

## **Appendix A.8.19**

### **Habitat Survey Results – Species Lists**

## A.8.19 Habitat Survey Results – Species Lists

# Document Verification

**Project title** N6 Galway City Ring Road  
**Document title** Updated Environmental Impact Assessment Report  
**Job number** 233985-00  
**Document ref** Appendix A.8.19 - Habitat Survey Results – Species Lists  
**File reference**

Revision	Date	Filename
Issue 1	30 August 2029	<b>Description</b> Issued for 2019 RFI Response

	Prepared by	Checked by	Approved by
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Issue 2	28 March 2025	Filename
		Description
		Issued for 2025 RFI Response

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Filename			
Description			
	Prepared by	Checked by	Approved by
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Issue Document Verification with Document

## A8.19.1 Introduction

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This appendix presents the species lists for habitats recorded along, and adjacent to, the Project. It formed part of the 2019 RFI Response and data presented remains unchanged. The accompanying figures replicate the information presented in the 2019 RFI Response to illustrate the location of where relevés were taken and along with updates to reflect the modifications to the Project detailed in Chapter 5 of the updated EIAR.

**Section A.8.19.2** presents the species lists for these habitat areas. The species lists and relevé references are presented in sections from west to east along the Project with reference to locations that correspond with either:

- Ecological sites<sup>1</sup>
- Habitat areas between the ecological sites, or
- A larger habitat study area that lies between the River Corrib and Lackagh Quarry (including where the proposed N6 GCRR passes through and adjacent to Lough Corrib SAC)

Each of these descriptive sections includes a table of the overall species lists for the habitat recorded within that area, with reference to the corresponding relevés that support the habitat classifications. The relevé references are presented in the ‘Key Species’ column in red font (e.g. EC03 R1).

The relevé dataset is contained in **Annex 1** to this Appendix, along with the associated photo dataset and GIS dataset collected along and adjacent to the Project, as referred to in **Section A.8.19.2**. The relevé locations are shown on **Figures 2.4.1 to 2.4.122** in **Annex 1** to this Appendix A.8.19.

The information presented in this Appendix does not include species lists for the residential habitat category (see Section 8.3.5.36 of Chapter 8, Biodiversity of the updated EIAR) and it also does not include species lists for the aquatic habitats, which are described in full in Section 8.3.5 of Chapter 8, Biodiversity of the updated EIAR and in Appendix A.8.20 (Results of the Aquatic Habitat Surveys) of the updated EIAR, and in Appendix N of the updated NIS.

Where referred to, the habitat codes for non-Annex I habitat types are after *A Guide to Habitats in Ireland* (Fossitt, 2000). Annex I habitat codes are as per the *Interpretation Manual of European Union Habitats* (CEC, 2013). Where vegetation community codes are referred to in the sections below, they are as per the following reports (as relevant):

- *Turlough Hydrology, Ecology and Conservation* (Waldren, S. 2015, Ed.)
- *Turloughs over 10 ha: vegetation survey and evaluation* (Goodwillie, 1992)

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<sup>1</sup> Ecological Sites are sites of potential ecological value for the habitats present: i.e. determined to be at least of a Local Importance (higher value) (refer to National Roads Authority, 2009 for more detail). The boundaries of the Ecological Sites were initially defined based on interpretation of orthophotography and collation of available existing habitat information, in conjunction with a ground truthing exercise to verify the orthophotography interpretation. These boundaries were then refined, where appropriate, based on the findings of the various habitat surveys undertaken.

- *The Irish semi-natural grasslands survey 2007-2012. Irish Wildlife Manuals, No. 78* (O'Neill et al., 2013)
- *Results of monitoring survey of old sessile oak woods and alluvial forests. Irish Wildlife Manuals, No. 71* (O'Neill, F.H. & Barron, S.J., 2013)
- *National survey of limestone pavement and associated habitats in Ireland. Irish Wildlife Manuals, No. 73* (Wilson, S. and Fernández, F., 2013)
- *Guidelines for a national survey and conservation assessment of upland vegetation and habitats in Ireland. Version 2.0. Irish Wildlife Manuals, No. 79* (Perrin et al., 2014)
- *Guidelines for the Assessment of Annex I Priority Petrifying Springs in Ireland. Irish Wildlife Manuals, No. 142.* (Denyer, Eakin, & Gill 2023)
- *National Survey of Native Woodlands 2003-2008. Volume II: Woodland Classification* (Perrin et al., 2008)

Nomenclature for vascular plant species follows New Flora of the British Isles, 4<sup>th</sup> Edition (Stace, 2021) and for bryophyte species follows the *Checklist of British and Irish bryophytes* (British Bryological Society, 2009<sup>2</sup>).

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<sup>2</sup> <http://rbg-web2.rbge.org.uk/bbs/Resources/Downloads.htm>

## A8.19.2 Habitats, Species Lists and Relevés Record along the Project

The tables below present the species lists and references to the associated supporting relevé data for the habitats recorded along, and adjacent to, the Project and should be read in conjunction with **Figures 2.4. 1 to 2.4.122** in **Annex 1** to this Appendix. The species lists and relevé references are presented in sections from west to east along the Project.

### EC03

EC03 - Species Lists & Relevés		
Habitat code <sup>3</sup>	Annex I habitat <sup>4</sup>	Key species
CB1	1220	<i>Elytrigia repens, Jacobaea vulgaris, Leontodon autumnalis, Lotus corniculatus, Rumex crispus and Plantago lanceolata.</i>
CM2	1330	<i>Agrostis stolonifera, Festuca rubra, Eleocharis uniglumis. Triglochin maritima, Leontodon autumnalis, Potentilla anserina, Lotus corniculatus and Cochlearia officinalis.</i>
FS1	n/a	<i>Phragmites australis and Filipendula ulmaria.</i>
GA1	n/a	<i>Lolium perenne, Holcus lanatus, Trifolium repens, Ranunculus repens and Rumex sp.</i>
GS2	n/a	<i>Arrhenatherum elatius, Trifolium pratense, Holcus lanatus, Centaurea nigra, Trifolium repens, Agrostis capillaris, Poa pratensis, Trifolium repens, Jacobaea vulgaris and Cynosurus cristatus.</i>
GS3	n/a	<i>Anthoxanthum odoratum, Agrostis capillaris, Potentilla erecta, Trifolium repens and Poa pratensis.</i>
GS3/ER1	n/a	Only partially visible from the North. ER1 species include abundant <i>Ulex gallii, Sedum anglicum</i> , frequent <i>Rumex acetosella, Hypochaeris radicata, Erica cinerea</i>
GS4	n/a	<i>Juncus effusus and Juncus acutiflorus.</i>
GM1	n/a	<i>Iris pseudacorus, Filipendula ulmaria, Lythrum salicaria, Mentha aquatica, Anagallis tenella, Carex nigra, Hydrocotyle vulgaris and Jacobaea aquaticus.</i>
HH1	4030 (DH1)	<i>Ulex gallii, Calluna vulgaris, Erica cinerea, Molinia caerulea, Anthoxanthum odoratum, Potentilla erecta, Succisa pratensis and Daboecia cantabrica</i> <b>EC03 R1</b>
WS1	n/a	<i>Ulex europaeus, Prunus spinosa and Rubus fruticosus.</i>

<sup>3</sup> Fossitt (2000)

<sup>4</sup> Where applicable, vegetation community codes are given in parenthesis.

\*8240 (LPE) = exposed limestone pavement; \*8240 (LPW) = wooded limestone pavement

## EC05

EC05 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
BL3/GA2	n/a	Residential area. Grassland species include <i>Bellis perennis</i> , <i>Lolium perenne</i> , <i>Odontitis vernus</i> , <i>Rumex acetosella</i> , <i>Trifolium pratense</i> .
FW1/GM1	n/a	<i>Iris pseudacorus</i> , <i>Apium nodiflorum</i> , <i>Potentilla palustris</i> , <i>Filipendula ulmaria</i> , <i>Lythrum salicaria</i> , <i>Mentha aquatica</i> , <i>Salix cinerea</i> ,
GA1	n/a	<i>Arrhenatherum elatius</i> , <i>Capsella bursa-pastoris</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Jacobaea vulgaris</i> , <i>Lolium perenne</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Poa annua</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> , <i>Stellaria media</i> , <i>Trifolium repens</i>
GS2	n/a	<i>Achillea millefolium</i> , <i>Arrhenatherum elatius</i> , <i>Centurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Hypocharis radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Taraxacum agg.</i> , <i>Trifolium pratense</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> , <i>Vicia sepium</i>
GS3	n/a	<i>Agrostis capillaris</i> , <i>Anthoxanthum odoratum</i> , <i>Cynosurus cristatus</i> , <i>Lolium perenne</i> , <i>Hypochaeris radicata</i> , <i>Achillea millefolium</i> , <i>Trifolium pratense</i> , <i>Veronica officinalis</i> , <i>Prunella vulgaris</i> , <i>Trifolium repens</i> , <i>Rumex obtusifolius</i> , <i>R acetosella</i> , <i>Rhytidadelphus squarrosus</i> , <i>Sedum anglicum</i> , <i>Dicranum sp.</i> , <i>Succisa pratensis</i> , <i>Euphrasia sp.</i> , <i>Hypnum cupressiforme</i> , <i>Agrostis sp.</i> , <i>Digitalis purpurea</i> , <i>Erica cinerea</i> , <i>Euphrasia sp.</i> , <i>Galium saxatile</i> , <i>Holcus lanatus</i> , <i>Hypochaeris radicata</i> , <i>Juncus acutiflorus</i> , <i>Lotus corniculatus</i> , <i>Pilosella officinarum</i> , <i>Poa sp.</i> , <i>Potentilla erecta</i> , <i>Ranunculus repens</i> , <i>Solidago virgaurea</i> , <i>Teucrium scorodonia</i> , <i>Vicia sepium</i> ,
GS3/WS1	n/a	GS3 dominant. Species include <i>Achillea millefolium</i> , <i>Agrostis sp.</i> , <i>Anthoxanthum odoratum</i> , <i>Digitalis purpurea</i> , <i>Erica cinerea</i> , <i>Euphrasia sp.</i> , <i>Galium saxatile</i> , <i>Holcus lanatus</i> , <i>Hypochaeris radicata</i> , <i>Juncus acutiflorus</i> , <i>Lotus corniculatus</i> , <i>Pilosella officinarum</i> , <i>Poa sp.</i> , <i>Potentilla erecta</i> , <i>Prunella vulgaris</i> , <i>Ranunculus repens</i> , <i>Rumex acetosella</i> , <i>Solidago virgaurea</i> , <i>Succisa pratensis</i> , <i>Teucrium scorodonia</i> , <i>Vicia sepium</i> .
GS4	n/a	<i>Juncus effusus</i> , <i>Juncus articulatus</i> , <i>Holcus lanatus</i> , <i>Agrostis stolonifera</i> , <i>Ranunculus repens</i> , <i>Hydrocotyle vulgaris</i> , <i>Lotus pedunculatus</i> , <i>Cirsium palustre</i> , <i>Lythrum salicaria</i> , <i>Rumex acetosa</i> , <i>Galium palustre</i> , <i>Potentilla erecta</i> , <i>Calliergonella cuspidata</i> , <i>Rhytidadelphus squarrosus</i> , <i>Angelica sylvestris</i> , <i>Carex echinata</i> , <i>Carex panicea</i> , <i>Comarum palustre</i> , <i>Dactylorhiza fuschii</i> , <i>Epilobium hirsutum</i> , <i>Equisetum fluviatile</i> , <i>Filipendula ulmaria</i> , <i>Hypericum scorpioides</i> , <i>Jacobaea aquatica</i> , <i>Juncus acutiflorus</i> , <i>Mentha aquatica</i> , <i>Persicaria hydropiper</i> , <i>Ranunculus flammula</i> , <i>Typha latifolia</i>

360 R1 and 352 R1

## EC05 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS1	n/a	<i>Anthoxanthum odoratum, Plantago lanceolata, Poa trivialis, Dactylis glomerata, Festuca rubra agg., Trifolium pratense, Hypochaeris radicata, Prunella vulgaris, Centaurea nigra, Lotus corniculatus, Agrostis capillaris and Leucanthemum vulgare.</i> <a href="#">363_R1</a>
HD1	n/a	<i>Pteridium aquilinum, Salix cinerea, Rubus fruticosus agg. Calystegia sepium.</i>
HD1/HH1	4030	Mosaic of HD1 and HH1. Species as described in this table.
HD1/GS3/WS1	n/a	HD1 most common, <i>Prunus spinosa, Rubus fruticosus agg. and Ulex galii</i> . Grassland species as above.
HD1/HH1/WS1	4030	HD1 dominant. <i>Blechnum spicant, Lonicera periclymenum, Myrica gale, Pteridium aquilinum, Teucrium scorodonia, Ulex galii, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Rubus fruticosus agg., Salix cinerea subsp. oleifolia, Ulex europeaus.</i>
HD1/WS1/GS4	n/a	Species as listed in this table.
HH1	4030 (DH1)	<i>Ulex gallii, Erica cinerea, Daboecia cantabrica, Molinia caerulea, Calluna vulgaris, Agrostis capillaris. Succisa pratensis, Teucrium scorodonia, Hylocomium splendens, Solidago virgaurea and Viola sp.</i> <a href="#">EC05 R1, 2394 R1, 2396 R1, 336 R1, 338 R1 and 361 R2</a>
HH1/HD1	4030	Dry heath and dense bracken species as described in this table. <a href="#">2391_R1</a>
HH1/WS1	4030	Dry heath and scrub species as described in this table. <a href="#">2397_R1</a>
HH1/WS1/HD1	4030	Dry heath, scrub and dense bracken species as described in this table.
PF2	n/a	<i>Juncus articulatus, Juncus effusus, Hypericum elodes, Hydrocotyle vulgaris, Anagallis tenella, Carex echinata, Carex nigra, Ranunculus flammula and Sphagnum sp.</i> <a href="#">341_R1</a>
WD2	n/a	<i>Betula sp., Pinus pinaster, Cupressus × leylandii.</i>
WS1	n/a	<i>Prunus spinosa, Salix cinerea, Crataegus monogyna, Ulex europaeus, Hedera helix, Pteridium aquilinum, Calystegia sepium, Cirsium arvense, Ilex aquifolium, Rubus fruticosus agg.</i> <a href="#">361_R1</a>
WS1/HH1	4030	Predominantly scrub habitat area. Dry heath and scrubs species as described in table, with exception of abundant <i>Potentilla erecta</i> in Dry heath habitat
WS1/HD1	n/a	Species as described in table above.
WS1/GS1	n/a	Species as described in table above.

WS1/GS3	n/a	Species as described in table above.
<b>EC05 - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
WS1/HD1/ GS3	n/a	<p><i>Prunus spinosa, Salix cinerea, Crataegus monogyna, Ulex europaeus, Hedera helix, Pteridium aquilinum, Rubus fruticosus agg., Calystegia sepium, Agrostis capillaris, Anthoxanthum odoratum, Cynosurus cristatus, Lolium perenne, Hypochaeris radicata, Achillea millefolium, Trifolium pratense, Veronica officinalis, Prunella vulgaris, Trifolium repens, Rumex obtusifolius, R acetosella, Rhytidadelphus squarrosus. Sedum anglicum, Dicranum sp., Succisa pratensis, Euphrasia sp., Hypnum cupressiforme.</i></p> <p>Dense bracken tends to shade out much of the grassland species beneath</p>

## EC11

<b>EC11 - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
ED3	n/a	<i>Poa annua, Tussilago farfara, Ranunculus repens, Papaver rhoeas, Persicaria maculosa, Atriplex patula, Veronica chamaedrys, Agrostis stolonifera, Sonchus asper, Cerastium fontanum, Reynoutria japonica and Fumaria muralis.</i>
ER1	n/a	The exposed rock is mostly bare. It has few crevices or clefts to harbour significant bryophyte or pteridophyte communities. Where rock outcrops occur in grassland habitats, they are often surrounded by species that prefer good drainage such as <i>Sedum anglica, Pilosella officinarum</i> and <i>Veronica serpyllifolia</i> .
FS1	n/a	<i>Phragmites australis</i> and <i>Typha latifolia</i> .
FS2	n/a	<i>Apium nodiflorum, Sparganium erectum, Epilobium hirsutum, Juncus articulatus, Hydrocotyle vulgaris</i> and <i>Glyceria fluitans</i> .
GA1	n/a	<i>Rumex obtusifolius, Ranunculus repens, Jacobaea vulgaris, Persicaria maculosa, Urtica dioica</i> and <i>Plantago major</i> .
GS1	n/a	<i>Centaurea nigra, Festuca rubra, Linum catharticum, Festuca rubra, Dactylis glomerata, Arrhenatherum elatius, Lotus corniculatus, Plantago lanceolata, Potentilla anserina, Leucanthemum vulgare, Euphrasia officinalis, Holcus lanatus, Achillea millefolium</i> and <i>Trifolium pratensis</i> .
GS2	n/a	<i>Dactylis glomerata, Festuca rubra, Holcus lanata, Arrhenatherum elatius, Anthoxanthum odoratum</i> and <i>Agrostis stolonifera</i> .
GS3	n/a	<p><i>Anthoxanthum odoratum, Agrostis capillaris, Nardus stricta, Carex disticha, Succisa pratensis, Ranunculus repens, Prunella vulgaris, Hypochaeris radicata, Potentilla erecta, Hylomenium splendens, Juncus bulbosus, Galium saxatile, Danthonia decumbens, Plantago lanceolata</i> and <i>Rhytidadelphus squarrosus</i>.</p> <p>Well-drained areas around rock outcrops also support <i>Lotus corniculatus, Euphrasia officinalis, Festuca rubra, Succisa pratensis, Carex panicea</i> and <i>Achillea millefolium</i>.</p>

## EC11 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS3/GS4/ GS1	n/a	GS3 and GS4 as described above, GS1 species include <i>Campanula rotundifolia</i> , <i>Carex flacca</i> , <i>Carlina vulgaris</i> , <i>Centaurium erythraea</i> , <i>Centurea nigra</i> , <i>Conopodium majus</i> , <i>Cynosurus cristatus</i> , <i>Daucus carota</i> , <i>Lathyrus pratensis</i> , <i>Leucanthemum vulgare</i> , <i>Linum catharticum</i> , <i>Lotus corniculatus</i> , <i>Pilosella aurantiaca</i> , <i>Polygala vulgaris</i> , <i>Trifolium pratense</i> .
GS3 / HH1 / GM1 / GS4	4030	Dense bracken near the road. <i>Apium nodiflorum</i> , <i>Nasturtium officinale</i> agg., <i>Typha latifolia</i> Grassland, Dry siliceous heath species as described in this table.
GS4	n/a	Species-poor <i>Juncus effusus</i> dominated vegetation. Typical species are <i>Juncus effusus</i> , <i>Juncus articulatus</i> , <i>Juncus conglomeratus</i> , <i>Filipendula ulmaria</i> , <i>Holcus lanatus</i> , <i>Lythrum salicaria</i> , <i>Lotus pedunculatus</i> , <i>Rubus fruticosus</i> , <i>Arrhenatherum elatius</i> , <i>Dryopteris dilatata</i> , <i>Dactylis glomerata</i> , <i>Anthoxanthum odoratum</i> , <i>Agrostis stolonifera</i> and <i>Carex echinata</i> .
	n/a (GL1diii)	Tussocky <i>Molinia</i> species-poor type occurring between and grading to heath habitats. Not considered annex habitat but of higher value than species-poor <i>Juncus effusus</i> dominated vegetation. Typical species are <i>Molinia caerulea</i> , <i>Ranunculus repens</i> , <i>Ranunculus acris</i> , <i>Succisa pratensis</i> , <i>Potentilla erecta</i> , <i>Cirsium vulgare</i> , <i>Vicia sepium</i> and <i>Anthoxanthum odoratum</i> . <b>EC11 R12 and 609_R1</b>
	6410 (GL1c)	Species include <i>Molinia caerulea</i> , <i>Angelica sylvestris</i> , <i>Juncus articulatus</i> , <i>Juncus conglomeratus</i> , <i>Lythrum salicaria</i> , <i>Filipendula ulmaria</i> , <i>Carex echinata</i> , <i>Carex flacca</i> , <i>Potentilla erecta</i> , <i>Lotus pedunculatus</i> , <i>Centaurea nigra</i> , <i>Galium palustre</i> and <i>Mentha aquatica</i> . <b>EC11 R1</b>
GS4/GS2	n/a	<i>Angelica sylvestris</i> , <i>Carex echinata</i> , <i>Carex panicea</i> , <i>Comarum palustre</i> , <i>Dactylorhiza fuschii</i> , <i>Epilobium hirsutum</i> , <i>Equisetum fluviatile</i> , <i>Filipendula ulmaria</i> , <i>Galium palustre</i> , <i>Hydrocotyle vulgaris</i> , <i>Hypericum scorpioides</i> , <i>Jacobaea aquatica</i> , <i>Juncus acutiflorus</i> , <i>Juncus effusus</i> , <i>Lotus pendunculatus</i> , <i>Lythrum salicaria</i> , <i>Mentha aquatica</i> , <i>Persicaria hydropiper</i> , <i>Ranunculus flammula</i> , <i>Typha latifolia</i> , <i>Achillea millefolium</i> , <i>Arrhenatherum elatius</i> , <i>Centaurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Hypochaeris radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Taraxacum officinale</i> agg., <i>Trifolium pratense</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> , <i>Vicia sepium</i> .
GS4/WS1	n/a	<i>Angelica sylvestris</i> , <i>Carex echinata</i> , <i>Carex panicea</i> , <i>Comarum palustre</i> , <i>Dactylorhiza fuschii</i> , <i>Epilobium hirsutum</i> , <i>Equisetum fluviatile</i> , <i>Filipendula ulmaria</i> , <i>Galium palustre</i> , <i>Hydrocotyle vulgaris</i> , <i>Hypericum scorpioides</i> , <i>Jacobaea aquatica</i> , <i>Juncus acutiflorus</i> , <i>Juncus effusus</i> , <i>Lotus pendunculatus</i> , <i>Lythrum salicaria</i> , <i>Mentha aquatica</i> , <i>Persicaria hydropiper</i> , <i>Ranunculus flammula</i> , <i>Typha latifolia</i> . WS1 as below.

**EC11 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GM1	n/a	<i>Typha latifolia, Osmunda regalis, Angelica sylvestris, Lythrum salicaria, Mentha aquatica, Hydrocotyle vulgaris, Potentilla palustris, Galium palustre, Juncus effusus, Agrostis stolonifera and Equisetum fluviatile.</i> <b>628_R1</b>
HD1	n/a	<i>Pteridium aquilinum</i> , with patches of <i>Rubus fruticosus</i> agg. <i>Calystegia sepium, Osmunda regalis, Epilobium hirsutum</i> and <i>Ulex europaeus</i> . Often grading into scrub.
HD1/HH1	n/a	Dense bracken most dominant habitat, annex-I status no longer applies. Species list for dense bracken and Dry Heath as described in table.
HD1/GS4/WS1	n/a	Dense bracken dominant. Species as described elsewhere in this table.
HH1	4030 (DH1/DH3)	Generally occurs in small patches round rock outcrops within a peatland or grassland mosaic. Typical species are <i>Ulex gallii, Calluna vulgaris, Erica cinerea, Potentilla erecta, Carex binervis, Agrostis capillaris, Anthoxanthum odoratum, Carex demissa, Molinia caerulea, Agrostis viminalis, Nardus stricta, Succisa pratensis, Campylopus flexuosus, Pleurozium schreberi, Scleropodium purum</i> and <i>Hypnum jutlandicum</i> . Scrub encroaching in 2023. <b>EC11 R4, EC11 R7, EC11 R10, 2403_R1 and 2407_R1</b>
HH1/HD1	4030	Heathland and dense bracken species as described in this table. <b>614_R1</b>
HH3	4010 (WH4a, Wh4b, WH7)	The habitat is generally found in mosaic with blanket bog and dry heath. Typical species include <i>Trichophorum germanicum, Calluna vulgaris, Erica tetralix, Molinia caerulea, Carex binervis, Potentilla erecta, Eriophorum angustifolium, Sphagnum capillifolium</i> ssp. <i>rubellum, Sphagnum fallax, Hypnum jutlandicum, Campylopus atrovirens</i> and <i>Cladonia portentosa</i> . In flushed areas <i>Myrica gale, Molinia caerulea, Schoenus nigricans</i> and <i>Sphagnum tenellum</i> . Grasses and sedges are frequent in heavily poached areas. Some encroachment from <i>Ulex</i> spp. and <i>Salix</i> spp. <b>EC11 R6, EC11 R8, EC11 R9, EC11 R11, 2406_R1 and 620_R1</b>
PB3	*7130 (BB2, BB3)	Typical species include <i>Molinia caerulea, Calluna vulgaris, Schoenus nigricans, Rhynchospora alba, Erica tetralix, Carex panicea, Eriophorum angustifolium, Eriophorum vaginatum, Narthecium ossifragum, Trichophorum germanicum, Sphagnum capillifolium</i> ssp. <i>rubellum, Sphagnum papillosum, Sphagnum tenellum, Sphagnum cuspidatum, Aulacomnium palustre, Drosera rotundifolia, Odontoschisma sphagni</i> and <i>Potentilla erecta</i> . Recovering hollows mostly have 100% <i>Sphagnum</i> cover with <i>Eriophorum angustifolium</i> , some <i>Eriophorum vaginatum, Erica tetralix</i> and <i>Calluna vulgaris</i> . <i>Rhynchospora alba</i> is locally abundant. <b>EC11 R3 and EC11 R5</b>

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### EC11 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
PB3	7150 (HW3)	<p><i>Rhynchospora</i> lawns occur in natural hollows and some of the recovering cutover hollows. The habitat is mostly found in the northern parts of the site but small patches present throughout.</p> <p><i>Rhynchospora alba</i>, <i>Menyanthes trifoliata</i>, <i>Narthecium ossifragum</i>, <i>Molinia caerulea</i>, <i>Calluna vulgaris</i>, <i>Erica tetralix</i>, <i>Sphagnum papillosum</i>, <i>Sphagnum magellanicum</i>, <i>Sphagnum cuspidatum</i>, <i>Sphagnum denticulatum</i> and <i>Eriophorum angustifolium</i>.</p> <p style="color: red;"><b>EC11 R2</b></p>
PB4	n/a	A high cover of bare peat with occasional <i>Molinia caerulea</i> , <i>Juncus effusus</i> , <i>Juncus bulbosus</i> and <i>Carex panicea</i> .
PF2	n/a	Small linear drainage feature within acid grassland. <i>Juncus effusus</i> , <i>Juncus articulatus</i> , <i>Sphagnum denticulatum</i> , <i>Ranunculus flammula</i> , <i>Potamogeton polygonifolius</i> , <i>Juncus bulbosus</i> , <i>Philonotis fontana</i> , <i>Agrostis stolonifera</i> , <i>Lythrum salicaria</i> and <i>Calliergonella cuspidata</i> .
WL1	n/a	<i>Crataegus monogyna</i> , <i>Salix cinerea</i> , <i>Prunus spinosa</i> , <i>Hedera helix</i> , <i>Ilex aquifolium</i> , <i>Lonicera periclymenum</i> and <i>Rubus fruticosus</i> agg.
WL2	n/a	Variable habitat type. Species typically found include <i>Pinus contorta</i> , <i>Cupressus</i> sp., <i>Picea sitchensis</i> , <i>Salix cinerea</i> , <i>Fraxinus excelsior</i> , <i>Acer pseudoplatanus</i> , <i>Crataegus monogyna</i> , <i>Rubus fruticosus</i> agg. and <i>Hedera helix</i>
WS1	n/a	Mostly taller scrub. Typical species <i>Ulex europaeus</i> , <i>Prunus spinosa</i> , <i>Crataegus monogyna</i> and <i>Salix cinerea</i> . Low scrub is dominated by <i>Rubus fruticosus</i> agg. Usually where it has encroached upon grassland.
WS1/GS4	n/a	Scrub encroaching on GS4. Species as described in this table.

**R336 to the Forá Maola Road (Ch. 0+000 – Ch. 1+150) – Habitats between EC03, EC05 and EC11 as far as the Forá Maola Road**

R336 to the Forá Maola Road - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ED2	n/a	<i>Calliergonella cuspidata, Geranium robertianum, Daucus carota, Trifolium repens, Crepis capillaris, Anagallis arvensis, Leontodon autumnalis, Epilobium obscurum and Epilobium ciliatum.</i> <b>2398_R1</b>
ED2/GS2	n/a	Small verge of GS2 along ED2, with species assemblage for both habitats as described in table.
ED3	n/a	<i>Agrostis capillaris, Agrostis stolonifera, Anagallis tenella, Anthoxanthum odoratum, Arrhenatherum elatius, Bellis perennis, Campylopus introflexus (A/F), Centaurea erythraea, Erica cinerea, Hieracium agg., Holcus lanatus, Leucanthemum vulgare, Lotus corniculatus, Nardus stricta, Potentilla erecta, Potentilla reptans, Jacobaea vulgaris, Succisa pratensis and Ulex gallii</i>
ED3a	n/a	<i>Agrostis stolonifera, Calluna vulgaris, Carex panicea, Holcus lanatus, Juncus effusus and Molinia caerulea</i>
GA1	n/a	<i>Arrhenatherum elatius, Capsella bursa-pastoris, Cerastium fontanum, Plantago lanceolata, Ranunculus acris, Stellaria media, Agrostis stolonifera, Cirsium vulgare, Dactylis glomerata, Holcus lanatus, Lolium perenne, Plantago major, Poa annua, Prunella vulgaris, Ranunculus repens, Rumex obtusifolius, Jacobaea vulgaris, Sonchus asper, Taraxacum officinale agg. and Trifolium repens</i>
GA1/GS3/ WS1	n/a	GA1 dominant. Species as described separately in this table.
GA1/GS2/ WS1/BL1	n/a	<i>Arrhenatherum elatius, Capsella bursa-pastoris, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Jacobaea vulgaris, Lolium perenne, Plantago lanceolata, Plantago major, Poa annua, Ranunculus acris, Ranunculus repens, Rumex obtusifolius, Stellaria media, Trifolium repens, Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus. agg., Salix cinerea subsp. Oleifolia, Ulex europaeus, Asplenium ceterach, Blechnum spicant, Hedera helix agg., Polypody sp.</i>

**R336 to the Foraí Maola Road - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GM1	n/a	<i>Angelica sylvestris, Cirsium palustre, Filipendula ulmaria (A), Galium palustre, Holcus lanatus, Juncus effusus (F), Lotus pedunculatus, Lythrum salicaria (F), Mentha aquatica, Potentilla anserina, Ranunculus acris, Scrophularia auriculata and Typha latifolia</i> <b>2629 R1</b>
GS2	n/a	<i>Agrostis stolonifera, Anthoxanthum odoratum, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Festuca rubra, Holcus lanatus, Leontodon autumnalis, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex acetosa and Trifolium pratensis</i>
GS2/GS4/ WS1/ER1	n/a	<i>Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Angelica sylvestris, Carex echinata, Carex panicea, Comarum palustre, Dactylorhiza fuchsii, Epilobium hirsutum, Equisetum fluviatile, Filipendula ulmaria, Galium palustre, Hydrocotyle vulgaris, Hypericum scorpioides, Jacobaea aquatica, Juncus acutiflorus, Juncus effusus, Lotus pedunculatus, Lythrum salicaria, Mentha aquatica, Persicaria hydropiper, Ranunculus flammula, Typha latifolia, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus. agg., Salix cinerea subsp. Oleifolia, Ulex europaeus</i>
GS2/GS4/ WS1/GS3/ ER1	n/a	Grazed by horses, some exposed rock. <i>Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Calluna vulgaris, Carex panicea, Carex sp., Danthonia decumbens, Erica cinerea, Erica tetralix, Hypochaeris radicata, Rumex acetosella, Sedum anglicum, Ulex gallii, Veronica officinalis.</i>
GS3	n/a	<i>Achillea millefolium, Agrostis sp., Lolium sp., Ranunculus repens, Rumex spp., Jacobaea vulgaris and Urtica dioica</i>
GS3/GA1/ ER1	n/a	GS3 species as above. <i>Arrhenatherum elatius, Capsella bursa-pastoris, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Jacobaea vulgaris, Lolium perenne, Plantago lanceolata, Plantago major, Poa annua, Ranunculus acris, Ranunculus repens, Rumex obtusifolius, Stellaria media, Trifolium repens</i> also present.

**R336 to the Foraí Maola Road - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS4	n/a	<i>Angelica sylvestris, Calystegia sepium, Cirsium palustre, Festuca rubra/ovina, Filipendula ulmaria, Holcus lanatus, Iris pseudacorus, Juncus effusus, Lolium perenne, Lythrum salicaria, Molinia caerulea, Plantago lanceolata, Plantago major, Pteridium aquilinum, Ranunculus acris, Ranunculus repens, Rubus fruticosus agg., Rumex obtusifolius, Rumex spp., Jacobaea vulgaris and Trifolium pretense</i> <b>2634_R1</b>
GS4/GS2	n/a	<i>Angelica sylvestris, Carex echinata, Carex panicea, Comarum palustre, Dactylorrhiza fuchsii, Epilobium hirsutum, Equisetum fluviatile, Filipendula ulmaria, Galium palustre, Hydrocotyle vulgaris, Hypericum scorpioides, Jacobaea aquatica, Juncus acutiflorus, Juncus effusus, Lotus pedunculatus, Lythrum salicaria, Mentha aquatica, Persicaria hydropiper, Ranunculus flammula, Typha latifolia, Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium.</i>
GS4/WS1	n/a	<i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia, and Ulex europaeus. Grassland species as above.</i>
HD1	n/a	<i>Pteridium aquilinum and Rubus fruticosus agg.</i>
HD1/GS2/ HH1/ER1	4030	Either HH1 or HD1 as dominant habitat. Species list for either one as listed above or below in table.
HH1	4030 (DH1)	<i>Ulex gallii, Erica cinerea, Hypnum jutlandicum, Agrostis stolonifera, Calluna vulgaris, Pteridium aquilinum, Daboecia cantabrica, Hylocomium splendens, Holcus lanatus, Campylopus introflexus, Deschampsia flexuosa, Molinia caerulea, Rubus fruticosus agg. Cladonia sp. Danthonia decumbens, Hypnum jutlandicum, Scleropodium purum, Campylopus flexuosus, Carex binervis, Hylocomium splendens, Juncus squarrosum, Nardus stricta, Potentilla erecta, Racomitrium lanuginosum, Sedum anglicum, Succisa pratensis and Teucrium scorodonia</i> <b>R336-NFMR R1, R336-NFMR R2 and 2638 R1</b>
HH1/WS1		<i>Ulex gallii dominant. Other species include Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia and Ulex europaeus.</i>
WD1	n/a	<i>Acer pseudoplatanus, Alnus cordata, Alnus glutinosa, Blechnum spicant, Corylus avellana, Crataegus monogyna, Dryopteris felix-mas, Fagus sylvatica, Fraxinus excelsior, Hedera helix, Phyllitis scolopendrium, Prunus sp., Quercus robur, Rubus fruticosus agg., Salix sp., Sorbus aria and Urtica dioica</i>

**R336 to the Foráí Maola Road - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
WD2	n/a	<i>Acer pseudoplatanus, Alnus cordata, Alnus glutinosa, Betula pubescens, Cupressus × leylandii, Fagus sylvatica, Fraxinus excelsior, Picea sitchensis, Pinus sylvestris, Pinus spp. and Quercus robur</i>
WL1	n/a	<i>Cotoneaster sp., Crocosmia x crocosmiiflora, Griselinia sp. and Lonicera nitida</i>
WL1a	n/a	<i>Calystegia sepium, Epilobium hirsutum, Filipendula ulmaria, Geranium robertianum, Hedera helix, Lonicera periclymenum, Phyllitis scolopendrium, Prunus spinosa and Pteridium aquilinum</i>
WL2	n/a	<i>Acer pseudoplatanus, Alnus glutinosa, Cupressus sp., Fagus sylvatica, Fraxinus excelsior, Pinus contorta, Pinus radiata, Prunus sp. and Sorbus aucuparia</i>
WS1	n/a	<i>Acer pseudoplatanus, Arrhenatherum elatius, Calystegia sepium, Dactylis glomerata, Epilobium sp., Lythrum salicaria, Rubus fruticosus agg. and Vicia cracca</i>
WS1/HD1	n/a	HD1 species as above, with <i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia and Ulex europeaus</i>
WS1/WN6	n/a	<i>Salix cinerea, Rubus fruticosus agg., Angelica sylvestris and Arrhenatherum elatius</i>

**The Foráí Maola Road to Troscaigh Thiar (Ch. 1+150 – Ch. 1+650) – Habitats between EC12, EC13, EC14 and the Foráí Maola Road**

<b>The Foráí Maola Road to Troscaigh Thiar - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
BL1	n/a	<i>Cladonia spp., Dicranum scoparium, Hedera helix, Homalothecium sericeum, Hypnum cupressiforme, Isothecium myosuroides, Mnium hornum, Polypodium vulgare and Racomitrium aciculare</i>
ED3/ED2/GS 2	n/a	<i>Capsella bursa-pastoris, Crepis sp., Elytrigia repens, Geranium molle, Jacobaea vulgaris, Lapsana communis, Lolium perenne, Persicaria maculosa, Plantago lanceolata, Plantago major, Potentilla anserina, Rumex crispus, Sagina nodosa, Scorzoneroidea autumnalis, Trifolium pratense, Tripleurospermum maritimum, Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium.</i>

**The Foráí Maola Road to Troscaigh Thiar - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
ER1	n/a	The exposed rock is mostly bare. It has few crevices or clefts to harbour significant bryophyte or pteridophyte communities. Where rock outcrops occur in grassland habitats, they are often surrounded by species that prefer good drainage such as <i>Sedum anglica</i> , <i>Pilosella officinarum</i> and <i>Veronica serpyllifolia</i> <a href="#">2698_R1</a>
FS2	n/a	<i>Apium nodiflorum</i> , <i>Equisetum fluviatile</i> , <i>Glyceria fluitans</i> , <i>Iris pseudacorus</i> , <i>Mentha aquatica</i> and <i>Veronica beccabunga</i>
FW4	n/a	<i>Apium nodiflorum</i> (often dominant), <i>Agrostis stolonifera</i> , <i>Juncus effusus</i> , <i>Arrhenatherum elatius</i> , <i>Holcus lanatus</i> , <i>Galium palustre</i> , <i>Stachys palustris</i> , <i>Filipendula ulmaria</i> , <i>Lythrum salicaria</i> and <i>Equisetum fluviatile</i> . <a href="#">2583_R1</a>
GA1	n/a	<i>Agrostis stolonifera</i> , <i>Lolium perenne</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> and <i>Urtica dioica</i> <a href="#">2580_R1</a> and <a href="#">2584_R2</a>
GA1/WS1	n/a	GA1 species above with <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Salix cinerea</i> subsp. <i>oleifolia</i> and <i>Ulex europeaus</i> .
GS1	n/a	<i>Anthoxanthum odoratum</i> , <i>Plantago lanceolata</i> , <i>Cynosurus cristatus</i> , <i>Phleum pratense</i> , <i>Poa trivialis</i> , <i>Dactylis glomerata</i> , <i>Festuca rubra</i> agg., <i>Trifolium pratense</i> , <i>Hypochaeris radicata</i> , <i>Prunella vulgaris</i> , <i>Centaurea nigra</i> , <i>Lotus corniculatus</i> , <i>Agrostis capillaris</i> and <i>Leucanthemum vulgare</i> . <a href="#">2577_R2</a> and <a href="#">2584_R1</a>
GS2	n/a	<i>Agrostis stolonifera</i> , <i>Angelica sylvestris</i> , <i>Arrhenatherum elatius</i> , <i>Calystegia sepium</i> , <i>Cirsium palustre</i> , <i>Hieracium</i> agg., <i>Holcus lanatus</i> , <i>Leucanthemum vulgare</i> , <i>Plantago lanceolata</i> , <i>Potentilla anserina</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Scrophularia auriculata</i> , <i>Sonchus asper</i> and <i>Trifolium dubium</i> <a href="#">2582_R2</a> and <a href="#">2583_R2</a>
GS2/ED3	n/a	GS2 as above. ED3 species include. <i>Capsella bursa-pastoris</i> , <i>Crepis</i> sp., <i>Elytrigia repens</i> , <i>Geranium molle</i> , <i>Jacobaea vulgaris</i> , <i>Lapsana communis</i> , <i>Lolium perenne</i> , <i>Persicaria maculosa</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Potentilla anserina</i> , <i>Rumex crispus</i> , <i>Sagina nodosa</i> , <i>Scorzoneroidea autumnalis</i> , <i>Trifolium pratense</i> , <i>Tripleurospermum maritimum</i> .
GS3	n/a	<i>Agrostis capillaris</i> , <i>Agrostis stolonifera</i> , <i>Calliergonella cuspidatum</i> , <i>Ceratium fontanum</i> , <i>Festuca rubra</i> , <i>Holcus lanatus</i> , <i>Lotus corniculatus</i> , <i>Pilosella officinarum</i> , <i>Plantago lanceolata</i> , <i>Prunella vulgaris</i> , <i>Ranunculus repens</i> , <i>Rhytidadelphus squarrosus</i> , <i>Rumex acetosa</i> , <i>Jacobaea vulgaris</i> , <i>Taraxacum officinale</i> agg., <i>Trifolium pratensis</i> , <i>Trifolium repens</i> , <i>Veronica chamaedrys</i> , <i>Veronica serpyllifolia</i> and <i>Viola riviniana</i>

		<a href="#">2581_R2</a> , <a href="#">2582_R1</a> and <a href="#">2582_R3</a>
<b>The Foráí Maola Road to Troscaigh Thiar - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
GS3/WS1	n/a	GS3 species as above, with <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Salix cinerea</i> subsp. <i>oleifolia</i> and <i>Ulex europeaus</i> .
GS4	n/a	<i>Agrostis stolonifera</i> , <i>Anthoxanthum odoratum</i> , <i>Centaurea nigra</i> , <i>Cirsium palustre</i> , <i>Dactylis glomerata</i> , <i>Filipendula ulmaria</i> , <i>Holcus lanatus</i> , <i>Iris pseudacorus</i> , <i>Juncus effusus</i> , <i>Lythrum salicaria</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex</i> spp. and <i>Succisa pratensis</i> <a href="#">2577_R1</a> , <a href="#">2581_R1</a> and <a href="#">2583_R3</a>
HD1	n/a	<i>Pteridium aquilinum</i>
HH1	4030 (DH1)	<i>Calluna vulgaris</i> , <i>Cladonia</i> sp., <i>Daboecia cantabrica</i> , <i>Danthonia decumbens</i> , <i>Deschampsia flexuosa</i> , <i>Erica cinerea</i> , <i>Hypnum jutlandicum</i> , <i>Molinia caerulea</i> , <i>Scleropodium purum</i> and <i>Ulex gallii</i> <a href="#">2700_R1</a>
HH3/WS1	4010	Mosaic of typical wet heath vegetation with <i>Ulex europeaus</i> , <i>Rubus fruticosus</i> agg. and <i>Chamaenerion angustifolium</i> .
Residential	n/a	<i>Fagus sylvatica</i> , <i>Acer pseudoplatanus</i> , <i>Festuca rubra</i> agg. and <i>Geranium robertianum</i> <a href="#">2607_R1</a>
WD2	n/a	<i>Acer pseudoplatanus</i> , <i>Betula pubescens</i> , <i>Cupressus</i> sp., <i>Fraxinus excelsior</i> , <i>Pinus</i> spp., <i>Prunus</i> sp. and <i>Rhododendron ponticum</i>
WD4	n/a	<i>Picea sitchensis</i> , <i>Cupressus</i> spp. <i>Acer pseudoplatanus</i> , <i>Hedera helix</i> , <i>Pteridium aquilinum</i> , <i>Urtica dioica</i> , <i>Kindbergia praelonga</i> , <i>Metzgeria furcata</i> , <i>Isothecium myosuroides</i> and <i>Hypnum</i> species. <a href="#">2575_R1</a>
WL1	n/a	<i>Crataegus monogyna</i> , <i>Cupressus x leylandii</i> , <i>Hedera helix</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rosa rugosa</i> and <i>Rubus fruticosus</i> agg.
WL2	n/a	<i>Cupressus</i> sp.
WS1	n/a	<i>Calystegia sepium</i> , <i>Crataegus monogyna</i> , <i>Dryopteris filix-mas</i> , <i>Fraxinus excelsior</i> , <i>Hedera helix</i> , <i>Lonicera periclymenum</i> , <i>Phyllitis scolopendrium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Ulex europaeus</i> , <i>Umbilicus rupestris</i> , <i>Veronica chamaedrys</i> and <i>Vicia sepium</i> <a href="#">2581_R3</a> and <a href="#">2582_R3</a>
WS1/HD1/ GS2	n/a	Species poor grassland – <i>Lolium pratense</i> , <i>Urtica dioica</i> , <i>Galium aparine</i> , <i>Epilobium hirsutum</i> and <i>Centaurea nigra</i> . Typical WS1 and HD1 species as above.

