ox-eye Daisy</td><td><i>Leucanthemum vulgare</i></td></tr> <tr><td>Honeysuckle</td><td><i>Lonicera periclymenum</i></td></tr> <tr><td>Wall Lettuce</td><td><i>Mycelis muralis</i></td></tr> <tr><td>Hart's-tongue Fern</td><td><i>Phyllitis scolopendrium</i></td></tr> <tr><td>Ribwort Plantain</td><td><i>Plantago lanceolata</i></td></tr> <tr><td>Soft Sheild-fern</td><td><i>Polistichum setiferum</i></td></tr> <tr><td>Selfheal</td><td><i>Prunella vulgaris</i></td></tr> <tr><td>Dog Rose</td><td><i>Rosa canina</i></td></tr> <tr><td>Bramble</td><td><i>Rubus fruticosus</i> agg.</td></tr> <tr><td>Curled Dock</td><td><i>Rumex crispus</i></td></tr> <tr><td>Broad Dock</td><td><i>Rumex obtusifolia</i></td></tr> <tr><td>Figwort</td><td><i>Scrophularia nodosa</i></td></tr> <tr><td>Ragwort</td><td><i>Senecio jacobea</i></td></tr> <tr><td>Upright Hedge-Parsley</td><td><i>Torilis japonica</i></td></tr> <tr><td>Nettle</td><td><i>Urtica dioeca</i></td></tr> <tr><td>Bush Vetch</td><td><i>Vicia sepium</i></td></tr> <tr><td>Violet</td><td><i>Viola</i> sp.</td></tr> </tbody> </table>		Common Name	Latin Name	Creeping Bent	<i>Agrostis capillaries</i>	False Oat-grass	<i>Arrhenatherum eliatum</i>	Maidenhair Spleenwort	<i>Asplenium trichomanes</i>	Common Mouse-ear	<i>Cerastium fontanum</i>	Cock's-foot	<i>Dactylis glomerata</i>	Foxglove	<i>Digitalis purpurea</i>	American Willowherb	<i>Epilobium ciliatum</i>	Wild Strawberry	<i>Fragaria vesca</i>	Cleaver	<i>Galium aparine</i>	Herb Robert	<i>Geranium robertianum</i>	Wood Aven	<i>Geum urbanum</i>	Ground Ivy	<i>Glechoma hederacea</i>	Ivy	<i>Hedera helix</i>	Yorkshire Fog	<i>Holcus lanatus</i>	Perforate St. John's-wort	<i>Hypericum perforatum</i>	Ox-eye Daisy	<i>Leucanthemum vulgare</i>	Honeysuckle	<i>Lonicera periclymenum</i>	Wall Lettuce	<i>Mycelis muralis</i>	Hart's-tongue Fern	<i>Phyllitis scolopendrium</i>	Ribwort Plantain	<i>Plantago lanceolata</i>	Soft Sheild-fern	<i>Polistichum setiferum</i>	Selfheal	<i>Prunella vulgaris</i>	Dog Rose	<i>Rosa canina</i>	Bramble	<i>Rubus fruticosus</i> agg.	Curled Dock	<i>Rumex crispus</i>	Broad Dock	<i>Rumex obtusifolia</i>	Figwort	<i>Scrophularia nodosa</i>	Ragwort	<i>Senecio jacobea</i>	Upright Hedge-Parsley	<i>Torilis japonica</i>	Nettle	<i>Urtica dioeca</i>	Bush Vetch	<i>Vicia sepium</i>	Violet	<i>Viola</i> sp.
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**Habitat Map****Photographic Record**

**Image 1: Treeline and hedgerow on either side of road**






**Image 2: Hedgerow with associated earth bank and grassy verge**



**Image 3: Close-up of hedgerow/earth bank**





TARGET NOTES - ID No. 121																																												
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 25/07/11																																										
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare																																										
<b>Sheet no:</b> 4505-a	<b>Townland:</b> Bridgetown	<b>Grid Ref:</b> 164444, 168086																																										
<b>Target note no.:</b> TN4		<b>Area:</b> 1ha																																										
<b>Ecological Value:</b> <span style="color: red;">Local Importance (Higher Value)</span>																																												
<b>Habitat code</b>  <b>GS4/GM1</b>	<p>Wet Grassland GS4 on gently sloping ground, grading in to Marsh GM1 at bottom of slope. The upper area is quite poached (grazed by cattle), while the lower area appears quite undisturbed. Lots of Wood White butterfly (<i>Leptidea sinapis/reali</i>) Occasional Willows (<i>Salix</i> spp.).</p> <p>Adjacent GM1 fields are very similar.</p> <p><b>Marsh Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Common Name</th> <th style="text-align: left; padding: 5px;">Latin Name</th> <th style="text-align: left; padding: 5px;">DAFOR</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Jointed/Sharp-flowered Rush</td> <td style="padding: 5px;"><i>Juncus articulatus/acutiflorus</i></td> <td style="padding: 5px;">Dominant</td> </tr> <tr> <td style="padding: 5px;">Soft Rush</td> <td style="padding: 5px;"><i>Juncus effusus</i></td> <td style="padding: 5px;">Abundant</td> </tr> <tr> <td style="padding: 5px;">Meadowsweet</td> <td style="padding: 5px;"><i>Filipendula ulmaria</i></td> <td style="padding: 5px;">Abundant</td> </tr> <tr> <td style="padding: 5px;">Ragged Robin</td> <td style="padding: 5px;"><i>Lychnis flos-cuculi</i></td> <td style="padding: 5px;">Frequent</td> </tr> <tr> <td style="padding: 5px;">Lesser Spearwort</td> <td style="padding: 5px;"><i>Ranunculus flammula</i></td> <td style="padding: 5px;">Frequent</td> </tr> <tr> <td style="padding: 5px;">Greater Bird's-foot Trefoil</td> <td style="padding: 5px;"><i>Lotus pedunculatus</i></td> <td style="padding: 5px;">Frequent</td> </tr> <tr> <td style="padding: 5px;">Square-stalked St. John's-wort</td> <td style="padding: 5px;"><i>Hypericum tetrapterum</i></td> <td style="padding: 5px;">Occasional</td> </tr> <tr> <td style="padding: 5px;">Marsh Thistle</td> <td style="padding: 5px;"><i>Cirsium palustre</i></td> <td style="padding: 5px;">Frequent</td> </tr> <tr> <td style="padding: 5px;">Meadow Vetchling</td> <td style="padding: 5px;"><i>Lathyrus pratensis</i></td> <td style="padding: 5px;">Occasional</td> </tr> <tr> <td style="padding: 5px;">Creeping Buttercup</td> <td style="padding: 5px;"><i>Ranunculus repens</i></td> <td style="padding: 5px;">Occasional</td> </tr> <tr> <td style="padding: 5px;">Yorkshire Fog</td> <td style="padding: 5px;"><i>Holcus lanatus</i></td> <td style="padding: 5px;">Occasional</td> </tr> <tr> <td style="padding: 5px;">Yellow Iris</td> <td style="padding: 5px;"><i>Iris pseudacorus</i></td> <td style="padding: 5px;">Occasional</td> </tr> <tr> <td style="padding: 5px;">Marsh Bedstraw</td> <td style="padding: 5px;"><i>Galium palustre</i></td> <td style="padding: 5px;">Occasional</td> </tr> </tbody> </table>		Common Name	Latin Name	DAFOR	Jointed/Sharp-flowered Rush	<i>Juncus articulatus/acutiflorus</i>	Dominant	Soft Rush	<i>Juncus effusus</i>	Abundant	Meadowsweet	<i>Filipendula ulmaria</i>	Abundant	Ragged Robin	<i>Lychnis flos-cuculi</i>	Frequent	Lesser Spearwort	<i>Ranunculus flammula</i>	Frequent	Greater Bird's-foot Trefoil	<i>Lotus pedunculatus</i>	Frequent	Square-stalked St. John's-wort	<i>Hypericum tetrapterum</i>	Occasional	Marsh Thistle	<i>Cirsium palustre</i>	Frequent	Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional	Creeping Buttercup	<i>Ranunculus repens</i>	Occasional	Yorkshire Fog	<i>Holcus lanatus</i>	Occasional	Yellow Iris	<i>Iris pseudacorus</i>	Occasional	Marsh Bedstraw	<i>Galium palustre</i>	Occasional
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<b>Habitat Map</b> 																																												



