

Scientific name	<i>Festuca rubra</i> – <i>Lotus corniculatus</i> grassland
Common name	Red Fescue – Bird's-foot-trefoil grassland
Community code	GL3F

Vegetation

Included in this community are swards grouped due to the common dominance of *Festuca rubra*. The only other constant species are *Agrostis stolonifera* and *Trifolium repens*. *Plantago lanceolata* and *Lotus corniculatus* are the most frequent of the other plants. Species indicative of calcareous grassland may occur (e.g. *Carex flacca*, *Euphrasia officinalis* agg. and *Koeleria macrantha*) but are typically not plentiful. Further variation is discussed under 'Sub-communities' below.

Ecology

The *Festuca rubra* – *Lotus corniculatus* grassland community is a lowland community found along the coast and inland (mean altitude = 38 m, $n = 185$; mean slope = 7.8° , $n = 185$). Soils are dry-humid, rather base-rich, of average fertility and fairly high organic content (mean organic content = 25.5%, $n = 151$).

Sub-communities

Festuca rubra – *Lotus corniculatus* grassland comprises two sub-communities. The *Plantago maritima* – *Plantago coronopus* sub-community (GL3Fi) is a maritime vegetation assemblage, found on cliff tops around the coast. The sward is typically very low and tight due to grazing or exposure (mean graminoid height = 6.0 cm, $n = 81$; mean forb height = 4.1 cm, $n = 81$), and there is a high cover of *Plantago* spp. Other maritime species encountered include *Armeria maritima* and *Anthyllis vulneraria*, but these are less frequent. The *Festuca rubra* – *Poa pratensis* agg. sub-community (GL3Fii) lacks these maritime indicators and may occur in a coastal or inland context. It usually occurs as a rank, ungrazed sward in which *Festuca rubra* forms a dense springy mat (mean graminoid height = 25.2 cm, $n = 104$; mean forb height = 17.0 cm, $n = 104$).

Similar communities

This is a fairly distinct community. *Festuca rubra* seldom achieves in other communities the abundance that is displayed in community GL3F. The aforementioned maritime plants are rarely found with abundance in other grasslands.

Records and distribution

Number of records (all)

Clearly assigned:	213
Transitional:	41
Total:	254

Number of records (mapped)

2001-2015:	216
1986-2000:	5
1971-1985:	6
Pre-1971:	12
Total:	249

Number of hectads (most recent records)

2001-2015:	106
1986-2000:	3
1971-1985:	4
Pre-1971:	5
Total:	118

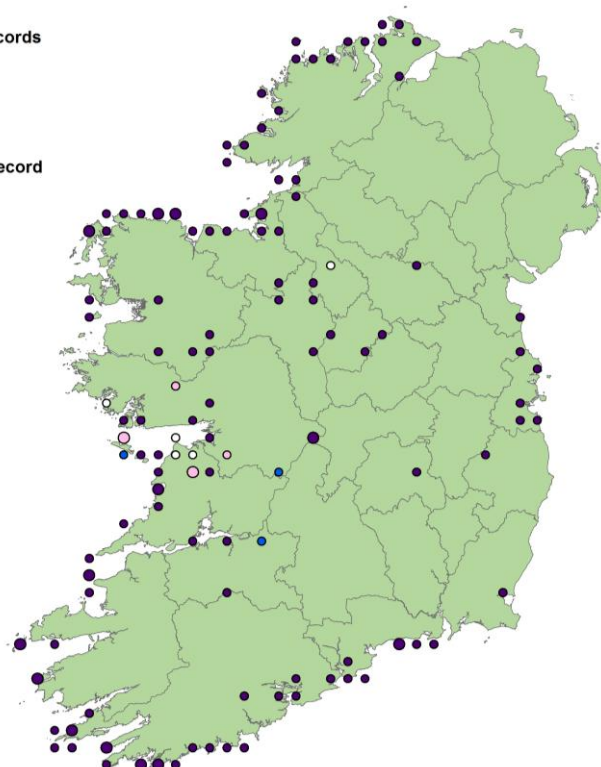
Number of hectads (all mapped records)

2001-2015:	106
1986-2000:	4
1971-1985:	6
Pre-1971:	9

Number of records



Most recent record



Synoptic table (n = 200)