## EC12

EC12 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
GA1	n/a	<i>Lolium perenne, Jacobaea vulgaris, Odontites verna, Rumex obtusifolius, Cerastium fontanum, Agrostis stolonifera, Ranunculus repens, Prunella vulgaris and Plantago lanceolata</i>
GS3	n/a	<i>Agrostis capillaris, Cynosurus cristatus, Achillea millefolium, Plantago lanceolata, Anthoxanthum odoratum, Potentilla erecta, Ranunculus repens and Leontodon autumnalis</i> <b>736_R1, 767_R4, 770_R1, 771_R1, 2419_R1 and 2417_R2</b>
GS3/ER1	n/a	<i>Achillea millefolium, Agrostis sp., Anthoxanthum odoratum, Digitalis purpurea, Erica cinerea, Euphrasia sp., Galium saxatile, Holcus lanatus, Hypochaeris radicata, Juncus acutiflorus, Lotus corniculatus, Pilosella officinarum, Poa sp., Potentilla erecta, Prunella vulgaris, Ranunculus repens, Rumex acetosella, Solidago virgaurea, Succisa pratensis, Teucrium scorodonia, Vicia sepium, Calluna vulgaris, Carex panicaria, Carex sp., Danthonia decumbens, Erica cinerea, Erica tetralix, Hypochaeris radicata, Rumex acetosella, Sedum anglicum, Ulex gallii, Veronica officinalis.</i>
GS3/GS4/ WS1/BL3	n/a	Species as described in table above. 15% BL3 – new track and entrance from road.
GS3/GS4/ FW4/FL8	n/a	Grassland species as described in this table. Pond devoid of vegetation.
GS4	n/a	<i>Juncus effusus, Lythrum salicaria, Agrostis stolonifera, Juncus articulatus, Holcus lanatus, Arrhenatherum elatius, Ranunculus repens, Stachys palustris, Angelica sylvestris, Succisa pratensis and Filipendula ulmaria.</i> <b>735_R2, 740_R1, 764_R1, 767_R3, 769_R2, 770_R2 and 771_R2</b>
GS4/GS3/GS2	n/a	Grassland species as described above under GS4. Small patch of GS2 near built land to west. <i>Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypochaeris radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium</i>

GS4/FW4	n/a	Grassland species as described above under GS4. <i>Anthoxanthum odoratum, Holcus lanatus, Juncus effusus, Arrhenatherum elatius, Glyceria fluitans, Stachys palustris, Filipendula ulmaria, Lythrum salicaria, Ranunculus repens, Galium palustre and Equisetum fluviatile</i> <b>734_R1</b>
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#### EC12 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS4/PF2	n/a	GS4 areas are dominated by such species as <i>Agrostis stolonifera, Juncus effusus, Arrhenatherum elatius, Potentilla erecta, Anthoxanthum odoratum, Holcus lanatus, Lythrum salicaria</i> and <i>Scleropodium purum</i> , whilst the PF2 areas are more dominated by <i>Agrostis canina, Hydrocotyle vulgaris, Juncus acutiflorus, Anagallis tenella, Viola palustris, Festuca rubra agg., Polytrichum commune</i> and <i>Hylocomium splendens</i> . <b>740_R3</b>
HD1	n/a	<i>Pteridium aquilinum, Rubus fruticosus</i> <b>736_R3, 739_R2 and 742_R1</b>
HD1/GS3	n/a	90% cover dense bracken. GS3 species include <i>Achillea millefolium, Agrostis sp., Anthoxanthum odoratum, Digitalis purpurea, Erica cinerea, Euphrasia sp., Galium saxatile, Holcus lanatus, Hypochaeris radicata, Juncus acutiflorus, Lotus corniculatus, Pilosella officinarum, Poa sp., Potentilla erecta, Prunella vulgaris, Ranunculus repens, Rumex acetosella, Solidago virgaurea, Succisa pratensis, Teucrium scorodonia, Vicia sepium</i> .
HD1/GS3/GS4	n/a	HD1 and GS3 dominant with small areas of GS4. Species as above.
HD1/WS1/GS3/PF2	n/a	Bracken dominant with abundant <i>Ulex gallii</i> . Species lists for WS1, GS3 and PF2 as listed in table.
HH1	4030 (DH1)	<i>Ulex gallii, Calluna vulgaris, Daboecia cantabrica, Erica cinerea, Agrostis capillaris, Molinia caerulea, Pteridium aquilinum, Rubus fruticosus agg., Epilobium hirsutum</i> and <i>Ulex europaeus</i> . <b>EC12 R1, EC12 R3, 734_R3, 739_R1, 764_R2, 2418_R1, 736_R4, 2414_R1, 2417_R1, 767_R2 and 2414_R2</b>
HH1/WS1	4030	Heath species as above, with <i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia</i> and <i>Ulex europeaus</i> .
HH3	4010 (WH3)	<i>Molinia caerulea, Calluna vulgaris, Narthecium ossifragum, Succisa pratensis, Potentilla erecta, Juncus articulatus, Drosera rotundifolia, Sphagnum capillifolium, S. denticulatum</i> and <i>Polygala serpyllifolia</i> . <b>EC12 R2 and 735_R1</b>

PB3	*7130	<i>Sphagnum</i> species such as <i>S. papillosum</i> , <i>S. cuspidatum</i> and <i>S. capillifolium</i> , as well as <i>Eleocharis multicaulis</i> , <i>Carex panicea</i> , <i>Succisa pratensis</i> , <i>Carex echinata</i> , <i>Molinia caerulea</i> , <i>Narthecium ossifragum</i> , <i>Aulacomnium palustre</i> , <i>Erica tetralix</i> and <i>Eriophorum vaginatum</i> . <b>743_R1</b>
PB3/HH1	*7130	65% PB3, 35% HH1. Species as described in table above.

### EC12 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
PF2	n/a	<i>Agrostis canina, Agrostis stolonifera, Hydrocotyle vulgaris, Juncus acutiflorus, Juncus bulbosus, Carex nigra, Viola palustris, Anagallis tenella, Festuca rubra agg., Polytrichum commune, Hylocomium splendens and Sphagnum species, including S. palustre and S. capillifolium.</i> <b>736_R2, 734_R2, 767_R1 and 742_R2</b>
WS1	n/a	<i>Rubus fruticosus agg., Ulex europaeus and Salix cinerea.</i> <b>739_R3, 740_R2, 769_R1 and 771_R3</b>

### EC13

#### EC13 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
ED3	n/a	<i>Ulex europaeus, Salix cinerea, Rubus fruticosus agg. Molinia caerulea, Rumex acetosa, Succisa pratensis, Erica cinerea, Centaurea nigra and Anthoxanthum odoratum.</i>
ER1	n/a	The exposed rock is mostly bare. It has few crevices or clefts to harbour significant bryophyte or pteridophyte communities. Where rock outcrops occur in grassland habitats, they are often surrounded by species that prefer good drainage such as <i>Sedum anglica, Pilosella officinarum</i> and <i>Veronica serpyllifolia</i> .
FS1	n/a	<i>Phragmites australis.</i>
GA1	n/a	<i>Rumex obtusifolius, Ranunculus repens, Cirsium arvense, Jacobaea vulgaris, Urtica dioica, Plantago major, Holcus lanatus, Dactylis glomerata and Poa annua.</i>
GM1	n/a	<i>Angelica sylvestris, Lythrum salicaria, Mentha aquatica, Hydrocotyle vulgare, Galium palustre, Juncus effusus, Agrostis stolonifera, Potentilla palustris Equisetum fluviatile, Plantago lanceolata, Succisa pratensis and Juncus articulatus.</i>
GS2	n/a	<i>Dactylis glomerata, Festuca rubra, Holcus lanata, Arrhenatherum elatius, Anthoxanthum odoratum, Agrostis stolonifera, Rumex crispus and Rubus fruticosus agg.</i>
GS3	n/a	Relatively species-rich dry acid grasslands in mosaic with dry heath. <i>Anthoxanthum odoratum, Agrostis capillaris, Agrostis stolonifera, Carex panicea, Succisa pratensis, Euphrasia officinalis, Pedicularis sylvatica, Hypochaeris radicata, Potentilla erecta, Hylocomium splendens, Centaurea nigra, Galium saxatile, Festuca rubra, Cynosurus cristatus, Prunella vulgaris, Trifolium pratense, Leontodon autumnalis, Achillea millefolium, Nardus stricta and Lotus corniculatus.</i>
GS4	n/a	Typical soft rush wet agricultural grasslands and patches of higher value (but non-Annex I) <i>Molinia</i> grassland. Merges to mosaic with <i>Molinia</i> meadow, marsh and poor flush. Species include <i>Juncus effusus, Molinia caerulea, Angelica sylvestris, Juncus articulatus, Holcus lanatus, Juncus conglomeratus, Lythrum salicaria, Filipendula ulmaria, Carex echinata, Carex flacca, Potentilla erecta, Galium palustre, Mentha aquatica and Arrhenatherum elatius.</i>

**EC13 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS4	6410 (GL1c)	<i>Juncus effusus, Juncus articulatus, Juncus conglomeratus, Filipendula ulmaria, Holcus lanatus, Lythrum salicaria, Anthoxanthum odoratum, Agrostis stolonifera, Carex echinata, Potentilla erecta, Carex flacca, Eriophorum angustifolium, Galium palustre, Angelica sylvestris, Carex panicea and Dactylorhiza maculata.</i> <b>EC13 R1</b>
HD1	n/a	<i>Pteridium aquilinum</i> , with patches of <i>Rubus fruticosus</i> agg. and <i>Ulex europaeus</i> .
HH1	4030 (DH1)	Two variants occur at the site. DH1 variant is found around rock outcrops in the peatland areas. It also generally occurs in isolated patches. Dominated by a combination of <i>Ulex gallii</i> and <i>Calluna vulgaris</i> . <i>Campylopus introflexus</i> is common on peat that has been burned in the past. <b>EC13 R5</b>
	4030 (DH3)	The DH3 variant occurs in mosaic with relatively species-rich GS3 grassland. Typical species are <i>Ulex gallii</i> , <i>Calluna vulgaris</i> , <i>Erica cinerea</i> , <i>Potentilla erecta</i> , <i>Agrostis capillaris</i> , <i>Anthoxanthum odoratum</i> , <i>Carex demissa</i> , <i>Carex panicea</i> , <i>Succisa pratensis</i> , <i>Lotus corniculatus</i> , <i>Hylocomium splendens</i> , <i>Scleropodium purum</i> , <i>Hypnum jutlandicum</i> , <i>Festuca rubra</i> and <i>Trifolium pratense</i> . <b>EC13 R2</b>
HH3	4010 (WH4, WH3)	Vegetation variable across the site but the shallow peat of the rocky areas mainly supports <i>Trichophorum</i> WH4 wet heath while the deeper peats in sections are more typical of WH3. Typical species are <i>Trichophorum germanicum</i> , <i>Calluna vulgaris</i> , <i>Erica tetralix</i> , <i>Molinia caerulea</i> , <i>Potentilla erecta</i> , <i>Eriophorum angustifolium</i> , <i>Sphagnum capillifolium</i> ssp. <i>rubellum</i> , <i>Hypnum jutlandicum</i> , <i>Campylopus atrovirens</i> , <i>Schoenus nigricans</i> , <i>Aulacomnium palustre</i> , <i>Narthecium ossifragum</i> , <i>Sphagnum compactum</i> , <i>Sphagnum subnitens</i> , <i>Cladonia portentosa</i> and <i>Sphagnum tenellum</i> . <i>Juncus effusus</i> , <i>Juncus articulatus</i> and grasses frequent in degraded areas. <i>Salix repens</i> . <i>Carex panicea</i> , <i>Comarum palustre</i> , <i>Erica cinerea</i> , <i>Juncus acutiflorus</i> , <i>Molinia caerulea</i> , <i>Narthecium ossifragum</i> , <i>Osmunda regalis</i> , <i>Potentilla erecta</i> , <i>Succisa pratensis</i> <b>EC13 R3 and EC13 R8</b>
HH3/GS4/ PB3/GS3	4010/* 7130	Wet Heath and lowland blanket bog species as listed in this table. Additional species include <i>Ulex gallii</i>
PB3	*7130 (BB2, BB3)	Restricted to small patches in deeper hollows between rock outcrops in an area mostly covered by wet heath. <i>Molinia caerulea</i> , <i>Calluna vulgaris</i> , <i>Schoenus nigricans</i> , <i>Rhynchospora alba</i> , <i>Erica tetralix</i> , <i>Eriophorum angustifolium</i> , <i>Eriophorum vaginatum</i> , <i>Narthecium ossifragum</i> , <i>Sphagnum capillifolium</i> ssp. <i>rubellum</i> , <i>Sphagnum papillosum</i> , <i>Sphagnum magellanicum</i> , <i>Sphagnum cuspidatum</i> , <i>Drosera rotundifolia</i> , <i>Odontoschisma sphagni</i> , <i>Potentilla erecta</i> and <i>Eleocharis multicaulis</i> . <b>EC13 R4 and EC13 R7</b>

### EC13 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
PB3	7150 (HW3)	<p><i>Rhynchospora</i> lawns are scattered throughout the wetter parts of the bog, in natural hollow.</p> <p><i>Rhynchospora alba</i>, <i>Narthecium ossifragum</i>, <i>Molinia caerulea</i>, <i>Calluna vulgaris</i>, <i>Erica tetralix</i>, <i>Sphagnum papillosum</i>, <i>Sphagnum cuspidatum</i> and <i>Eriophorum angustifolium</i>.</p> <p><b>EC13_R6</b></p>
PF2	n/a	<i>Juncus articulatus</i> , <i>Sphagnum denticulatum</i> , <i>Sphagnum palustre</i> , <i>Ranunculus flammula</i> , <i>Agrostis stolonifera</i> , <i>Lythrum salicaria</i> .
WS1	n/a	Taller scrub dominated by <i>Ulex europaeus</i> or <i>Prunus spinosa</i> . The low scrub, dominated by <i>Rubus fruticosus</i> agg., has colonized areas of neglected/abandoned land. Extensive patches of <i>Salix cinerea</i> subsp. <i>oleifolia</i> occurs in places.

### EC14

#### EC14 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
ED3	n/a	<i>Rubus fruticosus</i> agg. <i>Ulex europaeus</i> , <i>Chamerion angustifolium</i> , <i>Persicaria maculosa</i> , <i>Lythrum salicaria</i> , <i>Pteridium aquilinum</i> and <i>Calystegia sepium</i> .
ER1	n/a	<i>Anthoxanthum odoratum</i> , <i>Holcus lanatus</i> , <i>Lolium perenne</i> , <i>Trifolium repens</i> , <i>Agrostis capillaris</i> , <i>Sedum anglicum</i> , <i>Rumex acetosella</i> , <i>Festuca rubra</i> agg. and <i>Hypnum</i> species.
		<b>825_R1 and 827_R4</b>
HD1	n/a	<i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> and <i>Dactylis glomerata</i> .
		<b>827_R1</b>
HD1/WS1	n/a	HD1 as above, with <i>Rubus fruticosus</i> agg.
GS1	n/a	<i>Lolium perenne</i> , <i>Anthoxanthum odoratum</i> , <i>Plantago lanceolata</i> , <i>Cynosurus cristatus</i> , <i>Phleum pratense</i> , <i>Poa trivialis</i> , <i>Dactylis glomerata</i> , <i>Festuca rubra</i> agg., <i>Trifolium repens</i> , <i>Hypochaeris radicata</i> , <i>Prunella vulgaris</i> , <i>Centaurea nigra</i> , <i>Agrostis capillaris</i> and <i>Leucanthemum vulgare</i> .
		<b>825_R2, 825_R3 and 828_R1</b>
GS2	n/a	<i>Dactylis glomerata</i> , <i>Centaurea nigra</i> , <i>Lolium perenne</i> , <i>Plantago lanceolata</i> , <i>Lathyrus pratensis</i> , <i>Odontites verna</i> , <i>Anthoxanthum odoratum</i> , <i>Jacobaea vulgaris</i> and <i>Rumex crispus</i> .
GS3	n/a	<i>Agrostis capillaris</i> , <i>Nardus stricta</i> , <i>Potentilla erecta</i> , <i>Succisa pratensis</i> , <i>Hylocomium splendens</i> and <i>Juncus articulatus</i> .
		<b>827_R3</b>

#### EC14 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS3/WS1	n/a	<p><i>Achillea millefolium, Agrostis sp., Anthoxanthum odoratum, Digitalis purpurea, Erica cinerea, Euphrasia sp., Galium saxatile, Holcus lanatus, Hypochaeris radicata, Juncus acutiflorus, Lotus corniculatus, Pilosella officinarum, Poa sp., Potentilla erecta, Prunella vulgaris, Ranunculus repens, Rumex acetosella, Solidago virgaurea, Succisa pratensis, Teucrium scorodonia, Vicia sepium.</i></p> <p>20% Scrub cover. <i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia, Ulex europaeus.</i></p>
GS4	n/a	<p><i>Lythrum salicaria, Juncus articulatus, Filipendula ulmaria, Agrostis stolonifera, Potentilla anserine, Holcus lanatus, Juncus effusus and Cardamine pratensis.</i></p> <p><b>EC14 R5 and 827_R2</b></p>
GS4/GS2	n/a	Rank vegetation, <i>Juncus effusus, Lythrum salicaria, Iris pseudacorus, Filipendula ulmaria, Alnus glutinosa, Cirsium arvense and Calystegia sepium.</i>
GS4/GS3	n/a	<p><i>Angelica sylvestris, Carex echinata, Carex panicea, Comarum palustre, Dactylorhiza fuchsii, Epilobium hirsutum, Equisetum fluviatile, Filipendula ulmaria, Galium palustre, Hydrocotyle vulgaris, Hypericum scorpioides, Jacobaea aquatica, Juncus acutiflorus, Juncus effusus, Lotus pendunculatus, Lythrum salicaria, Mentha aquatica, Persicaria hydropiper, Ranunculus flammula, Typha latifolia, Achillea millefolium, Agrostis sp., Anthoxanthum odoratum, Digitalis purpurea, Erica cinerea, Euphrasia sp., Galium saxatile, Holcus lanatus, Hypochaeris radicata, Juncus acutiflorus, Lotus corniculatus, Pilosella officinarum, Poa sp., Potentilla erecta, Prunella vulgaris, Ranunculus repens, Rumex acetosella, Solidago virgaurea, Succisa pratensis, Teucrium scorodonia, Vicia sepium.</i></p>
GS4/WS1		GS4 dominant. Species as described in table.
HH1	4030 (DH1)	<p><i>Ulex gallii, Calluna vulgaris, Erica cinerea, Daboecia cantabrica, Molinia caerulea, Potentilla erecta and Hypnum jutlandicum.</i></p> <p><b>EC14 R1, 2611_R1, 2618_R2, 2622_R1, 2612_R1, 2617_R1 and 2623_R1</b></p>
HH3	4010 (WH3/WH7)	<p><i>Trichophorum germanicum, Calluna vulgaris, Erica tetralix, Ulex gallii, Eriophorum angustifolium, Molinia caerulea, Sphagnum capillifolium, Schoenus nigricans and Carex binervis.</i></p> <p><b>EC14 R2, EC14 R4, 848_R1, 2615_R1, 875_R1, 2613_R1, 2621_R1, 2614_R1 and 2616_R1</b></p>
HH3/GS4	4010	Mosaic of HH3 and GS4 habitats described above in this table.
PB3	*7130 (BB1b/BB1a)	<p><i>Schoenus nigricans, Rhynchospora alba, R. fusca, Trichophorum germanicum, Molina caerulea, Calluna vulgaris, Drosera rotundifolia, Erica tetralix, Sphagnum papillosum, Sphagnum denticulatum and Cladonia portentosa.</i></p> <p><b>EC14 R3</b></p>

**EC14 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
PF2	n/a	<p>There are a couple of small flushes within an area of wet grassland.</p> <p><i>Menyanthes trifoliata, Juncus articulatus, Potentilla anserine, Sphagnum palustre, Ranunculus flammula, Juncus effusus, Succisa pratensis, Polytrichum formosum, Agrostis stolonifera and Persicaria maculosa.</i></p>
PF2/HH3	4010	<p>Flush species as described</p> <p>HH3 species include <i>Molinia caerulea, Succisa pratensis, Hylocomium splendens, Calluna vulgaris, Juncus acutiflorus, Erica tetralix, Erica cinerea and Pleurozium schreberi.</i></p> <p><b>875 R1</b></p>
WS1	n/a	<p><i>Ulex europaeus, Rubus fruticosus agg., Salix cinerea, Betula pubescens, Sorbus aucuparia and Ilex aquifolium.</i></p> <p><b>2618 R1 and 861 R1</b></p>
WS1/GS2/ED3	n/a	<p>WS1 species as described above. Other species include <i>Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Capsella bursa-pastoris, Crepis sp., Elytrigia repens, Geranium molle, Jacobaea vulgaris, Lapsana communis, Lolium perenne, Persicaria maculosa, Plantago lanceolata, Plantago major, Potentilla anserina, Rumex crispus, Sagina nodosa, Scorzoneroidea autumnalis, Trifolium pratense, Tripleurospermum maritimum</i></p>

**Ann Gibbons Road (L13215) (Ch. 2+400 – Ch. 2+500) – Habitats between EC14 and EC09**

Ann Gibbons Road (L13215) - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ED3	n/a	<i>Plantago major, Poa annua, Potentilla anserina</i>
ER1	n/a	The exposed rock is mostly bare. It has few crevices or clefts to harbour significant bryophyte or pteridophyte communities. Where rock outcrops occur in grassland habitats, they are often surrounded by species that prefer good drainage such as <i>Sedum anglica, Pilosella officinarum</i> and <i>Veronica serpyllifolia</i>
GA1	n/a	<i>Agrostis stolonifera, Lolium perenne, Ranunculus repens, Jacobaea vulgaris, Cirsium arvense, Arrhenatherum elatius, Dactylis glomerata, Holcus lanatus, Rumex obtusifolius, Jacobaea vulgaris</i> and <i>Urtica dioica</i> <b>2649_R2</b>
GS2	n/a	<i>Arrhenatherum elatius</i> dominant. <i>Holcus lanatus, Ranunculus repens, Rumex obtusifolia, Ranunculus acris, Achillea millefolium, Pteridium aquilinum, Rubus fruticosus, Ulex europaeus, Centaurea nigra, Rhinanthus minor, Cynosurus cristatus, Epilobium hirsutum, Salix sp., Buddeja davidii.</i>
GS3	n/a	<i>Agrostis capillaris, Cynosurus cristatus, Holcus lanatus, Leontodon autumnalis, Plantago lanceolata, Potentilla erecta</i> and <i>Ranunculus repens</i>
GS4	n/a	Vegetation very tall in 2023. <i>Agrostis stolonifera, Filipendula ulmaria, Holcus lanatus, Juncus effusus, Lythrum salicaria, Iris pseudacorus</i> and <i>Potentilla anserina</i> <b>2648_R3 and 2649_R1</b>
WS1	n/a	<i>Prunus spinosa, Rubus fruticosus agg. and Ulex europaeus</i> <b>2648_R1 and 2648_R2</b>

## EC09

EC09 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ER1	n/a	The exposed rock is mostly bare. It has few crevices or clefts to harbour significant bryophyte or pteridophyte communities. Where rock outcrops occur in grassland habitats, they are often surrounded by species that prefer good drainage such as <i>Sedum anglica</i> , <i>Pilosella officinarum</i> and <i>Veronica serpyllifolia</i> .
ED2	n/a	<i>Holcus lanatus</i> , <i>Pteridium aquilinum</i> , <i>Juncus effusus</i> , <i>Ulex europaeus</i> , <i>Epilobium ciliatum</i> , <i>Funaria hygrometrica</i> , <i>Polytrichum commune</i> , <i>Chamerion angustifolium</i> , <i>Pohlia wahlenbergii</i> and <i>Conocephalum conicum</i> <a href="#">496_R2</a> , <a href="#">498_R1</a> , <a href="#">500_R1</a> and <a href="#">506_R1</a>
ED3	n/a	<i>Tussilago farfara</i> , <i>Ulex europaeus</i> , <i>Ulex gallii</i> , <i>Centaurea nigra</i> , <i>Hypochaeris radiata</i> , <i>Daucus carota</i> , <i>Lotus corniculatus</i> , <i>Carex disticha</i> , <i>Hypericum pulchellum</i> , <i>Achillea millefolium</i> , <i>Carex panacea</i> , <i>Potentilla anserina</i> , <i>Juncus effusus</i> , <i>Salix cinerea</i> . <a href="#">500_R2</a> and <a href="#">501_R2</a>
ED3/WS1/ GS2	n/a	<i>Persicaria maculosa</i> , <i>Jacoobaea vulgaris</i> , <i>Cirsium vulgare</i> , <i>Matricaria discoidea</i> , <i>Polygonum aviculare</i> , <i>Arrhenatherum elatius</i> , <i>Epilobium hirsutum</i> , <i>Cirsium arvense</i> , <i>Centaurea nigra</i> , <i>Lolium perenne</i> , <i>Urtica dioica</i> , <i>Larix decidua</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus agg.</i> , <i>Salix sp.</i> , <i>Crataegus monogyna</i> , <i>Calystegia sepium</i> , <i>Epilobium angustifloium</i> , <i>Phragmites australis</i> , <i>Buddleja davidii</i> , <i>Alnus glutinosa</i> and <i>Cirsium arvense</i> .
ER1	n/a	<i>Anthoxanthum odoratum</i> , <i>Holcus lanatus</i> , <i>Agrostis capillaris</i> , <i>Sedum anglicum</i> , <i>Rumex acetosella</i> , <i>Juncus effusus</i> , <i>Festuca rubra agg.</i> and <i>Hypnum species</i> . <a href="#">499_R4</a>
FS1	n/a	<i>Phragmites australis</i> , <i>Agrostis stolonifera</i> , <i>Filipendula ulmaria</i> , <i>Juncus articulatus</i> and <i>Potentilla palustris</i> .
GA1	n/a	<i>Lolium perenne</i> , <i>Urtica dioica</i> , <i>Dactylis glomerata</i> , <i>Rumex obtusifolius</i> , <i>Ranunculus repens</i> , <i>Agrostis stolonifera</i> , <i>Cirsium arvense</i> , <i>Polygonum aviculare</i> , <i>Epilobium montanum</i> , <i>Plantago lanceolata</i> , <i>Holcus lanatus</i> , <i>Calystegia sepium</i> , <i>Rubus fruticosus agg.</i> , <i>Persicaria maculosa</i> , <i>Sonchus asper</i> , <i>Brassica napus</i> , <i>Trifolium repens</i> and <i>Poa annua</i> .
GA2	n/a	Majority of area now amenity grassland. Species include <i>Bellis perennis</i> , <i>Taraxacum agg. Spp.</i> , <i>Plantago lanceolata</i> , <i>Trifolium pratense</i> , <i>Lolium perenne</i> ,

GA2/GS4	n/a	Area of lawn with some wet grassland indicators, <i>Juncus effusus</i> , <i>Lythrum salicaria</i> , <i>Iris pseudacorus</i> and <i>Filipendula ulmaria</i> .  <i>Fraxinus excelsior</i> , <i>Acer pseudoplatanus</i> , <i>Tilia cordata</i> , <i>Alnus glutinosa</i> ; <i>Juncus effusus</i> , <i>Lythrum salicaria</i> , <i>Iris pseudacorus</i> , <i>Filipendula ulmaria</i>
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#### EC09 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS2	n/a	<i>Dactylis glomerata</i> , <i>Arrhenatherum elatius</i> , <i>Rumex acetosa</i> , <i>Festuca rubra</i> , <i>Lotus corniculatus</i> , <i>Anthoxanthum odoratum</i> , <i>Agrostis stolonifera</i> , <i>Succisa pratensis</i> , <i>Centaurea nigra</i> and <i>Veronica chamaedrys</i> . Some <i>Thymus polytrichus</i> on ant hills only. Recolonized ground has some nutrient enrichment indicators such as <i>Cirsium arvense</i> and <i>Rumex obtusifolius</i> .  <span style="color:red">501_R3</span>
GS4/WS1/ GA2/BL3	n/a	Grassland species as listed in table.  <i>Larix</i> sp., <i>Ulex europaeus</i> , <i>Rubus fruticosus</i> , <i>Urtica dioica</i> , <i>Salix</i> sp., <i>Reynoutria japonica</i> , <i>Crataegus monogyna</i> , <i>Calystegia</i> sp., <i>Epilobium hirsutum</i> , <i>Calystegia sepium</i> , <i>Epilobium angustifolium</i> , <i>Phragmites australis</i> , <i>Buddleja</i> sp.  Built land comprises of recently constructed tennis court area to North.
GS2/HD1	n/a	Grassland dominant; species as listed in the table
GS3	n/a	Typical species are <i>Agrostis capillaris</i> , <i>Dactylis glomerata</i> , <i>Festuca rubra</i> , <i>Plantago lanceolata</i> , <i>Anthoxanthum odoratum</i> , <i>Nardus stricta</i> , <i>Rumex acetosa</i> , <i>Succisa pratensis</i> , <i>Lotus corniculatus</i> , <i>Juncus acutiflorus</i> , <i>Lotus penduculis</i> , <i>Ulex europeaus</i> , <i>Ranunculus repens</i> , <i>Leontodon autumnalis</i> , <i>Centaurea nigra</i> , <i>Potentilla erecta</i> and <i>Centaurium erythraea</i> .
	n/a	Highly species-rich variant recorded with abundant <i>Succisa pratensis</i> , on infertile ground.
	n/a	Slightly calcareous variant also recorded with <i>Lotus corniculatus</i> , <i>Prunella vulgaris</i> , <i>Carex disticha</i> and <i>Linum catharticum</i> .
GS3/GA2	n/a	Species as described above in this table with typical GS3 and GA2 species.

GS3/GS4	n/a	<i>Achillea millefolium, Agrostis sp., Anthoxanthum odoratum, Digitalis purpurea, Erica cinerea, Euphrasia sp., Galium saxatile, Holcus lanatus, Hypochaeris radicata, Juncus acutiflorus, Lotus corniculatus, Pilosella officinarum, Poa sp., Potentilla erecta, Prunella vulgaris, Ranunculus repens, Rumex acetosella, Solidago virgaurea, Succisa pratensis, Teucrium scorodonia, Vicia sepium, Angelica sylvestris, Carex echinata, Carex panicea, Comarum palustre, Dactylorrhiza fuchsii, Epilobium hirsutum, Equisetum fluviatile, Filipendula ulmaria, Galium palustre, Hydrocotyle vulgaris, Hypericum scorpioides, Jacobaea aquatica, Juncus acutiflorus, Juncus effusus, Lotus pedunculatus, Lythrum salicaria, Mentha aquatica, Persicaria hydropiper, Ranunculus flammula, Typha latifolia</i>
GS3/GM1	n/a	<i>Filipendula ulmaria</i> abundant. <i>Succisa pratensis, Epilobium hirsutum, Iris pseudacorus, Mentha aquatica, Typha latifolia, Lythrum salicaria, Rubus fruticosus agg.</i> present.
<b>EC09 - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
GS4	n/a	More species poor variant containing species such as <i>Juncus effusus, Holcus lanatus, Iris pseudacorus, Lythrum salicaria, Ranunculus repens, Ranunculus acris, Filipendula ulmaria, Potentilla anserina, Agrostis stolonifera, Juncus articulatus, Galium palustre, Lolium perenne, Dactylis glomerata, Lotus pedunculatus</i> and <i>Cirsium palustre</i> . <b>496_R1, 498_R3, 499_R1 and 468_R1</b>
	6410 (GL1c)	<i>Molinia</i> meadow in mosaic with acid grassland. A high-quality habitat with high species-richness (38 spp per 2m <sup>2</sup> ). Typical species include <i>Cirsium dissectum, Rhinanthus minor, Ranunculus flammula, Prunella vulgaris, Carex nigra, Carex demissa, Pedicularis sylvatica, Lophocolea bidentata, Riccardia cf. multifida</i> and <i>Calliergonella cuspidata</i> . <b>EC09 R1</b>
	6410 (GL1d)	<i>Molinia</i> meadow in mosaic with wet heath and has a low species-richness and forb cover. Typical species include <i>Molinia caerulea, Juncus conglomeratus, Juncus articulatus, Anthoxanthum odoratum, Succisa pratensis, Carex echinata, Carex panacea, Potentilla erecta</i> and <i>Pleurozium schreberi</i> . <b>EC09 R4</b>
GS4/WS1	n/a	<i>Juncus effusus, Lythrum salicaria, Iris pseudacorus, Filipendula ulmaria, Larix decidua, Ulex europeaus, Rubus fruticosus agg., Urtica dioica, Salix sp., Crataegus monogyna, Calystegia sepium, Chaamaenerion angustifolium, Phragmites australis, Buddleja davidii</i> .
GM1	n/a	<i>Lythrum salicaria, Mentha aquatica, Angelica sylvestris, Filipendula ulmaria, Arrhenatherum elatius, Agrostis stolonifera, Lathyrus pratensis, Stellaria graminea, Equisetum fluviatile, Hydrocotyle vulgaris, Juncus effusus</i> and <i>Juncus articulatus</i> . <b>501_R1</b>

GM1/WS1	n/a	Field dominated by <i>Filipendula ulmaria</i> and <i>Lythrum salicaria</i> with frequent <i>Rubus fruticosus</i> agg.
HD1	n/a	<i>Pteridium aquilinum</i> with patches of <i>Rubus fruticosus</i> agg. <i>Epilobium hirsutum</i> . Often grading into <i>Ulex europaeus</i> scrub. <a href="#">496_R3</a> , <a href="#">498_R2</a> , <a href="#">499_R2</a> and <a href="#">506_R2</a>
HD1/GS4/WS1 /GM1/ED2	n/a	Scrubby and impenetrable vegetation. Species as described in this table.
HH1	4030 (DH3, DH1)	<i>Calluna vulgaris</i> , <i>Erica cinerea</i> , <i>Cladonia portentosa</i> , <i>Carex binervis</i> , <i>Potentilla erecta</i> , <i>Cladonia uncialis</i> , <i>Carex panicea</i> , <i>Danthonia decumbens</i> , <i>Anthoxanthum odoratum</i> , <i>Succisa pratensis</i> , <i>Polygala serpyllifolia</i> and <i>Molinia caerulea</i> . Small patches of poor-quality <i>Ulex gallii</i> HH1 with <i>Erica cinerea</i> and <i>Rubus fruticosus</i> agg. in parts. <a href="#">EC09 R2</a>

#### EC09 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
HH3	4010 (WH3)	<i>Calluna vulgaris</i> , <i>Erica tetralix</i> , <i>Molinia caerulea</i> , <i>Succisa pratensis</i> , <i>Carex echinata</i> , <i>Potentilla erecta</i> , <i>Juncus effusus</i> , <i>Juncus articulates</i> , <i>Sphagnum capillifolium</i> ssp. <i>rubellum</i> , <i>Pleurozium schreberi</i> , <i>Eriophorum angustifolium</i> , <i>Hylocomium splendens</i> and <i>Narthecium ossifragum</i> . <a href="#">EC09 R3</a>
HH3/GS4/WS1 /HH1	4010/ 6410/ 4030	Species for HH3, HH1 and GS4 as above. Scrub species include <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Salix cinerea</i> subsp. <i>oleifolia</i> and <i>Ulex europeaus</i> .
WD2	n/a	Located just outside of EC09; small area of mixed woodland dominated by <i>Fraxinus excelsior</i> , <i>Pinus</i> spp and <i>Picea</i> spp. Other species include <i>Crataegus monogyna</i> , <i>pruns spinosa</i> and <i>Salix caprea</i> .
WL2	n/a	<i>Fraxinus excelsior</i> , <i>Crataegus monogyna</i> , <i>Pteridium aquilinum</i> and <i>Rubus fruticosus</i> agg.
WS1	n/a	<i>Ulex europaeus</i> , <i>Prunus spinosa</i> , <i>Crataegus monogyna</i> , <i>Salix cinerea</i> , <i>Rubus fruticosus</i> , <i>Pteridium aquilinum</i> , <i>Calystegia sepium</i> , <i>Epilobium angustifolium</i> , <i>Epilobium hirsutum</i> , <i>Ulex gallii</i> and <i>Erica cinerea</i> . <a href="#">499_R3</a> , and <a href="#">500_R3</a>
WS1/HD1/GS4 /GS3	n/a	Scrubby and impenetrable vegetation. Species as described in this table.
WS1/HD1/GS4 /ER1	n/a	<i>Juncus effusus</i> , <i>Lythrum salicaria</i> , <i>Iris pseudacorus</i> , <i>Filipendula ulmaria</i> , <i>Larix decidua</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus</i> agg., <i>Urtica dioica</i> , <i>Salix</i> sp., <i>Crataegus monogyna</i> , <i>Calystegia sepium</i> , <i>Epilobium hirsutum</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> , <i>Buddleja davidii</i> , <i>Pteridium aquilinum</i> , <i>Ulex gallii</i> .
WS1/GS4	n/a	WS1 dominant. Species as above.



**Ballard West to Ballard East (An Chloch Scoilte Junction, Ch. 3+050 – Ch. 3+450) – Habitats between EC09 and EC18**

Ballard West to Ballard East - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ED2	n/a	<i>Daucus carota, Trifolium repens, Crepis capillaris, Anagallis arvensis, Leontodon autumnalis, Epilobium obscurum and Epilobium ciliatum.</i> <b>2680_R2</b>
ED2/GS4/ ED3	n/a	<i>Juncus effusus, Lythrum salicaria, Iris pseudacorus, Filipendula ulmaria, Jacobaea vulgaris, Matricaria discoidea, Persicaria maculosa, Polygonum aviculare, Arrhenatherum elatius, Epilobium hirsutum, Cirsium arvense, Centaurea nigra, Lolium perenne, Urtica dioica.</i>
ER1	n/a	The exposed rock is mostly bare. It has few crevices or clefts to harbour significant bryophyte or pteridophyte communities. Where rock outcrops occur in grassland habitats, they are often surrounded by species that prefer good drainage such as <i>Sedum anglica, Pilosella officinarum</i> and <i>Veronica serpyllifolia</i>
FS2	n/a	<i>Apium nodiflorum, Epilobium hirsutum and Iris pseudacorus</i>
GA1	n/a	<i>Agrostis stolonifera, Arrhenatherum elatius, Calystegia sepium, Cirsium arvense, Dactylis glomerata, Galium aparine, Holcus lanatus, Jacobaea vulgaris, Juncus effusus, Lolium perenne, Plantago lanceolata, Plantago major, Ranunculus repens, Rubus fruticosus agg., Rumex obtusifolius, Taraxacum officinale agg., Trifolium repens and Urtica dioica</i> <b>2680_R1</b>
GA1/GS4/ WS1	n/a	GA1 and GS4 as described in this table. Wet grassland and Gorse scrub now very prominent.
GM1	n/a	<i>Carex panicea, Hydrocotyle vulgare, Hypericum perforatum, Iris pseudacorus, Juncus articulatus, Leontodon autumnalis, Lythrum salicaria, Mentha aquatica, Myosotis scorpioides, Potentilla palustris, Ranunculus acris and Solidago virgaurea.</i>
GS4	n/a	<i>Agrostis stolonifera, Arrhenatherum odoratum, Cirsium arvensis, Cynosurus cristatus, Dactylis glomerata, Filipendula ulmaria, Geranium robertianum, Holcus lanatus, Iris pseudacorus, Juncus effusus, Lolium perenne, Lythrum salicaria, Plantago lanceolata, Poa annua, Potentilla anserina, Ranunculus acris, Ranunculus repens, Rubus fruticosus agg., Rumex acetosa, Rumex obtusifolius, Jacobaea vulgaris, Taraxacum officinale agg., Urtica dioica and Veronica persica</i> <b>2667_R1, 2676_R1 and 2679_R1</b>
GS4/ER1	n/a	Wet grassland and exposed siliceous rock species as described above. <b>2658_R1</b>
GS4/GM1	n/a	Frequent occurrence of <i>Lythrum salicaria, Iris pseudacorus, Filipendula ulmaria.</i> Just outside boundary of Ballard West to Ballard East extent

**Ballard West to Ballard East - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS4/WS1	n/a	Wet grassland species as described above, Scrub species include: <i>Larix spp.</i> , <i>Ulex europaeus</i> , <i>Rubus fruticosus</i> , <i>Urtica dioica</i> , <i>salix spp.</i> , <i>Crataegus monogyna</i> , <i>Calystegia spp.</i> , <i>Epilobium hirsutum</i> , <i>Calystegia sepium</i> , <i>Epilobium angustifolium</i> , <i>Phragmites australis</i> , <i>Buddelja spp.</i>
PF2	n/a	<i>Agrostis canina</i> , <i>Agrostis stolonifera</i> , <i>Hydrocotyle vulgaris</i> , <i>Juncus acutiflorus</i> , <i>Juncus bulbosus</i> , <i>Carex nigra</i> , <i>Viola palustris</i> , <i>Anagallis tenella</i> , <i>Festuca rubra agg.</i> , <i>Polytrichum commune</i> , <i>Hylocomium splendens</i> and <i>Sphagnum</i> species, including <i>S. palustre</i> and <i>S. capillifolium</i> . <b>2662_R1</b>
WD1	n/a	<i>Acer pseudoplatanus</i> , <i>Alnus glutinosa</i> , <i>Cotoneaster sp.</i> , <i>Crataegus monogyna</i> , <i>Dryopteris felix-mas</i> , <i>Fraxinus excelsior</i> , <i>Hedera helix</i> , <i>Heracleum sphondylium</i> , <i>Phyllitis scolopendrium</i> , <i>Rubus fruticosus agg.</i> , <i>Symporicarpos alba</i> and <i>Urtica dioica</i> <b>2670_R1</b>
WS1	n/a	<i>Larix spp.</i> , <i>Ulex europaeus</i> , <i>Rubus fruticosus agg.</i> , <i>Urtica dioica</i> , <i>Salix spp.</i> , <i>Crataegus monogyna</i> , <i>Calystegia sepium</i> , <i>Epilobium angustifolium</i> , <i>Phragmites australis</i> , <i>Buddelja davidii</i>
WL2	n/a	Wide treeline, Mostly <i>Acer pseudoplatanus</i> . <i>Pinus contorta</i> also present.
WS1	n/a	<i>Prunus spinosa</i> , <i>Ulex europaeus</i> , <i>Crataegus monogyna</i> , <i>Rubus fruticosus agg.</i> A small area scrub associated with an abandoned residential property has several non-native garden shrubs including <i>Cotoneaster sp.</i> and <i>Symporicarpos alba</i> .