## Photographic Record



**Image 1: View from top of field showing trampled Wet Grassland**



**Image 2: Marsh GM1 habitat**

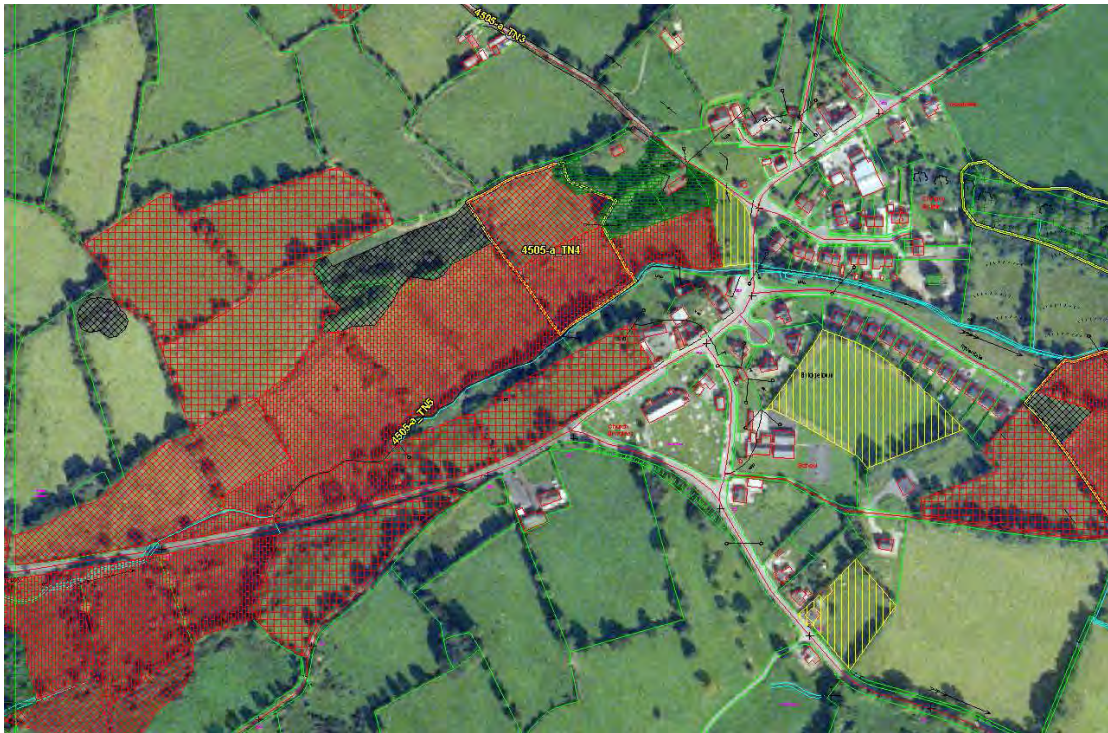




**Image 3: Close-up of Marsh GM1 vegetation**





TARGET NOTES - ID No. 122		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 25/07/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4505-a	<b>Townland:</b> Bridgetown	<b>Grid Ref:</b> 164447, 168004
<b>Target note no.:</b> TN5		<b>Area:</b>
<b>Ecological Value:</b> <b>Local Importance (Higher Value)</b>		
<b>Habitat code</b>  FW1WD1	<p>Small stream with fairly rapid flow, best classified as an Eroding Upland River FW1. No floating or standing vegetation and a rocky substrate. The adjacent woodland is composed of Ash (<i>Fraxinus excelsior</i>), Willows (<i>Salix</i> spp.), Hawthorn (<i>Crataegus monogyna</i>), Oak (<i>Quercus</i> sp.) and occasional Sycamore (<i>Acer pseudoplatanus</i>). The field layer is quite rich, with Brambles (<i>Rubus fruticosus</i> agg.), Meadowsweet (<i>Filipendula ulmaria</i>), Yellow Iris (<i>Iris pseudacorus</i>), Enchanter's Nightshade (<i>Circaea lutetiana</i>), Wood Aven (<i>Geum urbanum</i>), Wall Lettuce (<i>Mycelis muralis</i>), Herb Robert (<i>Geranium robertianum</i>), Hogweed (<i>Heracleum sphondylium</i>), Wood Aven (<i>Oxalis acetosella</i>), Wild Angelica (<i>Angelica sylvestris</i>), occasional Oak saplings, ferns and rushes (<i>Juncus</i> spp.).</p>	
<b>Habitat Map</b>		
		



