

Scientific name	<i>Molinia caerulea</i> – <i>Potentilla erecta</i> – <i>Agrostis stolonifera</i> grassland
Common name	Purple Moor-grass – Tormentil – Creeping Bent grassland
Community code	GL1D

Vegetation

Molinia caerulea is the dominant species of this community, usually growing as large tussocks which make ground covered by this vegetation tiresome to traverse. *Potentilla erecta* grows through the tussocks and can be abundant. No other species are constants, but *Juncus acutiflorus*, *Agrostis stolonifera*, *Anthoxanthum odoratum* and *Holcus lanatus* are frequent and help form a fairly tall, rank sward (mean graminoid height = 53.4 cm, $n = 119$). *Succisa pratensis* and *Filipendula ulmaria* are also frequent (mean forb height = 35.9 cm, $n = 119$). A component of small sedges consists of *Carex panicea*, *C. flacca*, *C. nigra* and *C. echinata*.

Ecology

The *Molinia caerulea* – *Potentilla erecta* grassland is typically a lowland assemblage (mean altitude = 82 m, $n = 119$; mean slope = 2.7°, $n = 119$) on wet, very infertile and acidic basin peats and peaty gleys (mean organic content = 34.6%, $n = 64$).

Sub-communities

Three sub-communities are described. The *Filipendula ulmaria* – *Hydrocotyle vulgaris* sub-community (GL1Di) reflects the wetter end of this community's variation. The *Holcus lanatus* – *Festuca rubra* sub-community (GL1Dii) conversely represents examples in drier (but still relatively wet) situations. The *Calluna vulgaris* – *Nardus stricta* sub-community (GL1Diii) contains heathland indicators and may be found at higher than average altitudes; this assemblage is transitional to wet heath.

Similar communities

Succisa pratensis is frequent but less abundant than in the more species-rich GL1C *Molinia caerulea* – *Succisa pratensis* grassland, which also has a higher forb cover.

Records and distribution

Number of records (all)

Clearly assigned:	263
Transitional:	31
Total:	294

Number of records (mapped)

2001-2015:	210
1986-2000:	22
1971-1985:	14
Pre-1971:	6
Total:	252

Number of hectads (most recent records)

2001-2015:	101
1986-2000:	9
1971-1985:	3
Pre-1971:	1
Total:	114

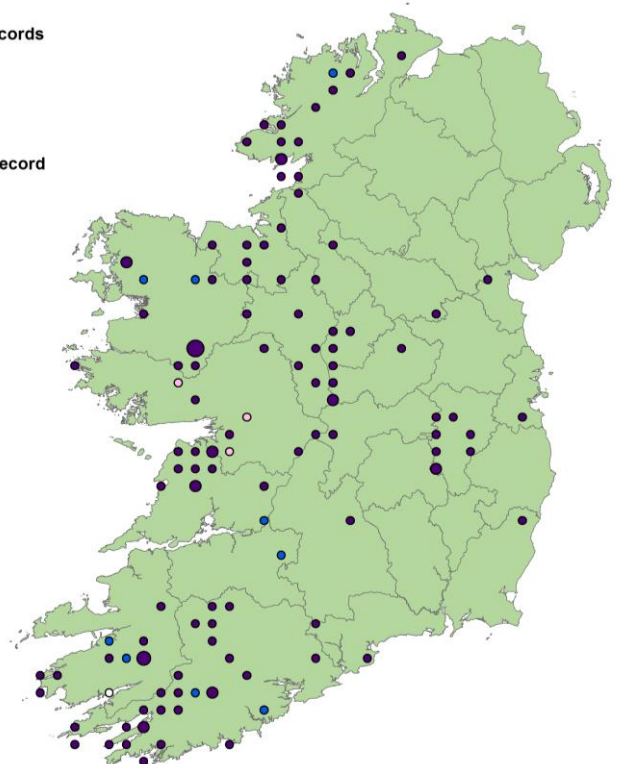
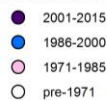
Number of hectads (all mapped records)

2001-2015:	101
1986-2000:	10
1971-1985:	6
Pre-1971:	3

Number of records



Most recent record



Synoptic table (n = 234)