## EC18

EC18 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ED2	n/a	Cleared vegetation with pockets of wet grassland (GS4) and scrub (WS1) remaining. <i>Arrhenatherum elatius, Juncus articulatus, Iris pseudacorus, Epilobium hirsutum, Filipendula ulmaria, Rubus fruticosus agg. and Ulex europaeus.</i>
ED2/ED3/ BL3	n/a	Mosaic of spoil, bare ground, recolonizing bare ground and built/artificial surfaces. Species include <i>Jacobaea vulgaris, Cirsium vulgare, Matricaria discoidea, Persicaria maculosa, Polygonum aviculare, Arrhenatherum elatius, Epilobium hirsutum, Cirsium arvense, Centaurea nigra, Lolium perenne, Urtica dioica.</i>
ED3	n/a	<i>Calliergonella cuspidata, Rhytidadelphus squarrosus, Poa annua, Dactylis glomerata, Plantago lanceolata, Trifolium repens, Lolium perenne and Jacobaea vulgaris.</i> <b>5899_R1</b>
GS1	n/a	<i>Anthoxanthum odoratum, Plantago lanceolata, Cynosurus cristatus, Phleum pratense, Poa trivialis, Dactylis glomerata, Festuca rubra agg., Trifolium repens, Cerastium fontanum, Hypochaeris radicata, Prunella vulgaris, Centaurea nigra, Lotus corniculatus, Ranunculus acris, Odontites vernus, Agrostis capillaris and Leucanthemum vulgare.</i> <b>1106_R1</b>
GS2/WS1	n/a	<i>Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypochaeris radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus. agg., Salix cinerea subsp. Oleifolia, Ulex europaeus.</i>
GS3	n/a	<i>Agrostis capillaris, Anthoxanthum odoratum, Dactylis glomerata, Holcus lanatus, Prunella vulgaris, Plantago lanceolata, Rumex acetosa, Trifolium pratense, T. Repens, Hypochaeris radicata, Centaurea nigra, Festuca rubra/ovina and Rhytidadelphus squarrosus. Other species if near dry heath include Succisa pratensis, Galium saxatile, Potentilla erecta and Pleurozium schreberi.</i> <b>1065_R2 and 2437_R2</b>

GS3a	n/a (UG2a)	<i>Nardus stricta, Agrostis capillaris, Anthoxanthum odoratum, Cynosurus cristatus, Juncus effusus, J. articulatus, Festuca rubra/ovina, Galium saxatile, Trifolium repens, Rumex acetosa, Pedicularis sylvatica, Plantago lanceolata, Potentilla erecta, Prunella vulgaris, Rhytidadelphus squarrosus, Hylocomium splendens and Pleurozium schreberi.</i> <b>EC18 R6</b>
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#### EC18 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS4	n/a	<i>Arrhenatherum elatius, Molinia caerulea, Juncus effusus, Filipendula ulmaria, Lythrum salicaria, Juncus articulatus, Mentha aquatica, Potentilla erecta, Galium palustre, Rubus fruticosus agg., Cirsium palustre, Salix cinerea and Betula pubescens.</i> <b>1106_R2, 2554_R1, 2437_R1, 2438_R1 and 2440_R1</b>
GS4	6410 (GL1c)	Localised areas of <i>Molinia</i> dominated grasslands on peaty ground and often associated with wet grassland or near heath. <i>Molinia caerulea, Agrostis stolonifera, Holcus lanatus, Anthoxanthum odoratum, Agrostis capillaris, Danthonia decumbens, Nardus stricta, Juncus articulatus, Succisa pratensis, Luzula multiflora, Potentilla erecta, Carex panacea, Carex echinata, Dactylorhiza sp., Filipendula ulmaria, Mentha aquatic, Pleurozium schreberi, Rhytidadelphus squarrosus, Sphagnum sp., Hylocomium splendens and Calliergonella cuspidata.</i> <b>EC18 R2 and EC18 R5</b>
HH1/ HH3/ WS1/ PF1/ PF2/ ER1	4030/ 4010/ 7230/ 8220	<i>Calluna vulgaris, Erica cinerea, Potentilla erecta, Ulex galli, Veronica officinalis</i> <i>Carex panicea, Comarum palustre, Erica cinerea, Juncus acutiflorus, Molinia caerulea, Narthecium ossifragum, Osmunda regalis, Potentilla erecta, Succisa pratensis</i> Possible increase in scrub area ( <i>Ulex europeaus</i> )
HH3/GS1	4010	Small patch of <i>Ulex europeaus</i> . Main species include: <i>Carex panicea, Comarum palustre, Erica cinerea, Juncus acutiflorus, Molinia caerulea, Narthecium ossifragum, Osmunda regalis, Potentilla erecta, Succisa pratensis</i>
GS4/WS1	n/a	Grassland species as above. Other species include <i>Chamaenerion angustifolium, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia and Ulex europaeus.</i>
GM1	n/a	<i>Glyceria fluitans, Agrostis stolonifera, Equisetum fluviatile, Holcus lanatus, Filipendula ulmaria, Mentha aquatic, Apium nodiflorum, Lythrum salicaria and Iris pseudacorus.</i> No bryophytes.
GM1	n/a	Marsh vegetation dominated by <i>Epilobium hirsutum, Iris pseudacorus, Mentha aquatica</i> and <i>Filipendula ulmaria</i> .
HD1	n/a	<i>Pteridium aquilinum</i> <b>1091_R1 and 2566_R1</b>

HD1/WS1	n/a	Dense bracken and scrub species as described in this table. <a href="#">1131_R1</a>
HH1	4030 (DH1)	<i>Ulex gallii, Calluna vulgaris, Erica cinerea, Daboecia cantabrica, Succisa pratensis, Arctostaphylos uva-ursi, Agrostis capillaris, Hylocomium splendens, Solidago virgaurea, Potentilla erecta, Molinia caerulea and Succisa pratensis.</i> <a href="#">EC18 R3, EC18 R7, 1098_R1, 2433_R1, 2435_R1, 2432_R1, 2431_R1 and 1065_R1</a>
<b>EC18 - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
HH1/WS1	n/a	Dry heath and scrub species as described in this table. <a href="#">2434_R1 and 2436_R1</a>
HH3	4010 (WH3)	<i>Calluna vulgaris, Molinia caerulea, Erica tetralix, Narthecium ossifragum, Juncus articulates, Potentilla erecta, Succisa pratensis, Dactylorhiza sp., Carex echinata, C. panacea, Rhytidadelphus squarrosus, Aulacomnium palustre, Hylocomium splendens, Sphagnum papillosum, Sphagnum capillifolium, Thuidium tamariscinum and Cladonia portentosa.</i> Localised areas at south with <i>Schoenus nigricans, Trichophorum germanicum, Eleocharis multicaulis and Myrica gale</i> <a href="#">EC18 R1, EC18 R4, EC18 R4, 1131_R2 and 1094_R1</a>
HH3/GS4/ WS1	4010	HH3 as described above with <i>Juncus effusus</i> and <i>Rubus fruticosus agg.</i>
WD1/WN5	n/a	<i>Alnus glutinosa, Fraxinus excelsior, Betula pubescens, Prunus spinosa, Rubus fruticosus agg., Hedera helix, Ranunculus repens, Veronica chamaedrys, Phyllitis scolopendrium, Solidago virgaurea, Plagiomnium undulatum, Lophocolea bidentata, Fagus sylvatica, Quercus robur, Sanicula sp., Brachypodium sylvaticum, Geum urbanum, Circaeae lutetiana and Rhododendron ponticum.</i>
WS1	n/a	<i>Prunus spinosa, Ulex europaeus, Crataegus monogyna, Acer pseudoplatanus, Sorbus aucuparia, Rubus fruticosus agg. and Pteridium aquilinum. Salix cinerea in hollows.</i> <a href="#">2442_R1, 2440_R2, 1094_R3 and 1094_R2</a>
WS1/GS4	n/a	<i>Ulex and Rubus scrub have spread substantially. Juncus effusus, Lythrum salicaria, Iris pseudacorus, Filipendula ulmaria, Larix decidua, Urtica dioica, Crataegus monogyna, Calystegia sepium, Epilobium hirsutum, Chamaenerion angustifolium, Phragmites australis and Buddleja davidii present.</i>
WS1/GS4/ HD1	n/a	WS1 as described above. <i>Angelica sylvestris, Carex echinata, Carex panicea, Comarum palustre, Dactylorhiza fuschi, Epilobium hirsutum, Equisetum fluviatile, Filipendula ulmaria, Galium palustre, Hydrocotyle vulgaris, Hypericum scorpioides, Jacobaea aquatica, Juncus acutiflorus, Juncus effusus, Lotus pendunculatus, Lythrum salicaria, Mentha aquatica, Persicaria hydropiper, Ranunculus flammula, Typha latifolia, Blechnum spicant, Lonicera periclymenum,</i>

		<i>Myrica gale</i> , <i>Pteridium aquilinum</i> , <i>Teucrium scorodonia</i> , <i>Ulex gallii</i> .
WS1/GS2/ BL3	n/a	Old scrubbed up farmstead. Scrub and Dry meadow/Grassy verges species list as described in table.
WS1/GS3	n/a	<i>Prunus spinosa</i> (F-A), <i>Crataegus monogyna</i> , <i>Rubus fruticosus</i> agg. and <i>Pteridium aquilinum</i> . Grassland species as described above under GS3.

**EC18 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
WS1/GS4/ HH3	4010	Scrub, grassland and heathland species as described above. <b>2424_R1</b>
WS1/FS1	n/a	An area of <i>Phragmites</i> swamp present. <i>Larix decidua</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus</i> agg., <i>Urtica dioica</i> , <i>Salix</i> sp., <i>Crataegus monogyna</i> , <i>Calystegia</i> sp., <i>Epilobium hirsutum</i> , <i>Calystegia sepium</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> , <i>Buddleja davidii</i> .

## Cappagh (Ch. 3+900 – Ch. 4+650) – Habitats between EC18 and EC20

Cappagh - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
BL1	n/a	Few epiphytes for the most part. Significant bryophyte communities in some places but few higher plant species. <i>Brachythecium rutabulum, Cladonia spp., Dicranum scoparium, Frullania dilatata, Hedera helix, Homalothecium, Hypnum cupressiforme, Isothecium myosuroides, Mnium hornum and Racomitrium aciculare</i>
FW2/WS1		Deep stream lined by <i>Crataegus monogyna</i> and <i>Salix</i> scrub.
GA1	n/a	<i>Agrostis stolonifera, Cirsium arvense, Cynosurus cristatus, Holcus lanatus, Lolium perenne, Plantago major, Ranunculus repens, Rumex crispus, Rumex obtusifolius, Taraxacum officinale agg., Trifolium repens</i> and <i>Urtica dioica</i> <b>2525_R1</b>
GA1/WS1	n/a	<i>Arrhenatherum elatius, Capsella bursa-pastoris, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Jacobaea vulgaris, Lolium perenne, Plantago lanceolata, Plantago major, Poa annua, Ranunculus acris, Ranunculus repens, Rumex obtusifolius, Stellaria media, Trifolium repens, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus. agg., Salix cinerea subsp. Oleifolia, Ulex europaeus.</i>
GA2	n/a	Amenity grassland associated with Residential area.
GS1	n/a	<i>Anthoxanthum odoratum, Plantago lanceolata, Cynosurus cristatus, Phleum pratense, Poa trivialis, Dactylis glomerata, Festuca rubra agg Trifolium repens, Cerastium fontanum, Ranunculus acris, Hypochaeris radicata, Prunella vulgaris, Centaurea nigra, Lotus corniculatus, Agrostis capillaris and Leucanthemum vulgare.</i> <b>2513_R2, 2527_R2 and 2542_R1</b>
GS2	n/a	<i>Arrhenatherum elatius, Cirsium arvense, Calystegia sepium, Dactylis glomerata, Festuca rubra, Holcus lanatus, Ranunculus repens and Rumex crispus. Alnus glutinosa occasionally present.</i>
GS2/WS1	n/a	<i>Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypochaeris radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus. agg., Salix cinerea subsp. Oleifolia, Ulex europaeus.</i>

**Cappagh - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS4	n/a	<i>Agrostis stolonifera, Epilobium hirsutum, Filipendula ulmaria, Holcus lanatus, Juncus effusus, Juncus acutiflorus, Lythrum salicaria, Persicaria hydropiper, Potentilla anserina and Ranunculus acris.</i> <b>2511 R1, 2513 R1, 2527 R1, 2533 R1 and 2554 R1</b>
GS4/WS1	n/a	<i>Angelica sylvestris, Carex echinata, Carex panicea, Comarum palustre, Dactylorhiza fuschii, Epilobium hirsutum, Equisetum fluviatile, Filipendula ulmaria, Galium palustre, Hydrocotyle vulgaris, Hypericum scorpioides, Jacobaea aquatica, Juncus acutiflorus, Juncus effusus, Lotus pendunculatus, Lythrum salicaria, Mentha aquatica, Persicaria hydropiper, Ranunculus flammula, Typha latifolia.</i> WS1 as below.
PF2	n/a	<i>Calliergonella cuspidata, Carex echinata, Carex panicea, Hypericum elodes, Juncus articulatus, Juncus bulbosus, Ranunculus flammula and Sphagnum palustre</i>
WL1	n/a	<i>Crataegus monogyna, Hedera helix, Prunus spinosa, Rubus fruticosus agg. and Urtica dioica</i>
WL2	n/a	Varying species compositions across the site. <i>Pinus</i> sp. and <i>Alnus cordata</i> are dominant in some treelines but the majority are composed of <i>Fraxinus excelsior, Alnus glutinosa</i> and <i>Acer pseudoplatanus</i>
WN2	n/a	Canopy species include <i>Fraxinus excelsior, Corylus avellana</i> and <i>Acer pseudoplatanus</i> , scrub species include <i>Crataegus monogyna, Prunus spinosa</i> and <i>Rubus fruticosus</i> agg. Ground layer species include <i>Pteridium aquilinum, Hedera helix, Brachypodium sylvaticum, Geranium robertianum, Eurhynchium striatum, Thamnobryum alopecurum, Hypnum species.</i> <b>1208_R1</b>
GS2/HD1	n/a	Some bracken encroachment along road <i>Alnus glutinosa, Cirsium arvense, Calystegia sepium, Salix</i> sp. <i>Pteridium aquilinum, Ulex galli</i>
WS1	n/a	<i>Crataegus monogyna, Prunus spinosa, Larix decidua, Urtica dioica, Salix</i> sp., <i>Calystegia sepium, Epilobium hirsutum, Epilobium angustifolium, Phragmites australis, Rubus fruticosus</i> agg. and <i>Ulex europaeus</i> (D)
WS1/GA2	n/a	Species as described above. <i>Fraxinus excelsior, Acer pseudoplatanus, Tilia cordata, Alnus glutinosa</i> also present,
WS3	n/a	<i>Chamaecyparis lawsoniana, Cotoneaster</i> sp., <i>Fagus sylvatica purpurea, Petasites pyrenaicus.</i>

## EC20

EC20 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
BL3	n/a	No.3 polygons previously labelled as Heathland (HH1/HH3) in 2018, now a residential area.
BL3/GA2	n/a	Residential area.
ED3	n/a	<i>Jacobaea vulgaris, Tussilago farfara, Bellis perennis, Ulex europaeus, Holcus lanatus, Taraxacum officinale, Centaurea nigra</i> and <i>Rumex obtusifolius</i> . <i>Buddleja davidii, Epilobium hirsutum, Carex nigra, Arrhenatherum elatius, Cirsium spp., Rumex spp., Salix cinerea</i> <b>5888 R1</b>
ED3/GS4	n/a	Areas of wet grassland developing on disturbed ground. <i>Juncus effusus, Lythrum salicaria, Iris pseudacorus, Filipendula ulmaria, Jacobaea vulgaris, Cirsium vulgare, Matricaria discoidea, Persicaria maculosa, Polygonum aviculare, Arrhenatherum elatius, Epilobium hirsutum, Cirsium arvense, Centaurea nigra, Lolium perenne, Urtica dioica, Larix decidua, Ulex europeaus, Rubus fruticosus agg., Salix sp., Crataegus monogyna, Calystegia sp., Epilobium hirsutum, Calystegia sepium, Chamaenerion angustifolium, Phragmites australis, Buddleja davidii</i> .
ED3/WS1	n/a	Areas recently disturbed with scrub development taking place. <i>Jacobaea vulgaris, Cirsium vulgare, Matricaria discoidea, Persicaria maculosa, Polygonum aviculare, Arrhenatherum elatius, Epilobium hirsutum, Cirsium arvense, Centaurea nigra, Lolium perenne, Urtica dioica, Larix decidua, Ulex europeaus, Rubus fruticosus agg., Salix sp., Crataegus monogyna, Calystegia sp., Epilobium hirsutum, Calystegia sepium, Chamaenerion angustifolium, Phragmites australis, Buddleja davidii</i> .
ED3/GS2/WS1	n/a	Previously disturbed area increasingly colonized by grassland and scrub, whose species assemblages are described in table.
ED3/GS4/WS1	n/a	Formerly disturbed area now revegetating with <i>Juncus effusus</i> wet grassland and <i>Ulex europaeus</i> scrub. Grassland species include <i>Juncus effusus, Lythrum salicaria, Iris pseudacorus</i> and <i>Filipendula ulmaria</i> .
ED3/WS1/GS4	n/a	Recolonising bare ground and wet grassland species as described in table with <i>Ulex spp.</i> spreading.
ED3/WS1/BL3	n/a	Recolonising bare ground and wet grassland species as described in table with <i>Ulex spp.</i> spreading.
ER1	n/a	Although the rock outcrops are generally devoid of vegetation some occasional clumps of <i>Calluna vulgaris</i> and <i>Blechnum spicant</i> were recorded growing in narrow fissures. <b>5890 R2</b>
HD1	n/a	<i>Pteridium aquilinum</i> overwhelmingly dominant. Few other species apart from <i>Rubus fruticosus agg.</i> <i>Chamerion angustifolium</i> very common in places. <b>1194 R1, 1188 R3 and 5890 R1</b>

HD1/HH1/HH3	4030/4010	25% heath habitat mosaic. Species include <i>Pteridium aquilinum</i> , <i>Salix</i> sp., <i>Ulex gallii</i> . Heath species as described below.
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#### EC20 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
HD1/WD1/GS2	n/a	<i>Salix</i> sp., <i>Pteridium aquilinum</i> , <i>Ulex gallii</i> , <i>Fraxinus excelsior</i> , <i>Acer pseudoplatanus</i> , <i>Alnus glutinosa</i> , <i>Crataegus monogyna</i> , <i>Cirsium arvense</i> , <i>Calystegia sepium</i> .
HD1/WS1	n/a	<i>Pteridium aquilinum</i> , <i>Larix decidua</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus</i> agg., <i>Urtica dioica</i> , <i>Salix</i> sp., <i>Crataegus monogyna</i> , <i>Calystegia</i> sp., <i>Epilobium hirsutum</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> , <i>Buddleja davidii</i> , <i>Ulex galii</i> .
HD1/WS1/ED3	n/a	Recently disturbed, scrub is revegetating. Species list for dense bracken and scrub is described in this table.
HH1	4030 (DH1 & DH3)	<i>Ulex gallii</i> , <i>Calluna vulgaris</i> , <i>Erica cinerea</i> , <i>Molinia caerulea</i> , <i>Potentilla erecta</i> , <i>Carex binervis</i> , <i>Carex panicea</i> , <i>Hypnum jutlandicum</i> and <i>Daboezia cantabrica</i> . <b>5890_R3, 5073_R1, 1187_R2, 1203_R1 and 1198_R1</b>
HH1/WS1/ER1	4030	Nearly all HH1 scrub burnt back Exposed siliceous rock species include <i>Danthonia decumbens</i> , <i>Erica cinerea</i> , <i>Erica tetralix</i> , <i>Hypochaeris radicata</i> , <i>Rumex acetosella</i> , <i>Sedum anglicum</i> , <i>Veronica officinalis</i> Scrub species include <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> . agg., <i>Salix cinerea</i> subsp. <i>Oleifolia</i> , <i>Ulex europaeus</i>
HH3	4010 (WH4a)	Confined to shallow peat. Typical/dominant species are <i>Molinia caerulea</i> , <i>Trichophorum germanicum</i> , <i>Calluna vulgaris</i> , <i>Erica tetralix</i> , <i>Sphagnum capillifolium</i> , <i>Narthecium ossifragum</i> and <i>Racomitrium lanuginosum</i> . <b>EC20 R1, EC20 R4, EC20 R5, 1188_R1, 1199_R1, 5884_R1 and 5890_R6</b>
HH3/ED3	4010	Areas of disturbed ground along eastern margins of polygon. HH3 species as described above. <i>Jacobaea vulgaris</i> , <i>Cirsium vulgare</i> , <i>Matricaria discoidea</i> , <i>Persicaria maculosa</i> , <i>Polygonum aviculare</i> , <i>Arrhenatherum elatius</i> , <i>Epilobium hirsutum</i> , <i>Cirsium arvense</i> , <i>Centaurea nigra</i> , <i>Lolium perenne</i> , <i>Urtica dioica</i> .
HH1/WS1	4030	Some scrub encroachment apparent. <i>Ulex gallii</i> , <i>Larix</i> spp, <i>Ulex europaeus</i> , <i>Rubus fruticosus</i> , <i>Urtica dioica</i> , <i>Salix</i> sp., <i>Reynoutria japonica</i> , <i>Crataegus monogyna</i> , <i>Calystegia</i> sp., <i>Epilobium hirsutum</i> , <i>Calystegia sepium</i> , <i>Epilobium angustifolium</i> , <i>Phragmites australis</i> , <i>Buddleia</i>

HH1/HH3/WS1	4030/40 10	Heath species as described above. Scrub species include <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Salix cinerea</i> subsp. <i>oleifolia</i> and <i>Ulex europeaus</i> .
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#### EC20 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
HH1/WS1/HD1/ ER1/HH3	4030/4010	Heath species as described above. 70% HH1/HH3; Scrub perhaps more frequent than previously.
FS1	n/a	A small lake completely infilled with dense <i>Phragmites australis</i> reed swamp. <i>Phragmites</i> cover is generally >75%. Other flora includes <i>Equisetum fluviatile</i> , <i>Cammarum palustre</i> , <i>Galium palustre</i> and <i>Calystegia sepium</i> .
FW1	n/a	Very little associated submerged vegetation occurs apart from some sparse <i>Juncus bulbosus</i> , <i>Callitricha stagnalis</i> and <i>Glyceria fluitans</i> .
GA1	n/a	<i>Dactylis glomerata</i> , <i>Holcus lanatus</i> , <i>Plantago lanceolata</i> , <i>Trifolium pratense</i> , <i>Centaurea nigra</i> , <i>Lolium perenne</i> , <i>Agrostis stolonifera</i> , <i>Ranunculus repens</i> , <i>Alopecurus pratensis</i> <b>2984_R1</b>
GA1/WS1	n/a	<i>Arrhenatherum elatius</i> , <i>Capsella bursa-pastoris</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Jacobaea vulgaris</i> , <i>Lolium perenne</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Poa annua</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> , <i>Stellaria media</i> , <i>Trifolium repens</i> , <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> . agg., <i>Salix cinerea</i> subsp. <i>Oleifolia</i> , <i>Ulex europaeus</i> .
GA2/ED3/ED2	n/a	GAA pitch. Typical improved amenity grassland species present. Some patches of bare ground present.
GS1	n/a	<i>Anthoxanthum odoratum</i> , <i>Holcus lanatus</i> , <i>Plantago lanceolata</i> , <i>Cynosurus cristatus</i> , <i>Carex flacca</i> , <i>Alopecurus pratensis</i> , <i>Hypnum species</i> , <i>Agrostis canina</i> , <i>Rhytidadelphus species</i> , <i>Dactylis glomerata</i> , <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Cerastium fontanum</i> , <i>Pteridium aquilinum</i> , <i>Agrostis stolonifera</i> , <i>Ranunculus repens</i> , <i>Alopecurus pratensis</i> <b>2451_R1, 2450_R1 and 1182_R1</b>
GS1/HD1	n/a	<i>Pteridium aquilinum</i> locally dominant in GS1 habitat (See above for typical grassland species). Other species include <i>Jacobaea vulgaris</i> , <i>Buddleja davidii</i> , <i>Salix sp.</i> , <i>Ulex gallii</i> .
GS2	n/a	<i>Holcus lanatus</i> , <i>Anthoxanthum odoratum</i> , <i>Arrhenatherum elatius</i> , <i>Centaurea nigra</i> , <i>Trifolium repens</i> , <i>Cynosurus cristatus</i> and <i>Dactylis glomerata</i> . <b>5888_R2</b>

GS2/HD1	n/a	<i>Achillea millefolium, Arrhenatherum elatius, Centurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Blechnum spicant, Lonicera periclymenum, Myrica gale, Pteridium aquilinum, Teucrium scorodonia, Ulex gallii</i>
<b>EC20 - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
GS2/WS1	n/a	Disturbed grassland with high cover of <i>Cirsium arvense, Calystegia sepium</i> .
GS3	n/a	In place vegetation grades in GS2 dry meadow. Typical species are <i>Agrostis capillaris, Anthoxanthum odoratum, Potentilla erecta, Succisa pratensis, Galium saxatile, Lotus corniculatus, Plantago lanceolata</i> and <i>Rhytidadelphus squarrosus</i> .
GS4	n/a	Species-poor <i>Juncus effusus</i> dominated grasslands. Typical species are <i>Juncus effusus, Juncus acutiflorus, Holcus lanatus, Anthoxanthum odoratum, Cirsium palustre, Agrostis stolonifera, Filipendula ulmaria, Iris pseudacorus, Lythrum salicaria, Ranunculus repens, Ranunculus flammula, Trifolium repens, Galium palustre</i> and the wetland moss <i>Calliergonella cuspidata</i> . <b>1176_R1, 1187_R1, 1200_R1, 2448_R1, 2447_R1 and 2447_R2</b>
	6410	<i>Molinia caerulea</i> dominated wet grassland type the dominant species generally however in some areas a more open, species-rich wetland vegetation occurs. Associated species include <i>Juncus acutiflorus, Agrostis stolonifera, Lythrum salicaria, Potentilla erecta</i> and <i>Succisa pratensis</i> . <b>EC20 R3</b>
GS4/GS1	n/a	<i>Juncus effusus, Lythrum salicaria, Iris pseudacorus, Filipendula ulmaria, Jacobaea vulgaris, Buddleja davidii, Pteridium aquilinum</i> .
GS4/HD1	n/a	Scrub appears to have cleared giving bracken and wet grassland mosaic. Grassland species as described above, including <i>Iris pseudacorus</i> . Dense bracken as described above, including <i>Ulex gallii</i>
PB3	7130* (Active blanket bog) (BB2 and BB3)	<i>Schoenus nigricans, Molinia caerulea, Erica tetralix, Calluna vulgaris, Narthecium ossifragum, Rhynchospora alba, Eriophorum vaginatum, Eriophorum angustifolium</i> and <i>Trichophorum germanicum, Sphagnum papillosum, Sphagnum capillifolium, Sphagnum cuspidatum</i> and <i>Racomitrium lanuginosum</i> . <b>EC20 R2</b>
PF3	7140 (PFLU5)	<i>Schoenus nigricans, Sphagnum papillosum, Molinia caerulea, Rhynchospora alba, Menyanthes trifoliata, Carex limosa, Carex rostrata, Eleocharis multicaulis, Potamogeton polygonifolius</i> and <i>Aulacomnium palustre</i> .

WD1	n/a	<i>Fraxinus excelsior, Fagus sylvatica, Acer pseudoplatanus</i> and <i>Ilex aquifolium</i> are the main tree species.
WN2	n/a	<i>Fraxinus excelsior, Hedera helix, Geranium robertianum, Holcus lanatus, Prunella vulgaris, Rhytidadelphus squarrosus, Dryopteris filix-mas, Pteridium aquilinum, Agrostis stolonifera, Acer pseudoplatanus, Rubus fruticosus agg., Hypnum jutlandicum</i> <b>1208 R1</b>
WS1	n/a	<i>Ulex europaeus</i> is the dominant species with <i>Rubus fruticosus</i> , <i>Pteridium aquilinum</i> and <i>Molinia caerulea</i> along the margins of scrub. There is also an area of scrub vegetation dominated
<b>EC20 - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
		by <i>Salix cinerea</i> . <b>2446_R1, 1201_R1, 5072_R1, 5890_R4, 5890_R5, 1199_R2, 5890 R7, and 1203 R2</b>
WS1/ED3	n/a	Disturbed area of scrub, quickly recolonizing. <i>Jacobaea vulgaris, Cirsium vulgare, Matricaria discoidea, Persicaria maculosa, Polygonum aviculare, Arrhenatherum elatius, Epilobium hirsutum, Cirsium arvense, Centaurea nigra, Lolium perenne, Urtica dioica, Larix decidua, Ulex europaeus, Rubus fruticosus agg., Urtica dioica, Salix sp., Crataegus monogyna, Calystegia sp., Calystegia sepium, Chamaenerion angustifolium, Phragmites australis and Buddleja davidii</i> .
WS1/GS1	n/a	WS1 dominant (described above), 20% GS1; <i>Campanula rotundifolia, Carex flacca, Carlina vulgaris, Centaurium erythraea, Centurea nigra, Conopodium majus, Cynosurus cristatus, Daucus carota, Lathyrus pratensis, Leucanthemum vulgare, Linum catharticum, Lotus corniculatus, Pilosella aurantiaca, Polygala vulgaris, Trifolium pratense</i> .
WS1/HD1/GS2	n/a	60% WS1, 30% HD1, 10% GS2. Mostly <i>Ulex europeaus</i> . Species as described in table above.
WS1/HD1/GS4	n/a	<i>Pteridium aquilinum, Ulex europaeus</i> and <i>Rubus fruticosus agg.</i> GS4 species as above.
WS1/HH1/HH3	4030/4010	<i>Ulex europeaus</i> is dominant with small patches of HH1 and HH3 (species as above). Other species present include <i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia</i> .

### Ballymoneen Road (Ballymoneen Road Junction, Ch. 5+550 – Ch. 5+700) – Habitats between EC20 and EC21

Ballymoneen Road - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ED2	n/a	Spoil and bare ground. Foundations of new buildings laid.

ED3	n/a	<i>Poa trivialis, Trifolium repens, Cerastium fontanum, Lolium perenne, Potentilla anserina, Ranunculus repens, Rumex crispus, Plantago major, Jacobaea vulgaris, Cirsium arvense, Cirsium vulgare, Persicaria maculosa, Polygonum aviculare, Arrhenatherum elatius, Epilobium hirsutum, Cirsium arvense, Centaurea nigra, Lolium perenne, Urtica dioica, Matricaria discoidea, Poa annua, Taraxacum sp., Stellaria media, Jacobaea vulgaris, Sisymbrium officinale</i> <b>2476_R1</b>
ED3/ED2/ GS2	n/a	Area disturbed by residential construction. <i>Jacobaea vulgaris, Cirsium vulgare, Matricaria discoidea, Persicaria maculosa, Polygonum aviculare, Arrhenatherum elatius, Epilobium hirsutum, Cirsium arvense, Centaurea nigra, Lolium perenne, Urtica dioica, Alnus glutinosa, Cirsium arvense, Calystegia sepium.</i>
<b>Ballymoneen Road - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
GA1	n/a	<i>Agrostis stolonifera, Cirsium arvense, Jacobaea vulgaris, Arrhenatherum elatius, Dactylis glomerata, Holcus lanatus, Lolium perenne, Plantago major, Ranunculus repens, Rumex obtusifolius, Trifolium repens and Urtica dioica</i> <b>2458_R2 and 2458_R3</b>
GS1	n/a	<i>Holcus lanatus, Plantago lanceolata, Trifolium repens, Cerastium fontanum, Cynosurus cristatus, Crepis capillaris, Agrostis canina, Jacobaea vulgaris, Buddleja davidii, Pteridium spp.</i> <b>2450_R2</b>
GS1/WS1/ HD1	n/a	No grazing in the vicinity. Grassland, scrub and dense bracken species list as described in table.
GS2	n/a	<i>Arrhenatherum elatius, Dactylis glomerata, Festuca rubra, Prunella vulgaris and Succisa pratensis. Alnus glutinosa, a Cirsium arvense and Calystegia sepium occasionally present.</i>
GS4	n/a	<i>Agrostis stolonifera, Holcus lanatus, Juncus effusus, Lythrum salicaria and Ranunculus acris</i>
HD1	n/a	<i>Pteridium aquilinum, Ulex gallii, Salix spp. Chamerion angustifolium very common in places.</i>
WD1/GS2	n/a	Area dominated by tall woodland. <i>Acer pseudoplatanus</i> is the main species with some <i>Fraxinus excelsior</i> and <i>Crataegus monogyna</i> . <i>Alnus glutinosa, Cirsium arvense</i> and <i>Calystegia sepium</i> .
WD2	n/a	<i>Fraxinus excelsior, Pinus sp., Crataegus monogyna, Prunus spinosa, Salix caprea, Picea sp.</i>
WL1	n/a	<i>Crataegus monogyna, Hedera helix, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg. and Urtica dioica</i>
WL2	n/a	<i>Cupressus sp., Fraxinus excelsior, Picea sitchensis and Pinus sp.</i>
WL2/WS1	n/a	<i>Betula sp., Salix cinerea, Acer pseudoplatanus, Corylus avellana, Calystegia sepium, Rubus fruticosus agg., Lythrum salicaria, Juncus sp., Acer pseudoplatanus, Buddleja davidii,</i>

		<i>Salix purpureum</i> , <i>Prunus spinosa</i> , <i>Crataegus monogyna</i> , <i>Pteridium aquilinum</i> , <i>Fraxinus excelsior</i> , <i>Symporicarpus alba</i> , <i>Urtica dioica</i> , <i>Filipendula ulmaria</i> , <i>Ranunculus repens</i> , <i>Cotoneaster</i> sp., <i>Hedera helix</i> agg., <i>Larix decidua</i> , <i>Ulex europeaus</i> , <i>Urtica dioica</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> , <i>Pinus contorta</i>
WS1	n/a	<i>Crataegus monogyna</i> , <i>Prunus spinosa</i> and <i>Ulex europaeus</i> <b>2458_R1</b>
WS1/HD1	n/a	Scrub dominant. Species include <i>Larix decidua</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus</i> , <i>Urtica dioica</i> , <i>Salix</i> sp., <i>Crataegus monogyna</i> , <i>Calstegia</i> sp., <i>Epilobium hirsutum</i> , <i>Chamnaenerion angustifolium</i> , <i>Phragmites australis</i> , <i>Buddleja davidii</i> , <i>Pteridium aquilinum</i> .

## EC21

EC21 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ER1	n/a	Although the rock outcrops are generally devoid of some occasional plants of <i>Sedum anglicum</i> , <i>Calluna vulgaris</i> and <i>Aira praecox</i> were recorded growing in small rock cracks. <b>1300_R1</b>
ED2	n/a	<i>Rubus fruticosus agg.</i> , <i>Holcus lanatus</i> , <i>Cerastium fontanum</i> , <i>Rumex acetosa</i> , <i>Cirsium arvense</i> , <i>Agrostis capillaris</i> , <i>Sagina procumbens</i> <b>1303_R2</b>
ED3	n/a	Mineral soil dominates these areas with a sparse, weedy, recolonizing flora which includes <i>Jacobaea vulgaris</i> , <i>Holcus lanatus</i> , <i>Ulex europaeus</i> , <i>Cirsium arvense</i> , <i>Cirsium vulgare</i> , <i>Matricaria discoidea</i> , <i>Persicaria maculosa</i> , <i>Polygonum aviculare</i> , <i>Arrhenatherum elatius</i> , <i>Epilobium hirsutum</i> , <i>Lolium perenne</i> , <i>Urtica dioica</i> , <i>Plantago major</i> , <i>Centaurea nigra</i> , <i>Rumex crispus</i> and <i>Leucanthemum vulgare</i> . <b>2970_R1</b>
ED3/ED2	n/a	Areas used to store topsoil and materials for adjacent building work. <i>Urtica dioica</i> and <i>Galium aparine</i> very common. <i>Jacobaea vulgaris</i> , <i>Cirsium vulgare</i> , <i>Matricaria discoidea</i> , <i>Persicaria maculosa</i> , <i>Polygonum aviculare</i> , <i>Arrhenatherum elatius</i> , <i>Epilobium hirsutum</i> , <i>Cirsium arvense</i> , <i>Centaurea nigra</i> , <i>Lolium perenne</i> , <i>Urtica dioica</i> .
ED3/GS2	n/a	Weedy vegetation with high disturbance. High cover of <i>Urtica dioica</i> and <i>Epilobium hirsutum</i> .
FW4	n/a	<i>Juncus effusus</i> , <i>Glyceria fluitans</i> , <i>Apium nodiflorum</i> , <i>Callitriches obtusangula</i> <b>2971_R1</b>
HD1	n/a	<i>Pteridium aquilinum</i> is overwhelmingly dominant and there are few associated species apart from <i>Rubus fruticosus</i> and <i>Arrhenatherum elatius</i> .
HH1	4030 (DH1 & DH3)	<i>Ulex gallii</i> , <i>Calluna vulgaris</i> and <i>Erica cinerea</i> , <i>Potentilla erecta</i> , <i>Carex binervis</i> , <i>Agrostis canina</i> , <i>Hypnum jutlandicum</i> , <i>Scleropodium purum</i> , <i>Nardus stricta</i> and <i>Daboecia cantabrica</i> . <b>EC21 R1</b>
HH3	4010 (WH4a)	Areas of wet heath occur on shallow peat. Typical species are <i>Trichophorum germanicum</i> , <i>Calluna vulgaris</i> , <i>Erica tetralix</i> , <i>Molinia caerulea</i> , <i>Sphagnum capillifolium</i> , <i>Narthecium ossifragum</i> , <i>Eriophorum angustifolium</i> , <i>Potentilla erecta</i> , <i>Succisa pratensis</i> and <i>Racomitrium lanuginosum</i> . <b>EC21 R2 and EC21 R3</b>
GA1	n/a	The dominant plant species tend to be the agricultural grasses <i>Lolium perenne</i> and <i>Holcus lanatus</i> , <i>Jacobaea vulgaris</i> , <i>Cirsium arvense</i> , <i>Cynosurus cristatus</i> , <i>Urtica dioica</i> , <i>Trifolium repens</i> and <i>Taraxacum officinale</i> . Other grass species such as <i>Dactylis glomerata</i> and <i>Arrhenatherum elatius</i> are also present.

		<a href="#">1300_R2</a> , <a href="#">1299_R1</a> , <a href="#">1301_R1</a> , <a href="#">2480_R1</a> and <a href="#">4926_R1</a>
<b>EC21 - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
GA1/GS4/ GS2	n/a	Grassland rank and ungrazed. Dominated by <i>Holcus lanatus</i> and <i>Arrhenatherum elatius</i> . Other species include <i>Jacobaea vulgaris</i> , <i>Urtica dioica</i> , <i>Cirsium arvense</i> , <i>Juncus effusus</i> , <i>Lythrum salicaria</i> , <i>Iris pseudacorus</i> , <i>Filipendula ulmaria</i> , <i>Alnus glutinosa</i> , <i>Cirsium arvense</i> , <i>Calystegia sepium</i> .
GA2	n/a	<i>Plantago lanceolata</i> , <i>Festuca rubra</i> , <i>Brachythecium rutabulum</i> , <i>Arrhenatherum elatius</i> , <i>Lolium perenne</i> <i>Jacobaea vulgaris</i> , <i>Agrostis capillaris</i> , <i>Taraxacum sp.</i> <a href="#">1302_R1</a>
GS2	n/a	<i>Arrhenatherum elatius</i> tends to dominate the grassy vegetation with <i>Centaurea nigra</i> , <i>Dactylis glomerata</i> , <i>Holcus lanatus</i> , <i>Trifolium repens</i> and <i>Anthoxanthum odoratum</i> . <i>Alnus glutinosa</i> , <i>Cirsium arvense</i> and <i>Calystegia sepium</i> also occasionally present.
GS2/GS4	n/a	GS2 species as above. <i>Juncus effusus</i> , <i>Lythrum salicaria</i> , <i>Iris pseudacorus</i> and <i>Filipendula ulmaria</i> also present.
GS3	n/a	Generally species-poor. <i>Agrostis capillaris</i> , <i>Potentilla erecta</i> , <i>Anthoxanthum odoratum</i> , <i>Holcus lanatus</i> , <i>Cynosurus cristatus</i> and <i>Rhytidiodelphus squarrosus</i> .
GS4	n/a	<i>Juncus effusus</i> species-poor grassland. Typical species are <i>Juncus effusus</i> , <i>Juncus acutiflorus</i> , <i>Holcus lanatus</i> , <i>Cirsium palustre</i> , <i>Ranunculus repens</i> , <i>Ranunculus flammula</i> , <i>Galium palustre</i> , <i>Lythrum salicaria</i> , <i>Potentilla erecta</i> and the wetland moss <i>Calliergonella cuspidata</i> . <a href="#">1299_R2</a> , <a href="#">1303_R3</a> , <a href="#">2972_R1</a> , <a href="#">2969_R1</a> and <a href="#">2972_R2</a>
GS4/HH1	4010	GS4 dominant. <i>Juncus effusus</i> , <i>Lythrum salicaria</i> , <i>Iris pseudacorus</i> , <i>Filipendula ulmaria</i> and <i>Ulex gallii</i> .
WS1	n/a	<i>Ulex europaeus</i> is the dominant species with <i>Rubus fruticosus</i> , <i>Pteridium aquilinum</i> and <i>Molinia caerulea</i> along the margins. <i>Larix decidua</i> , <i>Urtica dioica</i> , <i>Salix sp.</i> , <i>Crataegus monogyna</i> , <i>Calystegia sp.</i> , <i>Epilobium hirsutum</i> , <i>Calystegia sepium</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> and <i>Buddleja davidii</i> . <a href="#">1303_R1</a> and <a href="#">1304_R1</a> ,
WS1/GS2	n/a	<i>Larix decidua</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus agg.</i> , <i>Urtica dioica</i> , <i>Salix sp.</i> , <i>Crataegus monogyna</i> , <i>Calystegia sp.</i> , <i>Epilobium hirsutum</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> , <i>Buddleja davidii</i> , <i>Alnus glutinosa</i> , <i>Cirsium arvense</i> .
WS1/HD1/ ED3	n/a	<i>Salix sp.</i> , <i>Pteridium aquilinum</i> , <i>Ulex gallii</i> , <i>Larix decidua</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus agg.</i> , <i>Urtica dioica</i> , <i>Salix sp.</i> , <i>Crataegus monogyna</i> , <i>Calystegia sepium</i> , <i>Epilobium hirsutum</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> , <i>Buddleja davidii</i> , <i>Jacobaea vulgaris</i> , <i>Cirsium vulgare</i> , <i>Matricaria discoidea</i> , <i>Persicaria maculosa</i> , <i>Polygonum aviculare</i> ,

		<p><i>Arrhenatherum elatius, Epilobium hirsutum, Cirsium arvense, Centaurea nigra, Lolium perenne, Urtica dioica.</i></p>
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**EC21 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
WS1/GA1/ GS4/ER1	n/a	Area very rank and ungrazed. <i>Jacobaea vulgaris</i> , <i>Urtica dioica</i> , <i>Cirsium arvense</i> , <i>Arrhenatherum elatius</i> , <i>Dactylis glomerata</i> , <i>Holcus lanatus</i> , <i>Juncus effusus</i> , <i>Lythrum salicaria</i> , <i>iris pseudacorus</i> , <i>Filipendula ulmaria</i> , <i>Larix decidua</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus agg.</i> , <i>Urtica dioica</i> , <i>Salix sp.</i> , <i>Crataegus monogyna</i> , <i>Calystegia sepium</i> , <i>Epilobium hirsutum</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> , <i>Buddleja davidii</i> .

**Keeraun Bóithrín to Knocknafroska and the N59 Link Road (Ch. 5+850 – Ch. 7+550 and the N59 Link Road Site) – Habitats between EC21, EC23, EC25 and EC63, and between EC25 and EC29 along the N59 Link Road**

<b>Keeraun Bóithrín to Knocknafroska and the N59 Link Road - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
BC4	n/a	<i>Hedera helix</i> , <i>Ilex aquifolium</i> , <i>Prunus laurocerasus</i> , <i>Epilobium sp.</i> , <i>Acer sp.</i> , <i>Buddleja sp.</i> , <i>Campylopus sp.</i> <b>5446_R1</b>
BL1	n/a	<i>Asplenium trichomanes</i> , <i>Dactylis glomerata</i> , <i>Festuca rubra</i> , <i>Hedera helix</i> and <i>Rubus fruticosus agg.</i>
BL1/WS1	n/a	<i>Rubus fruticosus agg.</i> linear feature occurring between two dry stone walls.
BL3	n/a	<i>Acer spp.</i> , <i>Alnus glutinosa</i> , <i>Prunus laurocerasus</i> ,
BL3/WL2	n/a	<i>Fraxinus excelsior</i> copse around a ruined stone cottage.
BL3/ED2/ ED3	n/a	Mix of completed houses and disturbed ground under construction, previously scrub-wet grassland areas in 2018. Species list for spoil and recolonizing bare ground as described in this table.
BL3/WL2	n/a	Lane towards cemetery lined by <i>Taxus spp.</i>
ED2	n/a	Beginning to recolonise but vegetation cover is considered less than 50%. Species present include early colonisers – <i>Buddelja spp.</i> , <i>Epilobium spp.</i> , <i>Reynoutria japonica</i> , <i>Fraxinus excelsior</i> , <i>Matricaria discoidea</i> , <i>Plantago major</i> , <i>Rubus fruticosus agg.</i> , <i>Salix cinerea</i> , <i>Jacobaea vulgaris</i> , <i>Taraxacum officinale agg.</i> and <i>Tussilago farfara</i> <b>4753_R1</b>
ED2/ED3	n/a	Spoil and bare ground and recolonising bare ground species as described in this table. <b>2962_R1 and 2965_R3</b>
ED3	n/a	<i>Arrhenatherum elatius</i> , <i>Bellis perennis</i> , <i>Buddelja davidii</i> , <i>Carex nigra</i> , <i>Centaurea nigra</i> , <i>Dactylis glomerata</i> , <i>Hypochaeris radicata</i> , <i>Leucanthemum vulgare</i> , <i>Matricaria discoidea</i> , <i>Persicaria maculosa</i> , <i>Polygonum aviculare</i> , <i>Epilobium hirsutum</i> , <i>Cirsium arvense</i> , <i>Lolium perenne</i> , <i>Urtica dioica</i> , <i>Plantago lanceolata</i> , <i>Persicaria maculosa</i> , <i>Polygonum aviculare</i> , <i>Ranunculus repens</i> , <i>Rubus fruticosus agg.</i> , <i>Rumex spp.</i> , <i>Jacobaea vulgaris</i> , <i>Tussilago farfara</i> and <i>Ulex europeaus</i>

		<a href="#">2900_R1</a> , <a href="#">2950_R1</a> and <a href="#">2951_R1</a>
<b>Keeraun Bóithrín to Knocknafroska and the N59 Link Road - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
ED3/GS1	n/a	Recolonising bare ground and grassland species as described in this table. <a href="#">2965_R2</a>
ED3/WS1	n/a	Recolonising bare ground as described in this table. Area now dominated by weedy grassland vegetation, such as <i>Cirsium arvense</i> and <i>Rubus</i> scrub.
ED3/WS1/ ED2	n/a	Weedy recolonizing grassland area used for feeding livestock in recent past at the time of survey. Species as described above in this table.
FW4	n/a	<i>Angelica sylvestris</i> , <i>Potamogeton polygonifolius</i> , <i>Ranunculus flammula</i> and <i>Ranunculus repens</i>
GA1	n/a	<i>Agrostis stolonifera</i> , <i>Buddelja davidii</i> , <i>Arrhenatherum elatius</i> , <i>Capsella bursa-pastoris</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Holcus lanatus</i> ., <i>Jacobaea vulgaris</i> , <i>Lolium perenne</i> , <i>Persicaria maculosa</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Poa annua</i> , <i>Polygonum aviculare</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> , <i>Stellaria media</i> , <i>Trifolium repens</i> and <i>Urtica dioica</i> . Some areas also contain <i>Calystegia sepium</i> , <i>Buddelja spp.</i> , <i>Cynosurus cristatus</i> Some areas containing localized rush spp, <a href="#">4715_R1</a> , <a href="#">2933_R1</a> , <a href="#">2931_R1</a> , <a href="#">2898_R1</a> , <a href="#">2855_R1</a> , <a href="#">2821_R1</a> , <a href="#">2821_R2</a> , <a href="#">2818_R1</a> , <a href="#">2762_R2</a> , <a href="#">2757_R1</a> , <a href="#">4753_R2</a> , <a href="#">2832_R2</a> and <a href="#">2764_R2</a>
GA1/GS1	n/a	Species as described in this table.
GA1/GS2	n/a	GA1 species as described above. <i>Achillea millefolium</i> , <i>Arrhenatherum elatius</i> , <i>Centurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Hypocharis radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Taraxacum agg.</i> , <i>Trifolium pratense</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> , <i>Vicia sepium</i> also present.
GA1/ED2	n/a	Half of field turned into horse gallops with sand. Grassland species as described above.
GA1/GS1/ WS1	n/a	Mix of weedy semi-improved grassland habitats, species lists for both as described in this table. Margins of field lined by scrubs species <i>Ulex europaeus</i> , <i>Rubus fruticosus agg.</i>
GA1/ED2/ ED3	n/a	Disturbance along road to the north. Grassland species as listed in this table.