## Photographic Record



**Image 1: Stream classified as Eroding upland river FW1**



**Image 2: Stream with overhanging ferns**






**Image 3: Woodland on either side of stream**





TARGET NOTES - ID No. 123		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 26/07/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4505-a	<b>Townland:</b> Bridgetown	<b>Grid Ref:</b> 164686, 168465
<b>Target note no.:</b> TN6		<b>Area:</b> --
<b>Ecological Value:</b> <b>Local Importance (Higher Value)</b>		
<b>Habitat code</b>  WL1/WL2	<p>Good example of a mature treeline/hedgerow on either side of the road here. The treeline is dominated by mature Oak (<i>Quercus</i> sp.) and Ash (<i>Fraxinus excelsior</i>), with Hawthorn (<i>Crataegus monogyna</i>), Blackthorn (<i>Prunus spinosa</i>) and Elder (<i>Sambucus nigra</i>) in the sub-canopy layer. The understory contains Brambles (<i>Rubus fruticosus</i> agg.), Nettle (<i>Urtica dioica</i>), Hogweed (<i>Heracleum sphondylium</i>), Hedge Bindweed (<i>Calystegia sepium</i>), Herb Robert (<i>Geranium robertianum</i>), Wild Carrot (<i>Daucus carota</i> spp. <i>carota</i>), Wood Aven (<i>Geum urbanum</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Ground Ivy (<i>Glechoma hederacea</i>), Barren Strawberry (<i>Potentilla sterilis</i>), Cleaver (<i>Galium aparine</i>), Bush Vetch (<i>Vicia sepium</i>), False Oat-grass (<i>Arrhenantherum eliatum</i>) and Common Figwort (<i>Scrophularia nodosa</i>).</p>	
<b>Habitat Map</b>		
		



## Photographic Record




**Image 1: Mature treeline on either side of road**



**Image 2: Understory vegetation**



TARGET NOTES - ID No. 124		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 26/07/11
Surveyor: Jean Hamilton		County name: Clare
Sheet no: 4505-a	Townland: Bridgetown	Grid Ref: 164918, 167944
Target note no.: TN7		Area: 1.5ha
Ecological Value: <b>Local Importance (Higher Value)</b>		
Habitat code  GM1	<p>Marsh habitat dominated by Jointed/Sharp-flowered Rush (<i>Juncus articulatus/acutiflorus</i>), and Soft Rush (<i>J. effusus</i>). Other species include Meadowsweet (<i>Filipendula ulmaria</i>), Greater Bird's-foot Trefoil (<i>Lotus pedunculatus</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Watermint (<i>Mentha aquatica</i>), Marsh Cinquefoil (<i>Potentilla palustre</i>), Marsh Bedstraw (<i>Galium palustre</i>), Marsh Thistle (<i>Cirsium palustre</i>), Purple Loosestrife (<i>Lythrum salicaria</i>), Meadow Vetchling (<i>Lathyrus pratensis</i>), Compact Rush (<i>J. compactus</i>), Common Valerian (<i>Valeriana officinalis</i>) and occasional Willows (<i>Salix</i> spp.).</p> <p>This habitat is not dominated by herbaceous species, and therefore does not link to the EU Annex I habitat 6430 Hydrophilous Tall Herb Fringe Communities of Plains and of the Montane to Alpine Levels.</p>	
Habitat Map		
		



## Photographic Record




**Image 1: Marsh Habitat**



**Image 2: Close-up of Marsh Vegetation**



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<b>Ecological Value:</b> <span style="color: red;">Local Importance (Higher Value)</span>																																									
<b>Habitat code</b>  <b>GS4</b>	<p>Wet Grassland habitat adjacent to an area of Cutover Bog PB4. Dominated by Jointed/Sharp-flowered Rush (<i>Juncus articulatus/acutiflorus</i>) and Sweet Vernal-grass (<i>Anthoxanthum odoratum</i>).</p> <p><b>Species List</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Common Name</th> <th style="text-align: left; padding: 2px;">Latin Name</th> <th style="text-align: left; padding: 2px;">DAFOR</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">Sweet Vernal-grass</td> <td style="padding: 2px;"><i>Anthoxanthum odoratum</i></td> <td style="padding: 2px;">Dominant</td> </tr> <tr> <td style="padding: 2px;">Jointed/Sharp-flowered Rush</td> <td style="padding: 2px;"><i>Juncus articulatus/acutiflorus</i></td> <td style="padding: 2px;">Dominant</td> </tr> <tr> <td style="padding: 2px;">Purple Moor-grass</td> <td style="padding: 2px;"><i>Molinia caerulea</i></td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;">Meadowsweet</td> <td style="padding: 2px;"><i>Filipendula ulmaria</i></td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;">Tormential</td> <td style="padding: 2px;"><i>Potentilla erecta</i></td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;">Common Lousewort</td> <td style="padding: 2px;"><i>Pedicularis sylvatica</i></td> <td style="padding: 2px;">Abundant</td> </tr> <tr> <td style="padding: 2px;">Carnation Sedge</td> <td style="padding: 2px;"><i>Carex panacea</i></td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;">Common Sedge</td> <td style="padding: 2px;"><i>Carex nigra</i></td> <td style="padding: 2px;">Frequent</td> </tr> <tr> <td style="padding: 2px;">Marsh Thistle</td> <td style="padding: 2px;"><i>Cirsium palustre</i></td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;">Heath Woodrush</td> <td style="padding: 2px;"><i>Luzula multiflora</i></td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;">White Clover</td> <td style="padding: 2px;"><i>Trifolium pratense</i></td> <td style="padding: 2px;">Occasional</td> </tr> <tr> <td style="padding: 2px;">Devil's-bit Scabious</td> <td style="padding: 2px;"><i>Succisa pratensis</i></td> <td style="padding: 2px;">Abundant</td> </tr> </tbody> </table>		Common Name	Latin Name	DAFOR	Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Dominant	Jointed/Sharp-flowered Rush	<i>Juncus articulatus/acutiflorus</i>	Dominant	Purple Moor-grass	<i>Molinia caerulea</i>	Frequent	Meadowsweet	<i>Filipendula ulmaria</i>	Frequent	Tormential	<i>Potentilla erecta</i>	Abundant	Common Lousewort	<i>Pedicularis sylvatica</i>	Abundant	Carnation Sedge	<i>Carex panacea</i>	Frequent	Common Sedge	<i>Carex nigra</i>	Frequent	Marsh Thistle	<i>Cirsium palustre</i>	Occasional	Heath Woodrush	<i>Luzula multiflora</i>	Occasional	White Clover	<i>Trifolium pratense</i>	Occasional	Devil's-bit Scabious	<i>Succisa pratensis</i>	Abundant
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Heath Woodrush	<i>Luzula multiflora</i>	Occasional																																							
White Clover	<i>Trifolium pratense</i>	Occasional																																							
Devil's-bit Scabious	<i>Succisa pratensis</i>	Abundant																																							
<b>Habitat Map</b> 																																									



## Photographic Record



**Image 1: Wet Grassland**



**Image 2: Wet grassland vegetation including *Filipendula ulmaria*, *Iris pseudacorus* and *Cirsium palustre***





**Image 3: Close-up of Wet Grassland vegetation with abundant *Succisa pratensis***





TARGET NOTES - ID No. 126		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 26/07/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4505-a	<b>Townland:</b> Bridgetown/O'Briensbridge	<b>Grid Ref:</b> 165207, 167971
<b>Target note no.:</b> TN9		<b>Area:</b> 0.25ha
<b>Ecological Value:</b> County Importance – Semi Natural Woodland has limited distribution within the study area and is therefore considered to be of conservation value.		
<b>Habitat code</b>  WN5	Woodland beside a small stream with Willows ( <i>Salix</i> spp.) dominant. Ground flora is dominated by Brambles ( <i>Rubus fruticosus</i> agg.), with Ivy, Herb Robert ( <i>Geranium robertianum</i> ), Yellow Pimpernel ( <i>Lisimachia nemorum</i> ), Soft Rush ( <i>Juncus effusus</i> ) and Yorkshire Fog ( <i>Holcus lanatus</i> ).	