Species	Frequency	Cover	Species	Frequency	Cover
	(from I-V)	min (med) max		(from I-V)	min (med) max
<i>Molinia caerulea</i>	V	4-(8)-10	<i>Ranunculus flammula</i>	II	+- (3)-5
<i>Potentilla erecta</i>	V	1-(3)-8	<i>Trifolium repens</i>	II	+- (3)-4
<i>Agrostis stolonifera</i>	III	+- (3)-8	<i>Luzula multiflora</i>	II	+- (2)-3
<i>Carex panicea</i>	III	+- (3)-8	<i>Agrostis capillaris</i>	II	1-(3)-6
<i>Succisa pratensis</i>	III	+- (3)-7	<i>Plantago lanceolata</i>	I	+- (2)-5
<i>Anthoxanthum odoratum</i>	III	+- (3)-6	<i>Ranunculus acris</i>	I	+- (2)-3
<i>Juncus acutiflorus</i>	III	+- (3)-7	<i>Lotus corniculatus</i>	I	+- (2)-6
<i>Filipendula ulmaria</i>	III	+- (4)-8	<i>Agrostis canina / vinealis</i>	I	+- (3)-6
<i>Holcus lanatus</i>	III	+- (3)-8	<i>Juncus effusus</i>	I	+- (3)-6
<i>Festuca rubra</i>	II	+- (4)-7	<i>Carex nigra</i>	I	+- (3)-5
<i>Cirsium dissectum</i>	II	+- (3)-7	<i>Leontodon autumnalis</i>	I	1-(3)-4
<i>Galium palustre</i>	II	+- (3)-5	<i>Lotus pedunculatus</i>	I	1-(3)-5
<i>Mentha aquatica</i>	II	+- (3)-5	<i>Potentilla anserina</i>	I	1-(3)-6
<i>Calliergonella cuspidata</i>	II	+- (3)-7	<i>Cirsium palustre</i>	I	+- (1)-4
<i>Hydrocotyle vulgaris</i>	II	2-(3)-7	<i>Hylocomium splendens</i>	I	+- (3)-5
<i>Rhytiadelphus squarrosus</i>	II	+- (2)-6	<i>Cardamine pratensis</i>	I	+- (2)-3
<i>Carex flacca</i>	II	1-(3)-8	<i>Carex echinata</i>	I	1-(2)-4
<i>Scleropodium purum</i>	II	+- (2)-6	<i>Rumex acetosa</i>	I	+- (2)-3
<i>Ranunculus repens</i>	II	+- (3)-5	<i>Centaurea nigra</i>	I	+- (2)-5
<i>Carex hostiana</i>	II	2-(6)-8	<i>Kindbergia praelonga</i>	I	+- (2)-4

Affinities

GHI: GS4 Wet grassland (94.1%) (n = 119)

ZM: Junco-Molinion

EUNIS: E3.51 *Molinia caerulea* meadows and other related communities (E3.512 Acidocline purple moorgrass meadows)

NVC: M25 *Molinia caerulea*-*Potentilla erecta* mire (66.7%)

Annex I: 6410 *Molinia* meadows (32.8%) (n = 119)

Proxy environmental data

Light: 7.1 Reaction: 4.1 Wetness: 7.4 Fertility: 2.7 Salinity: 0.1

Conservation value

This is a fairly species-poor grassland community (species/4 m² = 18.2, n = 119), but some of the more diverse examples with *Cirsium dissectum* and lower dominance of *Molinia caerulea* qualify as EU HD Annex I habitat 6410 *Molinia* meadows.

Management

These swards are managed as rough grazing land (typically for cattle) but at a low intensity. The main threats to these grasslands include improvement, abandonment and afforestation.

Key references

O'Neill, F.H., Martin, J.R., Devaney, F.M. & Perrin, P.M. (2013) The Irish Semi-natural Grasslands Survey 2007-2012. *Irish Wildlife Manuals*, No. 78. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Synopsis version: V1.1

Synopsis date: November 2017

Synopsis author(s): P.M. Perrin



Photo 1. GL1D *Molinia caerulea* – *Potentilla erecta* – *Agrostis stolonifera* grassland, Dromyrourk, Killarney National Park
(C. MacMahon/K. McNutt, June 2012)



Photo 2. GL1D *Molinia caerulea* – *Potentilla erecta* – *Agrostis stolonifera* grassland, Bunrower, Killarney National Park
(C. MacMahon/K. McNutt, April 2012)