GA1/GS2	n/a	Rough improved grassland, not intensively managed. Grassland species as listed in this table.
GA1/ED3	n/a	Grassland species and recolonizing bare ground as listed in this table.
<b>Keeraun Bóithrín to Knocknafroska and the N59 Link Road - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
GA1/GS1/WS1	n/a	Grassland areas weedy with high cover of <i>Jacobaea vulgaris</i> , <i>Urtica dioica</i> and <i>Cirsium arvense</i> . Other species include <i>Arrhenatherum elatius</i> , <i>Dactylis glomerata</i> , <i>Holcus lanatus</i> , <i>Buddleja davidii</i> , <i>Pteridium aquilinum</i> , <i>Larix decidua</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus agg.</i> , <i>Salix sp.</i> , <i>Crataegus monogyna</i> , <i>Calystegia sp.</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> .
GA1/GS4	n/a	<i>Agrostis stolonifera</i> , <i>Cirsium sp.</i> , <i>Cynosurus cristatus</i> , <i>Dactylis glomerata</i> , <i>Juncus effusus</i> , <i>Lolium perenne</i> , <i>Plantago lanceolata</i> , <i>Prunella vulgaris</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> , <i>Jacobaea vulgaris</i> , <i>Trifolium pratense</i> and <i>Urtica dioica</i>
GA1/GS4/GS3	n/a	50% GA1, 35% GS4, 15% GS3. Species as described above.
GA1/GS4/ED2	n/a	Ongoing improvements and drainage Species list for GA1/GS4 as listed above.
GA1/WL1	n/a	GA1 as above. <i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Hedera helix</i> , <i>Prunus spinosa</i> , <i>Rubus fruticosus agg.</i> also present.
GA1/WL2	n/a	GA1 as above. <i>Acer pseudoplatanus</i> , <i>Acer sp.</i> , <i>Cupressus x leylandii</i> , <i>Fraxinus excelsior</i> and <i>Populus tremula</i> also present.
GA1/WS1	n/a	GA1 as above, with <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus agg.</i> , <i>Salix cinerea</i> subsp. <i>oleifolia</i> and <i>Ulex europeaus</i> <i>Jacobaea vulgaris</i> , <i>Urtica dioica</i> , <i>Arrhenatherum elatius</i> , <i>Dactylis glomerata</i> , <i>Holcus lanatus</i> , <i>Larix decidua</i> , <i>Epilobium hirsutum</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> , <i>Buddleja davidii</i> .
GA1/WS1/ED2	n/a	Area recently disturbed, infill material deposited on site. <i>Buddleja davidii</i> , <i>Crataegus monogyna</i> , <i>Fraxinus excelsior</i> , <i>Poa trivialis</i> , <i>Rumex obtusifolia</i> , <i>Urtica dioica</i> , <i>Heracleum sphondylium</i> , <i>Dactylis glomerata</i> , <i>Arrhenatherum elatius</i> , <i>Potentilla anserina</i> , <i>Lolium perenne</i> , <i>Jacobaea vulgaris</i> , <i>Cynosurus cristatus</i> , <i>Calystegia sepium</i> , <i>Rubus fruticosus agg.</i> , <i>Lythrum salicaria</i> , <i>Juncus sp.</i> , <i>Acer pseudoplatanus</i> , <i>Buddleja davidii</i> , <i>Salix purpurea</i> , <i>Salix cinerea</i> , <i>Prunus spinosa</i> , <i>Crataegus monogyna</i> , <i>Corylus avellana</i> , <i>Pteridium aquilinum</i> , <i>Fraxinus excelsior</i> , <i>Symporicarpus alba</i> , <i>Urtica dioica</i> , <i>Filipendula ulmaria</i> , <i>Ranunculus repens</i> , <i>Cotoneaster sp.</i> , <i>Hedera helix agg.</i>
GA1/WS1/GS4	n/a	50% GA1, 30% WS1, 20% GS4. Species as described in this table.

GA2	n/a	<p><i>Arrhenatherum elatius, Bellis perennis, Dactylis glomerata, Lolium perenne, Plantago lanceolata, Ranunculus repens and Trifolium repens.</i></p> <p>Tall planted trees, <i>Aesculus hippocastanum, Betula sp., Acer sp., Fagus sylvatica, Crataegus monogyna, Populus sp., Tilia sp., Salix cinerea, Fraxinus excelsior.</i></p> <p><b>5318_R1</b></p>
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#### Keeraun Bóithrín to Knocknafroska and the N59 Link Road - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GA2/BC4	n/a	Ornamental planting with low shrubs
GA2/BL3/ GS2	n/a	Grassland/built environment mosaic in Cemetery. Common grassland species, such as <i>Holcus lanatus, Ranunculus repens, Rumex obtusifolius, Ranunculus acris, Achillea millefolium, Pteridium aquilinum, Rubus fruticosus agg., Ulex europeaus, Centaurea nigra, Rhinanthus minor, Cynosurus cristatus, Arrhenatherum elatius, Epilobium hirsutum, Salix sp. and Buddleja davidii.</i>
GS1	n/a	<i>Achillea millefolium, Agrostis capillaris, Agrostis stolonifera, Anthoxanthum odoratum, Centaurea nigra, Cynosurus cristatus, Holcus lanatus, Lotus corniculatus, Prunella vulgaris, Trifolium pratense, Trifolium repens, Campanula rotundifolia, Carex flacca, Carlina vulgaris, Centaurium erythraea, Conopodium majus, Daucus carota, Lathyrus pratensis, Leucanthemum vulgare, Linum carthicum, Pilosella aurantiaca and Polygala vulgaris.</i> Weedy areas of GS1 also contain <i>Buddleja davidii</i> and <i>Jacobaea vulgaris.</i> <i>Arrhenatherum elatius, Cirsium repens, Dactylis glomerata, Pteridium aquilinum, Rubus fruticosus, Ranunculus repens, Rumex obtusifolius,</i> <b>5500_R1, 5496_R1, 2965_R1, 2944_R1, 2925_R1, 2869_R3, 2869_R2, 2869_R1, 2868_R1, 2867_R2, 2866_R3, 2866_R2, 2841_R1, 2831_R2, 2808_R1, 2801_R1, 2771_R1 and 2769_R1</b>
GS1/GA1	n/a	Grassland species as described above. <b>2867_R1</b>
GS1/GS2	n/a	Grassland species as described in this table.
GS1/GS4	n/a	Grassland species as described in this table.
GS1/ED3		Weedy with a high cover of <i>Rumex</i> spp. Surface water seen on day of survey. Species include <i>Jacobaea vulgaris, Buddleja davidii, Pteridium aquilinum, Cirsium vulgare, Matricaria discoidea, Persicaria maculosa, Polygonum aviculare, Arrhenatherum elatius, Epilobium hirsutum, Cirsium arvense, Centaurea nigra, Lolium perenne, Urtica dioica.</i>
GS1/WD5	n/a	GS1 with <i>Cupressus × leylandii, Acer pseudoplatanus</i>
GS2	n/a	<i>Agrostis stolonifera, Anthoxanthum odoratum, Arrhenatherum elatius, Centaurea nigra, Cirsium arvense, Dactylis glomerata, Festuca rubra, Lolium perenne, Lotus corniculatus, Rumex acetosa, Rumex obtusifolius, Trifolium pratensis, Trifolium repens, Veronica chamaedrys, Achillea millefolium, Cerastium fontanum, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris,</i>

		<i>Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Urtica dioica and Vicia sepium.</i> <b>2952_R2</b>
GS2/GS1	n/a	60-70% GS2, 30-40% GS1; Species as listed above.
<b>Keeraun Bóithrín to Knocknafroska and the N59 Link Road - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
GS2/ED3	n/a	Beside a building site. Species include <i>Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Capsella bursa-pastoris, Crepis sp., Elytrigia repens, Geranium molle, Jacobaea vulgaris, Lapsana communis, Lolium perenne, Persicaria maculosa, Plantago lanceolata, Plantago major, Potentilla anserina, Rumex crispus, Sagina nodosa, Scorzoneroidea autumnalis, Trifolium pratense, Tripleurospermum maritimum</i>
GS2/WS1	n/a	Rank grassland containing elements of scrub vegetation. Dominated by bindweed in some areas. <i>Rubus fruticosus agg., Ranunculus repens, Rumex obtusifolia, Dactylis glomerata, Centaurea nigra, Holcus lanatus, Agrostis stolonifera, Arrhenatherum elatius, Cirsium repens, Pteridium aquilinum, Heracleum sphondylium, Calystegia sepium, Rubus fruticosus, Lythrum salicaria, Juncus sp., Reynoutria japonica, Acer pseudoplatanus, Buddleja davidii, Salix purpureum, Salix cinerea, Prunus spinosa, Crataegus monogyna, Corylus avellana, Pteridium aquilinum, Fraxinus excelsior, Symphoricarpu alba, Urtica dioica, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp., Hedera helix agg.</i>
GS3	n/a	<i>Anthoxanthum odoratum, Holcus lanatus, Hypochaeris radicata, Arrhenatherum elatius, Rhytidadelphus squarrosum, Agrostis capillaris, Juncus acutiflorus, Ulex europaeus, Festuca species, Cerastium fontanum, Luzula multiflora</i> <b>2768_R1, 2785_R1 and 2916_R1</b>
GS3/WS1	n/a	Undulating ground with thin soils and localized patches of gorse scrub. <i>Ulex europeaus, Succisa pratensis, Juncus acutiflorus, Lotus pedunculatus.</i>
GS4	n/a	<i>Agrostis stolonifera, Centaurea nigra, Cirsium palustre, Filipendula ulmaria, Galium palustre, Holcus lanatus, Iris pseudacorus, Juncus articulatus, Juncus effusus, Lotus pedunculatus, Lythrum salicaria, Plantago lanceolata, Potentilla anserina, Prunella vulgaris, Ranunculus acris, Ranunculus repens, Rumex obtusifolius and Jacobaea vulgaris.</i> <b>5501_R1, 2815_R1, 2831_R1, 2866_R4, 2915_R2, 2941_R1, 4754_R1, 2944_R2, 2907_R1, 2841_R2, 2816_R1, 2785_R2, 2769_R2 and 2762_R1</b>
GS4/GA1	n/a	<i>Ulex europeaus, Sphagnum sp., Succisa pratensis, Molinia caerulea, Hypericum elodes, Potentilla erecta, Viola palustris, Buddleja davidii, Crataegus monogyna, Fraxinus excelsior, Poa trivalis, Rumex obtusifolia, Urtica dioica, Heracleum sphondylium, Dactylis glomerata,</i>

		<i>Arrhenatherum elatius, Potentilla anserina, Lolium perenne, Jacobaea vulgaris, Cynosurus cristatus.</i>
GS4/GS2	n/a	Species as described in this table.
GS4/HD1/ WS1	n/a	65% GS4, 20% HD1, 15% WS1. Species as described in table above.
<b>Keeraun Bóithrín to Knocknafroska and the N59 Link Road - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
GS4/WS1	n/a	<i>Angelica sylvestris, Carex echinata, Carex panicea, Comarum palustre, Dactylorhiza fuschii, Epilobium hirsutum, Equisetum fluviatile, Filipendula ulmaria, Galium palustre, Hydrocotyle vulgaris, Hypericum scorpioides, Jacobaea aquatica, Juncus acutiflorus, Juncus effusus, Lotus pendunculatus, Lythrum salicaria, Mentha aquatica, Persicaria hydropiper, Ranunculus flammula, Typha latifolia.</i> WS1 as described in table below.
HD1	n/a	<i>Rubus fruticosus agg., Kindbergia praelonga, Holcus lanatus, Pteridium aquilinum, Brachythecium sp.</i> <b>5456 R1</b>
HD1/WS1	n/a	Dense bracken and scrub species as described in this table. <b>2907_R2, 2912_R1 and 2917_R1</b>
WD1	n/a	<i>Acer pseudoplatanus, Alnus glutinosa, Aesculus pseudoplatanus, Fagus sylvatica, Fraxinus excelsior and Hedera helix</i> <b>2830 R1</b>
WD1/ED2	n/a	Partial removal under housing development. Woodland species as listed in table.
WL1	n/a	Dominated by <i>Rubus fruticosus</i> agg. <i>Hedera helix</i> also common. <i>Crataegus monogyna</i> is present and has matured to form small shrubs/trees along the hedgerow. Occasional <i>Fraxinus excelsior</i> .
WL2	n/a	<i>Acer pseudoplatanus, Fraxinus excelsior, Sorbus aria agg.<sup>5</sup> and Populus spp.</i> <b>5318_R2</b>
WS1	n/a	<i>Acer pseudoplatanus, Calystegia sepium, Cirsium arvense Crataegus monogyna, Dactylis glomerata, Epilobium hirsutum, Epilobium angustifolium, Fraxinus excelsior, Fuchsia magellanica, Hedera helix, Ilex aquifolium, Larix spp. Prunus spinosa, Pteridium aquilinum, Reynoutria japonica, Rhododendron ponticum, Rubus fruticosus agg., Salix cinerea, Sorbus sp., Ulex europaeus (D and Urtica dioica. Some areas also contained Lythrum salicaria, Juncus spp., Buddleja spp., Salix purpureum, Corylus avellana, Symphoricarpos alba, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp.</i> <b>2763_R1, 2837_R1, 4740_R1, 2764_R1, 2832_R1, 2915_R1, 2952_R1, 2956_R1, 4732_R1 and 4751_R1</b>
WS1/BL1	n/a	<i>Asplenium ceterach, Blechnum spicant, Hedera helix agg., Polypody sp.</i>

<sup>5</sup> *Sorbus* species are difficult to identify and require a number of characteristics (and potentially genetic work) to definitely confirm species present in the *Sorbus aria* aggregate group, this includes both *Sorbus aria sensu stricto* and *Sorbus hibernica*. Variability is common with both *Sorbus* species and taxonomic difficulties are still an ongoing discussion throughout Britain and Europe (Fay and Rich, 2022). Fay, M.F., Rich, T.C.G. (2022) SORBUS ARIA: Rosaceae, *Curtis's Botanical Magazine*, 39(4), 655-668.

WS1/ED3	n/a	<i>Jacobsaea vulgaris, Cirsium vulgare, Matricaria discoidea, Persicaria maculosa, Polygonum aviculare, Arrhenatherum elatius, Epilobium hirsutum, Cirsium arvense, Centaurea nigra, Lolium perenne, Urtica dioica, Larix decidua, Ulex europeaus, Rubus fruticosus agg., Salix sp., Reynoutria japonica, Crataegus monogyna, Calystegia speium, Epilobium hirsutum, Chamaenerion angustifolium, Phragmites australis, Buddleja davidii.</i>
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**Keeraun Bóithrín to Knocknafroska and the N59 Link Road - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
WS1/HD1	n/a	<i>Larix decidua, Ulex europeaus, Rubus fruticosus agg., Salix sp., Crataegus monogyna, Calystegia sp., Epilobium hirsutum, Calystegia sepium, Epilobium angustifolium, Phragmites australis, Buddleja davidii, Pteridium aquilinum, Ulex galii.</i>
WS1/GS1	n/a	Scrub and grassland species as described above. <a href="#">4940_R1</a>
WS1/GS2	n/a	Scrubby and ungrazed. <i>Jacobaea vulgaris, Buddleja davidii, Pteridium aquilinum, Larix decidua, Ulex europeaus, Rubus fruticosus agg., Urtica dioica, Salix sp., Crataegus monogyna, Calystegia sepium, Epilobium hirsutum, Chamaenerion angustifolium, Phragmites australis, Buddleja davidii.</i>
WS1/GS2/ HD1	n/a	Shared area with EC23. Scrub and grassland species as described above. <i>Salix spp., Pteridium aquilinum, Ulex gallii</i>
WS1/GA1	n/a	Scrubby field edge dominated by briar. Possibly same species as described in GA1/WS1.
WS1/GA2	n/a	Scrub and grassland species as described above. <a href="#">4757_R1</a>
WS3	n/a	<i>Calystegia sepium, Cirsium arvense, Corylus avellana, Crataegus monogyna, Hedera helix, Ilex aquifolium, Prunus spinosa, Salix cinerea subs. Oleifolia, Ulex europeaus, Acer pseudoplatanus, Symphoricarpos albus, Rubus fruticosus agg., Prunus laurocerasus, Fuchsia species</i> <a href="#">4853 R1</a>
WS3/GA2	n/a	Ornamental planting in green area of estate, c. 60m outside of Keeraun-Boithrin boundary

## EC23

EC23 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
HD1	n/a	<i>Pteridium aquilinum, Rubus fruticosus agg.</i>
GM1	n/a	<i>Juncus effusus, Juncus acutiflorus, Agrostis stolonifera, Epilobium hirsutum, Typha latifolia, Epilobium palustre, Hydrocotyle vulgaris, Lotus pedunculatus, Filipendula ulmaria and Calliergonella sp.</i>
GS3	n/a	<i>Agrostis capillaris, Anthoxanthum odoratum, Cynosurus cristatus, Festuca rubra/ovina, Hypochaeris radicata, Trifolium repens, Lotus corniculatus, Plantago lanceolata, Trifolium repens, Rumex acetosa and Rhytidadelphus squarrosus.</i> <b>EC23 R1</b>
GS3/GA1	n/a	<i>Achillea millefolium, Agrostis sp., Anthoxanthum odoratum, Digitalis purpurea, Erica cinerea, Euphrasia sp., Galium saxatile, Holcus lanatus, Hypochaeris radicata, Juncus acutiflorus, Lotus corniculatus, Pilosella officinarum, Poa sp., Potentilla erecta, Prunella vulgaris, Ranunculus repens, Rumex acetosella, Solidago virgaurea, Succisa pratensis, Teucrium scorodonia, Vicia sepium, Arrhenatherum elatius, Capsella bursa-pastoris, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Jacobaea vulgaris, Lolium perenne, Plantago lanceolata, Plantago major, Poa annua, Ranunculus acris, Ranunculus repens, Rumex obtusifolius, Stellaria media, Trifolium repens.</i>
GS3/HD1	n/a	75% GS3, 25% HD1. Species as described in this table.
GS4	n/a	<i>Juncus effusus, Ranunculus repens, Rumex acetosa, Calystegia soldanella, Cirsium palustre, Filipendula ulmaria, Stachys palustris, Holcus lanatus, Agrostis stolonifera, Lotus pedunculatus, Lythrum salicaria, Calliergonella cuspidata and Rhytidadelphus squarrosus.</i>
GS4/HD1	n/a	Species as described in this table.
WN2	n/a	<i>Crataegus monogyna, Fraxinus excelsior, Hedera helix, Rubus fruticosus agg., Rumex obtusifolius, Geranium robertianum, Poa trivialis, Galium aparine, Urtica dioica, Dryopteris dilatata</i> <b>2834_R1</b>
GM1/GS4	n/a	<i>Epilobium hirsutum, Iris pseudacorus, Mentha aquatic, Filipendula ulmaria, Typha latifolia, Lythrum salicaria, Rubus fruticosus, Juncus effusus</i>
WS1	n/a	<i>Crataegus monogyna, Rubus fruticosus agg. and Pteridium aquilinum. Ulex europeaus, Buddleja spp., Larix spp.,</i>
WS1/GS2/ HD1	n/a	Shared area with Keeraun Boithrin to Knocknafroska and the N59 Link Road. HD2 species include <i>Salix spp., Pteridium aquilinum, Ulex gallii</i>

## EC63

EC63 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ED3	n/a	Variable but includes species such as <i>Holcus lanatus</i> , <i>Fumaria officinalis</i> , <i>Trifolium pratensis</i> , <i>T. repens</i> , <i>Plantago lanceolata</i> and <i>Sisymbrium officinale</i> . <b>5806_R1</b>
HD1	n/a	<i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg. and <i>Chamerion angustifolium</i> .
GA2	n/a	<i>Lolium perenne</i> , <i>Bellis perennis</i> and <i>Trifolium repens</i> .
GA2/WS3	n/a	GA2 species as described above, with <i>Tilia cordata</i> , <i>Fraxinus excelsior</i> and <i>Alnus glutinosa</i> .
GS2	n/a	<i>Holcus lanatus</i> , <i>Plantago lanceolata</i> , <i>Trifolium repens</i> , <i>Jacquaea vulgaris</i> , <i>Dactylis glomerata</i> , <i>Arrhenatherum elatius</i> , <i>Cirsium arvensis</i> and occasional <i>Leucanthemum vulgare</i> . <i>Alnus glutinosa</i> frequently planted.
GS2/HD1	n/a	GS2 species with <i>Alnus glutinosa</i> , <i>Cirsium arvense</i> , <i>Calystegia sepium</i> , <i>Pteridium aquilinum</i> , <i>Salix</i> sp. and <i>Ulex gallii</i> .
GS4	n/a	<i>Juncus effusus</i> , <i>Filipendula ulmaria</i> , <i>Rumex obtusifolius</i> , <i>Chamerion angustifolium</i> , <i>Arrhenatherum elatius</i> , <i>Holcus lanatus</i> and <i>Ranunculus repens</i> .
WD1	n/a	Strip of planted woodland dominated by <i>Fraxinus excelsior</i> .
WL1	n/a	<i>Cupressus x leylandii</i> , <i>Griselinia</i> sp., <i>Fuchsia magellanica</i> , <i>Fagus sylvatica</i> F. <i>purpurea</i> ., <i>Crataegus monogyna</i> , <i>Hedera helix</i> , <i>Ilex aquifolium</i> , <i>Fraxinus excelsior</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Viburnum opulus</i> , <i>Buddleja davidii</i> , <i>Alnus glutinosa</i> , <i>Ulex europaeus</i> , <i>Betula pubescens</i> , <i>Cornus</i> sp. <i>Ulex europaeus</i> , <i>Alnus incana</i> , <i>Salix caprea</i> and <i>Calystegia sepium</i> .
WL2	n/a	Possibly WD1, the strip of trees is wide. <i>Fraxinus excelsior</i> , <i>Acer pseudoplatanus</i> , <i>Alnus glutinosa</i> , <i>Crataegus monogyna</i>
WS1	n/a	<i>Ulex europaeus</i> , <i>Calystegia sepium</i> , <i>Rubus fruticosus</i> agg., <i>Urtica dioica</i> and some <i>Salix cinerea</i> on damp ground. <i>Larix decidua</i> , <i>Crataegus monogyna</i> , <i>Calystegia sepium</i> , <i>Epilobium hirsutum</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> and <i>Buddleja davidii</i> present. <b>255_R1, 255_R2 and 5806_R2</b>
WS1/GS2	n/a	Scrub dominating up to 80% of polygon area <i>Larix</i> spp., <i>Ulex europaeus</i> , <i>Rubus fruticosus</i> , <i>Urtica dioica</i> <i>Salix</i> sp., <i>Reynoutria japonica</i> , <i>Crataegus monogyna</i> <i>Calystegia</i> sp., <i>Epilobium hirsutum</i> , <i>Calystegia sepium</i> , <i>Epilobium angustifolium</i> , <i>Phragmites australis</i> , <i>Buddeia</i>

### EC63 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
WS1/HD1/ ED3	n/a	Gorse scrub dominates with very little grassland. <i>Buddleja davidii</i> frequent. <i>Laris decidua</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus</i> agg., <i>Urtica dioica</i> , <i>Salix</i> sp., <i>Crataegus monogyna</i> , <i>Calystegia</i> sp., <i>Epilobium hirsutum</i> , <i>Chamaenerion angustifolium</i> , <i>Phragmites australis</i> , <i>Pteridium aquilinum</i> , <i>Ulex gallii</i> , <i>Jacobaea vulgaris</i> , <i>Cirsium vulgare</i> , <i>Matricaria discoidea</i> , <i>Persicaria maculosa</i> , <i>Polygonum aviculare</i> , <i>Arrhenatherum elatius</i> , <i>Epilobium hirsutum</i> , <i>Cirsium arvense</i> , <i>Centaurea nigra</i> , <i>Lolium perenne</i> , <i>Urtica dioica</i> .

### EC25

#### EC25 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
ED2	n/a	Recently cleared for residential dwellings
ED2/HH1/ GS3	4030	Recent disturbance and exposed bare ground with remnant pockets of heath and dry-humid acid grassland. <i>Sphagnum palustre</i> , <i>Sphagnum papilosum</i> , <i>Succisa pratensis</i> , <i>Calliergenella cuspidata</i> , <i>Juncus acutiflorus</i> , <i>Ranunculus flammula</i> , <i>Hydroper vulgaris</i> , <i>Potentilla erecta</i> , <i>Potamogeton polygonifolius</i>
ED3	n/a	<i>Hypochaeris radicata</i> , <i>Jacobaea vulgaris</i> , <i>Agrostis capillaris</i> , <i>Achillea millefolium</i> , <i>Trifolium pratensis</i> , <i>Centaurium erythraea</i> , <i>Anthoxanthum odoratum</i> , <i>Trifolium dubium</i> , <i>Anagallis arvensis</i> , <i>Plantago lanceolata</i> , <i>Cirsium arvensis</i> , <i>Ulex europaeus</i> , <i>Juncus effusus</i> , <i>Potentilla anserine</i> , <i>Rubus fruticosus</i> , <i>Leontodon autumnalis</i> , <i>Linum catharticum</i> and <i>Hypericum tetrapterum</i> . <b>2786_R2</b>
ED3/WS1	n/a	75% ED3, 25% WS1. Species lists as described in this table.
FL1	3160	Two small ponds, both surrounded by reed swamp with adjacent blanket bog and scrub. Typical species are <i>Phragmites australis</i> , <i>Potamogeton polygonifolius</i> , <i>Hypericum elodes</i> and <i>Menyanthes trifoliata</i> .
FL4	n/a	<i>Carex lasiocarpa</i> , <i>Hypericum elodes</i> , <i>Menyanthes trifoliata</i> , <i>Schoenoplectus lacustris</i> and <i>Potamogeton polygonifolius</i>
FS1	n/a	<i>Phragmites australis</i> , <i>Mentha aquatica</i> and <i>Myrica gale</i> .
FW4	n/a	<i>Holcus lanatus</i> , <i>Agrostis stolonifera</i> , <i>Galium palustre</i> , <i>Juncus effusus</i> , <i>Glyceria fluitans</i> , <i>Iris pseudacorus</i> <b>2809_R1</b>
GA1	n/a	<i>Lolium perenne</i> , <i>Rumex crispus</i> , <i>Plantago major</i> , <i>Jacobaea vulgaris</i> , <i>Trifolium repens</i> , <i>Bellis perennis</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> and <i>Achillea millefolium</i> .

### EC25 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS1	n/a	<p><i>Achillea millefolium, Agrostis capillaris, Agrostis stolonifera, Anthoxanthum odoratum, Arrhenatherum elatius, Brachythecium rutabulum, Brachythecium species, Carex viridula, Centaurea nigra, Cynosurus cristatus, Euphrasia arctica, Festuca rubra, Holcus lanatus, Hypochaeris radicata, Kindbergia praelonga, Leontodon autumnalis, Lolium perenne, Lotus corniculatus, Plagiomnium undulatum, Plantago lanceolata, Poa trivialis, Pteridium aquilinum, Ranunculus acris, Ranunculus repens, Rhytidadelphus squarrosus, Rumex obtusifolius, Trifolium dubium, Trifolium pratense, Trifolium repens</i></p> <p><b><a href="#">2777_R1</a>, <a href="#">2786_R1</a>, <a href="#">2795_R1</a>, <a href="#">2794_R3</a>, <a href="#">2795_R2</a>, <a href="#">1636_R1</a>, <a href="#">1635_R1</a>, <a href="#">2776_R2</a> and <a href="#">1652_R3</a></b></p>
GS1/GS4	n/a	Grassland species as described in this table. <b><a href="#">1679_R1</a></b>
GS1/WS1	n/a	Grassland and scrub species as described in this table. <b><a href="#">1633_R1</a></b>
GS2	6150 (GL3e)	<p><i>Arrhenatherum elatius, Dactylis glomerata, Epilobium hirsutum, Galium saxatile, Cirsium arvensis, Urtica dioica, Rumex obtusifolius, Euphrasia spp., Plantago lanceolata, Cynosurus cristatus, Prunus vulgaris, Lathyrus pratensis, Anthoxanthum odoratum, Helictotrichon pubescens, Ranunculus acris, Heracleum sphondylium and Pimpinella major.</i></p> <p><b>EC25 R6</b></p>
GS2/ED3/ ED2	n/a	Area of abandoned farmland, adjoining an ongoing housing development. <i>Holcus lanatus, Ranunculus repens, Rumex obtusifolia, Ranunculus acris, Achillea millefolium, Pteridium aquilinum, Rubus fruticosus agg., Ulex europeaus, Centaurea nigra, Rhinanthus minor, Cynosurus cristatus, Arrhenatherum elatius, Epilobium hirsutum, Salix sp., Buddleja davidii, Epilobium hirsutum, Carex nigra, Arrhenatherum elatius, Cirsium sp., Rumex sp., Salix cinerea.</i>
GS3	n/a	<p><i>Leontodon autumnalis, Succisa pratensis, Achillea millefolium, Festuca rubra, Prunus vulgaris, Plantago lanceolata, Jacobaea vulgaris, Rumex acetosella, Potentilla erecta, Euphrasia spp., Trifolium pratensis, Agrostis capillaris and Anthoxanthum odoratum, Holcus lanatus, Agrostis canina, Pteridium aquilinum, Centaurea nigra, Lolium perenne, Leontodon hispidus, Plantago major, Hylocomium splendens, Juncus acutus, Lotus penduculatus, Dactylis glomerata and Solidago virgaurea</i></p> <p><b><a href="#">EC25 R7</a>, <a href="#">1634_R2</a>, <a href="#">5810_R1</a>, <a href="#">5811_R1</a> and <a href="#">1650_R2</a></b></p>

**EC25 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS3/ER1	n/a	Lightly grazed pasture with outcropping rock. Species include <i>Succisa pratensis</i> , <i>Juncus acutiflorus</i> , <i>Lotus pendunculatus</i> and <i>Ulex europeaus</i> .
GS3/ED2/E D3	n/a	Disturbed area with mosaic of GS3/ED2 ( <i>i.e.</i> bare soil) and ED3. <i>Agrostis canina</i> , <i>Arrhenatherum elatius</i> , <i>Dactylis glomerata</i> , <i>Festuca spp.</i> , <i>Leontodon autumnalis</i> , <i>Odontites vernus</i> , <i>Potentilla reptans</i> , <i>Prunella vulgaris</i> , <i>Pteridium aquilinum</i> , <i>Ranunculus repens</i> , <i>Rubus fruticosus</i> , <i>Rumex obtusifolius</i> , <i>Jacobaea vulgaris</i> , <i>Succisa pratensis</i> , <i>Tussilago farfara</i> and <i>Ulex europaeus</i> .
GS3/PF2	n/a	Localised pockets of Poor Fen and flushing habitats within acidic grassland, whose species list comprises <i>Succisa pratensis</i> , <i>Juncus acutiflorus</i> , <i>Lotus penduculus</i> , <i>Ulex europaeus</i> . Poor fen and flushing species as described in this table, with the inclusion of <i>Carex flacca</i> , <i>Ranunculus repens</i> , <i>Sphagnum cuspidatum</i> , <i>Aulacomnium palustre</i> , <i>Anagallis tenella</i> , <i>Calliergenella cuspidate</i> , <i>Hydrocotyle vulgaris</i> , <i>Potentilla erecta</i> .
GS3/PF2/ WS1/HD1/ GS2	n/a	Diverse pockets of dry-humid acid grassland and poor fen & flush. Fen and flush species include <i>Juncus acutiflorus</i> , <i>Carex flacca</i> , <i>Scorzonoides autumnalis</i> , <i>Ranunculus repens</i> , <i>Ranunculus flammula</i> , <i>Sphagnum cuspidatum</i> , <i>Aulacomnium palustre</i> , <i>Anagallis tenella</i> , <i>Sphagnum papillosum</i> , <i>Sphagnum palustre</i> , <i>Euphrasia spp.</i> , <i>Succisa pratensis</i> , <i>Calliergenella cuspidate</i> , <i>Hydrocotyle vulgaris</i> , <i>Potentilla erecta</i> , <i>Potamogeton polygonifolius</i>
GS3/HD1/ WS1/GS4	n/a	GS3 areas grazed by horses, slightly improved. <i>Succisa pratensis</i> , <i>Juncus acutiflorus</i> , <i>Lotus penduculus</i> , <i>Ulex europeaus</i> , <i>Pteridium aquilinum</i> , <i>Sphagnum sp.</i> , <i>Molinia caerulea</i> , <i>Hypericum elodes</i> , <i>Potentilla erecta</i> , <i>Viola palustris</i> , <i>Calystegia sepium</i> , <i>Rubus fruticosus agg.</i> , <i>Lythrum salicaria</i> , <i>Juncus sp.</i> , <i>Acer pseudoplatanus</i> , <i>Buddleja davidii</i> , <i>Salix purpureum</i> , <i>Salix cinerea</i> , <i>Prunus spinosa</i> , <i>Crataegus monogyna</i> , <i>Corylus avellana</i> , <i>Fraxinus excelsior</i> , <i>Symporicarpus alba</i> , <i>Urtica dioica</i> , <i>Filipendula ulmaria</i> , <i>Ranunculus repens</i> , <i>Cotoneaster sp.</i> , <i>Hedera helix agg.</i>
GS4	n/a	<i>Juncus effusus</i> , <i>Rumex acetosa</i> , <i>Stachys palustris</i> , <i>Rumex acetosella</i> , <i>Agrostis stolonifera</i> , <i>Anthoxanthum odoratum</i> , <i>Rumex crispus</i> , <i>Juncus acutiflorus</i> , <i>Lythrum salicaria</i> , <i>Rubus fruticosus agg.</i> , <i>Arrhenatherum elatius</i> , <i>Rumex obtusifolius</i> and <i>Galium palustre</i> . <b>EC25 R8, 2774_R1, 1642_R1, 1633_R2, 1653_R3, 1679_R2, 1651_R2, 1632_R2 and 2810_R1</b>
GS4/WS1	n/a	<i>Ulex europeaus</i> scrub spreading onto rough GS4. Grassland species include <i>Succisa pratensis</i> , <i>Sphagnum sp.</i> , <i>Molinia caerulea</i> , <i>Hypericum elodes</i> , <i>Potentilla erecta</i> and <i>Viola palustris</i> .

### EC25 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
HD1	n/a	<i>Pteridium aquilinum, Ulex europaeus, Ulex gallii</i> and <i>Erica cinerea</i> . <b>2786_R3, 1632_R1 and 1632_R3</b>
HD1/GS4/ WS1	n/a	<i>Pteridium aquilinum, Ulex europeaus, Sphagnum sp., Succisa pratensis, Molinia caerulea, Hypericum eodes, Potentilla erecta, Viola palustris, Cakystegia sepium, Rubus fruticosus, Lythrum salicaria, Juncus sp., Acer pseudoplatanus, Buddleja davidii, Salix purpureum, Salix cinerea, Prunus spinosa, Crataegus monogyna, Corylus avellana, Pteridium aquilinum, Fraxinus excelsior, Symphoricarpu alba, Urtica dioica, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp., Hedera helix agg.</i> GS4 areas decrease in 2023 since previous surveys.
HD1/WS1/ GS2	n/a	50% HD1, 30% WS1, 20% GS2. Species as described in this table.
HH1	4030 (DH1)	<i>Ulex gallii, Daboecia cantabrica, Calluna vulgaris, Molinia caerulea</i> and <i>Cladonia portentosa</i> .
HH1/HH3	4030	Polygon tightly grazed and locally poached. Lobe to South now comprises dry and wet heath mosaic with spreading scrub/bracken areas. <i>Sphagnum palustre, Sphagnum papilosum, Succisa spp, Calliergenella cuspidata, Juncus acutiflorus, Ranunculus flammula, Hydrocotyle vulgaris, Potentilla erecta, Potamogeton polygonifolius</i>
HH3	4010 (WH1b)	<i>Molinia caerulea, Narthecium ossifragum, Succisa pratensis, Calluna vulgaris, Erica tetralix, Drosera rotundifolia, Pedicularis sylvatica, Potentilla erecta, Dactylis maculata, Sphagnum capillifolium, Sphagnum palustre, Sphagnum papilosum, Narthecium ossifragum, Sphagnum cuspidatum, Carex panicea, Agrostis stolonifera and Schoenus nigricans.</i> <b>EC25 R1, EC25 R3, 1655_R1 and 1653_R1</b>
HH3/HH1/ WS1/HD1	4010/40 30	Species as described in this table. Area of ground closed in further from scrub, particularly gorse encroachment onto heath habitats.
PB3	*7130 (BB1b)	<i>Molinia caerulea, Erica tetralix, Narthecium ossifragum, Rhynchospora alba, Sphagnum papillosum, Sphagnum capillifolium, Eriophorum angustifolium, Potentilla erecta, Drosera rotundifolia</i> and <i>Sphagnum cuspidatum</i> . <b>EC25 R2</b>
PB3	7150 (HW3)	Rhynchospora hollows are abundant within the extensive area of blanket bog. <i>Rhynchospora alba, Sphagnum papillosum, Narthecium ossifragum, Drosera rotundifolia, Eriophorum angustifolium, Sphagnum cuspidatum</i> and <i>Erica tetralix</i> . <b>EC25 R4</b>

**EC25 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
PB3/HH3	*7130/4010	PB3 species as described above. <i>Calluna vulgaris</i> cover >20%, <i>Molinia caerulea</i> , <i>Carex panicea</i> , <i>Narthecium ossifragum</i> , <i>Sphagnum cuspidatum</i> , <i>Sphagnum papillosum</i> and <i>Erica tetralix</i> also present.
PF2	n/a	There are several small flushes throughout the site in association with blanket bog, wet heath, transition mire and wet grassland. <i>Hypericum elodes</i> , <i>Menyanthes trifoliata</i> , <i>Ranunculus flammula</i> , <i>Potamogeton polygonifolius</i> , <i>Sphagnum denticulatum</i> , <i>Sphagnum cuspidata</i> , <i>Juncus acutus</i> , <i>Sphagnum papillosum</i> , <i>Aulacomnium palustre</i> , <i>Anagallis tenella</i> , <i>Sphagnum palustre</i> , <i>Euphrasia</i> sp., <i>Scorzonoides autumnalis</i> , <i>Succisa pratensis</i> , <i>Molinia caerulea</i> , <i>Carex echinata</i> , <i>Schoenus nigricans</i> and <i>Anagallis arvensis</i> . <b>5807_R1, 5808_R1, 2776_R1, 5259_R1, 1653_R2, 5810_R3, 1655_R2 and 1650_R1</b>
PF2/HH3	n/a	Tightly grazed and locally poached. <i>Sphagnum papillosum</i> , <i>Sphagnum palustre</i> , <i>Succisa pratensis</i> , <i>Calliergonella cuspidata</i> , <i>Juncus acutus</i> , <i>Ranunculus flammula</i> , <i>Hydrocotyl vulgaris</i> , <i>Potentilla erecta</i> , <i>Potamogeton polygonifolius</i> , <i>Molinia caerulea</i> , <i>Carex panacea</i> , <i>Narthecium ossifragum</i> , <i>Erica tetralix</i> , <i>Calluna vulgaris</i> .
PF3	7140 (PFLU5)	<i>Phragmites australis</i> , <i>Schoenus nigricans</i> , <i>Menyanthes trifoliata</i> , <i>Narthecium ossifragum</i> , <i>Equisetum hyemale</i> , <i>Myrica gale</i> , <i>Hypericum elodes</i> , <i>Potamogeton polygonifolius</i> , <i>Eriophorum angustifolium</i> , <i>Potentilla palustris</i> , <i>Erica tetralix</i> , <i>Sphagnum palustre</i> , <i>Carex rostrata</i> , <i>Campylium stellatum</i> and <i>Vaccinium oxycoccus</i> . <b>EC25 R5</b>
WL2	n/a	<i>Fraxinus excelsior</i> copse
WS1	n/a	<i>Ulex europaeus</i> , <i>Crataegus monogyna</i> , <i>Prunus spinosa</i> , <i>Rubus fruticosus</i> agg., <i>Calystegia sepium</i> , <i>Lythrum salicaria</i> , <i>Juncus</i> sp., <i>Pteridium aquilinum</i> , <i>Urtica dioica</i> and <i>Salix cinerea</i> . <b>1655_R3, 1652_R1, 1651_R1, 1650_R3, 1652_R2, 1659_R1, 1657_R1, 1642_R2, 1634_R1, 5810_R2 and 2794_R2</b>
WS1/ED3	n/a	<i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Lythrum salicaria</i> , <i>Juncus</i> sp., <i>Acer pseudoplatanus</i> , <i>Buddleja davidii</i> , <i>Salix purpureum</i> , <i>Corylus avellana</i> , <i>Fraxinus excelsior</i> , <i>Symporicarpus alba</i> , <i>Urtica dioica</i> , <i>Filipendula ulmaria</i> , <i>Ranunculus repens</i> , <i>Cotoneaster</i> sp., <i>Hedera helix</i> agg., <i>Salix cinerea</i> subsp. <i>oleifolia</i> , <i>Ulex europeaus</i> , <i>Blackstonia perfoliate</i> , <i>Buddleja davidii</i> , <i>Epilobium hirsutum</i> , <i>Carex nigra</i> , <i>Arrhenatherum elatius</i> , <i>Rumex</i> sp., <i>Cetranthus ruber</i> , <i>Centaureum erythraea</i> , <i>Centaurea nigra</i> , <i>Hypericum perforatum</i> , <i>Leucanthemum vulgaris</i> , <i>Lotus corniculatus</i> , <i>Pilosella officinarum</i> , <i>Plantago lanceolata</i> , <i>Trifolium pratense</i> and <i>Ulex europaeus</i> .