Habitat Map





## Photographic Record




Image 1: Riparian Woodland with abundant willows



Image 2: Yellow Pimpernel (*Lysimachia nemorum*)



TARGET NOTES - ID No. 127		
<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 26/07/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4505-a	<b>Townland:</b> Bridgetown/O'Briensbridge	<b>Grid Ref:</b> 165086, 168051
<b>Target note no.:</b> TN10		<b>Area:</b> 3ha
<b>Ecological Value:</b> Local Importance (Higher Value)		
<b>Habitat code</b>  WD5	Grove of mature, well-spaced Beech trees, best described as Scattered Trees and Parkland WD5. Heavily trampled by Cattle, with little or no ground flora. A three-entrance badger sett was found here, which appears to be inactive. The mature beech trees have bat roost potential.	
<b>Habitat Map</b>		
		




## Photographic Record



**Image 1: Grove of mature Birch**



**Image 2: Close-up of mature Birch**

TARGET NOTES - ID No. 128		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 29/07/11
Surveyor: Jean Hamilton		County name: Clare
Sheet no: 4505-a	Townland: Clonboy	Grid Ref: 165663, 168924
Target note no.: TN11		Area: 1.7ha
Ecological Value: Local Importance (Higher Value)		
Habitat code  WD2	Mixed broadleaved/coniferous woodland beside river. Composed of Ash ( <i>Fraxinus excelsior</i> ), Sycamore ( <i>Acer pseudoplatanus</i> ), Willows ( <i>Salix</i> spp.) and Scot's Pine ( <i>Pinus sylvestris</i> ).  Adult Sparrowhawk and two juveniles seen and heard in the woodland, probably nesting here.	
Habitat Map		
		



## Photographic Record



**Image 1: Mature mixed broadleaved/coniferous woodland**



**Image 2: Understory vegetation**





**Image 3: Field layer**



Rev F01



## Photographic Record



**Image 1: Mature Birch and Saplings**



**Image 2: *Rhododendron ponticum***





**Image 3: Birch Saplings. Rhododendron in Background**



**Image 4: Ground flora with *Sphagnum* spp, *Erica tetralix* and *Molinia caerulea***



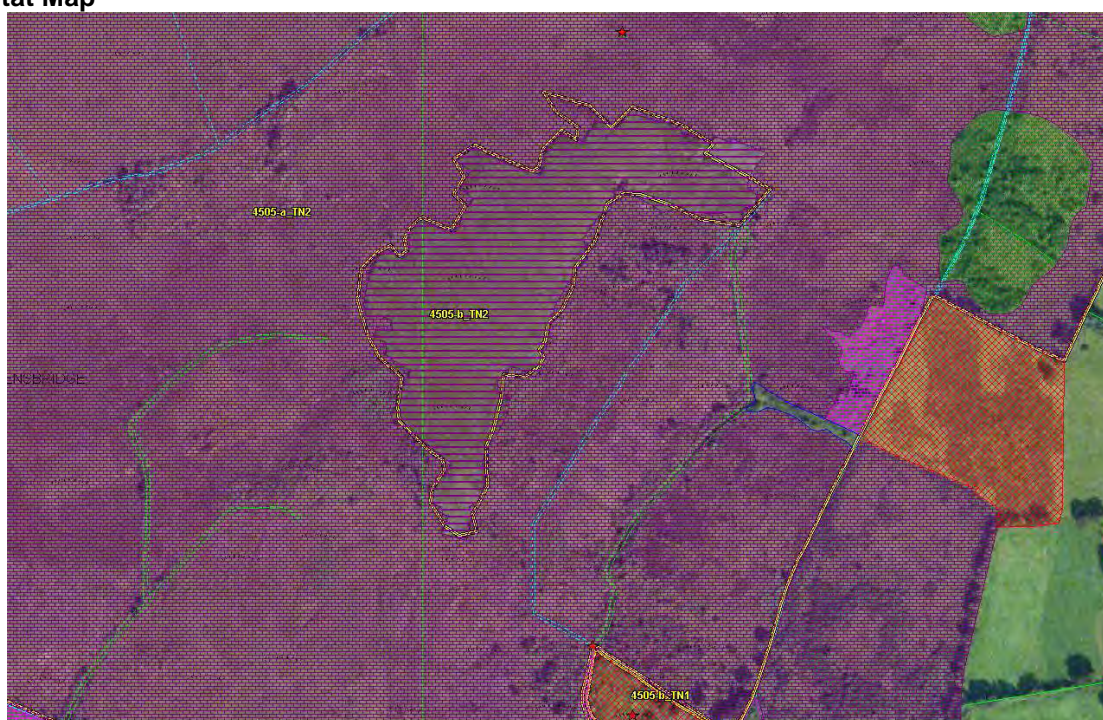


## TARGET NOTES - ID No. 130

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 25/07/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4505-b	<b>Townland:</b> Clonboy	<b>Grid Ref:</b> 166030, 167852
<b>Target note no.:</b> TN2		<b>Area:</b> 4.2ha

**Ecological Value:** County Importance

<b>Habitat code</b>  <b>PB1/PB4</b>	Small area of intact Raised Bog in the middle of a large area of Cutover. This area is very dry due to cutting which has been carried out on all sides. No Sphagnum, so definitely not active, but bog vegetation persists. The surrounding cut area is wetter and contains abundant Sphagnum, and so appears to be regenerating. <i>Rhododendron</i> is beginning to invade however.	
	<b>Species List:</b>	
	<b>Common Name</b>	<b>Latin Name</b>
	Bog Rosemary	<i>Andromeda polifolia</i>
	Ling	<i>Calluna vulgaris</i>
	Carnation Sedge	<i>Carex panicea</i>
	Round-leaved Sundew	<i>Drosera rotundifolia</i>
	Cross-leaved Heath	<i>Erica tetralix</i>
	Common Cottongrass	<i>Eriophorum angustifolium</i>
	Bog Asphodel	<i>Narthecium ossifragum</i>
	White Beak-sedge	<i>Rhynchospora alba</i>
	Deergrass	<i>Trichophorum cespitosum</i>
	<b>DAFOR</b>	
		Frequent
		Frequent
		Occasional
		Abundant
		Occasional
		Abundant
		Occasional
		Dominant

**Habitat Map**



## Photographic Record



**Image 1: Intact area of bog – peat face on left has been cut recently**



**Image 2: Overview of area showing peat banks**






**Image 3: Vegetation on Intact Area with Deergrass Dominant**



**Image 4: Close-up of Intact Bog Area Showing Bare Peat**





TARGET NOTES - ID No. 131		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 26/07/11
Surveyor: Jean Hamilton		County name: Clare
Sheet no: 4505-b	Townland: O'Briensbridge	Grid Ref: 167454, 168042
Target note no.: TN3		Area: 3.9ha
Ecological Value: Local Importance (Higher Value)		
Habitat code	Woodland has been felled here, but vegetation has recolonised to the extent that the classification Recently-felled Woodland WS5. Tall, rank grasses predominate, including False Oat-grass ( <i>Arrhenatherum eliatum</i> ) and Yorkshire Fog ( <i>Holcus lanatus</i> ). Rosebay Willowherb ( <i>Chamerion angustifolium</i> ), Greater Bird's-foot Trefoil ( <i>Lotus pedunculatus</i> ) and vetches including Tufted Vetch ( <i>Vicia cracca</i> ) and Bush Vetch ( <i>Vicia sepium</i> ).	
WS5		
Habitat Map		
		

## Photographic Record



**Image 1: Vegetation Recolonised in Recently-felled Area**



## TARGET NOTES - ID No. 132

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 11/08/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4505-b	<b>Townland:</b> O'Briensbridge	<b>Grid Ref:</b> 166702, 168152
<b>Target note no.:</b> TN4		<b>Area:</b> 1.3ha

**Ecological Value:** **Local Importance (Higher Value)**

**Habitat code**

PB4/GS3

Acid grassland on an area of Cutover bog. Flat ground, very wet and soft underfoot. Does not appear to be grazed. There is a rich carpet of non-Sphagnum mosses. The vegetation is dominated by Soft Rush (*Juncus effusus*) and Carnation Sedge (*Carex panicea*).

Scientific Name	Common Name	DAFOR
<i>Luzula multiflora</i>	Heath Woodrush	Rare
<i>Rumex acetosella</i>	Sheep's Sorrel	Occasional
<i>Calluna vulgaris</i>	Ling	Occasional
<i>Carex panicea</i>	Carnation Sedge	Dominant
<i>Cirsium palustre</i>	Marsh Thistle	Frequent
<i>Festuca</i> spp.	Fescues	Occasional
<i>Juncus effusus</i>	Soft Rush	Dominant
<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	Occasional
<i>Molinia caerulea</i>	Purple Moor-grass	Frequent
<i>Potentilla erecta</i>	Tormentil	Abundant
<i>Pilosella officinarum</i>	Mouse-ear Hawkweed	Frequent
<i>Succisa pratensis</i>	Devil's-bit Scabious	Abundant
<i>Trifolium repens</i>	White Clover	Abundant

**Habitat Map**





## Photographic Record



**Image 1: Acid Grassland on Cutover Bog**



**Image 2: Acid Grassland Vegetation**

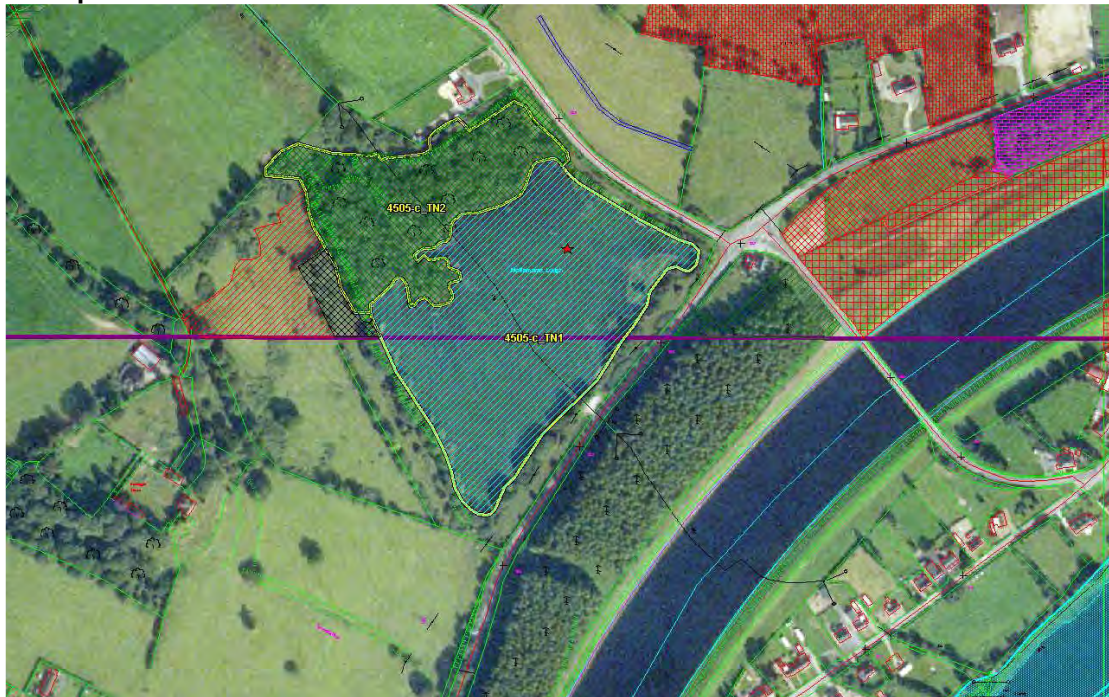




**Image 3: Close-up of Acid Grassland vegetation with abundant mosses**





TARGET NOTES - ID No. 133		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 26/07/11
Surveyor: Jean Hamilton		County name: Clare
Sheet no: 4505-c	Townland: O'Briensbridge	Grid Ref: 166285, 167445
Target note no.: TN1		Area: 0.8ha
Ecological Value: <b>County Importance</b>		
Habitat code  FL4/WD1/ WN6	<p>McNamara's Lough - Mesotrophic Lake (FL4) surrounded by Wet Willow-Alder-Ash woodland / Mature Treeline. Stoneworts (<i>Chara</i> spp.), Alternate Water-Milfoil (<i>Myriophyllum alternifolium</i>), and Water-plantain (<i>Alisma plantago-aquatica</i>) were observed growing in the lake. The invasive species Canadian Pondweed (<i>Elodea canadensis</i>) was also recorded within the lake. The surrounding shoreline is host to a wide variety of wetland species and mature woodland surrounds the entire lake. This woodland is classified as Wet Willow-Alder-Ash Woodland (WN6), see Target Note <b>4505-c_TN2</b>. Some areas within the woodland are dominated by willows and ground flora comprises mosses and wetland species. Non-native species such as Sycamore (<i>Acer pseudoplatanus</i>) also occur, particularly to the northwest of the lake and this area may be considered under Mixed broadleaved woodland (WD1). A path surrounds the lake, indicating that this area is an important local amenity.</p>	
Habitat Map		
		