### EC25 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
WS1/HD1	n/a	<i>Calystegia sepium, Rubus fruticosus agg., Lythrum salicaria, Juncus sp., Acer pseudoplatanus, Buddleja davidii, Salix purpureum, Salix cinerea, Prunus spinosa, Crataegus monogyna, Corylus avellana, Pteridium aquilinum, Fraxinus excelsior, Symphoricarpu</i> s alba, <i>Urtica dioica, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp., Hedera helix agg.</i>
WS1/HD1/GS4/GS1	n/a	Expanding scrub. <i>Calystegia sepium, Rubus fruticosus agg., Lythrum salicaria, Juncus sp., Acer pseudoplatanus, Buddleja davidii, Salix purpureum, Salix cinerea, Prunus spinosa, Crataegus monogyna, Corylus avellana, Pteridium aquilinum, Fraxinus excelsior, Symphoricarpu</i> s alba, <i>Urtica dioica, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp., Hedera helix agg., Ulex europeaus, Sphagnum sp., Succisa pratensis, Molinia caerulea, Hypericum elodes, Potentilla erecta, Viola palustris, Ranunculus repens, Rumex obtusifolius, Dactylis glomerata, Centaurea nigra, Holcus lanatus, Agrostis stolonifera, Arrhenatherum elatius, Cirsium repens, Pteridium aquilinum, Heracleum sphondylium.</i>
WS1/HH1	4030	Dense gorse scrub and bracken evident throughout (species described above), encroaching on heath habitat (ungrazed/unmanaged). Dry heath habitat as described above.
WS1/GS3	n/a	<i>Succisa pratensis, Juncus acutiflorus, Lotus penduculis. Ulex gallii and Ulex europeaus spreading on to area of GS3.</i>
WS1/PF2	n/a	<i>Juncus acutiflorus, Carex flacca, Scorzonoides autumnalis, Ranunculus repens, Ranunculus flammula, Sphagnum cuspidatum, Aulacomnium palustre, Anagallis tenella, Sphagnum papillosum, Sphagnum palustre, Euphrasia sp, Succisa pratensis, Calliergenella cuspidate, Hydrocotyle vulgaris, Potentilla erecta, Potamogeton polygonifolius</i>

### Upper Dangan/NUIG (Ch. 8+150 – Ch. 9+300) – Habitats between EC25 and the west bank of River Corrib (excluding EC30)

Upper Dangan/NUIG - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
BL1	n/a	<i>Crataegus monogyna, Fraxinus excelsior, Hedera helix and Rubus fruticosus agg.</i>
BL3	n/a	<i>Acer pseudoplatanus, Alnus glutinosa, Prunus laurocerasus,</i>
ED2	n/a	<i>Bellis perennis, Lolium perenne and Taraxacum officinale agg.</i>
ED3	n/a	<i>Trifolium repens, Lolium perenne, Galium aparine, Agrostis stolonifera, Urtica dioica, Stachys sylvatica, Bryum species, Arctium minus, Geranium lucidum, Persicaria lapathifolia</i> <b>5088_R3</b>

### Upper Dangan/NUIG - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
ED3/HD1		Recent cutting of treeline and localized removal of scrub. Recolonising bare ground species as described in this table. Dense bracken species include <i>Pteridium aquilinum</i> .
ED3/WS1	n/a	Recolonising bare ground and scrub species as described in this table. <b>3003_b_R1</b>
GA1	n/a	<i>Agrostis stolonifera, Arrhenatherum elatius, Bellis perennis, Buddleja davidii, Crataegus monogyna, Cirsium sp., Cynosurus cristatus, Dactylis glomerata, Fraxinus excelsior, Heracleum sphondylium, Holcus lanatus, Lathyrus pratensis, Lolium perenne, Plantago major, Ranunculus repens, Rumex crispus, Rumex obtusifolius, Poa trivialis, Potentilla anserina, Jacobaea vulgaris, Taraxacum officinale agg. and Urtica dioica</i> <b>2992_R2 and 2986_R2</b>
GA2	n/a	<i>Bellis perennis, Cirsium arvense, Festuca rubra, Holcus lanatus, Lolium perenne, Lolium spp., Plantago lanceolata, Plantago major, Ranunculus repens, Rumex obtusifolius, Senecio vulgaris, Taraxacum officinale agg., Trifolium repens</i> and <i>Vicia cracca</i> . Some trees/scrub also present; <i>Aesculus hippocastanum, Betula sp., Acer sp., Fagus sylvatica, Crataegus monogyna, Populus sp., Tilia cordata., Salix cinerea</i> and <i>Fraxinus excelsior</i> . <b>3031_R1, 4299_R1, 4299_R2, 5510_R1 and 5880_R1</b>
GS1	n/a	A more species poor variant of calcareous/neutral grassland supported the following species: <i>Centaurea nigra, Dactylis glomerata, Holcus lanatus, Agrostis stolonifera, Arrhenatherum elatius, Cirsium repens, Pteridium aquilinum, Heracleum sphondylium, Leontodon hispidus, Lolium perenne, Prunella vulgaris, Ranunculus repens, Rubus fruticosus agg., Rumex spp., Jacobaea vulgaris</i> and <i>Urtica dioica</i> <b>2994_R3, 2995_R1, 2992_R1, 2986_R1, 2996_R1, 4302_R1, 5088_R1, 5880_R4, 5880_R3 and 5880_R2</b>
	n/a	Species-rich variant of calcareous grassland which did not meet criteria for EU Annex I habitat. Species recorded include <i>Anthoxanthum odoratum, Calliergonella cuspidata, Holcus lanatus, Briza media, Festuca ovina, Linum catharticum, Trifolium pratense, Homalothecium lutescens, Lathyrus pratensis, Lolium perenne, Prunella vulgaris, Ranunculus repens, Carex flacca, Cerastium fontanum, Euphrasia spp., Plantago lanceolata, Ranunculus acris, Agrostis stolonifera, Alchemilla mollis, Carex panacea, Centaurea nigra, Cirsium arvense, Cynosurus cristatus, Dactylis glomerata, Festuca spp., Leontodon autumnalis, Leontodon hispidus, Pteridium aquilinum, Rubus fruticosus agg., Rumex crispus, Taraxacum officinale agg. and Trifolium repens</i> <b>UD-NUIG R1</b>

Habitat code	Annex I habitat	Key species
GS1/GS2	n/a	Typical GS1 species as above. <i>Achillea millefolium</i> , <i>Arrhenatherum elatius</i> , <i>Agrostis stolonifera</i> , <i>Pteridium aquilinum</i> , <i>Centurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Hypochaeris radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Taraxacum agg.</i> , <i>Trifolium pratense</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> , <i>Vicia sepium</i> also present.
GS1/GS2/WS1	n/a	Grassland in transition to GS2 due to lack of grazing. Species include <i>Rubus fruticosus agg.</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> , <i>Dactylis glomerata</i> , <i>Centaurea nigra</i> , <i>Holcus lanatus</i> , <i>Agrostis stolonifera</i> , <i>Arrhenatherum elatius</i> , <i>Cirsium repens</i> , <i>Pteridium aquilinum</i> , <i>Heracleum sphondylium</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolia</i> , <i>Ranunculus acris</i> , <i>Achillea millefolium</i> , <i>Pteridium aquilinum</i> , <i>Ulex europeaus</i> , <i>Rhinanthus minor</i> , <i>Cynosurus cristatus</i> , <i>Epilobium hirsutum</i> , <i>Salix sp.</i> , <i>Buddleja davidii</i> , <i>Calystegia sepium</i> , <i>Lythrum salicaria</i> , <i>Juncus sp.</i> , <i>Renoutria japonica</i> , <i>Acer pseudoplatanus</i> , <i>Salix purpureum</i> , <i>Salix cinerea</i> , <i>Prunus spinosa</i> , <i>Crataegus monogyna</i> , <i>Corylus avellana</i> , <i>Fraxinus excelsior</i> , <i>Symporicarpus alba</i> , <i>Urtica dioica</i> , <i>Filipendula ulmaria</i> , <i>Ranunculus repens</i> , <i>Cotoneaster sp.</i> , <i>Hedera helix agg.</i>
GS1/WS1	n/a	<i>Rubus fruticosus</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolia</i> <i>Dactylis glomerata</i> , <i>Centaurea nigra</i> , <i>Holcus lanatus</i> , <i>Agrostis stolonifera</i> , <i>Arrhenatherum elatius</i> , <i>Cirsium repens</i> , <i>Pteridium aquilinum</i> , <i>Heracleum sphondylium</i> WS1 area continuing to spread, species listed as described in this table.
GS2	n/a	Some areas are unmowed areas of grassland for pollinators. <i>Arrhenatherum elatius</i> , <i>Achillea millefolium</i> , <i>Buddleja davidii</i> , <i>Calystegia sepium</i> , <i>Centaurea nigra</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Cynosurus cristatus</i> , <i>Dactylis glomerata</i> , <i>Epilobium hirsutum</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> , <i>Lathyrus pratensis</i> , <i>Plantago lanceolata</i> , <i>Prunella vulgaris</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rhinanthus minor</i> , <i>Rubus fruticosus agg.</i> , <i>Rumex crispus</i> , <i>Rumex obtusifolius</i> , <i>Rumex spp.</i> , <i>Salix cinerea</i> , <i>Jacobaea vulgaris</i> , <i>Taraxacum officinale agg.</i> , <i>Trifolium pratense</i> , <i>Ulex europeaus</i> and <i>Urtica dioica</i> <b>3003 R2, 4198 R1, 4198 R2, 4198 R3 and 3005 R1</b>
GS2/WS1	n/a	Rank grassland <i>Arrhenatherum elatius</i> dominant. <i>Salix spp.</i> , <i>Rubus fruticosus agg.</i> , <i>Buddelja davidii</i> and <i>Populus sp.</i> scrub.
GS4	n/a	Species-poor <i>Juncus effusus</i> wet grassland with <i>Agrostis stolonifera</i> , <i>Cirsium palustre</i> , <i>Galium palustre</i> , <i>Holcus lanatus</i> , <i>Potentilla anserina</i> , <i>Ranunculus acris</i> and <i>Ranunculus repens</i>

**Upper Dangan/NUIG - Species Lists & Relevés**

<b>Habitat code</b>	<b>Annex I habitat</b>	<b>Key species</b>
GS4	n/a	A more species rich wet grassland variant included <i>Agrostis stolonifera</i> , <i>Arrhenatherum elatius</i> , <i>Centaurea nigra</i> , <i>Cirsium arvense</i> , <i>Cynosurus cristatus</i> , <i>Dactylis glomerata</i> , <i>Epilobium montanum</i> , <i>Festuca rubra</i> , <i>Filipendula ulmaria</i> , <i>Holcus lanatus</i> , <i>Iris pseudacorus</i> , <i>Juncus articulatus</i> , <i>Juncus effusus</i> , <i>Lolium perenne</i> , <i>Lythrum salicaria</i> , <i>Phragmites australis</i> , <i>Plantago lanceolata</i> , <i>Potentilla anserina</i> , <i>Prunella vulgaris</i> , <i>Ranunculus repens</i> , <i>Rhinanthus minor</i> , <i>Rubus fruticosus agg.</i> , <i>Rumex acetosa</i> , <i>Rumex spp.</i> , <i>Succisa pratensis</i> , <i>Taraxacum officinale agg.</i> , <i>Trifolium pratense</i> , <i>Urtica dioica</i> and <i>Vicia cracca</i> .
GS4/GA1	n/a	Previously recorded as Rich fen and flushing (PF1) in 2018. Wet grassland and amenity grassland species as described in table.
FP1	n/a	Permanent wet circular feature. Margins trampled by horses. Standing water present. <i>Glyceria fluitans</i> , <i>Ranunculus flammula</i> , <i>Rumex crispus</i> , <i>Lytherum salicaria</i> , <i>Juncus effusus</i> , <i>Calliergonella cuspidate</i> , <i>Nasturtium officinale</i> , <i>Equisetum fluviatile</i>
HD1	n/a	<i>Rubus fruticosus agg.</i> , <i>Kindbergia praelonga</i> , <i>Pteridium aquilinum</i> <b>2994 R2</b>
HD1/WS1	n/a	Dense bracken and scrub species as described in this table. <b>3003 R3</b>
WD1	n/a	<i>Acer pseudoplatanus</i> , <i>Aesculus hippocastanum</i> , <i>Anthriscus sylvestris</i> , <i>Arrhenatherum elatius</i> , <i>Brachypodium sylvaticum</i> ., <i>Crataegus monogyna</i> , <i>Fagus sylvatica</i> , <i>Fraxinus excelsior</i> , <i>Fagus sylvatica</i> , <i>Geranium robertianum</i> , <i>Geum urbanum</i> , <i>Hedera helix</i> , <i>Heracleum sphondylium</i> , <i>Pinus spp.</i> , <i>Prunus avium</i> , <i>Rubus fruticosus agg.</i> , <i>Salix cinerea</i> , <i>Tilia cordata</i> , <i>Torilis japonica</i> , <i>Ulmus glabra</i> , <i>Urtica dioica</i> and <i>Vicia sepium</i> <b>3382_R1, 4304_R1, 4308_R1, 4547_R1, 4550_R1, 4551_R1, 4555_R1, 5556_R1, 5577_R1 and 5776_R1</b>
WD1/GS2	n/a	Open canopy with GS2. Ash dieback prevalent on canopy. Woodland species as listed in table.
WD3	n/a	Copse of <i>Picea</i> sp.
WL1	n/a	<i>Acer pseudoplatanus</i> , <i>Crataegus monogyna</i> , <i>Cupressus x leylandii</i> , <i>Epilobium ciliatum</i> , <i>Escallonia spp.</i> , <i>Fagus purpurea</i> , <i>Fagus sylvatica</i> , <i>Fraxinus excelsior</i> , <i>Fuchsia magellanica</i> , <i>Geranium robertianum</i> , <i>Griselinia sp.</i> , <i>Hedera helix</i> , <i>Ilex aquifolium</i> , <i>Plantago lanceolata</i> , <i>Prunus laurocerasus</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus agg.</i> , <i>Rumex obtusifolius</i> , <i>Ulmus glabra</i> , <i>Urtica dioica</i> and <i>Vicia sp.</i>
WL2	n/a	<i>Acer pseudoplatanus</i> , <i>Aesculus hippocastanum</i> , <i>Alnus glutinosa</i> , <i>Betula sp.</i> , <i>Cornus sp.</i> , <i>Crataegus monogyna</i> , <i>Corylus avellana</i> , <i>Cupressus x Leylandii</i> , <i>Fagus sylvatica</i> , <i>Reynoutria japonica</i> , <i>Fraxinus excelsior</i> , <i>Hedera helix</i> , <i>Prunus lusitanica</i> , <i>Prunus spinosa</i> , <i>Rubus fruticosus agg.</i> , <i>Salix caprea</i> , <i>Salix cinerea</i> , <i>Sorbus sp.</i> , <i>Symporicarpos albus</i> , <i>Tilia cordata</i> and <i>Urtica dioica</i>

Upper Dangan/NUIG - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
WL2/WS1		<i>Picea</i> sp. treeline with spreading <i>Pteridium aquilinum</i> and <i>Rubus fruticosus</i> agg.
WN2	n/a	<i>Hedera helix</i> , <i>Fraxinus excelsior</i> , <i>Rubus fruticosus</i> agg. <i>Acer pseudoplatanus</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Phyllitis scolopendrium</i> and <i>Thuidium</i> sp. Small amount of <i>Alnus glutinosa</i> and <i>Salix cinerea</i> . Locally frequent <i>Ulmus glabra</i> . <b>UD-NUIG R3, 4309 R1 and 5579 R1</b>
WN5/WS1	n/a	Scrub species as described in this table. <i>Fraxinus excelsior</i> , <i>Salix cinerea</i> s. <i>oleifolia</i> , <i>Hedera helix</i> , <i>Phalaris arundinacea</i> , <i>Athyrium filix-femina</i> <b>3815_R1</b>
WN6	*91E0	<i>Alnus glutinosa</i> main canopy species with frequent <i>Fraxinus excelsior</i> and <i>Salix cinerea</i> subsp. <i>oleifolia</i> . Abundant ruderals in the ground layer.
WS1	n/a	Abundant <i>Reynoutria japonica</i> in places with young <i>Acer pseudoplatanus</i> , <i>Buddleja davidii</i> , <i>Salix purpureum</i> . Recent removal disturbance and dumping of garden waste in some areas. <i>Betula pubescens</i> , <i>Crataegus monogyna</i> , <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Ilex aquifolium</i> , <i>Dactylis glomerata</i> , <i>Epilobium hirsutum</i> , <i>Fraxinus excelsior</i> , <i>Galium aparine</i> , <i>Hedera helix</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Salix cinerea</i> , <i>Salix cinerea</i> subsp. <i>oleifolia</i> , <i>Ulex europaeus</i> and <i>Urtica dioica</i> , <b>5506_R1, 4077_R1, 4078_R1, 2988_R1, 2994_R1, 2995_R2, 5088_R2 and 3005_R2</b>
WS1/FS1	n/a	<i>Rubus fruticosus</i> agg. and ruderals establishing and spreading onto common <i>Phragmites australis</i> dominated habitat. <i>Urtica dioica</i> , <i>Filipendula ulmaria</i> , <i>Ranunculus repens</i> .
WS1/GA1	n/a	Scrub and grassland species as described in this table.
WS1/GS1	n/a	Scrub and grassland species as described in this table. Spread of bramble scrub due to lack of grazing.
WS1/GS2	n/a	Scrub and grassland species as described in this table. <b>4733_R1</b>
WS1/HD1	n/a	Scrub and bracken species as described in this table.
WS1/HD1/ED3/GS2	n/a	Scrub and bracken species as described in this table. <i>Buddleja</i> spreading throughout.
WS3	n/a	Predominantly tall conifers with <i>Larix</i> spp., <i>Picea</i> spp. and <i>Chamaecyparis lawsoniana</i> .
WN6	*91E0	<i>Ranunculus repens</i> , <i>Hedera helix</i> , <i>Salix cinerea</i> , <i>Scrophularia auriculata</i> , <i>Alnus glutinosa</i> , <i>Urtica dioica</i> , <i>Crataegus monogyna</i> , <i>Filipendula ulmaria</i> , <i>Circaea lutetiana</i> , <i>Geranium robertianum</i> , <i>Heracleum sphondylium</i> , <i>Phyllitis scolopendrium</i> , <i>Taraxacum officinale</i> agg. and <i>Holcus lanatus</i> <b>UD-NUIG R5 and 3381_R1</b>

## EC29

EC29 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
FS1	n/a	Species-poor, tall reed swamp vegetation dominates wide, wet drains which occur intermittently on both sides of the railway embankment. <i>Phragmites australis</i> , <i>Epilobium hirsutum</i> , <i>Urtica dioica</i> , <i>Menyanthes trifoliata</i> and <i>Equisetum fluviatile</i> .
GA1	n/a	<i>Holcus lanatus</i> , <i>Ranunculus repens</i> , <i>Lolium perenne</i> , <i>Cynosurus cristatus</i> , <i>Bellis perennis</i> and <i>Plantago lanceolata</i> .
GS1	6210 (GL1b)	Relatively species-rich calcareous grassland is frequent on shallow soil which overlies the limestone of the old railway embankment. Parts correspond to annex habitat, while other areas do not meet criteria. Typical species are <i>Centaurea nigra</i> , <i>Trifolium pratense</i> , <i>Festuca rubra</i> , <i>Plantago lanceolata</i> , <i>Lotus corniculatus</i> , <i>Briza media</i> , <i>Anthoxanthum odoratum</i> , <i>Leontodon hispidus</i> , <i>Rhinanthus minor</i> , <i>Linum catharticum</i> , <i>Vicia cracca</i> and <i>Prunella vulgaris</i> . <b>EC29 R1</b>
GS2	n/a	<i>Arrhenatherum elatius</i> , <i>Dactylis glomerata</i> , <i>Holcus lanatus</i> , <i>Agrostis capillaris</i> , <i>Trifolium repens</i> , <i>Ranunculus repens</i> , <i>Trifolium pratense</i> and <i>Anthoxanthum odoratum</i> .
GS4	n/a	<i>Anthoxanthum odoratum</i> , <i>Holcus lanatus</i> , <i>Centaurea nigra</i> , <i>Filipendula ulmaria</i> , <i>Juncus effusus</i> , <i>Juncus inflexus</i> <b>1720_R1</b>
GS4/GM1	n/a	<i>Juncus effusus</i> , <i>Iris pseudacorus</i> , <i>Holcus lanatus</i> , <i>Lythrum salicaria</i> , <i>Cirsium palustre</i> , <i>Ranunculus acris</i> , <i>Juncus articulatus</i> , <i>Agrostis stolonifera</i> and <i>Filipendula ulmaria</i> .
GS4/WS1	n/a	Grassland species as described above. Scrub species include <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> . agg., <i>Salix cinerea</i> subsp. <i>oleifolia</i> , <i>Ulex europaeus</i>
PF1	7230	<i>Succisa pratensis</i> , <i>Juncus acutiflorus</i> , <i>Potentilla erecta</i> , <i>Prunus vulgaris</i> , <i>Anagallis tenella</i> , <i>Equisetum</i> sp., <i>Anthoxanthum odoratum</i> , <i>Cirsium palustre</i> , <i>Carex panicea</i> , <i>Call cusp</i> , <i>Lythrum salicaria</i> , <i>Mentha aquatica</i> , <i>Schoenus nigricans</i> and <i>Hydrocotyle vulgaris</i> .
WL2	n/a	<i>Acer pseudoplatanus</i> , <i>Acer</i> sp., <i>Cupressus x leylandii</i> , <i>Fraxinus excelsior</i> , and <i>Populus tremula</i> .

## EC30

EC30 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
GA2	n/a	Rank grassland with <i>Holcus lanatus</i> , <i>Centaurea nigra</i> , <i>Ranunculus repens</i> , <i>Ranunculus acris</i> , <i>Rumex obtusifolius</i> , <i>Achillea millefolium</i> .
WD1	n/a	<i>Fraxinus excelsior</i> , <i>Fagus sylvatica</i> , <i>Aesculus hippocastanum</i> , <i>Acer pseudoplatanus</i> , <i>Alnus cordata</i> <i>Betula spp.</i> <i>Corylus avellana</i> , and <i>Populus sp</i> , <i>Prunus laurocerasus</i> , <i>Salix cinerea</i> , <i>Sorbus aucuparia</i> , <i>Sorbus aria</i> , <i>Hedera helix</i> , <i>Urtica dioica</i> , <i>Rubus fruticosus</i> , <i>Galium aparine</i> , <i>Dactylis glomerata</i> , <i>Ranunculus repens</i> , <i>Cirsium vulgare</i> and <i>Geranium robertianum</i> . <b>3035 R1, 3029 R1 and 3028 R1</b>
WN2	n/a	<i>Fraxinus excelsior</i> , <i>Salix cinerea</i> , <i>Salix caprea</i> , <i>Rubus fruticosus</i> , <i>Fagus sylvatica</i> , <i>Hedera helix</i> , <i>Urtica dioica</i> , <i>Acer pseudoplatanus</i> , <i>Calystegia sepium</i> , <i>Reynoutria japonica</i> , <i>Crataegus monogyna</i> , <i>Betula pubescens</i> , <i>Geranium robertianum</i> , <i>Arum maculatum</i> , <i>Polystichum setiferum</i> , <i>Thuidium tamariscinum</i> and <i>Eurhynchium spp.</i> <b>5581_R1</b>
WS1/WN2	n/a	<i>Fraxinus excelsior</i> overtopping <i>Salix cinerea</i> , <i>Rubus fruticosus agg.</i> , <i>Cotoneaster sp.</i> and occasional <i>Acer pseudoplatanus</i> .

## EC31

EC31 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
GS1	6210* (GL3a)	Species-rich calcareous grassland occurs in mosaic with lowland hay meadow. Orchids are abundant in places. <i>Briza media</i> , <i>Dactylorhiza fuchsii</i> , <i>Lotus corniculatus</i> , <i>Anthyllis vulneraria</i> , <i>Blackstonia perfoliata</i> , <i>Carex flacca</i> , <i>Linum catharticum</i> , <i>Listera ovata</i> and <i>Pilosella officinarum</i> . <b>EC31 R2</b>
GS2	n/a	Species-poor meadow and verge. Typical species include <i>Dactylis glomerata</i> , <i>Helictotrichon pubescens</i> , <i>Centaurea nigra</i> , <i>Trifolium repens</i> , <i>Rumex crispus</i> , <i>Cirsium arvensis</i> and <i>Plantago lanceolata</i> .
	6510 (GL3e)	Occurs on the site in mosaic with calcareous grassland (6210). <i>Plantago lanceolata</i> , <i>Trifolium pratense</i> , <i>Heracleum sphondylium</i> , <i>Helictotrichon pubescens</i> , <i>Lathyrus pratensis</i> , <i>Holcus lanatus</i> , <i>Centaurea nigra</i> , <i>Anthoxanthum odoratum</i> , <i>Dactylis glomerata</i> and <i>Agrostis capillaris</i> , <i>Dactylorhiza fuchsia</i> and <i>Dactylorhiza incarnata</i> . <b>EC31 R1</b>
GS4	n/a	<i>Filipendula ulmaria</i> , <i>Urtica dioica</i> , <i>Juncus effusus</i> , <i>Iris pseudacorus</i> , <i>Convolvulus arvensis</i> , <i>Galium aparine</i> , <i>Festuca arundinacea</i> , <i>Juncus conglomeratus</i> , <i>Epilobium hirsutum</i> and <i>Valeriana officinalis</i> .
WD1	n/a	<i>Fagus sylvatica</i> , <i>Fraxinus excelsior</i> , <i>Hedera helix</i> , <i>Rubus fruticosus</i> , <i>Ilex aquifolium</i> , <i>Primula vulgaris</i> , <i>Acer pseudoplatanus</i> and <i>Conopodium majus</i> .
WL2	n/a	<i>Betula</i> sp. and <i>Salix cinerea</i> treeline.
WN2	n/a	<i>Fraxinus excelsior</i> , <i>Acer pseudoplatanus</i> , <i>Hedera helix</i> , <i>Crataegus monogyna</i> , <i>Circaeae lutetiana</i> , <i>Geranium robertianum</i> , <i>Rubus fruticosus</i> agg., <i>Urtica dioica</i> , <i>Geum urbanum</i> , <i>Rumex sanguineus</i> and <i>Ranunculus ficaria</i> .
WN6	*91EO	Typical species include <i>Alnus glutinosa</i> , <i>Salix cinerea</i> , <i>Crataegus monogyna</i> , <i>Listera ovata</i> , <i>Holcus mollis</i> , <i>Carex remota</i> and <i>Agrostis stolonifera</i> . <b>EC31 R3</b>
WS1	n/a	Scrub composition varies but dominant species include <i>Crataegus monogyna</i> , <i>Prunus spinosa</i> and <i>Rubus fruticosus</i> agg.

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) (Ch. 9+400 – Ch. 11+400) – Habitats between the River Corrib and Lackagh Quarry**

River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
BL1	n/a	<i>Crataegus monogyna, Fraxinus excelsior, Hedera helix, Prunus spinosa and Rubus fruticosus agg.</i>
BL3	n/a	<i>Acer pseudoplatanus, Alnus glutinosa, Prunus laurocerasus, Hedera helix agg.</i>
BL3/WS1/ GS2/ED3		<i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg. Salix cinerea subsp. oleifolia, Ulex europaeus, Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypochaeris radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum officinale agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Capsella bursa-pastoris, Crepis sp., Elytrigia repens, Geranium molle, Lapsana communis, Lolium perenne, Persicaria maculosa, Plantago major, Potentilla anserina, Rumex crispus, Sagina nodosa, Scorzoneroidea autumnalis, Trifolium pratense and Tripleurospermum maritimum.</i>
ED2	n/a	<i>Lolium perenne and Potentilla anserina</i>
ED3	n/a	<i>Agrostis stolonifera, Lolium perenne, Plantago major, Potentilla anserina, Ranunculus repens, Rumex spp., Stellaria media, Trifolium pratense and Veronica persica, Capsella bursa-pastoris, Crepis sp., Elytrigia repens, Geranium molle, Jacobaea vulgaris, Lapsana communis, Lolium perenne, Persicaria maculosa, Plantago lanceolata, Rumex crispus, Sagina nodosa, Scorzoneroidea autumnalis, Tripleurospermum maritimum.</i>
ED3/WS1	n/a	<i>Blackstonia perfoliata, Budleja davidii, Centranthus ruber, Centuria erythraea, Centaurea nigra, Hypericum perforatum, Leucanthemum vulgare, Lotus corniculatus, Pilosella officinarum, Plantago lanceolata, Trifolium pratense, Ulex europaeus, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus. agg., Salix cinerea subsp. Oleifolia.</i>

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
ER2	*8240 LPE	The most frequently recorded species across these 39 relevés were: <i>Anthoxanthum odoratum</i> , <i>Asperula cynanchica</i> , <i>Asplenium ruta-muraria</i> , <i>Brachythecium rutabulum</i> , <i>Briza media</i> , <i>Bryum capillare</i> , <i>Calliergonella cuspidata</i> , <i>Carex flacca</i> , <i>Carlina vulgaris</i> , <i>Centaurea nigra</i> , <i>Ceterach officinarum</i> , <i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Ctenidium molluscum</i> , <i>Dicranum scoparium</i> , <i>Encalypta streptocarpa</i> , <i>Epilobium montanum</i> , <i>Epilobium parviflorum</i> , <i>Euphrasia salisburgensis</i> , <i>Festuca ovina</i> , <i>Festuca rubra</i> , <i>Fissidens dubius</i> , <i>Fragaria vesca</i> , <i>Fraxinus excelsior</i> , <i>Galium verum</i> , <i>Geranium robertianum</i> , <i>Grimmia pulvinata</i> , <i>Hedera helix</i> , <i>Homalothecium lutescens</i> , <i>Homalothecium sericeum</i> , <i>Hypericum pulchrum</i> , <i>Hypochaeris radicata</i> , <i>Ilex aquifolium</i> , <i>Koeleria macrantha</i> , <i>Lapsana communis</i> , <i>Leontodon hispidus</i> , <i>Leucanthemum vulgare</i> , <i>Linum catharticum</i> , <i>Lotus corniculatus</i> , <i>Mycelis muralis</i> , <i>Neckera complanata</i> , <i>Neckera crispa</i> , <i>Phyllitis scolopendrium</i> , <i>Pilosella officinarum</i> , <i>Plantago lanceolata</i> , <i>Plantago maritima</i> , <i>Polygala vulgaris</i> , <i>Potentilla erecta</i> , <i>Prunus spinosa</i> , <i>Ranunculus acris</i> , <i>Rosa spinosissima</i> , <i>Rubus fruticosus</i> agg., <i>Rubus idaeus</i> , <i>Scleropodium purum</i> , <i>Jacobaea vulgaris</i> , <i>Sesleria caerulea</i> , <i>Solidago virgaurea</i> , <i>Sonchus asper</i> , <i>Sorbus aria</i> , <i>Succisa pratensis</i> , <i>Taraxacum officinale</i> agg., <i>Teucrium scorodonia</i> , <i>Thymus polytrichus</i> , <i>Tortella nitida</i> , <i>Tortella tortuosa</i> , <i>Trifolium pratense</i> and <i>Veronica chamaedrys</i> .  Relevés BEC 115, BEC 118, BEC 343 and BEC 345, 3087_R1, 3087_R2, 3087_R3, 3087_R4, 3087_R5, 3130_R1, 3130_R2, 3169_R1, 3618_R2, 3089_R1, 3494_R3, 3494_R4, 3494_R5 and 3322_R3
ER2/GS1/ WS1	*8240	<i>Campanula rotundifolia</i> , <i>Carex flacca</i> , <i>Carlina vulgaris</i> , <i>Centaurium erythraea</i> , <i>Centurea nigra</i> , <i>Conopodium majus</i> , <i>Cynosurus cristatus</i> , <i>Daucus carota</i> , <i>Lathyrus pratensis</i> , <i>Leucanthemum vulgare</i> , <i>Linum catharticum</i> , <i>Lotus corniculatus</i> , <i>Pilosella aurantiaca</i> , <i>Polygala vulgaris</i> , <i>Trifolium pratense</i> , <i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Prunus spinosa</i> , <i>Rubus fruticosus</i> agg., <i>Salix</i> sp., <i>Sorbus aria</i> .
ER2/WS1	*8240/6210	Exposed calcareous rock and scrub species as described in this table. 3618_R1
FL6	*3180 <i>Potentilla anserina</i> - <i>Carex nigra</i> vegetation community (Waldren, 2015, Ed.).	Typical FL6/ GM1 vegetation with <i>Agrostis stolonifera</i> , <i>Apium inundatum</i> , <i>Caltha palustris</i> , <i>Cinclidotus fontinaloides</i> , <i>Eleocharis palustris</i> , <i>Equisetum palustre</i> , <i>Filipendula ulmaria</i> , <i>Glyceria fluitans</i> , <i>Mentha aquatica</i> , <i>Myosotis aquatica</i> , <i>Persicaria amphibia</i> , <i>Persicaria maculata</i> , <i>Potentilla anserina</i> , <i>Prunella vulgaris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Rumex obtusifolius</i> , <i>Jacobaea aquaticus</i> , <i>Urtica dioica</i> and <i>Veronica catenata</i>
FS2	6430	<i>Epilobium palustre</i> , <i>Epilobium hirsutum</i> , <i>Galium palustre</i> , <i>Valeriana dioica</i> , <i>Menyanthes trifoliata</i> , <i>Phragmites australis</i> , <i>Calliergonella cuspidata</i> , <i>Equisetum fluviatile</i> , <i>Carex rostrata</i> , <i>Ranunculus acris</i> , <i>Prunus spinosa</i> , <i>Iris pseudacorus</i> , <i>Holcus lanatus</i> and <i>Agrostis stolonifera</i> .  EC36 R4

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
FS2/WS1	6430	Species as above, with scrub species such as <i>Crataegus monogyna</i> , <i>Prunus spinosa</i> , <i>Ulex europeaus</i> , <i>Rubus fruticosus</i> agg., <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Ilex aquifolium</i> , <i>Pteridium aquilinum</i> and <i>Salix cinerea</i> also present.
FW2	3260	Annex code updated as in Inspectors Report – see Appendix A.8.20 of the updated EIAR and Appendix N of the updated NIS for details.
FW4	n/a	<i>Calliergonella cuspidata</i> , <i>Kindbergia praelonga</i> , <i>Filipendula ulmaria</i> , <i>Glyceria fluitans</i> , <i>Salix caprea</i> , <i>Salix cinerea</i> s. <i>oleifolia</i> and <i>Fontinalis antipyretica</i> <b>4267_R1</b>
GA1	n/a	<i>Agrostis stolonifera</i> , <i>Arrhenatherum elatius</i> , <i>Capsella bursa-pastoris</i> , <i>Cerastium fontanum</i> , <i>Centaurea nigra</i> , <i>Cirsium arvense</i> , <i>Crepis</i> sp., <i>Cynosurus cristatus</i> , <i>Dactylis glomerata</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Jacobaea vulgaris</i> , <i>Lolium perenne</i> , <i>Odontites vernus</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Poa annua</i> , <i>Poa trivialis</i> , <i>Potentilla anserina</i> , <i>Prunella vulgaris</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> , <i>Rumex</i> spp., <i>Stellaria media</i> , <i>Taraxacum officinale</i> agg., <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Urtica dioica</i> and <i>Veronica</i> sp.
GA1/WS1	n/a	60% GA1, 40% WS1 species lists as described above.
GA2	n/a	<i>Bellis perennis</i> , <i>Festuca rubra</i> , <i>Holcus lanatus</i> , <i>Lolium perenne</i> , <i>Plantago lanceolata</i> , <i>Rumex acetosa</i> , <i>Rumex obtusifolius</i> , <i>Taraxacum officinale</i> agg. and <i>Trifolium repens</i>
GS1	n/a (GL2C, GL3B, GL3C, and GL3E)	The following species were commonly encountered in non-Annex I calcareous grassland: <i>Agrostis capillaris</i> , <i>Agrostis stolonifera</i> , <i>Arrhenatherum elatius</i> , <i>Anthoxanthum odoratum</i> , <i>Brachythecium rutabulum</i> , <i>Campanula rotundifolia</i> , <i>Carlina vulgaris</i> , <i>Centaureum erythraea</i> , <i>Conopodium majus</i> , <i>Lathyrus pratensis</i> , <i>Leucanthemum vulgare</i> , <i>Linum catharticum</i> , <i>Lotus corniculatus</i> , <i>Pilosella aurantiaca</i> , <i>Polygala vulgaris</i> , <i>Calliergonella cuspidata</i> , <i>Carex flacca</i> , <i>Centaurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Cynosurus cristatus</i> , <i>Dactylis glomerata</i> , <i>Daucus carota</i> , <i>Festuca rubra</i> , <i>Holcus lanatus</i> , <i>Hypochaeris radicata</i> , <i>Leontodon autumnalis</i> , <i>Lolium perenne</i> , <i>Lotus corniculatus</i> , <i>Odontites vernus</i> , <i>Plagiomnium undulatum</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Potentilla anserina</i> , <i>Prunella vulgaris</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rhinanthus minor</i> , <i>Rubus fruticosus</i> agg., <i>Rumex acetosa</i> , <i>Rumex obtusifolius</i> , <i>Taraxacum officinale</i> agg., <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Urtica dioica</i> and <i>Veronica chamaedrys</i> . Relevés BEC 175, BEC 258, BEC 363, RC-LQ R1, RC-LQ R6, RC-LQ R7, RC-LQ R8, 3999_R1, 4270_R1, 4399_R1, 4399_R2, 4400_R1, 4400_R2, 4400_R3, 4400_R4, 4400_R5, 4401_R1, 4401_R2, 4401_R3, 4401_R4, 4401_R5, 4402_R1, 4402_R2, 4415_R1 and 5853_R1, 4259_R1, 4259_R2, 4268_R1, 4243_R1, 4245_R1, 4245_R2, 4246_R1, 4248_R1 and 4149_R3

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS1	6210	<p>The following species were commonly encountered in calcareous grassland which corresponded with the Annex I Calcareous grassland [6210] habitat:</p> <p><i>Achillea millefolium, Agrostis capillaris, Anthoxanthum odoratum, Brachythecium rutabulum, Briza media, Calliergonella cuspidata, Campanula rotundifolia, Carex caryophyllea, Carex flacca, Centaurea nigra, Ctenidium molluscum, Cynosurus cristatus, Dactylis glomerata, Daucus carota, Festuca ovina, Festuca rubra, Galium verum, Helictotrichon pubescens, Hypericum pulchrum, Hypochaeris radicata, Leontodon autumnalis, Leontodon hispidus, Leucanthemum vulgare, Linum catharticum, Lotus corniculatus, Pilosella officinarum, Plantago lanceolata, Plantago maritima, Polygala vulgaris, Potentilla erecta, Prunella vulgaris, Ranunculus acris, Rosa spinosissima, Rubus fruticosus agg., Scleropodium purum, Sesleria caerulea, Solidago virgaurea, Succisa pratensis, Taraxacum officinale agg., Thymus polytrichus, Trifolium pratense and Trifolium repens</i></p> <p><b>Relevé BEC 7</b></p>
	*6210	<p>The following species were commonly encountered in calcareous grassland which corresponded with the priority Annex I calcareous grassland [*6210] habitat:</p> <p><i>Agrostis capillaris, Anthoxanthum odoratum, Anthyllis vulneraria, Asperula cynanchica, Briza media, Calliergonella cuspidata, Campanula rotundifolia, Carex caryophyllea, Carex flacca, Carex panicea, Centaurea nigra, Ctenidium molluscum, Cynosurus cristatus, Dactylis glomerata, Dactylorhiza fuchsii, Danthonia decumbens, Daucus carota, Euphrasia officinalis ag., Festuca rubra, Galium verum, Gymnadenia conopsea, Helictotrichon pubescens, Holcus lanatus, Hypericum pulchrum, Koeleria macrantha, Leontodon hispidus, Leucanthemum vulgare, Linum catharticum, Listera ovata, Lotus corniculatus, Pilosella officinarum, Plantago lanceolata, Plantago maritima, Polygala vulgaris, Potentilla erecta, Prunella vulgaris, Rhinanthus minor, Rhytidadelphus squarrosus, Rosa spinosissima, Scleropodium purum, Sesleria caerulea, Solidago virgaurea, Succisa pratensis, Thymus polytrichus, Trifolium pratense and Trifolium repens</i></p> <p><b>Relevés BEC 15, BEC 17 and BEC 102.</b></p>
	*8240	Grassland species as described in this table. <b>3322_R1 and 3322_R5</b>
GS1/ED2	n/a	Grassland and spoil and bare ground species as described in this table. <b>3729_R1, 3729_R2, 3729_R3, 3729_R4 and 4266_R1</b>

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS1/ER2	*8240/6210	<i>Campanula rotundifolia, Carex flacca, Carlina vulgaris, Centaurium erythraea, Centurea nigra, Conopodium majus, Cynosurus cristatus, Daucus carota, Lathyrus pratensis, Leucanthemum vulgare, Linum catharticum, Lotus corniculatus, Pilosella aurantiaca, Polygala vulgaris, Trifolium pratense. Asplenium ruta-muraria, Carlina vulgaris, Centranthus ruber, Dryopteris sp., Galium verum, Geranium robertianum, Geranium sanguineum, Hedera helix agg., Leucanthemum vulgare, Mycelis muralis, Origanum vulgare, Potentilla sterilis, Rosa spinosissima, Solidago virgaurea, Succisa vulgaris, Teucrium vulgaris.</i>
GS1/ER2/ WS1	*8240/6210	<i>Asplenium ruta-muraria, Carlina vulgaris, Centranthus ruber, Dryopteris sp., Galium verum, Geranium robertianum, Geranium sanguineum, Hedera helix agg., Leucanthemum vulgare, Mycelis muralis, Origanum vulgare, Potentilla sterilis, Rosa spinosissima, Solidago virgaurea, Succisa vulgaris, Teucrium vulgaris, Corylus avellana, Crataegus monogyna, Prunus spinosa, Rubus fruticosus agg., Salix sp., Sorbus aria</i>
GS1/GS2		<i>Campanula rotundifolia, Carex flacca, Carlina vulgaris, Centaurium erythraea, Centurea nigra, Conopodium majus, Cynosurus cristatus, Daucus carota, Lathyrus pratensis, Leucanthemum vulgare, Linum catharticum, Lotus corniculatus, Pilosella aurantiaca, Polygala vulgaris, Trifolium pratense, Achillea millefolium, Arrhenatherum elatius, Centurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium</i>
GS1/GS4	n/a	Grassland species as described in this table. <b>4270_R2</b>
GS1/WS1	6210	Grassland species as described in this table. 85% grassland cover. Scrub species include <i>Corylus avellana, Crataegus monogyna, Prunus spinosa, Rubus fruticosus agg., Salix sp., Sorbus aria,</i>
GS1/WS1	n/a	<i>Campanula rotundifolia, Carex flacca, Carlina vulgaris, Centaurium erythraea, Centurea nigra, Conopodium majus, Cynosurus cristatus, Daucus carota, Lathyrus pratensis, Leucanthemum vulgare, Linum catharticum, Lotus corniculatus, Pilosella aurantiaca, Polygala vulgaris, Trifolium pratense, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus. agg., Salix cinerea subsp. oleifolia, Ulex europaeus</i>

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS1/WS1/ BL1	*8240/6210	WS1 species as below in table. Grassland species include <i>Campanula rotundifolia</i> , <i>Carex flacca</i> , <i>Carlina vulgaris</i> , <i>Centaurium erythraea</i> , <i>Centurea nigra</i> , <i>Conopodium majus</i> , <i>Cynosurus cristatus</i> , <i>Daucus carota</i> , <i>Lathyrus pratensis</i> , <i>Leucanthemum vulgare</i> , <i>Linum catharticum</i> , <i>Lotus corniculatus</i> , <i>Pilosella aurantiaca</i> , <i>Polygala vulgaris</i> , <i>Trifolium pratense</i>
GS1/WS1/ ER1	*8240/6210	<i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Prunus spinosa</i> , <i>Rubus fruticosus agg.</i> , <i>Salix sp.</i> , <i>Sorbus aria</i> , <i>Calluna vulgaris</i> , <i>Carex panicea</i> , <i>Carex sp.</i> , <i>Danthonia decumbens</i> , <i>Erica cinerea</i> , <i>Erica tetralix</i> , <i>Hypochaeris radicata</i> , <i>Rumex acetosella</i> , <i>Sedum anglicum</i> , <i>Ulex gallii</i> and <i>Veronica officinalis</i> . Grassland species as described above in this table.
GS1/WS1/ HD1	6210	<i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Prunus spinosa</i> , <i>Rubus fruticosus agg.</i> , <i>Salix sp.</i> , <i>Sorbus aria</i> , <i>Blechnum spicant</i> , <i>Lonicera periclymenum</i> , <i>Myrica gale</i> , <i>Pteridium aquilinum</i> , <i>Teucrium scorodonia</i> and <i>Ulex gallii</i> . Grassland species as described above in this table.
GS2	n/a	<i>Agrostis stolonifera</i> , <i>Arrhenatherum elatius</i> , <i>Briza media</i> , <i>Calystegia sepium</i> , <i>Carex flacca</i> , <i>Carex hirta</i> , <i>Centaurea nigra</i> , <i>Chamerion angustifolium</i> , <i>Cirsium arvense</i> , <i>Cirsium vulgare</i> , <i>Crepis sp.</i> , <i>Cynosurus cristatus</i> , <i>Dactylis glomerata</i> , <i>Epilobium ciliatum</i> , <i>Epilobium hirsutum</i> , <i>Equisetum fluviatile</i> , <i>Festuca rubra</i> , <i>Filipendula ulmaria</i> , <i>Galium aparine</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Juncus inflexus</i> , <i>Lathyrus pratensis</i> , <i>Leontodon hispidus</i> , <i>Lolium perenne</i> , <i>Achillea millefolium</i> , <i>Cerastium fontanum</i> , <i>Hypocharis radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Veronica chamaedrys</i> , <i>Plantago lanceolata</i> , <i>Poa annua</i> , <i>Prunella vulgaris</i> , <i>Pteridium aquilinum</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rubus fruticosus agg.</i> , <i>Rumex acetosa</i> , <i>Rumex obtusifolius</i> , <i>Sonchus asper</i> , <i>Stellaria media</i> , <i>Succisa pratensis</i> , <i>Taraxacum officinale agg.</i> , <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Urtica dioica</i> and <i>Vicia sepium</i> <b>4199_R1</b>
GS2/HD1	n/a	<i>Achillea millefolium</i> , <i>Arrhenatherum elatius</i> , <i>Centurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Hypocharis radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Taraxacum agg.</i> , <i>Trifolium pratense</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> , <i>Vicia sepium</i> , <i>Blechnum spicant</i> , <i>Lonicera periclymenum</i> , <i>Myrica gale</i> , <i>Pteridium aquilinum</i> , <i>Teucrium scorodonia</i> , <i>Ulex gallii</i>

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS2/GS4/ WS1	n/a	<i>Achillea millefolium, Arrhenatherum elatius, Centurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Angelica sylvestris, Carex echinata, Carex panicea, Comarum palustre, Dactylorrhiza fuchsii, Epilobium hirsutum, Equisetum fluviatile, Filipendula ulmaria, Galium palustre, Hydrocotyle vulgaris, Hypericum scorpioides, Jacobaea aquatica, Juncus acutiflorus, Juncus effusus, Lotus pedunculatus, Lythrum salicaria, Mentha aquatica, Persicaria hydropiper, Ranunculus flammula, Typha latifolia</i>
GS2/WL1	n/a	Grassland species as above. WL1 consists of <i>Corylus avellana, Crataegus monogyna, Hedera helix agg., Prunus spinosa, Rubus fruticosus agg.</i>
GS2/WS1	n/a	<i>Calystegia sepium dominant. Achillea millefolium, Arrhenatherum elatius, Centurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus. agg., Salix cinerea subsp. Oleifolia, Ulex europaeus.</i>
GS4	n/a	<i>Agrostis stolonifera, Anthoxanthum odoratum, Calliergonella cuspidata, Cirsium arvense, Cirsium palustre, Cynosurus cristatus Epilobium montanum, Filipendula ulmaria, Galium palustre, Hypericum elodes, Juncus articulatus, Mentha aquatica, Molinia caerulea, Juncus effusus, Arrhenatherum elatius, Holcus lanatus, Lychnis flos-cuculi, Lythrum salicaria, Plantago lanceolata, Potentilla anserina, Potentilla erecta, Trifolium repens, Ranunculus flammula, Ranunculus repens, Ranunculus acris, Rumex obtusifolius, Jacobaea vulgaris, Sphagnum spp., Succisa pratensis, Ulex europeaus, Trifolium pratense, Viola palustris and Valeriana officinalis</i> <i>Relevé: RC-LQ R3, 3962_R1, 3962_R2, 3962_R3, 3962_R4, 4275_R1, 4275_R2, 4275_R3, 4275_R4, 4275_R5 and 4275_R6</i>
GS4/WS1	n/a	<i>Salix scrub, with species rich GS4 understorey as described above.</i>