## Photographic Record



**Image 1: View of lakeshore from southeast side**



**Image 2: Woodland surrounding lake**





**Image 3: Water-plantain (*Alisma plantago-aquatica*)**

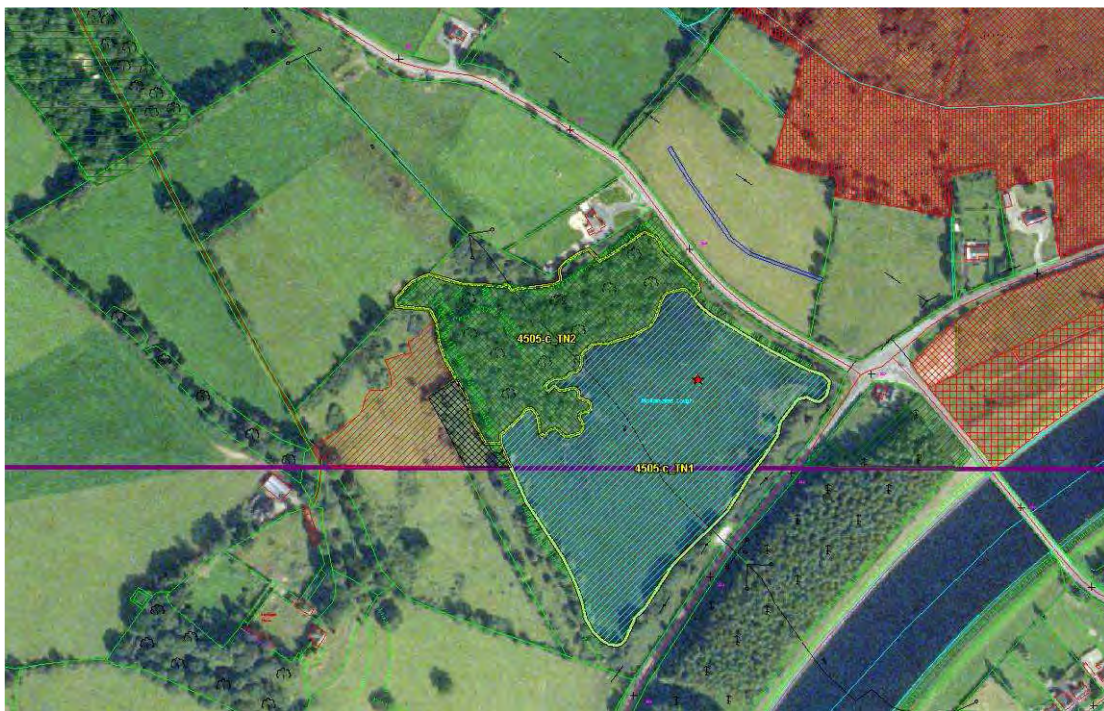


**Image 4: Canadian Pondweed (*Elodea canadensis*) growing in the lake.**



**Image 5: Canadian Pondweed (*Elodea canadensis*) on lake edge**



TARGET NOTES - ID No. 134		
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 26/07/11
Surveyor: Jean Hamilton		County name: Clare
Sheet no: 4505-c	Townland: O'Briensbridge	Grid Ref: 165433, 167105
Target note no.: TN2		Area: 2ha
Ecological Value: <b>Local Importance (Higher Value)</b>		
Habitat code  WN6	<p>Wet Willow-Alder-Ash woodland WN6 on the edge of a small lake (see 4505-c_TN1), dominated by Willows (<i>Salix</i> spp.). The area appears to be permanently waterlogged, with much standing water. Very little ground flora, except frequent Marsh Pennywort (<i>Hydrocotyl vulgaris</i>) and occasional Watermint (<i>Mentha aquatica</i>).</p> <p>The edges of the woodland are somewhat drier, with mature Downy Birch (<i>Betula pubescens</i>) and Sessile Oak (<i>Quercus petraea</i>). These areas are quite moist, with a rich carpet of mosses, Watermint (<i>Mentha aquatica</i>), Bilberry (<i>Vaccinium myrtillus</i>), Herb Robert (<i>Geranium robertianum</i>), Honeysuckle (<i>Lonicera periclymenum</i>), Common Gorse (<i>Ulex europaea</i>), Skullcap (<i>Scutellaria galericulata</i>) and Tutsan (<i>Hypericum androsaemum</i>)</p>	
Habitat Map		
		