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
WD1	n/a	<p>The most frequently recorded species within this habitat were:</p> <p><i>Aesculus hippocastanum, Acer pseudoplatanus, Arum maculatum, Betula spp., Circaea lutetiana, Corylus avellana, Crataegus monogyna, Eurhynchium striatum, Fagus sylvatica, Fraxinus excelsior, Hedera helix, Ilex aquifolium, Isothecium alopecuroides, Isothecium myosuroides, Kindbergia praelonga, Lejeunea cavifolia, Metzgeria furcata, Neckera complanata, Phyllitis scolopendrium, Prunus laurocerasus, Radula complanata, Rhynchostegiella tenella, Rubus fruticosus agg., Salix cinerea, Sorbus acuparia, Sorbus aria, Thamnobryum alopecurum, Thuidium tamariscinum, Tortella tortuosa and Urtica dioica,</i></p> <p><b>Relevés: BEC 174, RC-LQ R2, 3734_R1, 3734_R2, 3734_R3, 3734_R4, 3734_R5, 4255_R1 and 4256_R1</b></p>
WD1	n/a	<p>A lot of <i>Acer pseudoplatanus, Fagus sylvatica</i> present.</p> <p>Previously Oak-ash-hazel woodland (no Annex-I habitat qualification)</p>
WL1	n/a	<p><i>Calystegia sepium, Circaea lutetiana, Corylus avellana, Crataegus monogyna, Euonymus europaeus, Fraxinus excelsior, Hedera helix, Heracleum sphondylium, Ilex aquifolium, Lathyrus pratensis, Lonicera periclymenum, Prunus spinosa, Pteridium aquilinum, Quercus robur, Rubus fruticosus agg., Sambucus nigra, Sorbus aria, Sorbus aucuparia, Urtica dioica and Viburnum opulus</i></p> <p>Some overgrown hedgerow, bramble spreading from the margins at polygon c.150m NE of Menlo castle</p>
WL2	n/a	<p><i>Acer pseudoplatanus, Betula spp., Alnus glutinosa, Corylus avellana, Crataegus monogyna, Fraxinus excelsior, Hedera helix, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea, and Sambucus nigra</i></p> <p><b>4149_R2, 4619_R1 and 4619_R2</b></p>
WL2/BL1/ GS2	n/a	<p>WL2 a described above. Grassland species include <i>Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium</i>.</p>
WN2	n/a (WL2A WL2E)	<p>Oak-ash-hazel woodland in this area was typically either <i>Corylus avellana</i> or <i>Fraxinus excelsior</i> woodlands. The following species were recorded in areas that did not conform to any Annex I habitat type: <i>Acer pseudoplatanus, Arum maculatum, Brachypodium sylvaticum, Circaea lutetiana, Corylus avellana, Crataegus monogyna, Eurhynchium hians</i>,</p>

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
		<p><i>Eurhynchium striatum, Fissidens taxifolius, Fraxinus excelsior, Frullania dilatata, Geranium robertianum, Geum urbanum, Hedera helix, Homalothecium sericeum, Hypnum resupinatum, Ilex aquifolium, Isothecium alopecuroides, Isothecium myosuroides, Kindbergia praelonga, Lonicera periclymenum, Metzgeria furcata, Neckera complanata, Phyllitis scolopendrium, Plagiomnium undulatum, Potentilla sterilis, Primula vulgaris, Prunus spinosa, Quercus robur, Radula complanata, Rhytidadelphus triquetrus, Rubus fruticosus agg., Rumex sanguineus, Thamnobryum alopecurum, Thuidium tamariscinum, Ulota bruchii, Veronica chamaedrys and Viola spp.</i></p> <p>Relevés: BEC 139, BEC 336, BEC 340, BEC 366, BEC 404, RC-LQ R9, RC-LQ R10, 3297_R2, 3754_R1, 3754_R2, 3754_R4, 3768_R2, 4541_R1, 4541_R2, 4541_R5, 5505_R1, 5505_R2, 4422_R1, 4422_R3, 4422_R4, 3857_R1, 3936_R1, 3936_R2, 3936_R3, 3941_R1, 4414_R1, 4473_R1, 3790b_R1, 3790b_R2 and 4538_R2</p>
WN2	*8240 (LPW)	<p>Woodland which corresponded with the Annex I Limestone pavement [*8240] habitat included the following species:</p> <p><i>Asplenium trichomanes, Brachypodium sylvaticum, Carex flacca, Corylus avellana, Crataegus monogyna, Ctenidium molluscum, Euonymus europaeus, Eurhynchium striatum, Fissidens dubius, Fragaria vesca, Fraxinus excelsior, Frullania dilatata, Geranium robertianum, Hedera helix, Homalothecium sericeum, Ilex aquifolium, Isothecium alopecuroides, Kindbergia praelonga, Lonicera periclymenum, Metzgeria furcata, Neckera complanata, Neckera crispa, Phyllitis scolopendrium, Plagiomnium undulatum, Potentilla sterilis, Prunus spinosa, Pteridium aquilinum, Radula complanata, Rhytidadelphus triquetrus, Rosa spinosissima, Rubus fruticosus agg., Scapania aspera, Scleropodium purum, Sesleria caerulea, Solidago virgaurea, Thamnobryum alopecurum, Thuidium tamariscinum, Tortella tortuosa, Ulota bruchii, Ulota crispa, Veronica chamaedrys and Viola spp.</i></p> <p>Relevés BEC 9, BEC 42, BEC 120, BEC 121, BEC 144, BEC 145, BEC 240, BEC 246, BEC 333, BEC 335, RC-LQ R4, 3155_R1, 3494_R1, 4413_R1, 4413_R2, 5508_R1, 3619_R1, 3638_R1, 3177_R2 and 3790_R3</p>
WN2/ER2	*8240	<p>Woodland and exposed calcareous rock species as described in this table.</p> <p>3790a_R1</p>
WN2/GS2	n/a	Woodland and scrub as described in this table. Small GS2 area found within.
WN2/WS1	n/a	<p>Woodland and scrub species as described in this table. Scrub species include <i>Corylus avellana, Crataegus monogyna, Prunus spinosa, Rubus fruticosus agg., Salix sp. and Sorbus aria.</i></p> <p>3768_R1</p>

River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
WN2/WD1	n/a	Predominant <i>Fraxinus excelsior</i> in canopy, overtopping <i>Crataegus monogyna</i> , <i>Sorbus aria</i> agg. <sup>6</sup> , <i>Fagus sylvatica</i> , <i>Salix cinerea</i> , <i>Alnus glutinosa</i>
WN2/WS5	*8240	WS5 - Partly clear-felled. Species list for WN2 as list in the table.
WN6	*91E0 (WN6_3c)	<i>Agrostis stolonifera</i> , <i>Calliergonella cuspidatum</i> , <i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Epilobium hirsutum</i> , <i>Equisetum fluviatile</i> , <i>Erythronium striatum</i> , <i>Filipendula ulmaria</i> , <i>Fraxinus excelsior</i> , <i>Galium aparine</i> , <i>Galium palustre</i> , <i>Geranium robertianum</i> , <i>Hedera helix</i> , <i>Juncus effusus</i> , <i>Kindbergia praelonga</i> , <i>Lythrum salicaria</i> , <i>Prunus spinosa</i> , <i>Ranunculus repens</i> , <i>Rubus fruticosus</i> agg., <i>Rumex sanguineus</i> , <i>Salix cinerea</i> subsp. <i>oleifolia</i> and <i>Thamnobryum alopecurum</i> <a href="#">3297_R1</a> and <a href="#">3297a_R2</a>
WS1/GS1	n/a	Predominantly scrub area (75%), species list as described in table.
WS1	n/a	<i>Symporicarpos alba</i> , <i>Crataegus monogyna</i> , <i>Rubus fruticosus</i> agg., <i>Calystegia sepium</i> , <i>Lythrum salicaria</i> , <i>Juncus</i> sp., <i>Acer pseudoplatanus</i> , <i>Buddleja davidii</i> , <i>Salix purpureum</i> , <i>Salix cinerea</i> , <i>Prunus spinosa</i> , <i>Corylus avellana</i> , <i>Pteridium aquilinum</i> , <i>Fraxinus excelsior</i> , <i>Urtica dioica</i> , <i>Filipendula ulmaria</i> , <i>Ranunculus repens</i> , <i>Cotoneaster</i> sp. and <i>Hedera helix</i> agg., <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Ulex europeaus</i>
WS1/ER2	*8240	Limestone pavement as described above. Scrub species include <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Salix xinerea</i> subsp. <i>oleifolia</i> and <i>Ulex europeaus</i> .
WS1/GA1	n/a	70% WS1, 30% GA1. Species as described in table above.
WS1/GS1	n/a	WS1 species as above. Grassland species include <i>Campanula rotundifolia</i> , <i>Carex flacca</i> , <i>Carlina vulgaris</i> , <i>Centaurium erythraea</i> , <i>Centurea nigra</i> , <i>Conopodium majus</i> , <i>Cynosurus cristatus</i> , <i>Daucus carota</i> , <i>Lathyrus pratensis</i> , <i>Leucanthemum vulgare</i> , <i>Linum catharticum</i> , <i>Lotus corniculatus</i> , <i>Pilosella aurantiaca</i> , <i>Polygala vulgaris</i> , <i>Trifolium pratense</i>
WS1/GS2	n/a	Scrub and grassland species as described above.

<sup>6</sup> *Sorbus* species are difficult to identify and require a number of characteristics (and potentially genetic work) to definitely confirm species present in the *Sorbus aria* aggregate group, this includes both *Sorbus aria* sensu stricto and *Sorbus hibernica*. Variability is common with both *Sorbus* species and taxonomic difficulties are still an ongoing discussion throughout Britain and Europe (Fay and Rich, 2022). Fay, M.F., Rich, T.C.G. (2022) SORBUS ARIA: Rosaceae, *Curtis's Botanical Magazine*, 39(4), 655-668.

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
WS1	n/a	<p>The following species were recorded within scrub habitat that does not meet the criteria for the Annex I Limestone pavement [*8240] habitat:</p> <p><i>Agrostis capillaris, Agrostis stolonifera, Anthoxanthum odoratum, Arrhenatherum elatius, Brachypodium sylvaticum, Calliergonella cuspidata, Centaurea nigra, Circaea lutetiana, Corylus avellana, Crataegus monogyna, Dactylis glomerata, Festuca rubra, Filipendula ulmaria, Fragaria vesca, Fraxinus excelsior, Geum urbanum, Hedera helix, Holcus lanatus, Ilex aquifolium, Juncus conglomeratus, Kindbergia praelonga, Molinia caerulea, Myrica gale, Odontites vernus, Oxyrrhynchium hians, Plagiomnium undulatum, Plantago lanceolata, Potentilla erecta, Potentilla palustris, Primula vulgaris, Prunus spinosa, Pteridium aquilinum, Radula complanata, Ranunculus repens, Rhytidiodelphus squarrosus, Rosa canina, Rubus fruticosus agg., Rumex sanguineus, Salix cinerea, Symphoricarpos albus, Thamnobryum alopecurum, Thuidium tamariscinum, Trifolium pratense, Trifolium repens, Ulex europaeus, Urtica dioica, Veronica montana and Vicia sepium</i></p> <p><b>3938_R1, 3938_R2, 3938_R3, 4142_R1, 4155_R1, 4155_R2, 4155_R3, 4156_R1, 4156_R2, 4156_R3, 4156_R4, 4156_R5, 4270_R3, 4422_R2, 4517_R4, 4538_R1, 4541_R3, 4541_R4, 3754_R3 and 5505_R3</b></p>
WS1	*8240 (LPE)	<p>The following species were typical of areas of scrub that corresponded with the Annex I Limestone pavement [*8240] habitat:</p> <p><i>Agrimonia eupatoria, Asplenium adiantum-nigrum, Brachythecium rutabulum, Calliergonella cuspidata, Campylium stellatum v. protensum, Cladonia pocillum, Didymodon insulanus, Dryopteris filix-mas, Epipactis atrorubens, Euphrasia salisburgensis, Euphrasia species, Fissidens taxifolius, Galium sterneri, Galium verum, Holcus lanatus, Homalothecium sericeum, Hylocomium brevirostre, Hypnum lacunosum, Hypochaeris radicata, Isothecium myosuroides, Lathyrus pratensis, Leontodon hispidus, Leontodon saxatilis, Plagiomnium species, Ranunculus acris, Schistidium apocarpum, Schistidium crassipilum, Trichostomum brachydontium, Trifolium pratense, Ulota bruchii, Veronica chamaedrys and Veronica montana</i></p> <p><b>Relevés BEC 8, BEC 18, BEC 35, BEC 148, BEC 242, 3088_R1, 3088_R2, 3088_R3, 3088_R4, 3705_R1, 3705_R2, 3494_R2, 5507_R1 and 3322_R2</b></p>
WS1	6210	Scrub species as described in this table. <b>3513_R1, 3513_R2 and 3322_R4</b>
WS1/ER1	n/a	<i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia, Ulex europaeus, Calluna vulgaris, Carex panicea, Carex sp., Danthonia decumbens, Erica cinerea, Erica tetralix, Hypochaeris radicata, Rumex acetosella, Sedum anglicum, Ulex gallii and Veronica officinalis.</i>

**River Corrib to Lackagh Quarry and Surrounding areas (which includes part of Lough Corrib SAC) - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
WS1/HD1	n/a	<i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia, Ulex europaeus, Blechnum spicant, Lonicera periclymenum, Myrica gale, Teucrium scorodonia and Ulex gallii.</i>
WS1/ER2	*8240	Scrub and exposed calcareous rock species as described in this table. <b>3156 R1 and 3177 R1</b>
WS2	n/a	<i>Anthriscus sylvestris, Corylus avellana, Crataegus monogyna, Fraxinus excelsior, Geranium robertianum, Hedera helix, Rubus fruticosus agg. and Salix spp.</i>
WS5	n/a	New area recently cleared, felled in Oak-ash-hazel woodland, species list as described in table above.

### EC33

<b>EC33 - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
ED3	n/a	<i>Sonchus oleraceus, Arrhenatherum elatius, Rubus fruticosus, Jacobaea vulgaris, Potentilla sterilis, Epilobium montana, Chamerion angustifolium, Hedera helix, Lonicera periclymenum and Cirsium arvensis.</i>
ER2	*8240 (LPE_3a)	<i>Hedera helix, Rosa spinosissima, Asplenium ruta-muraria, Ctenidium molluscum, Geranium robertianum, Sesleria caerulea, Ilex aquilinum, Prunus spinosa, Sorbus aria agg.<sup>7</sup>, Corylus avellana, Teucrium scorodonia, A. Trichomanes, Thymus polytrichus, Fragaria vesca and Viburnum opulus.</i> <b>EC33 R3</b>
FS1	n/a	<i>Phragmites australis, Lythrum salicaria and Filipendula ulmaria.</i>
HD1	n/a	<i>Pteridium aquilinum, Arrhenatherum elatius, Sonchus oleraceus, Holcus lanatus and Galium aparine.</i>
GS1	6210 (GL3a)	<i>Briza media, Galium verum, Prunella vulgaris, Succisa pratensis, Dactylis fuchsia, Thymus polytrichus, Trifolium pratensis, Sesleria albicans, Anthoxanthum odoratum and Lotus corniculatus. Also some wet elements in grassland adjacent to wetland e.g. Schoenus nigricans, Molinia caerulea and Galium boreale.</i> <b>EC33 R2 and EC33 R4</b>

<sup>7</sup> *Sorbus* species are difficult to identify and require a number of characteristics (and potentially genetic work) to definitely confirm species present in the *Sorbus aria* aggregate group, this includes both *Sorbus aria sensu stricto* and *Sorbus hibernica*. Variability is common with both *Sorbus* species and taxonomic difficulties are still an ongoing discussion throughout Britain and Europe (Fay and Rich, 2022). Fay, M.F., Rich, T.C.G. (2022) SORBUS ARIA: Rosaceae, *Curtis's Botanical Magazine*, 39(4), 655-668.

### EC33 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS2	n/a	Species-poor variant. Typical species include <i>Lolium perenne</i> , <i>Odontites verna</i> , <i>Ranunculus repens</i> , <i>Cirsium arvensis</i> , <i>Centaurea nigra</i> , <i>Holcus lanatus</i> and <i>Agrostis capillaris</i> .
GS2	6510 (GL3e)	Typical species include <i>Plantago lanceolata</i> , <i>Odontites verna</i> , <i>Ranunculus acris</i> , <i>Prunus vulgaris</i> , <i>Jacobsa vulgaris</i> , <i>Lolium perenne</i> , <i>Cerastium fontanum</i> , <i>R. repens</i> , <i>Centaurea nigra</i> , <i>Leucanthemum vulgare</i> and <i>Trifolium repens</i> . <b>EC33 R1</b>
WL1/GS2	n/a	GS2 species as above with species poor variant. WL1 species include <i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Hedera helix</i> , <i>Prunus spinosa</i> and <i>Rubus fruticosus agg.</i>
WN2	n/a	<i>Corylus avellana</i> , <i>Hedera helix</i> , <i>Fraxinus excelsior</i> , <i>Veronica chamaedrys</i> , <i>Rubus fruticosus</i> , <i>Primula vulgaris</i> , <i>Rhytidadelphus triquetrus</i> , <i>Geranium robertianum</i> and <i>Brachythecium rutabulum</i> .
WN6	*91E0	Occurs in mosaic with scrub and reed swamp (FS1). <i>Salix cinerea</i> , <i>Fraxinus excelsior</i> , <i>Iris pseudacorus</i> , <i>Phragmites australis</i> and <i>Filipendula ulmaria</i> .
WS1	n/a	<i>Prunus spinosa</i> , <i>Crataegus monogyna</i> , <i>Rubus fruticosus</i> , <i>Arrhenatherum elatius</i> , <i>Euonymus europaeus</i> , <i>Lonicera periclymenum</i> and <i>Calystegia sepium</i> .

## EC36

EC36 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
BL3/ED3/ WS1	n/a	<i>Capsella bursa-pastoris, Crepis sp., Elytrigia repens, Geranium molle, Jacobaea vulgaris, Lapsana communis, Lolium perenne, Persicaria maculosa, Plantago lanceolata, Plantago major, Potentilla anserina, Rumex crispus, Sagina nodosa, Scorzoneroïdes autumnalis, Trifolium pratense, Tripleurospermum maritimum, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. Oleifolia, Ulex europaeus.</i>
ER2	*8240 (LPE_1b/1c)	<i>Acer pseudoplatanus, Asplenium ruta-muraria, Buddleja davidii, Calluna vulgaris, Carex flacca, Carlina vulgaris, Centranthus ruber, Ceterach officinalis, Corylus avellana, Cotoneaster sp., Festuca ovina, Fissidens dubius, Fraxinus excelsior, Geranium robertianum, Hedera helix, Ilex aquifolium, Linum catharticum, Lotus corniculatus, Mycelis muralis, Potentilla erecta, Prunus spinosa, Rosa spinosissima, Rubus fruticosus agg., Sesleria albicans, Sorbus aria agg.<sup>8</sup>, Succisa pratensis, Teucrium scorodonia, Thalictrum minus, Thymus praecox, Tortella tortuosa and Trichostomum crispulum.</i> <b>EC36 R6</b>
GA1	n/a	<i>Arrhenatherum elatius, Capsella bursa-pastoris, Cerastium fontanum, Dactylis glomerata, Jacobaea vulgaris, Lolium perenne, Plantago lanceolata, Poa annua, Rumex obtusifolius, Stellaria media, Holcus lanatus, Trifolium repens, Ranunculus repens, Cirsium arvense, Ranunculus acris, Rumex crispus, Agrostis stolonifera, Heracleum sphondylium with Plantago major, Ononis repens, Rumex obtusifolius. Occasional GS4 species e.g. Juncus effusus, Potentilla anserina and Carex hirta.</i> <b>1875_R1</b>
GA1/BL3/ WL2	n/a	Grassland (GA1) and Built environment dominate this mosaic, accounting for 90% of the area. Grassland species include <i>Arrhenatherum elatius, Capsella bursa-pastoris, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Jacobaea vulgaris, Lolium perenne, Plantago lanceolata, Plantago major, Poa annua, Ranunculus acris, Ranunculus repens, Rumex obtusifolius, Stellaria media, Trifolium repens</i> , WL2 species include <i>Acer pseudoplatanus, Acer sp., Cupressus × leylandii, Fraxinus excelsior, Populus tremula</i>

<sup>8</sup> *Sorbus* species are difficult to identify and require a number of characteristics (and potentially genetic work) to definitely confirm species present in the *Sorbus aria* aggregate group, this includes both *Sorbus aria sensu stricto* and *Sorbus hibernica*. Variability is common with both *Sorbus* species and taxonomic difficulties are still an ongoing discussion throughout Britain and Europe (Fay and Rich, 2022). Fay, M.F., Rich, T.C.G. (2022) SORBUS ARIA: Rosaceae, *Curtis's Botanical Magazine*, 39(4), 655-668.

## EC36 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS1	n/a	<p>Non-annex variant. Typical species include <i>Ranunculus acris</i>, <i>Holcus lanatus</i>, <i>Dactylis glomerata</i>, <i>Centaurea nigra</i>, <i>Plantago lanceolata</i>, <i>Cirsium arvense</i>, <i>Jacobaea vulgaris</i>, <i>Cynosurus cristatus</i>, <i>Prunella vulgaris</i>, <i>Festuca rubra</i>, <i>Trifolium repens</i>, <i>Lolium perenne</i>, <i>Agrostis stolonifera</i>, <i>Trifolium pratense</i>, <i>Taraxacum officinale</i> agg. Some <i>Daucus carota</i>, <i>Lotus corniculatus</i>, <i>Galium verum</i>, <i>Linum catharticum</i>. Some GS4 species locally e.g. <i>Filipendula ulmaria</i> and <i>Carex hirta</i>.</p> <p style="color: red;"><i>1841_R1, 1843_R1, 1858_R1, 1862_R1, 1890_R1, 1890_R2, 1897_R1, 1897_R2, 4608_R1, 4610_R1, 4611_R1, 4612_R1 and 4613_R1</i></p>
	6210/6210* (GL3a)	<p>Annex Habitat sometimes with orchids. Typical species include <i>Briza media</i>, <i>Sesleria caerulea</i>, <i>Anthyllis vulneraria</i>, <i>Succisa pratensis</i>, <i>Lotus corniculatus</i>, <i>Leontodon hispidus</i>, <i>Carex flacca</i>, <i>Centaurea nigra</i>, <i>Linum catharticum</i>, <i>Ctenidium molluscum</i>, <i>Pilosella officinarum</i>, <i>Primula veris</i>, <i>Galium verum</i>, <i>Carlina vulgaris</i>, <i>Rhinanthus minor</i>, <i>Solidago virgaurea</i>, with orchids <i>Gymnadenia conopsea</i> and <i>Dactylorhiza fuchsii</i> and <i>Neottia ovata</i>, <i>Primula veris</i>, <i>Leucanthemum vulgare</i>, <i>Daucus carota</i>, <i>Crepis capillaris</i>, <i>Avenula pubescens</i> and <i>Homalothecium lutescens</i>. Some encroaching scrub of <i>Pteridium aquilinum</i>, <i>Prunus spinosa</i> and <i>Crataegus monogyna</i>.</p> <p style="color: red;"><b>EC36 R1 and EC36 R3</b></p>
GS1/GA1	n/a	Species as described in this table.
GS1/ GS2b	n/a	<p>Species-poor GS2b <i>Arrhenatherum elatius</i>, <i>Ranunculus repens</i>, <i>Cirsium arvense</i>, <i>Rumex obtusifolius</i>, <i>Rumex crispus</i>, <i>Potentilla anserina</i>, <i>Heracleum sphondylium</i>, <i>Cerastium fontanum</i>, <i>Juncus effusus</i>, <i>Lolium perenne</i>, <i>Agrostis stolonifera</i>, <i>Holcus lanatus</i>, <i>Alopecurus pratensis</i>, <i>Urtica dioica</i>, <i>Potentilla anserina</i>, with occasional GS1 species e.g. <i>Prunella vulgaris</i>, <i>Centaurea nigra</i>, <i>Trifolium pratensis</i>, <i>Achillea millefolium</i>, <i>Leontodon hispidus</i>, <i>Rosa spinosissima</i>, <i>Centaurea nigra</i>, <i>Anthyllis vulneraria</i>, <i>Linum catharticum</i>, <i>Prunella vulgaris</i>, <i>Lotus corniculatus</i> and <i>Euphrasia officinalis</i> agg.</p>

GS1/GS2/ WS1	n/a	Typical GS1 species as described above. Other species include <i>Achillea millefolium</i> , <i>Arrhenatherum elatius</i> , <i>Centurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Hypocharis radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Taraxacum agg.</i> , <i>Trifolium pratense</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> , <i>Vicia sepium</i> , <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> . agg., <i>Salix cinerea</i> subsp. <i>Oleifolia</i> , <i>Ulex europaeus</i>
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#### EC36 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS1/ HD1	n/a	Typical GS1 species with <i>Pteridium aquilinum</i> . Some areas highly grazed, others with low grazing.
GS1/WL1	n/a	Typical GS1 species with <i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Hedera helix</i> , <i>Prunus spinosa</i> and <i>Rubus fruticosus</i> agg.
GS1/WS1	n/a	Typical GS1 species with <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Salix cinerea</i> subsp. <i>oleifolia</i> and <i>Ulex europeaus</i> .
GS2	n/a	Low species-diversity variant. Typical species: <i>Arrhenatherum elatius</i> , <i>Ranunculus repens</i> , <i>Cirsium arvense</i> , <i>Rumex obtusifolius</i> , <i>Rumex crispus</i> , <i>Potentilla anserina</i> , <i>Heracleum sphondylium</i> , <i>Cerastium fontanum</i> , <i>Juncus effusus</i> , <i>Lolium perenne</i> , <i>Agrostis stolonifera</i> , <i>Holcus lanatus</i> , <i>Alopecurus pratensis</i> , <i>Dactylis glomerata</i> , <i>Hypocharis radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus acris</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Taraxacum agg.</i> , <i>Trifolium pratense</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> , <i>Vicia sepium</i> and <i>Urtica dioica</i> . Occasional GS1 species e.g. <i>Prunella vulgaris</i> , <i>Centaurea nigra</i> , <i>Trifolium pratensis</i> , <i>Achillea millefolium</i> , in shorter vegetation.

**EC36 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS2	n/a	More species-rich variant. Typical species are <i>Heracleum sphondylium</i> (LD), <i>Stachys sylvatica</i> , <i>Phleum pratense</i> , <i>Calystegia sepium</i> , <i>Lolium perenne</i> , <i>Rumex obtusifolius</i> , <i>Lathyrus pratensis</i> , <i>Tussilago farfara</i> , <i>Arrhenatherum elatius</i> (LA), <i>Cirsium arvense</i> (LA), <i>Dactylis glomerata</i> and <i>Lapsana communis</i> . Occasional GS1/ 6210 indicators e.g. <i>Knautia arvensis</i> , <i>Galium verum</i> , <i>Centaurea nigra</i> (LA), <i>Rhinanthus minor</i> , <i>Rosa spinosissima</i> , <i>Leucanthemum vulgare</i> , <i>Daucus carota</i> , <i>Pimpinella saxifraga</i> , <i>Dactylorhiza fuchsii</i> , <i>Succisa pratense</i> (LA), <i>Carex flacca</i> , <i>Thymus polytrichus</i> , <i>Lotus corniculatus</i> . Scattered scrub frequent e.g. <i>Rubus fruticosus</i> agg., <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Corylus avellana</i> , <i>Sorbus</i> sp.
	6510	Typical species are (but not limited to) <i>Cynosurus cristatus</i> , <i>Festuca rubra/ovina</i> , <i>Dactylis glomerata</i> , <i>Phleum pratense</i> , <i>Agrostis capillaris</i> , <i>Briza media</i> , <i>Holcus lanatus</i> , <i>Anthoxanthum odoratum</i> , <i>Rhinanthus minor</i> , <i>Centaurea nigra</i> , <i>Plantago lanceolata</i> , <i>Lotus corniculatus</i> , <i>Achillea millefolium</i> , <i>Daucus carota</i> , <i>Agrimonia eupatoria</i> , <i>Thymus praecox</i> , <i>Hypochaeris radicata</i> , <i>Prunella vulgaris</i> , <i>Ranunculus acris</i> , <i>Cerastium fontanum</i> , <i>Prunus spinosus</i> and <i>Filipendula ulmaria</i> . <b>EC36 R7</b>
GS2/ WS1	n/a	GS2 species: <i>Centaurea nigra</i> , <i>Leucanthemum vulgare</i> , <i>Arrhenatherum elatius</i> , <i>Centranthus ruber</i> , <i>Plantago lanceolata</i> , <i>Polygala vulgaris</i> , <i>Calliergonella cuspidata</i> , <i>Agrostis stolonifera</i> , <i>Potentilla erecta</i> , <i>Hypochaeris radicata</i> , <i>Brachypodium sylvaticum</i> , with frequent WS1 species: <i>Rubus fruticosus</i> agg., <i>Fraxinus excelsior</i> , <i>Acer pseudoplatanus</i> , <i>Chamerion angustifolium</i> , <i>Salix caprea</i> and <i>Corylus avellana</i> . 6210 species in shorter vegetation e.g. <i>Briza media</i> , <i>Lotus corniculatus</i> , <i>Carex flacca</i> , <i>Galium verum</i> , <i>Carlina vulgaris</i> and <i>Tortella tortuosa</i> . <b>1881_R1</b>
GS4	n/a	High species-diversity wet grassland. Typical species include <i>Juncus conglomeratus</i> , <i>Agrostis stolonifera</i> , <i>Potentilla erecta</i> , <i>Dactylorhiza fuchsii</i> , <i>Prunella vulgaris</i> , <i>Juncus bufonius</i> , <i>Filipendula ulmaria</i> (LD), <i>Lotus corniculatus</i> , <i>Lathyrus linifolius</i> , <i>Juncus effusus</i> , <i>Holcus lanatus</i> , <i>Carex flacca</i> , <i>Succisa pratensis</i> (LA), <i>Anthoxanthum odoratum</i> , <i>Molinia caerulea</i> , <i>Hypochaeris radicata</i> , <i>Vicia cracca</i> , <i>Centaurea nigra</i> , <i>Carex panicea</i> , <i>Plantago lanceolata</i> , <i>Potentilla anserina</i> , <i>Vicia sepium</i> , <i>Cirsium arvense</i> (LD), <i>Lathyrus pratensis</i> , <i>Persicaria amphibia</i> and <i>Alopecurus pratensis</i> . Occasional 6210 species e.g. <i>Lotus corniculatus</i> , <i>Rhinanthus minor</i> , <i>Euphrasia officinalis</i> agg. and <i>Gymnadenia conopsea</i> .

**EC36 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS4/ FS2	n/a	Central wet channel supports tall-herb swamp FS2 (with local areas of reed and large sedge swamp FS1): <i>Juncus effusus</i> , <i>Nasturtium aquaticum</i> (LD), <i>Glyceria fluitans</i> , <i>Juncus articulatus</i> , <i>Typha latifolia</i> , <i>Eleocharis palustris</i> , <i>Potamogeton natans</i> , <i>Iris pseudacorus</i> , <i>Lemna minor</i> and <i>Lemna minuta</i> . Vegetation cover decreases in channel to southeast. Wet grassland with typical GS4 species (above) with additions such as <i>Trifolium pratense</i> , <i>Ranunculus acris</i> , <i>Hypericum pulchrum</i> , <i>Equisetum palustre</i> , <i>Epilobium hirsutum</i> , <i>Cirsium palustre</i> , <i>Mentha aquatica</i> , <i>Carex nigra</i> , <i>Carex disticha</i> , <i>Galium palustre</i> , <i>Epilobium palustre</i> , <i>Dactylorhiza fuchsii</i> , <i>Lythrum salicaria</i> , <i>Daucus carota</i> and <i>Jacobaea aquatica</i> .
GS4/WS1	n/a	<i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Salix cinerea</i> subsp. <i>oleifolia</i> , <i>Ulex europeaus</i> , <i>Angelica sylvestris</i> , <i>Carex echinata</i> , <i>Carex panicea</i> , <i>Comarum palustre</i> , <i>Dactylorhiza fuschii</i> , <i>Epilobium hirsutum</i> , <i>Equisetum fluviatile</i> , <i>Filipendula ulmaria</i> , <i>Galium palustre</i> , <i>Hydrocotyle vulgaris</i> , <i>Hypericum scoriooides</i> , <i>Jacobaea aquatica</i> , <i>Juncus acutiflorus</i> , <i>Juncus effusus</i> , <i>Lotus pedunculatus</i> , <i>Lythrum salicaria</i> , <i>Mentha aquatica</i> , <i>Persicaria hydropiper</i> , <i>Ranunculus flammula</i> and <i>Typha latifolia</i> .
HD1	n/a	<i>Pteridium aquilinum</i> (D), <i>Cirsium arvense</i> and <i>Rumex crispus</i> .
WL1	n/a	<i>Crataegus monogyna</i> , <i>Prunus spinosa</i> , <i>Fraxinus excelsior</i> , <i>Rubus fruticosus</i> agg. <i>Pteridium aquilinum</i> (at edges), <i>Corylus avellana</i> , <i>Calystegia sepium</i> , <i>Urtica dioica</i> , <i>Hedera helix</i> and <i>Ilex aquifolium</i> .
WL1/GS1/ ED3	n/a	WL1 species as described above. Other species present includes <i>Campanula rotundifolia</i> , <i>Carex flacca</i> , <i>Carlina vulgaris</i> , <i>Centaurium erythraea</i> , <i>Centurea nigra</i> , <i>Conopodium majus</i> , <i>Cynosurus cristatus</i> , <i>Daucus carota</i> , <i>Lathyrus pratensis</i> , <i>Leucanthemum vulgare</i> , <i>Linum catharticum</i> , <i>Lotus corniculatus</i> , <i>Pilosella aurantiaca</i> , <i>Polygala vulgaris</i> , <i>Trifolium pratense</i> , <i>Capsella bursa-pastoris</i> , <i>Crepis sp.</i> , <i>Elytrigia repens</i> , <i>Geranium molle</i> , <i>Jacobaea vulgaris</i> , <i>Lapsana communis</i> , <i>Lolium perenne</i> , <i>Persicaria maculosa</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Potentilla anserina</i> , <i>Rumex crispus</i> , <i>Sagina nodosa</i> , <i>Scorzoneroidea autumnalis</i> , <i>Trifolium pratense</i> , <i>Tripleurospermum maritimum</i> .
WL1/GS2	n/a	<i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Hedera helix</i> , <i>Prunus spinosa</i> , <i>Rubus fruticosus</i> agg., <i>Achillea millefolium</i> , <i>Arrhenatherum elatius</i> , <i>Centaurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Hypochaeris radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Taraxacum officinale</i> agg., <i>Trifolium pratense</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> and <i>Vicia sepium</i> .
WL2	n/a	<i>Fraxinus excelsior</i> dominant (mature and young trees) with <i>Prunus spinosa</i> , <i>Hedera helix</i> , <i>Asplenium scolopendrium</i> , <i>Rubus fruticosus</i> agg. <i>Thamnobryum alopecurum</i> , <i>Crataegus monogyna</i> , <i>Calystegia sepium</i> , <i>Urtica dioica</i> , <i>Corylus avellana</i> and <i>Populus tremula</i> .

### EC36 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
WN2	n/a	<p><i>Fraxinus excelsior</i> with <i>Crataegus monogyna</i>, <i>Hedera helix</i>, <i>Acer pseudoplatanus</i>, <i>Populus tremula</i>, <i>Ilex aquifolium</i>, <i>Lonicera periclymenum</i>, <i>Dryopteris dilatata</i>, <i>Carex remota</i>, <i>Eurhynchium striatum</i> and <i>Neckera complanata</i>, <i>Prunus spinosa</i>, <i>Ilex aquilinum</i>, <i>Corylus avellana</i>, <i>Fragaria vesca</i>, <i>Hedera helix</i>, <i>Rubus fruticosus</i>, <i>Viola spp.</i>, <i>Geranium robertianum</i>, <i>Rosa canina</i>, <i>Circaeae lutetiana</i> and <i>Brachypodium sylvaticum</i>.</p> <p><b>1885_R1, 4473_R2 and 1893_R1</b></p>
	*8240 (LPW_2a)	<p><i>Corylus avellana</i>, <i>Ilex aquifolium</i>, <i>Euonymus europaeus</i>, <i>Fraxinus excelsior</i>, <i>Crataegus monogyna</i> and <i>Rubus fruticosus</i> agg. Ground flora includes <i>Thamnobryum alopecurum</i>, <i>Eurhynchium striatum</i>, <i>Neckera crispa</i> <i>Dryopteris filix-mas</i>, <i>Asplenium scolopendrium</i>, <i>Melica uniflora</i>, <i>Circaeae lutetiana</i>, <i>Potentilla sterilis</i>, <i>Primula vulgaris</i> and <i>Geranium robertianum</i>. <i>Calystegia sepium</i>, <i>Cirsium arvense</i>, <i>Prunus spinosa</i>, <i>Pteridium aquilinum</i>, <i>Rubus fruticosus</i> agg., <i>Salix cinerea</i> subsp. <i>oleifolia</i> and <i>Ulex europeaus</i></p> <p><b>EC36 R2, 1889 R1 and 1883 R1</b></p>
WS1	n/a	<p><i>Corylus avellana</i>, <i>Prunus spinosa</i>, <i>Crataegus monogyna</i>, <i>Rubus fruticosus</i> agg., <i>Salix sp.</i>, <i>Sorbus aria</i>, <i>Pteridium aquilinum</i> and <i>Hedera helix</i>. Occasional mature <i>Fraxinus excelsior</i> trees.</p> <p><b>4612_R2</b></p>
WS1/GS2	n/a	WS1 dominant,(as described above) with some grassland species; <i>Achillea millefolium</i> , <i>Arrhenatherum elatius</i> , <i>Centurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Hypocharis radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Taraxacum agg.</i> , <i>Trifolium pratense</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> , <i>Vicia sepium</i>

### EC37

### EC37 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
ED3	n/a	<p><i>Cirsium arvense</i>, <i>Tripleurospermum inodorum</i>, <i>Persicaria maculata</i>, <i>Rumex crispus</i>, <i>Stellaria media</i>, <i>Euphorbia helioscopia</i>, <i>Plantago major</i>, <i>Rumex obtusifolius</i>, <i>Sonchus oleraceus</i>, <i>Sisymbrium officinale</i>, <i>Cirsium vulgare</i>, <i>Centaurea nigra</i>, <i>Potentilla anserina</i> with scattered <i>Rubus fruticosus</i> agg. scrub.</p>

**EC37 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
ER2	*8240 (LPE_1b)	Typical species include <i>Teucrium scorodonia</i> , <i>Geranium robertianum</i> , <i>Asplenium ruta-muraria</i> , <i>Asplenium scolopendrium</i> , <i>Tortella tortuosa</i> , <i>Fissidens dubius</i> , <i>Fragaria vesca</i> , <i>Sesleria caerulea</i> , <i>Mycelia muralis</i> , <i>Hedera helix</i> , <i>Ctenidium molluscum</i> , <i>Erica cinerea</i> , <i>Asperula cynanchica</i> , <i>Plantago maritima</i> , <i>Thymus polytrichus</i> , <i>Briza media</i> , <i>Calluna vulgaris</i> and <i>Hedera helix</i> . Invading scrub comprises <i>Corylus avellana</i> , <i>Prunus spinosa</i> , <i>Crataegus monogyna</i> , <i>Euonymus europaeus</i> and <i>Rubus fruticosus</i> agg. <b>EC37 R3</b>
GA1/GS2	n/a	<i>Achillea millefolium</i> , <i>Arrhenatherum elatius</i> , <i>Centurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Hypocharis radicata</i> , <i>Jacobaea vulgaris</i> , <i>Lotus corniculatus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Stellaria graminea</i> , <i>Taraxacum</i> agg., <i>Trifolium pratense</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> , <i>Vicia sepium</i>
GA1/WS1	n/a	30% scrub cover. <i>Arrhenatherum elatius</i> , <i>Capsella bursa-pastoris</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Jacobaea vulgaris</i> , <i>Lolium perenne</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Poa annua</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> , <i>Stellaria media</i> , <i>Trifolium repens</i> , <i>Calystegia sepium</i> , <i>Cirsium arvense</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Prunus spinosa</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus</i> agg., <i>Salix cinerea</i> subsp. <i>Oleifolia</i> , <i>Ulex europaeus</i> .
GS1	n/a	Low species-diversity variant. Typical species include <i>Trifolium repens</i> , <i>Cirsium arvense</i> , <i>Calliergonella cuspidata</i> , <i>Ranunculus repens</i> , <i>Dactylis glomerata</i> , <i>Lolium perenne</i> , <i>Cynosurus cristatus</i> , <i>Odontites verna</i> , <i>Cerastium fontanum</i> , <i>Trifolium pratense</i> , <i>Prunella vulgaris</i> , <i>Pteridium aquilinum</i> , <i>Plantago lanceolata</i> , <i>Brachythecium rutabulum</i> , <i>Holcus lanatus</i> , <i>Festuca rubra</i> , <i>Filipendula ulmaria</i> and <i>Bellis perennis</i> .
	n/a	Higher species-diversity variant. Typical species include <i>Cynosurus cristatus</i> , <i>Alopecurus pratensis</i> , <i>Trifolium repens</i> , <i>Cirsium palustre</i> , <i>Ranunculus repens</i> , <i>Ranunculus acris</i> , <i>Festuca rubra</i> , <i>Cerastium fontanum</i> , <i>Lolium perenne</i> , <i>Taraxacum officinale</i> , <i>Rumex acetosa</i> , <i>Trifolium pratense</i> , <i>Holcus lanatus</i> and <i>Plantago lanceolata</i> . <i>Leucanthemum vulgare</i> , <i>Trisetum flavescens</i> , <i>Thymus polytrichus</i> , <i>Lotus corniculatus</i> , <i>Briza media</i> and <i>Cirsium arvense</i> . <b>EC37 R5, EC37 R7 and 4956_R1</b>
	6210 and *6210 (GL3a)	Typical GS1 species (mentioned above) with calcareous indicator species frequent e.g. <i>Lotus corniculatus</i> , <i>Centaurea nigra</i> , <i>Briza media</i> , <i>Carex flacca</i> , <i>Daucus carota</i> , <i>Sesleria caerulea</i> , <i>Anthyllis vulneraria</i> and <i>Thymus polytrichus</i> ; and frequent orchids <i>Anacamptis pyramidalis</i> and <i>Dactylorhiza fuchsiae</i> . <b>EC37 R1, EC37 R4, EC37 R6 and EC37 R8</b>

**EC37 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS1/ED3	n/a	Patches of <i>Reynoutria japonica</i>  <i>Elytrigia repens, Geranium molle, Jacobaea vulgaris, Lapsana communis, Lolium perenne, Persicaria maculosa, Plantago lanceolata, Plantago major, Potentilla anserina, Rumex crispus, Sagina nodosa, Scorzonerooides autumnalis, Trifolium pratense</i>
GS1/ ER2	6210 (GL3A LPE_4B)	Species include <i>Sesleria albicans, Anacamptis pyramidalis, Briza media, Carex flacca, Thymus polytrichus, Teucrium scorodonia, Linum catharticum, Pilosella officinarum, Carlina vulgaris, Lotus corniculatus, Blackstonia perfoliata, Plantago maritima, Tortella tortuosa, Fissidens dubius and Ctenidium molluscum.</i>
GS2	n/a	<i>Arrhenatherum elatius</i> generally dominant with <i>Vicia cracca, Plantago lanceolata, Taraxacum officinale, Potentilla anserina, Potentilla reptans, Dactylis glomerata, Trifolium repens, Rhytidadelphus squarrosus, Rubus fruticosus agg., Ranunculus acris, Festuca rubra, Agrostis stolonifera, Holcus lanatus, Calystegia sepium, Cirsium arvense, Lathyrus pratensis, Heracleum sphondylium</i> . Where it occurs in a mosaic with *8240, there are some calcareous indicators (e.g. <i>Carex flacca, Briza media, Galium verum, Sesleria albicans, Leucanthemum vulgare, Dactylorhiza fuchsii</i> ) but not enough for 6210 and <i>A. elatius</i> still abundant in tall vegetation.
GS2/GS1	n/a	Roughly 60:40 GS2:GS1  GS2 species include <i>Achillea millefolium, Arrhenatherum elatius, Centurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium,</i>  GS1 species include <i>Campanula rotundifolia, Carex flacca, Carlina vulgaris, Centaurium erythraea, Centurea nigra, Conopodium majus, Cynosurus cristatus, Daucus carota, Lathyrus pratensis, Leucanthemum vulgare, Linum catharticum, Lotus corniculatus, Pilosella aurantiaca, Polygala vulgaris, Trifolium pratense</i>
GS2/WS1	n/a	Some areas of GS2 occur in a mosaic with small areas of WS1. Species present include <i>Achillea millefolium, Arrhenatherum elatius, Centurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus. agg., Salix cinerea subsp. Oleifolia, Ulex europaeus.</i>

**EC37 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
WL1/GS2	n/a	<i>Corylus avellana, Crataegus monogyna, Hedera helix, Prunus spinosa, Rubus fruticosus agg., Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypochaeris radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum officinale agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys and Vicia sepium.</i>
WN2	n/a	<i>Corylus avellana (D), Crataegus monogyna, Hedera helix (LD), Primula veris, Ilex aquifolium, Rubus fruticosus agg., Arum maculatum, Primula vulgaris, Prunus spinosa, Kindbergia praelonga, Thamnobryum alopecurum and Eurhynchium striatum.</i> Grades to WS1 at edges. <b>1973_R1 and 1979_R1</b>
WN2/ WS1	*8240 (LPW_2a in mosaic with WS1)	<i>Corylus avellana dominant (mostly &lt;3m in height) with typical *8240 (LPW) species in understorey e.g. Prunus spinosa, Rubus fruticosus agg., Sorbus aria, Sorbus aria agg.<sup>9</sup>, Fragaria vesca, Neckera crispa, Rosa spinosissima, Thuidium tamariscinum, Ilex aquifolium, Brachypodium sylvaticum and Hedera helix.</i> <b>EC37 R2</b>
WS1	n/a	Scrub with occasional mature <i>Fraxinus excelsior</i> . <i>Pteridium aquilinum</i> often abundant at edges. Additional species: <i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Salix cinerea subsp. oleifolia, Rubus fruticosus agg., Prunus spinosa, Corylus avellana</i> (particularly on limestone pavement), <i>Epilobium hirsutum, Chamerion angustifolium, Ulex europaeus</i> and <i>Hedera helix</i> . <b>1949_R1, 1974_R1 and 1982_R1</b>
WS1/GS1	n/a	60% Scrub area, the remainder improved grassland. Species list for both habitats as described in this table. <i>Reynoutria japonica</i> also present.
WS1/GS2	n/a	80% Scrub cover, remainder grassland habitat. Species list as described above in this table.
WS2	n/a	<i>Betula pendula, Alnus glutinosa Fraxinus excelsior, Acer pseudoplatanus</i> and <i>Ilex aquifolium</i>

<sup>9</sup> *Sorbus* species are difficult to identify and require a number of characteristics (and potentially genetic work) to definitely confirm species present in the *Sorbus aria* aggregate group, this includes both *Sorbus aria sensu stricto* and *Sorbus hibernica*. Variability is common with both *Sorbus* species and taxonomic difficulties are still an ongoing discussion throughout Britain and Europe (Fay and Rich, 2022). Fay, M.F., Rich, T.C.G. (2022) SORBUS ARIA: Rosaceae, *Curtis's Botanical Magazine*, 39(4), 655-668.

## Lackagh Quarry to the N84 Headford Road (Ch. 11+250 – Ch. 12+100) – Habitats between EC36, EC37 and EC39, including Lackagh Quarry

Lackagh Quarry to the N84 Headford Road - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
BL3/ED3	n/a	Species include <i>Capsella bursa-pastoris</i> , <i>Crepis sp.</i> , <i>Elytrigia repens</i> , <i>Geranium molle</i> , <i>Jacobaea vulgaris</i> , <i>Lapsana communis</i> , <i>Lolium perenne</i> , <i>Persicaria maculosa</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Potentilla anserina</i> , <i>Rumex crispus</i> , <i>Sagina nodosa</i> , <i>Scorzoneroidea autumnalis</i> , <i>Trifolium pratense</i> , <i>Tripleurospermum maritimum</i> .
BL3/GA2	n/a	Residential area. Grassland species include <i>Bellis perennis</i> , <i>Lolium perenne</i> , <i>Odontites vernus</i> , <i>Rumex acetosella</i> , <i>Trifolium pratense</i> .
BL3/GS1	n/a	Grassland species include <i>Campanula rotundifolia</i> , <i>Carex flacca</i> , <i>Carlina vulgaris</i> , <i>Centaurium erythraea</i> , <i>Centurea nigra</i> , <i>Conopodium majus</i> , <i>Cynosurus cristatus</i> , <i>Daucus carota</i> , <i>Lathyrus pratensis</i> , <i>Leucanthemum vulgare</i> , <i>Linum catharticum</i> , <i>Lotus corniculatus</i> , <i>Pilosella aurantiaca</i> , <i>Polygala vulgaris</i> , <i>Trifolium pratense</i> .
ED2	n/a	<i>Festuca rubra</i> , <i>Centaurea nigra</i> , <i>Plantago maritima</i> , <i>Didymodon insulanus</i> , <i>Rubus fruticosus agg.</i> , <i>Carex flacca</i> , <i>Potentilla sterilis</i> , <i>Teucrium scorodonia</i> , <i>Agrostis capillaris</i> and <i>Calliergonella cuspidata</i> <b>4560_R1, 5379_R1 and 5413_R1</b>
ED3	n/a	<i>Achillea millefolium</i> , <i>Agrostis canina</i> , <i>Arrhenatherum elatius</i> , <i>Bellis perennis</i> , <i>Blackstonia perfoliata</i> , <i>Briza media</i> , <i>Carex panicea</i> , <i>Centaurea nigra</i> , <i>Centaurium erythraea</i> , <i>Dactylis glomerata</i> , <i>Festuca rubra</i> , <i>Festuca spp.</i> , <i>Galium verum</i> , <i>Gymnadenia conopsea</i> , <i>Hypericum pulchrum</i> , <i>Leontodon autumnalis</i> , <i>Leucanthemum vulgare</i> , <i>Lolium perenne</i> , <i>Lotus corniculatus</i> , <i>Odontites verna</i> , <i>Pilosella officinarum</i> , <i>Pimpinella major</i> , <i>Potentilla reptans</i> , <i>Prunus vulgaris</i> , <i>Pteridium aquilinum</i> , <i>Ranunculus repens</i> , <i>Rubus fruticosus agg.</i> , <i>Rumex spp.</i> , <i>Salix cinerea</i> , <i>Jacobaea vulgaris</i> , <i>Solidago virgaurea</i> , <i>Succisa pratensis</i> , <i>Tussilago farfara</i> , <i>Ulex europaeus</i> and <i>Vicia cracca</i> <b>5412_R1 and 5381_R1</b>
ED3/GS1/ WS1	n/a	<i>Capsella bursa-pastoris</i> , <i>Crepis sp.</i> , <i>Elytrigia repens</i> , <i>Geranium molle</i> , <i>Jacobaea vulgaris</i> , <i>Lapsana communis</i> , <i>Lolium perenne</i> , <i>Persicaria maculosa</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Potentilla anserina</i> , <i>Rumex crispus</i> , <i>Sagina nodosa</i> , <i>Scorzoneroidea autumnalis</i> , <i>Trifolium pratense</i> , <i>Tripleurospermum maritimum</i> , <i>Campanula rotundifolia</i> , <i>Carex flacca</i> , <i>Carlina vulgaris</i> , <i>Centaurium erythraea</i> , <i>Centurea nigra</i> , <i>Conopodium majus</i> , <i>Cynosurus cristatus</i> , <i>Daucus carota</i> , <i>Lathyrus pratensis</i> , <i>Leucanthemum vulgare</i> , <i>Linum catharticum</i> , <i>Lotus corniculatus</i> , <i>Pilosella aurantiaca</i> , <i>Polygala vulgaris</i> , <i>Trifolium pratense</i> , <i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Prunus spinosa</i> , <i>Rubus fruticosus agg.</i> , <i>Salix sp.</i> , <i>Sorbus aria</i> .

**Lackagh Quarry to the N84 Headford Road - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
ED3/GS1/ WS1/FL8	n/a	<i>Capsella bursa-pastoris, Crepis sp., Elytrigia repens, Geranium molle, Jacobaea vulgaris, Lapsana communis, Lolium perenne, Persicaria maculosa, Plantago lanceolata, Plantago major, Potentilla anserina, Rumex crispus, Sagina nodosa, Scorzoneroidea autumnalis, Trifolium pratense, Tripleurospermum maritimum, Campanula rotundifolia, Carex flacca, Carlina vulgaris, Centaurium erythraea, Centurea nigra, Conopodium majus, Cynosurus cristatus, Daucus carota, Lathyrus pratensis, Leucanthemum vulgare, Linum catharticum, Lotus corniculatus, Pilosella aurantiaca, Polygala vulgaris, Trifolium pratense, Corylus avellana, Crataegus monogyna, Prunus spinosa, Rubus fruticosus agg., Salix sp., Sorbus aria, Juncus sp., Phragmites australis, Salix sp., Typha latifolia.</i>
GA1	n/a	<i>Arrhenatherum elatius, Capsella bursa-pastoris, Cerastium fontanum, Jacobaea vulgaris, Poa annua, Ranunculus acris, Stellaria media, Agrostis spp., Bellis perennis, Centaurea nigra, Cirsium arvense, Cirsium spp., Cynosurus cristatus, Dactylis glomerata, Epilobium montanum, Holcus lanatus, Lolium perenne, Odontites vernus, Pimpinella major, Plantago lanceolata, Plantago major, Polypodium spp., Prunella vulgaris, Prunus spinosa, Pteridium aquilinum, Ranunculus repens, Rumex spp., Trifolium repens and Urtica dioica</i>
GA1/WS1	n/a	Mostly GA1 (as above) with small patches of WS1. Species in scrub area include <i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia</i> and <i>Ulex europaeus</i> .
GS1	n/a	Calcareous grassland that does not meet EU Annex I habitat criteria. Species include <i>Agrostis canina, Arrhenatherum elatius, Bellis perennis, Briza media, Carex spp., Centaurea nigra, Cirsium arvense, Cirsium vulgare, Ctenidium molluscum, Cynosurus cristatus, Dactylis glomerata, Holcus lanatus, Leontodon hispidus, Leontodon saxatilis, Leucanthemum vulgare, Lolium perenne, Lolium spp., Lotus corniculatus, Pimpinella major, Plantago lanceolata, Polygonum sp., Potentilla reptans, Prunella vulgaris, Ranunculus repens, Rumex obtusifolius, Rumex spp., Jacobaea vulgaris, Solidago virgaurea, Trifolium dubium, Trifolium pratense and Trifolium repens</i> <b>1970_R1, 4561_R1, 4563_R1, 4563_R2, 5391_R1, 5403_R1, 5407_R1, 5408_R1, 5411_R1 and 5629_R1</b>
	6210	Annex I habitat with the following species: <i>Briza media, Calliergonella cuspidata, Centaurea nigra, Festuca rubra, Anthoxanthum odoratum, Anthyllis vulneraria, Carex panicea, Pimpinella major, Plantago lanceolata, Achillea millefolium, Blackstonia perfoliata, Leucanthemum vulgare, Lotus corniculatus, Rubus fruticosus agg., Centaurium erythraea, Tussilago farfara, Carex flacca, Hypericum pulchrum, Leontodon hispidus, Linum catharticum, Potentilla anserina, Prunella vulgaris, Taraxacum officinale agg., Trifolium pratense, odoratum, Agrostis capillaris, Knautia arvensis,</i>

Lackagh Quarry to the N84 Headford Road - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
		<i>Pimpinella major, Cotoneaster sp., Daucus carota, Helictotrichon pubescens, Hypericum pulchrum, Lathyrus pratensis, Plantago lanceolata, Potentilla anglica, Ranunculus repens, Solidago virgaurea, Alchemilla vulgaris, Calystegia sepium, Cirsium dissectum, Teucrium scorodonia, Agrostis canina, Alchemilla mollis, Campanula rotundifolia, Dactylorhiza fuchsii, Lolium perenne, Odontites vernus, Plantago major, Plantago maritima, Potentilla reptans, Rumex spp., Salix cinerea, Trifolium dubium and Vicia cracca</i> <b>LQ-N84 R1 and LQ-N84 R2</b>
GS1/GS2	n/a	Small area of grassland on rocky mound, waste land that is becoming encroached by bramble and scrub; Small patch of <i>Reynoutria japonica, Angelica sylvestris, Anthoxanthum odoratum, Arrhenatherum elatius, Calystegia sepium, Crataegus monogyna, Dactylis glomerata, Epipactis helleborine, Festuca rubra, Festuca vivipara, Homalothecium sericeum, Hylocomium splendens, Lathyrus pratensis, Leontodon hispidus, Leucanthemum vulgare, Linum catharticum, Lotus corniculatus, Lythrum salicaria, Petasites pyrenaicus, Pimpinella major, Pimpinella saxifraga, Plantago lanceolata, Potentilla anserina, Potentilla reptans, Pteridium aquilinum, Rubus fruticosus agg., Salix caprea, Salix cinerea, Jacobaea vulgaris, Trifolium dubium, Trifolium pratense and Vicia cracca</i>
GS1/WS1	n/a	Species as described in this table.
GS2	n/a	<i>Arrhenatherum elatius, Calystegia sepium, Centaurea nigra, Dactylis glomerata, Epilobium montanum, Filipendula ulmaria, Fraxinus excelsior, Lathyrus pratensis, Leucanthemum vulgare, Plantago lanceolata, Prunus spinosa, Ranunculus repens, Rubus fruticosus agg., Rumex crispus, Salix cinerea, Jacobaea vulgaris, Tussilago farfara and Ulex europaeus</i> <b>5410_R1</b>
HD1	n/a	<i>Dactylis glomerata, Prunus spinosa, Pteridium aquilinum and Rubus fruticosus agg.</i>
WL1	n/a	<i>Calystegia sepium, Cirsium arvense, Corylus avellana, Crataegus monogyna, Euonymus europaeus, Fraxinus excelsior, Hedera helix, Ilex aquifolium, Lathyrus pratensis, Lonicera periclymenum, Prunus spinosa, Pteridium aquilinum, Quercus robur, Rosa canina, Rubus fruticosus agg., Salix caprea, Salix cinerea, Sorbus aria, Urtica dioica and Viburnum opulus</i>
WL1/WS1	n/a	WL1 as above, with <i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia and Ulex europeaus</i>
WN2	n/a	<i>Fraxinus excelsior, Crataegus monogyna, Hedera helix, Ilex aquifolium</i> <b>4033_R1</b>

### Lackagh Quarry to the N84 Headford Road - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
WS1	n/a	<i>Prunus spinosa, Crataegus monogyna, Urtica dioica, Rubus fruticosus agg., Calliergonella cuspidata, Salix aurita, Fragaria vesca, Galium odoratum, Reynoutria japonica, Veronica chamaedrys and Salix caprea.</i> <b>4563 R2</b>
WL1	n/a	<i>Calystegia sepium, Cirsium arvense, Corylus avellana, Crataegus monogyna, Euonymus europaeus, Fraxinus excelsior, Hedera helix, Ilex aquifolium, Lathyrus pratensis, Lonicera periclymenum, Prunus spinosa, Pteridium aquilinum, Quercus robur, Rosa canina, Rubus fruticosus agg., Salix caprea, Salix cinerea, Sorbus aria, Urtica dioica and Viburnum opulus</i>
WL1/WS1	n/a	WL1 as above, with <i>Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia and Ulex europeaus</i>
WN2	n/a	<i>Fraxinus excelsior, Crataegus monogyna, Hedera helix, Ilex aquifolium</i> <b>4033 R1</b>
WS1	n/a	<i>Prunus spinosa, Crataegus monogyna, Urtica dioica, Rubus fruticosus agg., Calliergonella cuspidata, Salix aurita, Fragaria vesca, Galium odoratum, Veronica chamaedrys and Salix caprea.</i> <b>4563 R2</b>

### EC39

EC39 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ED3	n/a	<i>Cirsium arvense, Tripleurospermum inodorum, Polygonum aviculare, Plantago major, officinale, Cirsium arvensis, Plantago major, Potentilla anserina with scattered Rubus fruticosus agg. scrub.</i>
ED3/GS2	n/a	ED3 species as above. Grassland species include <i>Achillea millefolium, Arrhenatherum elatius, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Hypocharis radicata, Jacobaea vulgaris, Lotus corniculatus, Plantago lanceolata, Ranunculus acris, Ranunculus repens, Rumex crispus, Stellaria graminea, Taraxacum agg., Trifolium pratense, Urtica dioica, Veronica chamaedrys, Vicia sepium.</i>
ER2	*8240 (LPE_1b)	Exposed limestone pavement: <i>Hedera helix, Corylus avellana, Prunus spinosa, Geranium robertianum, Sesleria albicans, Asplenium ruta-muraria, Teucrium scorodonia, Mycelis muralis, Epipactis helleborine, Fissidens dubius, Ctenidium molluscum, Tortella tortuosa and Scapania asper</i> in grykes. <b>EC39 R1 and EC39 R2</b>

**EC39 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
FL5	n/a	<i>Nymphaea alba, Elodea Canadensis, Lemna sp.</i> The smallest water body near the eastern edge had <i>Potamogeton natans</i> , <i>Hippuris vulgaris</i> , <i>Elodea canadensis</i> , <i>Alisma plantago-aquatica</i> and <i>Ranunculus trichophyllus</i> on exposed mud at edge.
FS1	n/a	<i>Phragmites australis, Schoenoplectus lacustris</i> and <i>Cladium mariscus</i> are the main species. <a href="#">EC39 R12 and 2073_R2</a>
	*7210	<i>Cladium mariscus</i> and <i>Phragmites australis</i> .
FW4	n/a	Mostly no emergent vegetation. Some drains with <i>Sparganium natans</i> , <i>Utricularia vulgaris</i> and <i>Myriophyllum sp.</i>
GA1	n/a	<i>Lolium perenne</i> and <i>Trifolium repens</i> sward. <i>Cirsium arvense</i> and <i>Rumex obtusifolius</i> . Also <i>Poa pratensis</i> , <i>Odontites verna</i> and <i>Polygonum persicaria</i> . <a href="#">2374_R2</a>
GS1	n/a	<i>Trifolium repens, Cirsium arvense, Calliergonella cuspidata, Ranunculus repens, Dactylis glomerata, Lolium perenne, Cynosurus cristatus, Anthoxanthum odoratum, Cerastium fontanum, Trifolium repens, Prunella vulgaris, Pteridium aquilinum, Plantago lanceolata, Brachythecium rutabulum, Holcus lanatus, Festuca rubra, Filipendula ulmaria</i> and <i>Bellis perennis, Achillea millefolium, Agrostis stolonifera, Arrhenatherum elatius, Cirsium arvense, Heracleum sphondylium, Jacobaea vulgaris, Plantago major, Potentilla anserina, Ranunculus acris, Stachys palustris, Trifolium pratense, Urtica dioica, Veronica chamaedrys</i>
	n/a	High-diversity calcareous grassland. Aforementioned species with calcareous indicator species frequent e.g. <i>Lotus corniculatus, Centaurea nigra, Briza media, Carex flacca, Daucus carota, Sesleria caerulea, Anthyllis vulneraria</i> and <i>Thymus polytrichus</i> ; and frequent orchids <i>Anacamptis pyramidalis, Dactylorhiza fuchsii</i> . <a href="#">EC39 R5 and 2374_R1</a>
	6210 (GL3a)	Aforementioned species and <i>Agrostis capillaris, Trifolium pratense, Odontites verna, Ranunculus acris, Festuca rubra, Leucanthemum vulgare, Centaurea nigra, Hypochaeris radicata, Prunella vulgaris, Plantago lanceolata, Blackstonia perfoliata</i> and <i>Galium verum</i> . <a href="#">EC39 R11 and 2096_R1</a>
GS1/ED3	6210	GS1 as above. <i>Blackstonia perfoliata, Buddleja davidii, Centranthus ruber, Centaurea erythraea, Centaurea nigra, Hypericum perforatum, Leucanthemum vulgare, Lotus corniculatus, Pilosella officinarum, Plantago lanceolata, Trifolium pratense, Ulex europaeus</i> . <i>Reynoutria japonica</i> also recorded.

### EC39 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GS2	n/a	<i>Arrhenatherum elatius, Vicia cracca, Plantago lanceolata, Taraxacum officinale, Potentilla anserina, Dactylis glomerata, Trifolium repens, Rubus fruticosus agg., Ranunculus acris, Festuca rubra, Agrostis stolonifera, Holcus lanatus, Calystegia sepium, Cirsium arvense, Lathyrus pratensis, Heracleum sphondylium, and Rhytidadelphus squarrosus.</i> <b>2080_R2 and 2375_R1</b>
	6510	Typical species: <i>Leucanthemum vulgare, Trifolium pratense, Potentilla anglica, Plantago lanceolata, Helictotrichon pubescens, Odontites verna, Calliergonella cuspidata, Trifolium dubium, Trisetum flavescens, Festuca rubra, Holcus lanatus, Leontodon hispidus, Cerastium fontanum, Pimpinella major, Carex flacca and Daucus carota.</i> <b>EC39 R13</b>
GS2/WS1	n/a	Species as described elsewhere in this table. <i>Reynoutria japonica</i> also recorded.
GS4	6410 (GL1d and GL1c)	<i>Molinia caerulea, Carex panacea, Carex nigra, Carex elata, Carex echinata, Carex pulicaris, Carex disticha, Carex ovalis, Juncus articulatus, Filipendula ulmaria, Potentilla erecta, Cirsium dissectum and Achillea ptarmica. Calliergonella cuspidata</i> is the main bryophyte, but <i>Climaciun dendroides</i> and <i>Rhytidadelphus squarrosus</i> occur towards grazed edges. At the edges of the wet meadows, where <i>Molinia caerulea</i> is very sparse or absent, other species occurring more frequently include <i>Potentilla anserina, Carex nigra, Holcus lanatus, Ranunculus repens, Galium palustre, Festuca arundinacea</i> and <i>Eleocharis palustris</i> . <b>EC39 R6, EC39 R7, EC39 R8, EC39 R10, EC39 R14 and EC39 R15</b>
	n/a	<i>Potentilla anserina, Agrostis stolonifera, Ranunculus flammula, Glyceria fluitans, Juncus articulates, Filipendula ulmaria, Molinia caerulea, Carex binervis, Alopecurus geniculatus, Phragmites australis, Calliergonella cuspidata</i> <b>2091_R1 and 2073_R1</b>
PF1	n/a	Non-annex habitat as the vegetation does not contain brown mosses. Typical species are <i>Phragmites australis, Schoenus nigricans, Myrica gale, Carex panicea, Carex nigra, Carex elata, Molinia caerulea, Hydrocotyle vulgaris, Menyanthes trifoliata, Filipendula ulmaria, Juncus acutiflorus, Agrostis stolonifera, Epilobium palustre</i> and <i>Ranunculus flammula</i> . <b>EC39 R3 and 2076_R1</b>
	7230 (RFLU4)	<i>Schoenus nigricans, Juncus subnodulosus, Molinia caerulea, Hydrocotyle vulgaris, Carex panacea, C. peliocarpa, Juncus articulatus, Ranunculus flammula, Cirsium dissectum, Parnassia palustris, Drosera anglica, Calliergonella cuspidata, Scorpidium scorpioides, S. cossonii, Campylium stellatum, Myrica gale</i> <b>EC39 R9</b>



**EC39 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
WN2/ER2	*8240 (LPE_2a)	Wooded limestone pavement: dominated by <i>Corylus avellana</i> with <i>Crataegus monogyna</i> and <i>Prunus spinosa</i> scrub. Bryophytes include <i>Neckera complanata</i> , <i>Rhytidadelphus triquetrus</i> , <i>Eurhynchium striatum</i> , <i>Neckera complanata</i> and <i>Thuidium tamariscinum</i> as well as <i>Ctenidium molluscum</i> and <i>Thamnobryum alopecurum</i> .
WN2	n/a	<i>Corylus avellana</i> dominated canopy with scrub ( <i>Prunus spinosa</i> & <i>Crataegus monogyna</i> ). Understorey with typical WN2 woodland flora such as <i>Circaea lutetiana</i> , <i>Phyllitis scolopendrium</i> , <i>Viola</i> sp., <i>Primula vulgaris</i> , <i>Hedera helix</i> , <i>Geum urbanum</i> , <i>Rumex sanguineus</i> , <i>Arum maculatum</i> , <i>Fragaria vesca</i> , <i>Brachypodium sylvaticum</i> and <i>Thamnobryum alopecurum</i> . <b>2086_R1 and 2086_R2</b>
WS1	n/a	<i>Corylus avellana</i> , <i>Crataegus monogyna</i> , <i>Salix cinerea</i> and <i>Salix caprea</i> trees. <i>Prunus spinosa</i> is frequent in the more open areas with <i>Rubus fruticosus</i> agg. and <i>Pteridium aquilinum</i> locally abundant. <i>Fraxinus excelsior</i> . <i>Pteridium aquilinum</i> often abundant at edges. Additional species: <i>Rubus fruticosus</i> , <i>Prunus spinosa</i> , (particularly on limestone pavement), <i>Epilobium hirsutum</i> , <i>Chamerion angustifolium</i> , <i>Ulex europaeus</i> and <i>Hedera helix</i> . <b>2080_R1</b>
WS1/WN6	n/a	Scrub grading to wet woodland at north-western edge of Ballindooley Lough. <i>Salix cinerea</i> , <i>Phragmites australis</i> , <i>Mentha aquatica</i> , <i>Filipendula ulmaria</i> , <i>Lysimachia</i> sp. and <i>Carex</i> sp.

**Ballindooley to Parkmore Industrial Estate/Galway Racecourse (Ch. 12+550 – Ch. 14+400) – Habitats between EC39, EC42, EC44, EC47, EC49 and the Parkmore Industrial Estate/Galway Racecourse**

<b>Ballindooley to Parkmore Industrial Estate/Galway Racecourse - Species Lists &amp; Relevés</b>		
Habitat code	Annex I habitat	Key species
BL3/ED3	n/a	Species include <i>Capsella bursa-pastoris</i> , <i>Crepis</i> sp., <i>Elytrigia repens</i> , <i>Geranium molle</i> , <i>Jacobaea vulgaris</i> , <i>Lapsana communis</i> , <i>Lolium perenne</i> , <i>Persicaria maculosa</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Potentilla anserina</i> , <i>Rumex crispus</i> , <i>Sagina nodosa</i> , <i>Scorzoneroidea autumnalis</i> , <i>Trifolium pratense</i> , <i>Tripleurospermum maritimum</i> .
ED2	n/a	<i>Dactylis glomerata</i> , <i>Poa trivialis</i> , <i>Lolium perenne</i> <b>5177_R1</b>

**Ballindooley to Parkmore Industrial Estate/Galway Racecourse - Species Lists & Relevés**

<b>Habitat code</b>	<b>Annex I habitat</b>	<b>Key species</b>
ED3	n/a	<i>Achillea millefolium, Anagallis arvensis, Anthoxanthum odoratum, Arrhenatherum elatius, Bellis perennis, Blackstonia perfoliata, Buddleja davidii, Carex flacca, Carex nigra, Centaurea nigra, Centaurium erythraea, Cirsium sp., Crepis sp., Cynosurus cristatus, Dactylis glomerata, Dactylorhiza fuchsia, Epilobium ciliatum, Epilobium montanum, Epilobium hirsutum, Epilobium parviflorum, Euphrasia officinalis agg., Festuca rubra, Hedera helix, Holcus lanatus, Hypericum perforatum, Leucanthemum vulgare, Linum catharticum, Lotus corniculatus, Medicago lupulina, Odontites vernus, Plantago lanceolata, Poa pratensis, Potentilla anserina, Potentilla reptans, Primula veris, Prunella vulgaris, Rubus fruticosus agg., Rumex spp., Salix caprea., Salix cinerea, Scrophularia auriculata, Jacobaea vulgaris, Sonchus asper, Stachys palustris, Tussilago farfara and Veronica chamaedrys</i> <b>4585_R2 and 4804_R1</b>
ED3/WS1	n/a	<i>Buddleja davidii, Salix cinerea and common ruderal species spreading on recolonizing ground. Grazed by horses.</i>
GA1	n/a	<i>Achillea millefolium, Bellis perennis, Buddleja davidii, Crataegus monogyna, Fraxinus excelsior, Arrhenatherum elatius, Potentilla anserina, Cerastium fontanum, Cerastium glomeratum, Cirsium arvense, Cirsium spp., Cynosurus cristatus, Dactylis glomerata, Elytrigia repens, Heracleum sphondylium, Holcus lanatus, Lolium perenne, Plantago lanceolata, Poa trivialis, Ranunculus repens, Rumex obtusifolius, Rumex spp., Jacobaea vulgaris, Taraxacum officinale agg., Trifolium repens and Urtica dioica</i> <b>5115_R1, 5126_R1, 5130_R1, 5131_R1, 5138_R1, 5138_R2 and 5143_R1</b>
GA1/GS2	n/a	Occasional <i>Knautia arvensis</i> and <i>Achillea millefolium</i> . GS2 species as described in this table.
GA1/WS1	n/a	Species as described for GA1 and WS1 in this table.
GA1/GS4/ WS1/GS2/ GA2	n/a	Species as described for these habitats in this table. Ungrazed.
GA2	n/a	<i>Achillea millefolium, Bellis perennis, Cerastium fontanum, Lolium perenne, Plantago lanceolata, Ranunculus repens, Taraxacum officinale agg. and Trifolium pretense</i> <b>5140_R1</b>
GS1	n/a	<i>Agrostis stolonifera, Arrhenatherum elatius, Bellis perennis, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Cirsium repens, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Lolium perenne, Lolium spp., Plantago lanceolata, Potentilla anserina, Pteridium aquilinum, Heracleum spondylium, Prunella vulgaris, Ranunculus repens, Ranunculus repens, Rubus fruticosus Rumex obtusifolia., Taraxacum officinale agg. and Urtica dioica</i> <b>4782_R1, 4783_R1, 5133_R1, 5135_R1 and 5196_R1</b>

**Ballindooley to Parkmore Industrial Estate/Galway Racecourse - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS1	6210	<i>Sesleria caerulea, Carex flacca, Juncus conglomeratus, Lotus corniculatus, Leontodon hispidus, Potentilla palustris, Calliergonella cuspidata, Ctenidium molluscum, Scleropodium purum, Dicranum scoparium</i> <b>4585_R1</b>
GS2	n/a	Species-poor variant. <i>Arrhenatherum elatius, Agrostis capillaris, Anthoxanthum odoratum, Holcus lanatus, Phleum pratense, Dactylis glomerata, Plantago lanceolata, Cirsium arvense, Ranunculus acris, Ranunculus repens, Cerastium fontanum, Leucanthemum vulgare, Epilobium ciliatum, Potentilla anserina, Scorzoneroidea autumnalis and Taraxacum officinale agg.</i> <b>5239_R1</b>
	n/a	More species-rich variant. Species include: <i>Agrostis capillaris, Agrostis stolonifera, Alopecurus pratensis, Anthoxanthum odoratum, Arrhenatherum elatius, Calystegia sepium, Centaurea nigra, Cerastium fontanum, Cirsium arvense, Dactylis glomerata, Heracleum sphondylium, Holcus lanatus, Phleum pratense, Plantago lanceolata, Potentilla anserina, Ranunculus acris, Ranunculus repens, Achillea millefolium, Pteridium aquilinum, Rubus fruticosus agg., Rhinanthus minor, Cynosurus cristatus, Epilobium hirsutum, Salix sp., Buddleja davidii, Rumex spp., Scorzoneroidea autumnalis, Trifolium repens and Urtica dioica</i>
GS4	n/a	<i>Calliergonella cuspidata, Carex disticha, Carex flacca, Carex hirta, Cirsium arvense, Dactylis glomerata, Equisetum arvense, Holcus lanatus, Juncus effusus, Juncus inflexus, Lathyrus pratensis, Lythrum salicaria, Iris pseudacorus, Filipendula ulmaria, Persicaria amphibia, Phleum pratense, Plantago lanceolata, Poa trivialis, Rumex crispus, Rumex obtusifolius, Scorzoneroidea autumnalis, Taraxacum officinale agg. and Trifolium dubium</i>
WD1	n/a	<i>Acer pseudoplatanus, Fagus sylvatica, Fraxinus excelsior, Rubus fruticosus agg. and Urtica dioica</i>
WL1	n/a	<i>Alnus incana, Anthriscus sylvestris, Arrhenatherum elatius, Asplenium scolopendrium, Brachypodium sylvaticum, Calystegia sepium, Circaeа lutetiana, Convolvulus arvensis, Corylus avellana, Crataegus monogyna, Dactylis glomerata, Dryopteris filix-mas, Euonymus europaeus, Fraxinus excelsior, Fuchsia magellanica, Galium aparine, Geranium robertianum, Geum urbanum, Hedera helix, Heracleum sphondylium, Lathyrus pratensis, Lonicera periclymenum, Prunus domestica, Prunus spinosa, Pteridium aquilinum, Ribes spp., Rosa canina, Rosa spp., Rubus fruticosus agg., Rumex sanguineus, Salix cinerea, Salix spp., Sambucus nigra, Urtica dioica, Vicia sepium and X Cuprocyparis leylandii</i>
WL2	n/a	<i>Acer pseudoplatanus, Alnus incana, Betula sp., Cornus sp., Cupressus x leylandii, Lonicera nitida, Picea glauca, Pinus radiata and Sorbus aucuparia, Acer sp., Fraxinus excelsior, Populus tremula</i>

Ballindooley to Parkmore Industrial Estate/Galway Racecourse - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
WL2/WS1	n/a	<i>Acer pseudoplatanus, Acer sp., Cupressus x leylandii, Fraxinus excelsior, Polpulus tremula, Calystegia sepium, Cirsium arvense, Crataegus monogyna, Ilex aquifolium, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Salix cinerea subsp. oleifolia, Ulex europeaus</i>
WN2	n/a	<i>Acer pseudoplatanus, Corylus avellana, Fraxinus excelsior, Hedera helix, Pteridium aquilinum, Rubus fruticosus agg., Salix caprea and Salix cinereal</i> <b>4572_R1</b>
WS1	n/a	<i>Alnus glutinosa, Alnus incana, Arrhenatherum elatius, Crataegus monogyna, Dactylis glomerata, Fraxinus excelsior, Hebe sp., Hedera helix, Plantago lanceolata, Prunus spinosa, Prunus laurocerasus, Rubus fruticosus agg., Salix cinerea and Sorbaria sp.</i> <b>4822_R1</b>
WS1/GS2	n/a	Species as described above.
WS1/BL3/ ED3	n/a	Species as described above.

## EC42

EC42 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ER2	*8240 (LPE_1B)	Open pavement areas have a characteristic sparse flora. The most conspicuous species include <i>Rosa spinosissima, Corylus avellana, Prunus spinosa, Mycelis muralis, Asplenium ruta-muraria, Jacobaea vulgaris, Teucrium scorodonia, Thymus polytrichus, Lotus corniculatus, Plantago maritima, Geranium robertianum, Phyllitis scolopendrium, Sesleria albicans and Carex flacca.</i> <b>EC42 R1, EC42 R2 and EC42 R5</b>
	*8240 (Wooded) (LPE_2B)	The dominant shrub/tree species is <i>Corylus avellana</i> with <i>Fraxinus excelsior, Prunus spinosa, Crataegus monogyna, Ilex aquifolium</i> and <i>Sorbus aria</i> also frequent in the low canopy. Common ground layer species include <i>Brachypodium sylvaticum, Rubus fruticosus, Hedera helix, Potentilla sterilis, Neckera crispa, Fragaria vesca, Thuidium tamariscinum, Primula vulgaris</i> and <i>Thamnobryum alopecurum</i> .
GA1	n/a	The characteristic species noted included <i>Lolium perenne, Holcus lanatus, Cirsium arvense, Cirsium vulgare, Trifolium repens, Taraxacum officinale</i> and <i>Rumex obtusifolius</i> .

**EC42 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GM1	n/a	The main species in the vegetation include <i>Juncus articulatus</i> , <i>Juncus effusus</i> , <i>Mentha aquatica</i> , <i>Galium palustre</i> , <i>Ranunculus repens</i> , <i>Comarum palustre</i> , <i>Carex nigra</i> , <i>Carex panacea</i> , <i>Carex disticha</i> , <i>Carex echinata</i> , <i>Carex rostrata</i> , <i>Cirsium palustre</i> , <i>Epilobium</i> sp., <i>Potentilla anserina</i> , <i>Luzula campestris</i> , <i>Menyanthes trifoliata</i> , <i>Hypericum tetrapterum</i> , <i>Filipendula ulmaria</i> , <i>Molinia caerulea</i> , <i>Salix aurita</i> , <i>Anthoxanthum odoratum</i> , <i>Hydrocotyle vulgaris</i> , <i>Persicaria amphibia</i> , <i>Eleocharis palustris</i> , <i>Glyceria fluitans</i> , <i>Apium nodiflorum</i> and the wetland moss <i>Calliergonella cuspidata</i> .
GS1	n/a	Common calcareous grassland species noted include <i>Lotus corniculatus</i> , <i>Briza media</i> , <i>Carex flacca</i> , <i>Galium verum</i> , <i>Linum catharticum</i> , <i>Thymus polytrichus</i> and <i>Leontodon</i> sp. <b>2355_R1</b>
	6210	Typical species include <i>Lotus corniculatus</i> , <i>Briza media</i> , <i>Molinia caerulea</i> , <i>Carex flacca</i> , <i>Lathyrus pratensis</i> , <i>Scleropodium purum</i> , <i>Calliergonella cuspidata</i> , <i>Euphrasia</i> sp., <i>Centaurea nigra</i> , <i>Holcus lanatus</i> , <i>Hypericum maculatum</i> , <i>Potentilla erecta</i> , <i>Thuidium tamariscinum</i> , <i>Hypochaeris radicata</i> , <i>Trifolium pratense</i> , <i>Ctenidium molluscum</i> , <i>Leucanthemum vulgare</i> , <i>Festuca rubra</i> , <i>Hypericum pulchrum</i> , <i>Potentilla sterilis</i> , <i>Danthonia decumbens</i> , <i>Linum catharticum</i> , <i>Thymus polytrichus</i> , <i>Prunella vulgaris</i> , <i>Veronica chamaedrys</i> , <i>Daucus carota</i> and <i>Galium verum</i> . <b>EC42 R4</b>
GS2	n/a	<i>Arrhenatherum elatius</i> tends to dominate the tall grassy vegetation with <i>Centaurea nigra</i> , <i>Dactylis glomerata</i> , <i>Holcus lanatus</i> , <i>Trifolium repens</i> and <i>Anthoxanthum odoratum</i> .
GS4	n/a	<i>Arrhenatherum elatius</i> , <i>Convolvulus arvensis</i> , <i>Dactylis glomerata</i> , <i>Epilobium hirsutum</i> , <i>Filipendula ulmaria</i> , <i>Lythrum salicaria</i> , <i>Plantago lanceolata</i> , <i>Potentilla anserina</i> , <i>Rumex acetosa</i> , <i>Salix</i> sp., <i>Urtica dioica</i> , <i>Vicia sepium</i> , <i>Rumex crispus</i> , <i>Anthoxanthum odoratum</i> , <i>Carex nigra</i> , <i>Carex echinata</i> , <i>Cirsium palustre</i> , <i>Rhytidiodelphus squarrosum</i> <b>2356_R1</b>
WN2	*8240	<i>Corylus avellana</i> , <i>Ilex aquifolium</i> , <i>Hedera helix</i> , <i>Brachypodium sylvaticum</i> , <i>Fraxinus excelsior</i> , <i>Potentilla sterilis</i> , <i>Rubus fruticosus</i> , <i>Crataegus monogyna</i> , <i>Fragaria vesca</i> , <i>Primula vulgaris</i> , <i>Taraxacum</i> agg., <i>Brachythecium rutabulum</i> , <i>Geum urbanum</i> , <i>Lonicera periclymenum</i> , <i>Prunus spinosa</i> , <i>Thamnobryum alopecurum</i> , <i>Viola</i> sp., <i>Thuidium tamariscinum</i> and <i>Phyllitis scolopendrium</i> . <b>EC42 R3</b>
WS1	n/a	<i>Corylus avellana</i> , <i>Prunus spinosa</i> , <i>Crataegus monogyna</i> , <i>Ilex aquifolium</i> , <i>Sorbus aria</i> , <i>Rubus fruticosus</i> , <i>Hedera helix</i> , <i>Fragaria vesca</i> , <i>Thuidium tamariscinum</i> , <i>Geranium robertianum</i> , <i>Primula vulgaris</i> and <i>Kindbergia praelonga</i> . <b>2354_R1</b>

WS1/GS1	n/a	Mature <i>Fraxinus excelsior</i> . Species as described above.
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## EC44

EC44 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ER2	*8240 (LPE_1e)	<i>Hedera helix, Corylus avellana, Sesleria albicans, Teucrium scorodonia, Pteridium aquilinum, Neckera crispa, Ctenidium molluscum</i> and <i>Rubia peregrina</i>
GS1	n/a	<i>Briza media, Dactylis glomerata, Anthoxanthum odoratum, Holcus lanatus, Festuca rubra, Centaurea nigra, Linum catharticum, Lotus corniculatus, Euphrasia sp., Carex flacca, Rubus fruticosus, Blackstonia perfoliata, Daucus carota, Leucanthemum vulgare, Hypericum androsaemum</i> and <i>Potentilla reptans</i> . <b>EC44 R4</b>
GS2/GA1	n/a	<i>Rumex sanguineus, Cirsium arvense, Holcus lanatus, Plantago lanceolata, Jacobaea vulgaris, Cerastium fontanum, Urtica dioica, Heracleum sphondylium, Ranunculus repens</i> and <i>Potentilla anserina</i>
WN2/ER2	*8240 (LPW_2a)	<i>Corylus avellana</i> dominated canopy (4-5m high) with occasional <i>Crataegus monogyna, Ilex aquifolium</i> and <i>Sorbus aucuparia</i> . <i>Prunus spinosa</i> localised <2m high. Ground flora dominated by bryophytes notably <i>Eurhynchium striatum</i> , but also <i>Rhytidadelphus triquetrus</i> and <i>Thuidium tamariscinum</i> and <i>Neckera spp.</i> common on base of trees. <i>Hedera helix</i> locally frequent. <b>EC44 R1, EC44 R2</b>
WN2	n/a	<i>Corylus avellana</i> dominated canopy (6-9m high) with occasional <i>Prunus spinosa</i> & <i>Crataegus monogyna</i> . Understorey with typical WN2 woodland flora such as <i>Veronica montana, Circaeа lutetiana, Sanicula europaeus, Viola sp., Primula vulgaris, Hedera helix, Carex sylvatica, Brachypodium sylvaticum, Fragaria vesca, Epipactis helleborine, Thamnobryum alopecurum</i> and <i>Plagiomnium undulatum</i> .
WS1/WN2	n/a	<i>Prunus spinosa</i> dominant scrub species with occasional <i>Crataegus monogyna</i> and <i>Corylus avellana</i> . Also <i>Rubus fruticosus</i> agg. and occasionally <i>Pteridium aquilinum</i> and <i>Urtica dioica</i> .
WS1	*8240	<i>Corylus avellana, Hedera helix, Eurhynchium striatum, Brachypodium sylvaticum, Thamnobryum alopecurum, Crataegus monogyna, Kindbergia praelonga, Potentilla sterilis, Viola riviniana, Lonicera periclymenum, Ctenidium molluscum, Plagiochila asplenoides, Rubus fruticosus, Fragaria vesca, Solidago virgaurea, Sorbus aucuparia, Prunus spinosa, Primula vulgaris, Fissidens sp., Carex sp., Phyllitis scolopendrium, Epipactis helleborine</i> and <i>Sanicula europaeus</i> . <b>EC44 R3</b>

WS1	n/a	<p><i>Prunus spinosa, Crataegus monogyna, Urtica dioica, Rubus fruticosa and Pteridium aquilinum.</i></p> <p><b>2250_R1</b></p>
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## EC47

EC47 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
GS1	n/a	<i>Pseudoscleropodium purum, Rhytidadelphus squarrosus, Anthoxanthum odoratum, Holcus lanatus, Cynosurus cristatus, Trifolium repens (O-LF), Geranium robertianum, Rubus fruticosus agg., Fragaria vesca, Lotus corniculatus, Galium verum and Cirsium arvense.</i>
WN2/ER2	*8240 (LPW_2b)	<i>Fraxinus excelsior, Corylus avellana, Crataegus monogyna, Hedera helix, Rubus fruticosus agg., Asplenium scolopendrium, Viola sp., Dryopteris filix mas, Fragaria vesca, Primula veris, Veronica chamaedrys, Eurhynchium striatum, Rhytidadelphus triquetrus, Thamnobryum alopecurum and Scapania aspera.</i> <b>EC47_R1</b>
WS1/WN2/ ER2	n/a and *8240	<i>Prunus spinosa, Crataegus monogyna, Fraxinus excelsior, Corylus avellana, Ilex aquifolium, Urtica dioica, Geranium robertianum, Hedera helix, Veronica chamaedrys, Urtica dioica.</i> Bryophytes 70% cover: <i>Thamnobryum alopecurum</i> and <i>Eurhynchium striatum</i> . Some small areas of *8240 (LPW), within the woodland, but too small to map.
GA1	n/a	<i>Anthoxanthum odoratum, Holcus lanatus, Trifolium repens, Cynosurus cristatus, Lolium perenne, Lathyrus pratensis, Veronica chamaedrys, Agrostis stolonifera, Ranunculus repens.</i> <b>2316_R1</b>
WS1	n/a	<i>Crataegus monogyna, Fraxinus excelsior, Geranium robertianum, Agrostis stolonifera, Urtica dioica</i> <b>2319_R1</b>

## EC48

EC48 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
WS1/WN2/ ER2	n/a	<i>Prunus spinosa, Corylus avellana, Crataegus monogyna, Urtica dioica, Geranium robertianum, Primula veris, Thamnobryum alopecurum, Eurhynchium striatum and Thuidium tamariscinum.</i>
WS1/ER2	n/a	<i>Crataegus monogyna, Prunus spinosa</i> scrub on sloping terrain. Outcropping calcareous rock substrate.
WS1	n/a	<i>Crataegus monogyna, Sambucus nigra, Geranium robertianum, Veronica montana, Galium aparine, Agrostis stolonifera, Urtica dioica, Calliergon sp.</i> <b>2321_R1</b>