## Photographic Record



**Image 1: Wet Willow Alder Ash Woodland**



**Image 2: Standing water in Wet Willow Alder Ash woodland**





**Image 3: Sparse ground flora with Marsh Pennywort and Watermint**



**Image 4: Rich ground flora at edge of woodland**





TARGET NOTES - ID No. 135																																																
Survey Title: Survey and Mapping of Habitats in Mid Clare		Survey date: 05/08/11																																														
Surveyor: Jean Hamilton		County name: Clare																																														
Sheet no: 4505-c	Townland: Ardataggle	Grid Ref: 164710, 167064																																														
Target note no.: TN3		Area: 0.7ha																																														
Ecological Value: <b>Local Importance (Higher Value)</b>																																																
Habitat code  WD1	<p>Mixed broadleaved woodland dominated by Ash (<i>Fraxinus excelsior</i>) and Hybrid Oak (<i>Quercus petraea x robur</i>). Occasional Sycamore (<i>Acer pseudoplatanus</i>) excludes this woodland from a WN classification. Hawthorn (<i>Crataegus monogyna</i>) and Mountain Ash (<i>Sorbus aucuparia</i>) are also frequent. There are also occasional Birch (<i>Betula</i> sp.) and Beech (<i>Fagus sylvatica</i>).</p> <p>The ground flora is dominated by grasses, including Cocks-foot (<i>Dactylis glomerata</i>) and False Oat-grass (<i>Arrhenatherum elatius</i>), but there is a good diversity of herbaceous woodland species.</p> <p><b>Species List</b></p> <table border="1"> <thead> <tr> <th>Scientific Name</th> <th>Common Name</th> </tr> </thead> <tbody> <tr><td><i>Acer pseudoplatanus</i></td><td>Sycamore</td></tr> <tr><td><i>Arrhenatherum elatius</i></td><td>False Oat-grass</td></tr> <tr><td><i>Betula</i> sp.</td><td>Birch</td></tr> <tr><td><i>Circaea lutetiana</i></td><td>Enchanter's Nightshade</td></tr> <tr><td><i>Crataegus monogyna</i></td><td>Hawthorn</td></tr> <tr><td><i>Dactylis glomerata</i></td><td>Cocks-foot</td></tr> <tr><td><i>Fagus sylvatica</i></td><td>Beech</td></tr> <tr><td><i>Fraxinus excelsior</i></td><td>Ash</td></tr> <tr><td><i>Geranium robertianum</i></td><td>Herb Robert</td></tr> <tr><td><i>Geum urbanum</i></td><td>Wood Aven</td></tr> <tr><td><i>Glechoma hederacea</i></td><td>Ground Ivy</td></tr> <tr><td><i>Hedera helix</i></td><td>Ivy</td></tr> <tr><td><i>Hyacinthoides non-scripta</i></td><td>Bluebell</td></tr> <tr><td><i>Lonicera periclymenum</i></td><td>Honeysuckle</td></tr> <tr><td><i>Lysimachia nemorum</i></td><td>Yellow Pimpernel</td></tr> <tr><td><i>Oxalis acetosella</i></td><td>Wood Anemone</td></tr> <tr><td><i>Quercus petraea x robur</i></td><td>Hybrid Oak</td></tr> <tr><td><i>Ranunculus repens</i></td><td>Creeping Buttercup</td></tr> <tr><td><i>Rubus fruticosus</i> agg.</td><td>Bramble</td></tr> <tr><td><i>Sorbus aucuparia</i></td><td>Mountain Ash</td></tr> <tr><td><i>Stellaria holostea</i></td><td>Greater Stitchwort</td></tr> <tr><td><i>Viola</i> sp.</td><td>Violet</td></tr> </tbody> </table>		Scientific Name	Common Name	<i>Acer pseudoplatanus</i>	Sycamore	<i>Arrhenatherum elatius</i>	False Oat-grass	<i>Betula</i> sp.	Birch	<i>Circaea lutetiana</i>	Enchanter's Nightshade	<i>Crataegus monogyna</i>	Hawthorn	<i>Dactylis glomerata</i>	Cocks-foot	<i>Fagus sylvatica</i>	Beech	<i>Fraxinus excelsior</i>	Ash	<i>Geranium robertianum</i>	Herb Robert	<i>Geum urbanum</i>	Wood Aven	<i>Glechoma hederacea</i>	Ground Ivy	<i>Hedera helix</i>	Ivy	<i>Hyacinthoides non-scripta</i>	Bluebell	<i>Lonicera periclymenum</i>	Honeysuckle	<i>Lysimachia nemorum</i>	Yellow Pimpernel	<i>Oxalis acetosella</i>	Wood Anemone	<i>Quercus petraea x robur</i>	Hybrid Oak	<i>Ranunculus repens</i>	Creeping Buttercup	<i>Rubus fruticosus</i> agg.	Bramble	<i>Sorbus aucuparia</i>	Mountain Ash	<i>Stellaria holostea</i>	Greater Stitchwort	<i>Viola</i> sp.	Violet
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<i>Stellaria holostea</i>	Greater Stitchwort																																															
<i>Viola</i> sp.	Violet																																															

**Habitat Map**



## Photographic Record



**Image 1: Mixed Broadleaved Woodland**



**Image 2: Ground Flora**





**TARGET NOTES - ID No. 136**

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 05/08/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4505-c	<b>Townland:</b> Ardataggle	<b>Grid Ref:</b> 164769, 167027
<b>Target note no.:</b> TN4		<b>Area:</b> 3.2ha

**Ecological Value:** **International Importance - Linked to Annex I habitat 6510 Lowland hay meadows**

**Habitat code**

GS2

Grassland on gently undulating ground with tall tussocky grasses dominant – appears to be managed as a hay meadow. No signs of recent grazing. The Meadow Brown Butterfly (*Maniola jurtina*) was recorded in this habitat.

Scientific Name	Common Name	DAFOR
<i>Agrostis</i> spp.	Bents	Abundant
<i>Alopecurus pratensis</i>	Meadow Foxtail	Frequent
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Abundant
<i>Arrhenatherum elatius</i>	False Oat-grass	Occasional
<i>Centaurea nigra</i>	Knapweed	Rare
<i>Cerastium fontanum</i>	Common Mouse-ear	Frequent
<i>Dactylis glomerata</i>	Cock's-foot	Dominant
<i>Holcus lanatus</i>	Yorkshire Fog	Abundant
<i>Lolium perenne</i>	Perennial Ryegrass	Occasional
<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	Frequent
<i>Plantago lanceolata</i>	Ribwort Plantain	Frequent
<i>Ranunculus acris</i>	Meadow Buttercup	Frequent
<i>Ranunculus repens</i>	Creeping Buttercup	Frequent
<i>Stellaria graminea</i>	Stitchwort	Frequent
<i>Trifolium</i> spp.	Clovers	Frequent
<i>Vicia cracca</i>	Tufted Vetch	Occasional

**Habitat Map**



## Photographic Record



**Image 1: View of Hay meadow from bottom of field (eastern end)**



**Image 2: View of meadow from middle of field looking eastwards**





**Image 3: Close-up of Hay meadow vegetation with *Vicia cracca* and *Dactylis glomerata***



## TARGET NOTES - ID No. 137

<b>Survey Title:</b> Survey and Mapping of Habitats in Mid Clare		<b>Survey date:</b> 25/07/11
<b>Surveyor:</b> Jean Hamilton		<b>County name:</b> Clare
<b>Sheet no:</b> 4505-d	<b>Townland:</b> O'Briensbridge	<b>Grid Ref:</b> 166287, 167430
<b>Target note no.:</b> TN1		<b>Area:</b> 0.8ha

**Ecological Value:** **Local Importance (Higher Value)**

<b>Habitat code</b>  <b>GS4</b>	Wet Grassland GS4 with abundant Purple Moor-grass ( <i>Molinia caerulea</i> ). Probably not species-rich enough to be linked to the EU Annex I habitat <i>Molinia</i> Meadow.		
	<b>Common Name</b>	<b>Latin Name</b>	<b>DAFOR</b>
	Star Sedge	<i>Carex echinata</i>	Frequent
	Jointed/Sharp-flowered Rush	<i>Juncus articulatus/acutiflorus</i>	Abundant
	Purple Moor-grass	<i>Molinia caerulea</i>	Abundant
	Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Abundant
	Creeping Bent	<i>Agrostis capillaris</i>	Abundant
	Lesser Spearwort	<i>Ranunculus flammula</i>	Frequent
	Meadowgrass	<i>Poa</i> sp.	Frequent