## EC49

EC49 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ED3/GS1/ W S1	n/a	Bare flat disturbed ground with Pockets of grassland: <i>Centaurea nigra, Achillea millefolium, Linum catharticum, Blackstonia perfoliata</i> and <i>Centaurium erythraea</i> . Piles of spoil with <i>Buddleja davidii, Rubus fruticosus agg, Prunus spinosa, Centranthus ruber, Petasites sp.</i> and <i>Cotoneaster sp.</i>
ED3	n/a	<a href="#">2325_R3</a>
ED3/WS1	n/a	Abundant <i>Buddleja davidii, Calystegia sepium, Rubus fruticosus agg., Lythrum salicaria, Juncus sp., Acer pseudoplatanus, Salix purpureum, Salix cinerea, Prunus spinosa, Crataegus monogyna, Corylus avellana, Pteridium aquilinum, Fraxinus excelsior, Symphoricarpu</i> s alba, <i>Urtica dioica, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp., Hedera helix agg., Epilobium hirsutum, Carex nigra, Arrhenatherum elatius, Cirsium sp., Rumex sp.</i>
ER2	n/a	<i>Rubus fruticosus agg., Salix sp., Centranthus ruber, Hypnum jutlandicum, Campylopus atrovirens</i> <a href="#">2323_R1</a>
ER2/WS1	n/a	Old quarry area. Recognising with bramble scrub, ruderals and GS1 species (list as described in table).
GS1	n/a	<i>Anthoxanthum odoratum, Cynosurus cristatus, Trifolium repens, Ranunculus acris, Carex flacca, Linum catharticum, Rhinanthus minor, Euphrasia sp., Odontites verna, Rubus fruticosus agg., Ranunculus repens, Rumex obtusifolius, Dactylis glomerata, Centaurea nigra, Holcus lanatus, Agrostis stolonifera, Arrhenatherum elatius, Cirsium arvense, Pteridium aquilinum and Heracleum sphondylium.</i> <a href="#">2324_R1 and 2325_R1</a>
WN2	n/a	<i>Corylus avellana, Crataegus monogyna, Hedera helix, Rubus fruticosus agg. Phyllitis scolopendrium, Arum maculatum, Lonicera periclymenum, Primula veris, Dryopteris filix mas, Thamnobryum alopecurum and Thuidium tamariscinum.</i> <a href="#">5322_R1</a>
WS1	n/a	<i>Prunus spinosa, Crataegus monogyna, Acer pseudoplatanus, Fraxinus excelsior, Rubus fruticosus agg., Pteridium aquilinum, Calystegia sepium, Lythrum salicaria, Juncus sp., Buddleja davidii, Salix purpureum, Salix cinerea, Corylus avellana, Symphoricarpu</i> s alba, <i>Urtica dioica, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp., Hedera helix agg., Agrostis canina, Ranunculus acris, Anthoxanthum odoratum, Holcus lanatus, Plantago lanceolata, Trifolium repens, Jacobaea vulgaris, Calliergon species</i> <a href="#">2325_R2</a>

**Galway Racecourse to Ardaun (Ch. 14+400 – Ch. 18+350 and along the R446 tie-in) – Habitats between EC56, EC57 and EC59**

Galway Racecourse to Ardaun - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
BC4	n/a	<i>Epilobium sp.</i> , <i>Griselinia sp.</i> <b>5094_R1</b>
BL3/BC4	n/a	Plot of dry meadow and grassy verge remains on eastern side of car park, bound by treeline of <i>Alnus glutinosa</i> , <i>Prunus laurocerasus</i> , BC4 species list as described above.
ED2	n/a/	<i>Plantago lanceolata</i> , <i>Agrostis stolonifera</i> , <i>Ranunculus repens</i> , <i>Bellis perennis</i> , <i>Plantago major</i> <b>5062_R1</b>
ED2	n/a	Previously Treelines, now infill gravel track; Previously amenity grassland, now infill gravel aggregate; Treelines adjacent to infill access track and stone wall
ED3	n/a	<i>Buddleja davidii</i> , <i>Hypericum spp.</i> , <i>Leucanthemum vulgare</i> , <i>Reseda luteola</i> , <i>Jacobaea vulgaris</i> , <i>Agrostis stolonifera</i> , <i>Holcus lanatus</i> , <i>Prunella vulgaris</i> , <i>Rumex obtusifolius</i> , <i>Rumex crispus</i> , <i>Plantago lanceolata</i> , <i>Ranunculus repens</i> <b>5310_R2, 5308_R1, 5310_R1, 5204_R1, 5101_R1, 5134_R1, 5134_R2, 5059_R1, 5059_R2 and 5062_R2</b>
ED3/GS2	n/a	Mosaic of habitats forming around motorway attenuation ponds. <i>Holcus lanatus</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolia</i> , <i>Ranunculus acris</i> , <i>Achillea millefolium</i> , <i>Pteridium aquilinum</i> , <i>Rubus fruticosus agg.</i> , <i>Ulex europeaus</i> , <i>Centaurea nigra</i> , <i>Rhinanthus minor</i> , <i>Cynosurus cristatus</i> , <i>Arrhenatherum elatius</i> , <i>Epilobium hirsutum</i> , <i>Salix sp.</i> , <i>Buddleja davidii</i> , <i>Epilobium hirsutum</i> , <i>Carex nigra</i> , <i>Cirsium sp.</i> , <i>Rumex sp.</i> , <i>Salix cinerea</i> .
GA1	n/a	<i>Arrhenatherum elatius</i> , <i>Bellis perennis</i> , <i>Buddleja davidii</i> , <i>Cirsium arvense</i> , <i>Cirsium vulgare</i> , <i>Crataegus monogyna</i> , <i>Cynosurus cristatus</i> , <i>Dactylis glomerata</i> , <i>Fraxinus excelsior</i> , <i>Holcus lanatus</i> , <i>Heracleum sphondylium</i> , <i>Lolium perenne</i> , <i>Plantago lanceolata</i> , <i>Poa annua</i> , <i>Poa trivialis</i> , <i>Potentilla anserina</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> , <i>Jacobaea vulgaris</i> <i>Taraxacum officinale agg.</i> , <i>Trifolium repens</i> and <i>Urtica dioica</i> <b>4866_R1, 4879_R1, 5034_R1, 5042_R1, 5044_R1, 5060_R1, 5060_R2, 5066_R1, 5308_R2 and 5308_R3</b>
GA2	n/a	<i>Bellis perennis</i> , <i>Cirsium arvense</i> , <i>Festuca rubra</i> , <i>Holcus lanatus</i> , <i>Lathyrus pratensis</i> , <i>Lolium spp.</i> , <i>Plantago lanceolata</i> , <i>Poa annua</i> , <i>Potentilla anserina</i> , <i>Prunella vulgaris</i> , <i>Jacobaea vulgaris</i> , <i>Senecio vulgaris</i> , <i>Taraxacum officinale agg.</i> , <i>Trifolium repens</i> and <i>Trifolium spp.</i> <i>Acer pseudoplatanus</i> , <i>Acer campestre</i> , <i>Aesculus hippocastanum</i> , <i>Populus sp.</i> , <i>Crataegus monogyna</i> , <i>Fagus sylvatica</i> , <i>Fraxinus excelsior</i> , <i>Tilia cordata</i> , <i>Salix cinerea</i> and <i>Betula sp.</i> occasionally present. <b>5033_R1 and 4896_R1</b>

### Galway Racecourse to Ardaun - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
GA2/BL3/ BC4	n/a	Footpaths, walkway and ornamental shrubs as part of roadside planting. <i>Acer sp.</i> , <i>Betula sp.</i> , <i>Prunus laurocerasus</i> , <i>Alnus glutinosa</i> . <i>Reynoutria japonica</i> also present.
GS1	n/a	<i>Achillea millefolium</i> , <i>Agrostis stolonifera</i> , <i>Arrhenatherum elatius</i> , <i>Arctium lappa</i> , <i>Bellis perennis</i> , <i>Centaurea nigra</i> , <i>Cerastium fontanum</i> , <i>Cirsium arvense</i> , <i>Cirsium vulgare</i> , <i>Dactylis glomerata</i> , <i>Epilobium hirsutum</i> , <i>Heracleum sphondylium</i> , <i>Holcus lanatus</i> , <i>Jacobaea vulgaris</i> <i>Leucanthemum vulgare</i> , <i>Lolium perenne</i> , <i>Plantago lanceolata</i> , <i>Plantago major</i> , <i>Potentilla anserina</i> , <i>Prunella vulgaris</i> , <i>Ranunculus acris</i> , <i>Ranunculus repens</i> , <i>Rumex crispus</i> , <i>Rumex obtusifolius</i> , <i>Jacobaea vulgaris</i> , <i>Stachys palustris</i> , <i>Taraxacum officinale</i> agg., <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Urtica dioica</i> , <i>Veronica chamaedrys</i> and <i>Veronica montana</i> <b>5310_R3, 5107_R1, 5059_R3, 5062_R4, 5062_R3, 5046_R1 and 5039_R1</b>
GS2	n/a	<i>Arrhenatherum elatius</i> , <i>Centaurea nigra</i> , <i>Cirsium arvense</i> , <i>Dactylis glomerata</i> , <i>Epilobium parviflorum</i> , <i>Epilobium</i> sp., <i>Festuca rubra</i> , <i>Holcus lanatus</i> , <i>Heracleum sphondylium</i> , <i>Plantago lanceolata</i> , <i>Pteridium aquilinum</i> , <i>Ranunculus repens</i> , <i>Ranunculus acris</i> , <i>Rhinanthus minor</i> , <i>Rubus fruticosus</i> agg., <i>Rumex obtusifolius</i> , <i>Jacobaea vulgaris</i> , <i>Taraxacum officinale</i> agg., <i>Trifolium pratense</i> , <i>Ulex europaeus</i> , <i>Urtica dioica</i> , <i>Vicia cracca</i> and <i>Vicia sepium</i> <b>5165_R1 and 5039_R2</b>
GS2/ED3		Abundant <i>Epilobium hirsutum</i> in addition to <i>Carex nigra</i> , occasional <i>Arrhenatherum elatius</i> , <i>Cirsium</i> sp. and <i>Rumex</i> sp.
GS2/GS1	n/a	Amenity grassland no longer mown. Grassland has moderate diversity with <i>Centaurea nigra</i> , <i>Rhinanthus minor</i> and <i>Cynosurus cristatus</i> . <i>Rubus fruticosus</i> agg., <i>Ranunculus repens</i> , <i>Rumex obtusifolia</i> , <i>Dactylis glomerata</i> , <i>Centaurea nigra</i> , <i>Holcus lanatus</i> , <i>Agrostis stolonifera</i> , <i>Arrhenatherum elatius</i> , <i>Cirsium repens</i> , <i>Pteridium aquilinum</i> , <i>Heracleum sphondylium</i> , <i>Ranunculus acris</i> , <i>Achillea millefolium</i> , <i>Pteridium aquilinum</i> , <i>Ulex europeaus</i> , <i>Epilobium hirsutum</i> , <i>Salix</i> sp., <i>Buddleja davidii</i> .
GS2/ER2	n/a	<i>Holcus lanatus</i> , <i>Ranunculus repens</i> , <i>Rumex obtusifolius</i> , <i>Ranunculus acris</i> , <i>Achillea millefolium</i> , <i>Pteridium aquilinum</i> , <i>Ulex europeaus</i> , <i>Centaurea nigra</i> , <i>Rhinanthus minor</i> , <i>Cynosurus cristatus</i> , <i>Arrhenatherum elatius</i> , <i>Epilobium hirsutum</i> , <i>Buddleja davidii</i> , <i>Rubus fruticosus</i> agg., <i>Salix cinerea</i> , <i>Fraxinus excelsior</i> .
WD1	n/a	Screen planting with <i>Corylus avellana</i> , <i>Sorbus aria</i> , <i>Sorbus aucuparia</i> , <i>Fraxinus excelsior</i> . Occasional occurrence of <i>Betula</i> spp., <i>Fagus sylvatica</i>

**Galway Racecourse to Ardaun - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
WD1/WS1	n/a	<i>Acer pseudoplatanus, Arrhenatherum elatius, Arum maculatum, Asplenium scolopendrium, Athyrium filix-femina, Brachypodium sylvaticum, Chamaecyparis lawsoniana, Corylus avellana, Crataegus monogyna, Dactylis glomerata, Dryopteris filix-mas, Kindbergia praelonga, Eurhynchium striatum, Fagus sylvatica, Fraxinus excelsior, Hedera hibernica, Picea sp., Pinus sylvestris, Polystichum setiferum, Prunus spinosa, Rubus fruticosus agg., Salix caprea, Salix cinerea, Jacobaea vulgaris, Veronica hederacea, Veronica montana and Viola canina</i> <b>5094 R2 and 5066 R3</b>
WD5	n/a	Scattered trees with <i>Tilia cordata</i>
WL1	n/a	<i>Cornus sp., Corylus avellana, Crataegus monogyna, Escallonia sp., Fagus sylvatica, Fuchsii sp., Hedera helix, Prunus laurocerasus, Prunus spinosa, Rubus fruticosus agg., Salix caprea, Salix cinerea, Sorbaria, Sorbus aucuparia and Ulex europaeus</i>
WL2	n/a	<i>Acer pseudoplatanus, Alnus glutinosa, Alnus incana, Betula pubescens, Cornus spp., Corylus avellana, Crataegus monogyna, Fagus sylvatica, Fraxinus excelsior, Prunus spinosa, Rosa rugosa, Rubus fruticosus agg., Salix cinerea, Sorbus aucuparia, Symphoricarpos albus and Viburnum opulus</i> <b>2476 R1</b>
WN2	n/a	<i>Corylus avellana, Cupressus x Leylandii, Fagus sylvatica, Fraxinus excelsior, Ilex aquifolium and Sorbus aucuparia</i> <b>5492 R1 and 5066 R2</b>
WS1	n/a	<i>Calystegia sepium, Lythrum salicaria, Juncus sp., Acer pseudoplatanus, Buddleja davidii, Salix purpureum, Salix cinerea, Prunus spinosa, Crataegus monogyna, Corylus avellana, Fraxinus excelsior, Symphoricarpos alba, Urtica dioica, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp., Hedera helix agg., Dactylis glomerata, Holcus lanatus, Lolium perenne, Plantago lanceolata, Prunus spinosa, Pteridium aquilinum, Rubus fruticosus agg., Trifolium pratense and Trifolium repens</i> <b>5283 R1, 5050 R1 and 5061 R1</b>
WS1/ED3	n/a	Abundant spread of <i>Buddleja davidii</i> . Scrub species as above. <i>Epilobium hirsutum, Carex nigra, Arrhenatherum elatius, Cirsium sp., Rumex sp., Salix cinerea.</i>
WS2	n/a	<i>Fraxinus excelsior, Betula sp., Populus sp. and Crataegus monogyna</i>
WS3	n/a	With young trees. Species include <i>Chamaecyparis lawsoniana, Picea sitchensis</i> and <i>Larix decidua</i>

## EC56

EC56 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ED2	n/a	<i>Prunella vulgaris, Agrostis stolonifera, Ranunculus repens, Bellis perennis, Cirsium arvense, Plantago major, Didymodon species</i> <b>127_R2</b>
ED3	n/a	<i>Anthoxanthum odoratum, Holcus lanatus, Lolium perenne, Jacobaea vulgaris, Agrostis stolonifera, Ranunculus repens, Cirsium arvense, Cirsium vulgare, Heracleum sphondylium, Rumex conglomeratus</i> <b>127_R3</b>
ER2	*8240 (LPE_1b)	<i>Corylus avellana, Ulex europaeus, Juniperus communis, Hedera helix, Rosa spinosissima, Teucrium scorodonia, Sesleria albicans, Mycelis muralis, Asplenium ruta-muraria, Geranium robertianum, Carlina vulgaris, Neckera crispa, Fissidens dubius, Tortella tortuosa, Ctenidium molluscum, Festuca rubra, Koeleria macrantha, Thymus praecox, Antennaria dioica, Lotus corniculatus, Hypericum pulchrum, Gentiana verna, Carex caryophyllea, Dactylorhiza fuchsiae, Succisa pratensis, Rubus fruticosus, Phyllitis scolopendrium, Fragaria vesca, Dactylis glomerata and Solanum dulcamara.</i> <b>EC56 R2 and EC56 R5</b>
FL8/FS1	n/a	Wetland forming in excavated attenuation pond area adjacent to west side of M6/N6 junction. <i>Phragmites australis, Typha latifolia, Sparganium erectum, Schoenoplectus lacustris, Apium nodiflorum, Nasturtium officinale, Lemma minor and Epilobium hirsutum. Clematis vitalba</i> also present.
GA1	n/a	Semi-improved neutral grassland in part with locally frequent <i>Cynosurus cristatus</i> . Other species: <i>Buddleja spp., Crataegus monogyna, Fraxinus excelsior, Poa trivialis, Rumex obtusifolia, Urtica dioica, Heracleum sphondylium, Dactylis glomerata, Arrhenatherum elatius, Potentilla anserina, Lolium perenne, Jacobaea vulgaris</i> .
GA2	n/a	<i>Dactylis glomerata, Festuca rubra, Arrhenatherum elatius, Centaurea nigra, Festuca arundinacea, Holcus lanatus, Plantago lanceolata, Trifolium pratense, Trifolium repens, Jacobaea vulgaris, Trifolium dubium, Agrostis stolonifera, Ranunculus repens, Bellis perennis, Alopecurus pratensis, Taraxacum species, Calliergon species</i> <b>129_R1 and 107_R1</b>
GS1	n/a	<i>Anthoxanthum odoratum, Festuca rubra, Holcus lanatus, Cynosurus cristatus, Plantago lanceolata, Centaurea nigra, Trifolium repens, Trifolium pratense, Lotus corniculatus, Ranunculus bulbosus, Achillea millefolium, Luzula campestris, Pteridium aquilinum, Hypochaeris radicata, Dactylorhiza fuchsiae, Danthonia decumbens, Potentilla anserina, Jacobaea vulgaris, Bellis perennis, Agrostis canina, Prunella vulgaris, Taraxacum agg., Leucanthemum vulgare, Euphrasia sp., Briza media, Sonchus sp., Urtica dioica, Succisa pratensis, Rumex obtusifolius, Odontites verna, Pimpinella saxifraga and Primula vulgaris.</i> <b>EC56 R8, EC56 R9, 118_R1, 127_R1, 113_R2 and 113_R3</b>

**EC56 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
GS1	6210 (GS1_3a)	<i>Succisa pratensis, Briza media, Danthonia decumbens, Festuca ovina, Schoenus nigricans, Cynosurus cristatus, Sesleria albicans, Carex pulicaris, Carex panacea, Carex demissa, Carex flacca, Pinguicula vulgaris, Trifolium repens, Antennaria dioica, Blackstonia perforata, Plantago maritima, Anagallis tenella, Selaginella sp., Linum catharticum, Cirsium dissectum, Molinia caerulea, Gentiana verna, Euphrasia sp., Polygala vulgaris, Prunella vulgaris, Lathyrus linifolius, Dactylorhiza fuchsii, Platanthera bifolia, Calliergonella cuspidata, Ctenidium molluscum, Fissidens adianthoides and Didymodon ferrugineus.</i> <b>EC56 R1, EC56 R3, EC56 R4 and EC56 R7</b>
GS2	n/a	<i>Calliergonella cuspidata, Trifolium repens, Festuca rubra, Trifolium dubium, Rhytidadelphus squarrosus, Carex flacca, Veronica serpyllifolia, Medicago lupulina, Ranunculus repens, Carex panicea</i> <b>129_R2</b>
GS2/GS1	n/a	Calcareous grassland with rough grassland and establishing scrub within wayleave area. Species include <i>Holcus lanatus, Ranunculus repens, Rumex obtusifolius, Ranunculus acris, Achillea millefolium, Pteridium aquilinum, Rubus fruticosus agg., Ulex europeaus, Centaurea nigra, Rhinanthus minor, Cynosurus cristatus, Arrhenatherum elatius, Epilobium hirsutum, Salix sp., Buddleja davidii, Dactylis glomerata, Centaurea nigra, Agrostis stolonifera, Arrhenatherum elatius, Cirsium arvense, Heracleum sphondylium.</i>
GS2/ED3	n/a	<i>Holcus lanatus, Ranunculus repens, Rumex obtusifolius, Ranunculus acris, Achillea millefolium, Pteridium aquilinum, Rubus fruticosus agg., Ulex europeaus, Centaurea nigra, Rhinanthus minor, Cynosurus cristatus, Arrhenatherum elatius, Epilobium hirsutum, Salix sp., Buddleja davidii, Carex nigra, Cirsium sp., Rumex sp. Salix cinerea.</i>
GS2/WS1	n/a	<i>Holcus lanatus, Ranunculus repens, Rumex obtusifolia, Ranunculus acris, Achillea millefolium, Pteridium aquilinum, Rubus fruticosus agg., Ulex europaeus, Centaurea nigra, Rhinanthus minor, Cynosurus cristatus, Arrhenatherum elatius, Epilobium hirsutum, Salix sp., Buddleja davidii, Calystegia sepium, Lythrum salicaria, Juncus sp., Acer pseudoplatanus, Buddleja davidii, Salix purpureum, Salix cinerea, Prunus spinosa, Crataegus monogyna, Corylus avellana, Pteridium avellana, Pteridium aquilinum, Fraxinus excelsior, Symphoricarpu alba, Urtica dioica, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp., Hedera helix agg.</i>
GS2/GS1/ ER2/GA2	n/a	GS2 covers the greatest area. Pockets of GS1, and a more extensive area of GS1 on embankments between slip road and attenuation pond. Fringing area maintained as GA2.
GS4/GS1	n/a	<i>Holcus lanatus, Juncus effusus, Juncus articulates, Carex flacca, Carex panacea, Potentilla anserina, Epilobium hirsutum and Ranunculus repens. On drier patches Centaurea nigra, Leucanthemum vulgare and Daucus carota.</i> <b>113_R1</b>

**EC56 - Species Lists & Relevés**

Habitat code	Annex I habitat	Key species
HD1/GS1	n/a	<b>Grassland species as described in this table.</b> <i>Pteridium aquilinum</i> . <b>114_R2</b>
WN2/ER2	*8240 (LPW_2a)	<i>Corylus avellana, Crataegus monogyna, Rosa spinosissima, Fragaria vesca, Viola sp. Rubus fruticosus agg., Neckera crispa, Rhytidadelphus triquetrus, Ctenidium molluscum, Eurhynchium striatum, Thamnobryum alopecurum and Thuidium tamariscinum.</i> <b>EC56 R6</b>
WN2	*8240	<i>Corylus avellana, Crataegus monogyna, Ilex aquifolium, Eurhynchium striatum, Neckera complanata, Geranium robertianum, Thamnobryum alopecurum, Urtica dioica, Hedera helix s. hibernica, Poa sp., Fragaria vesca, Prunus spinosa, Rubus fruticosus agg., Thamnobryum alopecurum</i> <b>116_R1, 5491_R1 and 5338_R1</b>
	n/a	Similar to WN2/ER2, and with similar species, as well as the following: <i>Acer pseudoplatanus, Prunus spinosa</i> . Other ground flora species include <i>Arum maculatum, Circaea lutetiana</i> and <i>Hedera helix</i> . <i>Bryophyte cover &lt;50%</i> <i>Thamnobryum alopecurum</i> and <i>Thuidium tamariscinum</i> . <b>116_R2</b>
WS1	n/a	<i>Crataegus monogyna, Prunus spinosa, Ilex aquifolium, Sorbus aria agg.<sup>10</sup>, S. aucuparia, Rubus fruticosus agg., Corylus avellana, Acer pseudoplatanus, Ilex aquifolium, Salix caprea, Hedera helix, Lonicera periclymenum, Fragaria vesca, Pteridium aquilinum, Brachypodium sylvaticum, Fraxinus excelsior</i> and <i>Ulex europaeus</i> . <b>96_R1 and 114_R1</b>
WS1/GS1	n/a	Semi-improved GS1; bramble scrub spreading throughout. <i>Rubus fruticosus agg., Ranunculus repens, Rumex obtusifolia, Dactylis glomerata, Centaurea nigra, Holcus lanatus, Agrostis stolonifera, Arrhenatherum elatius, Cirsium repens, Pteridium aquilinum, Heracleum spondylium, Calystegia sepium, Rubus fruticosus, Lythrum salicaria, Juncus sp., Reynoutria japonica, Acer pseudoplatanus, Buddleja davidii, Salix purpureum, Salix cinerea, Prunus spinosa, Crataegus monogyna, Corylus avellana, Pteridium aquilinum, Fraxinus excelsior, Symphoricarpu</i> s alba <i>, Urtica dioica, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp., Hedera helix agg.</i>
WS1/GS1/ER2	*8240 – limestone pavement areas only	Scrub and grassland to south, species described as in this table; Diverse grassland and exposed rock (shattered limestone pavement) to north. <i>Buddleja spp., Rubus fruticosus agg., Salix cinerea, Fraxinus excelsior.</i>

<sup>10</sup> *Sorbus* species are difficult to identify and require a number of characteristics (and potentially genetic work) to definitely confirm species present in the *Sorbus aria* aggregate group, this includes both *Sorbus aria sensu stricto* and *Sorbus hibernica*. Variability is common with both *Sorbus* species and taxonomic difficulties are still an ongoing discussion throughout Britain and Europe (Fay and Rich, 2022). Fay, M.F., Rich, T.C.G. (2022) SORBUS ARIA: Rosaceae, *Curtis's Botanical Magazine*, 39(4), 655-668.

## EC57

EC57 - Species Lists & Relevés		
Habitat code	Annex I habitat	Key species
ED3	n/a	<i>Brassica rapa, Urtica dioica, Polygonum persicaria, Cirsium arvense, Potentilla anserina and Matricaria discoidea.</i>
GS1	n/a	<i>Cynosurus cristatus, Holcus lanatus, Poa pratensis, Cirsium arvense, Trifolium repens, T. Pratense, Rumex acetosa, Pteridium aquilinum and Prunus spinosa.</i> <b>137_R1 and 137_R2</b>
	6210 (GS1_3A)	<i>Anthyllis vulneraria, Briza media, Danthonia decumbens, Anthoxanthum odoratum, Festuca rubra, Koeleria macrantha, Leontodon hispidus, Potentilla erect, Sesleria albicans, Carex caryophyllea, C. panacea, C. flacca, Antennaria dioica, Linum catharticum, Galium verum, Plantago maritima, Succisa pratensis, Centaurea nigra, Euphrasia sp. Polygala vulgaris, Prunella vulgaris and Lotus corniculatus.</i> <b>EC57 R1 and EC57 R2</b>
	*6210 (GS1_3A)	Includes a small area of orchid rich grassland (Priority Annex I *6210). Includes the orchids <i>Dactylorhiza fuchsii, Platanthera bifolia</i> and <i>Listera ovata</i> and without the <i>Anthyllis vulneraria</i> listed above, plus <i>Molinia caerulea</i> and <i>Lathyrus linifolius</i> . <b>EC57 R4</b>
GS1/WS1	n/a	Some ruderal patches due to overgrazing/poaching. <i>Calystegia sepium, Rubus fruticosus, Lythrum salicaria, Juncus sp., Reynoutria japonica, Acer pseudoplatanus, Buddleja, Salix purpureum, Salix cinerea, Prunus spinosa, Crataegus monogyna, Corallis avellana, Pteridium aquilinum, Fraxinus excelsior, Symphoricarpu alba, Urtica dioica, Filipendula ulmaria, Ranunculus repens, Cotoneaster sp., Hedera helix agg. Rumex obtusifolia, Dactylis glomerata, Centaurea nigra, Holcus lanatus, Agrostis stolonifera, Arrhenatherum elatius, Cirsium repens, Pteridium aquilinum, Heracleum spondylium</i>
GS2	n/a	<i>Holcus lanatus, Poa pratensis, Lolium perenne, Dactylis glomerata, Rumex acetosa, Ranunculus repens and Cynosurus cristatus.</i>
WN2/ER2	*8240 (LPW_2a)	<i>Corylus avellana, Crataegus monogyna, Prunus spinosa, Fragaria vesca, Viola sp., Rubus fruticosus agg., Hedera helix, Lonicera periclymenum, Brachypodium sylvaticum, Arum maculatum, Circaeae lutetiana, Geum urbanum, Phyllitis scolopendrium, Dryopteris filix-mas, Rhytidadelphus triquetrus, Eurhynchium striatum, Thamnobryum alopecurum and Thuidium tamariscinum.</i> <b>EC57 R3</b>
WS1	n/a	<i>Prunus spinosa, Rubus fruticosus agg., Pteridium aquilinum, Eurhynchium striatum, Kindbergia praelonga, Thuidium tamariscinum, Corylus avellana, Crataegus monogyna, Hedera helix s. hibernica</i> <b>140_R1, 144_R1 and 144_R2</b>

### EC57 - Species Lists & Relevés

Habitat code	Annex I habitat	Key species
WS1/ER2	n/a	<i>Prunus spinosa, Crataegus monogyna, Corylus avellana, Rubus fruticosus agg., Pteridium aquilinum, Hedera helix, Rosa spinosissima, Teucrium scorodonia, Solidago virgaurea, Brachypodium sylvaticum, Fragaria vesca, Lathyrus linifolius and Molinia caerulea.</i>
WS1/ER2	*8240	<i>Prunus spinosa, Corylus avellana, Fraxinus excelsior, Crataegus monogyna, Ulex europaeus, Rosa spinosissima, Rubus fruticosus agg., Pteridium aquilinum, Hedera helix, Teucrium scorodonia, Lonicera periclymenum, Solidago virgaurea, Sesleria albicans, Brachypodium sylvaticum, Fragaria vesca, Thymus praecox, Molinia caerulea, Ctenidium molluscum and Scleropodium purum.</i> <b>EC57 R5</b>

## **Annex 1**

### **Habitat Survey Results - Digital Data Sets**

## A.1 Relevés Recorded along the Project

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### A.1.1 Photo Dataset

The photo dataset contains a photographic record of the 2019 habitat surveys. This includes a series of photos recorded in 2019 habitat surveys along the route of the Project. For each relevé it includes, at a minimum, one photo. Additionally, there is a large selection of photos taken for all habitat types across the entire Project.

The pdf file *N6GCRR\_HabitatPhotographs\_ReadMe.pdf* within the *N6GCRR\_HabitatPhotographs.zip* photo dataset explains how the photos are filed and arranged.

### A.1.2. Relevé Dataset

The relevé dataset contains the full results of all relevés taken between 2013 and 2019 in a Microsoft Excel Workbook. These relate to the following relevé shapefiles (which themselves are included as part of the GIS dataset as described in **Section A.3.3** below):

- N6GCRR\_2018RelevéLocations.shp
- N6GCRR\_RelevéLocations\_3a.shp
- N6GCRR\_RelevéLocations\_3b.shp

The *N6GCRR\_RelevéDatabase.xlsx* file includes a ReadMe tab providing information for users.

### A.1.3. Drawings

The drawings dataset contains drawings of the relevé locations in relation to the habitat survey areas which overlap with the Assessment Boundary.

**Figures 2.2.01 to 2.2.09** - Relevé Locations - Full Study Area Sheets 9 to 9

**Figures 2.4. 1.1 to 2.4. 1.3** - Relevé Locations in Habitat Survey Areas which overlap with the Assessment Boundary Overview Sheets 1 to 3

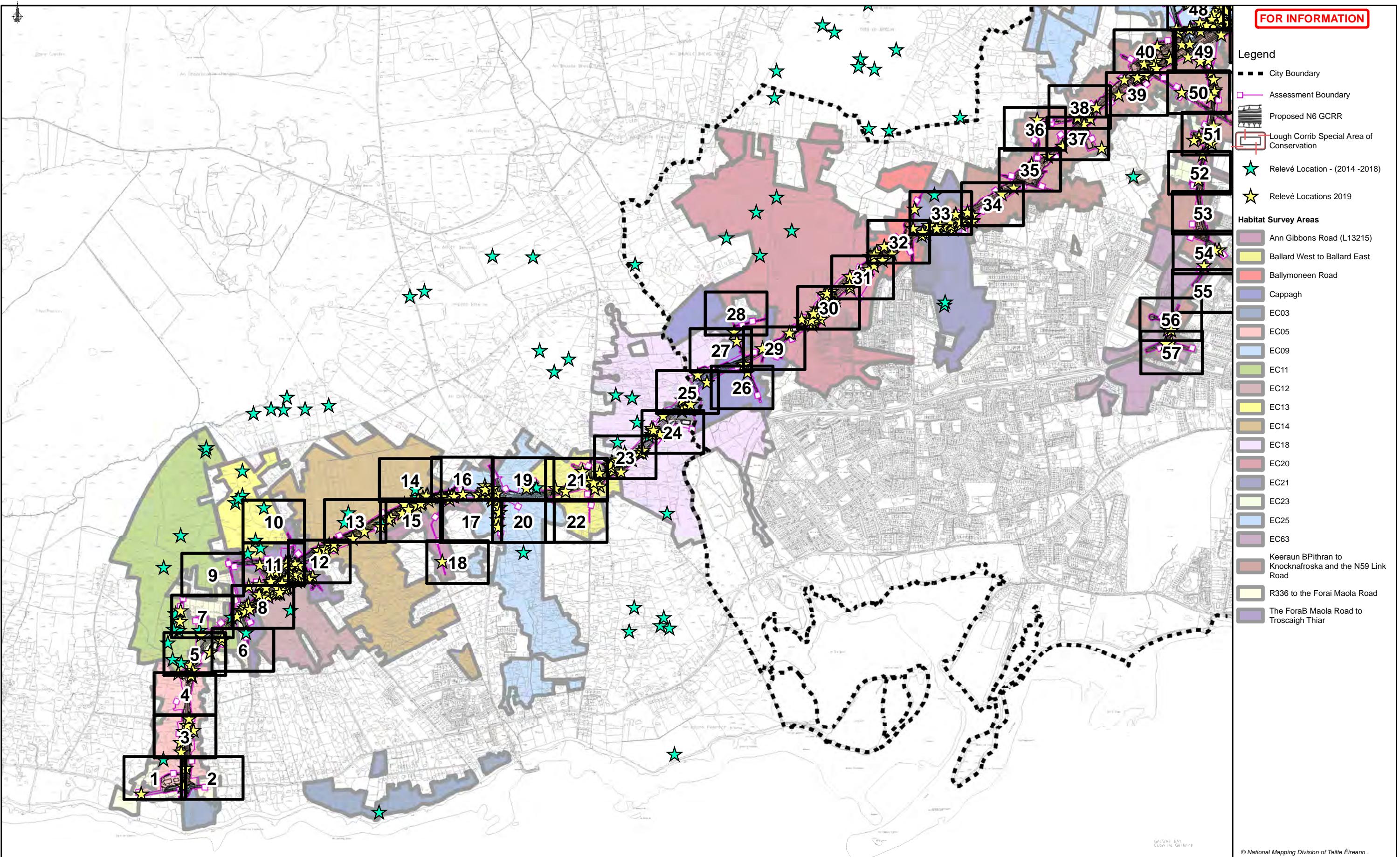
**Figures 2.4. 1 to 2.4.122** - Relevé Locations in Habitat Survey Areas which overlap with the Assessment Boundary Sheets 1 to 122

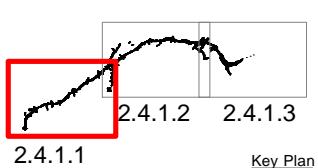
### A.1.4. GIS Dataset

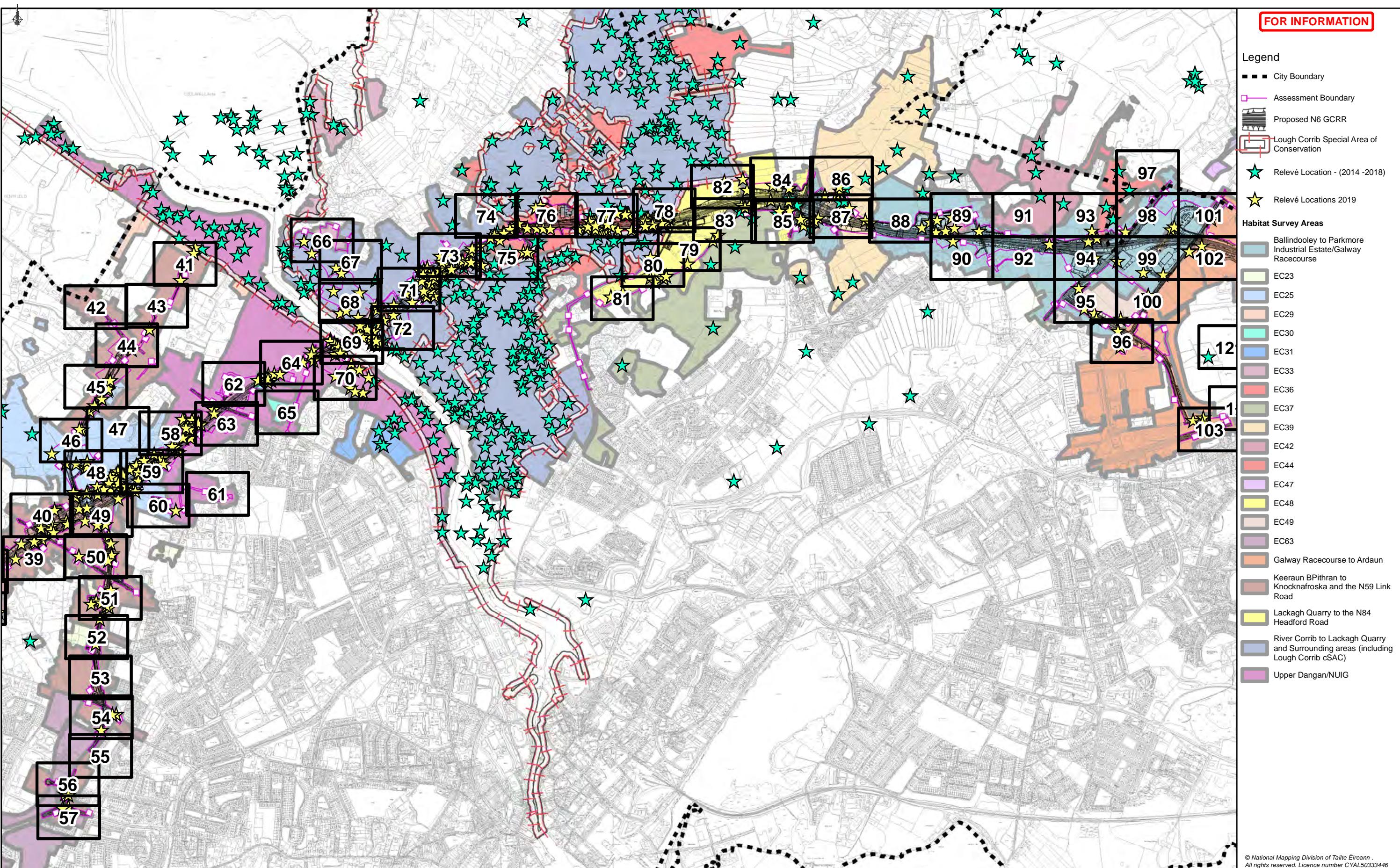
The GIS dataset contains 19 separate shapefiles which includes seven which were used in the preparation of the habitat map published in the 2018 updated EIAR and the updated EIAR and 11 used to provide data in response to the 2019 RFI Response and the updated EIAR.

## A.8.19 Habitat Survey Results – Species Lists

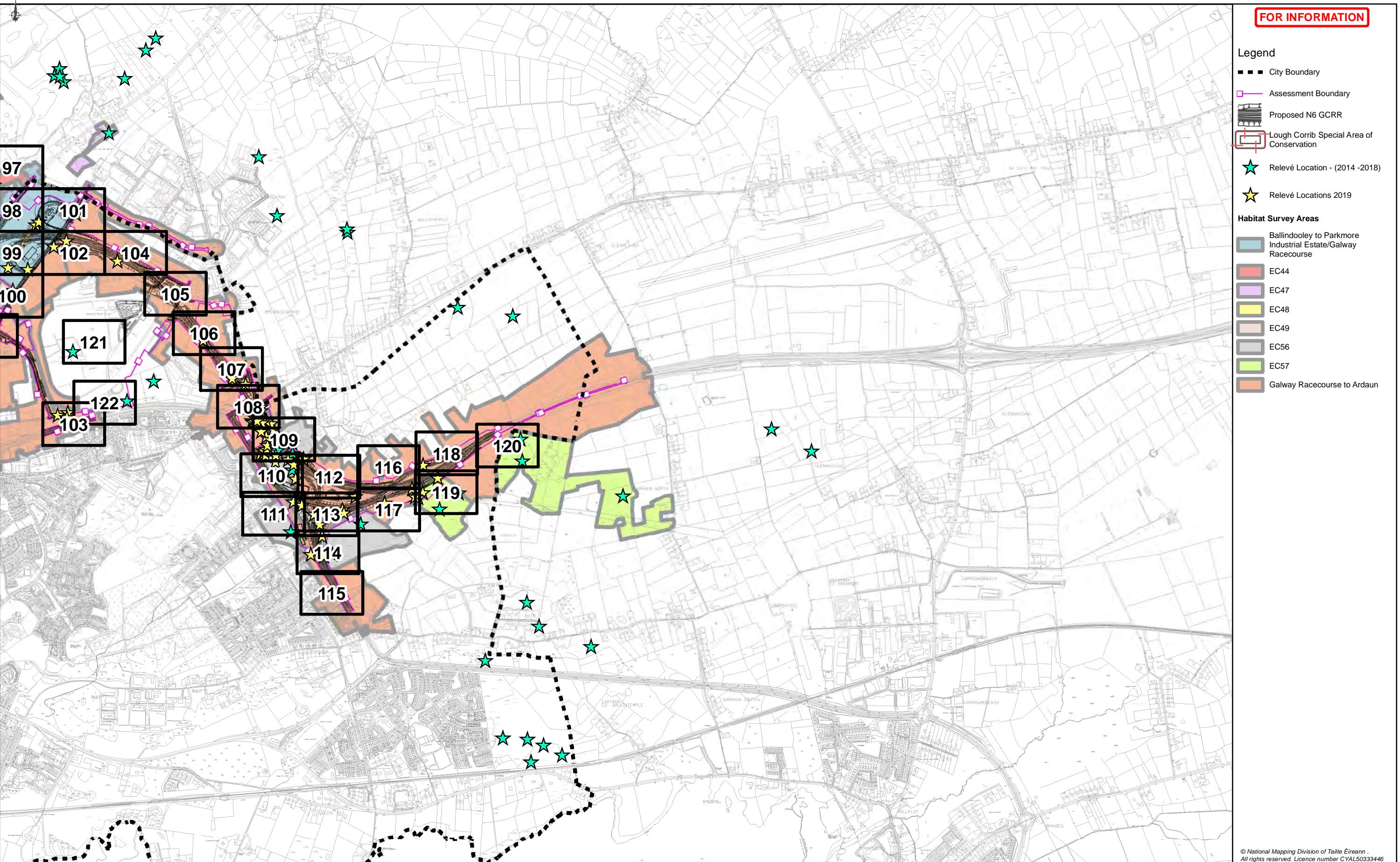
### Annex A.1.3 Drawings



Clients	 <b>An Roinn Iompair</b> Department of Transport 2040  <b>Tionscal Eireann</b> Project Ireland 2040  <b>G</b>  <b>Galway City Transport Project</b>  <b>Comhairle Chontae na Gaillimhe</b> Galway County Council  <b>TII</b> The Major Impact Institute	 <b>Key Plan</b> 2.4.1.1 2.4.1.2 2.4.1.3 2.4.1.4	Consultant	<b>ARUP</b> Corporate House City East Business Park Ballybrit, Galway, Ireland Tel +353 (0)91 460675 <a href="http://www.N6GalwayCity.ie">www.N6GalwayCity.ie</a> <a href="http://www.arup.ie">www.arup.ie</a>	Job Title	<b>N6 Galway City Ring Road</b>		
					Scale:	1: 20000 @ A3		
					Date:	February 2025	I1	28/02/2025 AG EC MH
					Issue	Date	By	Chkd Appd
					Job No	Drawing No	Issue	
					233985	Figure 2.4.1.1	I1	



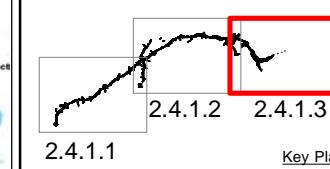
Clients	An Roinn Iompair Department of Transport Tionscal Eireann Project Ireland 2040  Comhairle Chontae na Gaillimhe Galway County Council  TII Dor Major Impair Division	Consultant	Job Title <b>N6 Galway City Ring Road</b>	Drawing Title Relevé Locations in Habitat Survey Areas which overlaps with Assessment Boundary Overview Sheet 2 of 3
	 Key Plan	Scale: 1: 20000 @ A3 Date: February 2025	I1 28/02/2025 AG EC MH Issue Date By Chkd Appd	Drawing Status For Information Job No 233985 Drawing No Figure 2.4.1.2 Issue I1



## Clients



## Consultant



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Scale: 1: 20000 @ A3  
Date: February 2025

I1	Date	By	Chkd	Appd
Issue	28/02/2025	AG	EC	MH

## Drawing Title

Relevé Locations in Habitat Survey Areas which overlaps with Assessment Boundary Overview  
Sheet 3 of 3

## Drawing Status

For Information

Job No	Drawing No	Issue
233985	Figure 2.4.1.3	I1