## Habitat Map





## Photographic Record

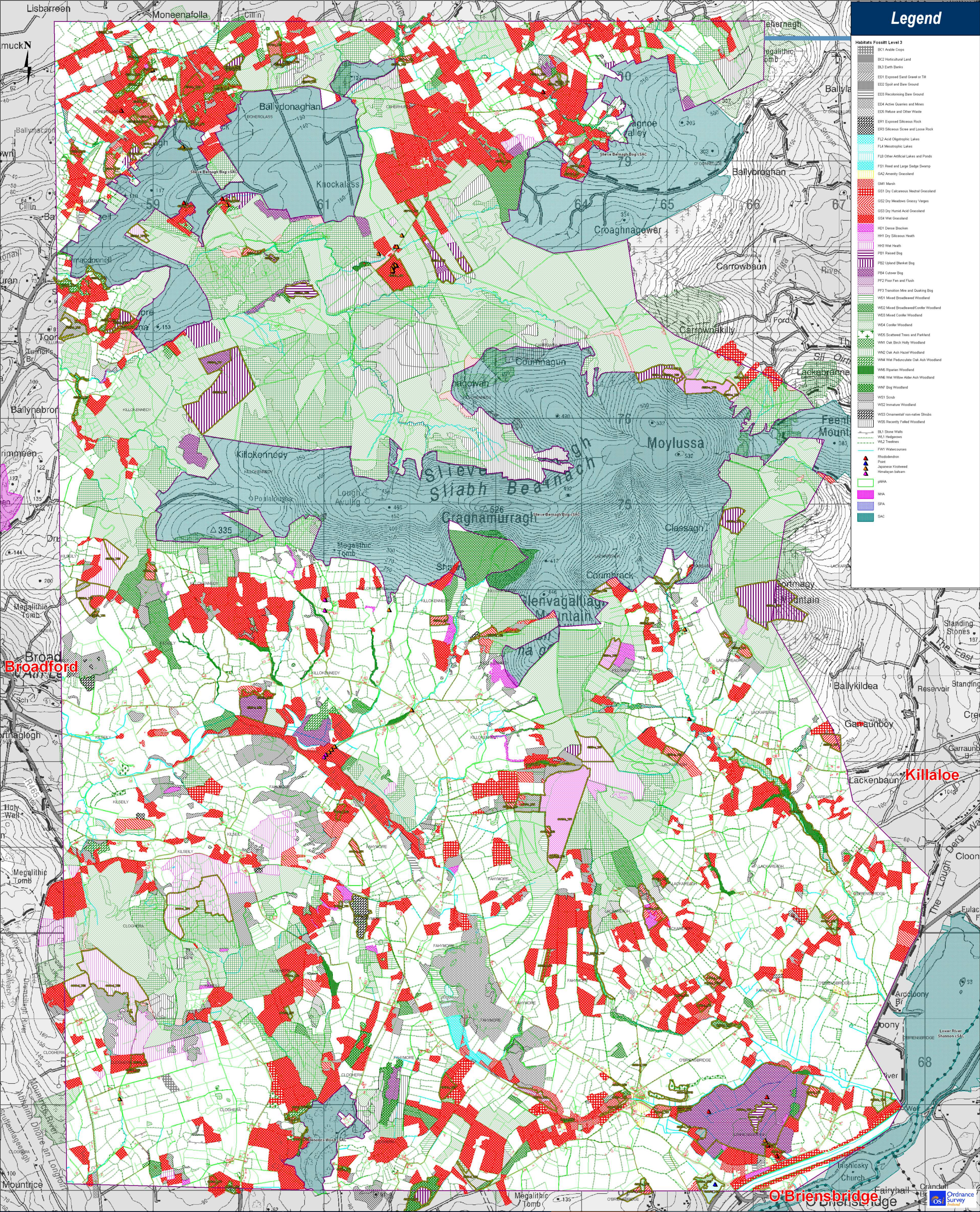


**Image 1: Wet Grassland with abundant *Molinia caerulea***



**Image 2: Close-up of Wet Grassland vegetation**





**Legend**

**Habitats Fossit Level 3**

BC1 Arable Crops

BC2 Horticultural Land

BC3 Earth Banks

ED1 Exposed Sand Gravel or Till

ED2 Spoil and Bare Ground

ED3 Reclaiming Bare Ground

ED4 Active Quarries and Mines

ED5 Refuse and Other Waste

ER1 Exposed Siliceous Rock

ER2 Siliceous Scree and Loose Rock

FL2 Acid Oligotrophic Lakes

FL4 Mesotrophic Lakes

FLB Other Artificial Lakes and Ponds

F51 Reed and Large Sedge Swamp

GA2 Amenity Grassland

GM1 Marsh

GS1 Dry Calcareous Neutral Grassland

GS2 Dry Meadows Grassy Verges

GS3 Dry Humid Acid Grassland

GS4 Wet Grassland

H01 Dense Bracken

H01 Dry Siliceous Heath

H03 Dry Heath

P01 Raised Bog

P02 Upland Blanket Bog

P04 Cutover Bog

PF2 Poor Fen and Flush

PF3 Transition Mire and Quaking Bog

WD1 Mixed Broadleaved Woodland

WD2 Mixed Broadleaved/Conifer Woodland

WD3 Mixed Conifer Woodland

WD4 Conifer Woodland

W05 Scattered Trees and Parkland

WN1 Oak Birch Holly Woodland

WN2 Oak Ash Hazel Woodland

WN4 Wet Pedunculate Oak Ash Woodland

WN5 Riparian Woodland

WN6 Wet Willow Alder Ash Woodland

WN7 Bog Woodland

WS1 Scrub

WS2 Immature Woodland

WS3 Ornamental/non-native Shrubs

WS5 Recently Felled Woodland

BL1 Stone Walls

WL1 Hedgerows

WL2 Treelines

FW1 Watercourses

Rhododendron

Pine

Japanese Knotweed

Himalayan Balsam

pHWA

NHA

SPA

SAC

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Mervue, Galway,  
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The Heritage Council

Clare Biodiversity

Clare Biodiversity

Project

Mid Clare Habitat Mapping

Title

Habitat Map

Figure

**Issue Details**

Drawn by: PK

Checked by: MW

Approved by: WM

Scale: 1:14,000

Date: September 2011

Project No. MGE0297

File Ref. MGE0297MI0001

Drawing No. MI0001

Rev. D01

**Notes**

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2. All levels are referred to Ordnance Datum, Malin Head.

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