Species	Frequency	Cover	Species	Frequency	Cover
	(from I-V)	min (med) max		(from I-V)	min (med) max
<i>Festuca rubra</i>	V	3-(7)-10	<i>Rumex acetosa</i>	I	+- (2)-6
<i>Trifolium repens</i>	IV	+- (3)-8	<i>Rhytidadelphus squarrosus</i>	I	+- (2)-6
<i>Agrostis stolonifera</i>	IV	2-(3)-8	<i>Kindbergia praelonga</i>	I	+- (2)-6
<i>Plantago lanceolata</i>	III	+- (3)-6	<i>Bellis perennis</i>	I	+- (2)-6
<i>Lotus corniculatus</i>	III	+- (3)-7	<i>Carex panicea</i>	I	+- (3)-5
<i>Holcus lanatus</i>	III	1-(3)-8	<i>Dactylis glomerata</i>	I	+- (3)-7
<i>Plantago maritima</i>	III	+- (4)-9	<i>Trifolium pratense</i>	I	+- (2)-5
<i>Plantago coronopus</i>	III	+- (3)-8	<i>Anagallis tenella</i>	I	+- (2)-6
<i>Armeria maritima</i>	II	+- (3)-7	<i>Hypnum cupressiforme</i>	I	+- (2)-6
<i>Carex flacca</i>	II	+- (3)-7	<i>Thymus polytrichus</i>	I	1-(3)-7
<i>Cerastium fontanum</i>	II	+- (2)-4	<i>Taraxacum officinale</i> agg.	I	+- (2)-4
<i>Hypochaeris radicata</i>	II	+- (2)-7	<i>Danthonia decumbens</i>	I	+- (2)-5
<i>Agrostis capillaris</i>	II	+- (3)-7	<i>Prunella vulgaris</i>	I	+- (2)-4
<i>Potentilla erecta</i>	II	+- (3)-6	<i>Calliergonella cuspidata</i>	I	+- (2)-6
<i>Leontodon autumnalis</i>	II	+- (2)-4	<i>Carex nigra</i>	I	1-(3)-6
<i>Koeleria macrantha</i>	II	1-(3)-5	<i>Viola riviniana</i>	I	+- (2)-4
<i>Anthoxanthum odoratum</i>	II	2-(3)-7	<i>Sagina procumbens</i>	I	1-(2)-4
<i>Carex viridula</i>	I	+- (2)-6	<i>Calluna vulgaris</i>	I	+- (2)-4
<i>Euphrasia officinalis</i> agg.	I	+- (2)-5	<i>Cochlearia officinalis</i>	I	+- (2)-5
<i>Poa pratensis</i> agg.	I	+- (2)-5	<i>Galium verum</i>	I	+- (3)-6

Affinities

GHI: GS1 Dry calcareous and neutral grassland (58.4%) / GS4 Wet grassland (14.6%) / GS3 Dry-humid acid grassland (13.0%) / GS2 Dry meadows and grassy verges (11.4%) (n = 185)

ZM: Silenion maritimae / Cynosurion cristati

EUNIS: B3.31 Atlantic sea-cliff communities

NVC: MC9a *Festuca rubra*-*Holcus lanatus* maritime grassland *Plantago maritima* sub-community (74.2%)

Annex I: 6130 Calaminarian grassland (3.8%) (n = 185)

Proxy environmental data

Light: 7.6 Reaction: 5.8 Wetness: 5.5 Fertility: 4.4 Salinity: 1.3

Conservation value

This is a species-poor grassland community (species/4 m² = 15.8, n = 185) but the maritime assemblage does support a number of coastal specialists. A few swards on soils containing heavy metals and generally found in association with old mine workings in coastal areas, correspond with the EU HD Annex I habitat 6130 Calaminarian grassland.

Management

Sub-community GL3Fi may be grazed by sheep or cattle, or ungrazed. The rank sward of sub-community GL3Fii is usually ungrazed, occurring in inaccessible areas along the coast and abandoned fields inland. Coastal erosion is a threat to maritime communities. Inland communities could gradually be lost if abandonment becomes long-term or if intensive management is introduced.

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: V1.0

Synopsis date: December 2016

Synopsis author(s): P.M. Perrin



Photo 1. GL3F *Festuca rubra* – *Lotus corniculatus* grassland, Garinish Point, Cork (S. Barron/P. Perrin, July 2008)



Photo 2. GL3F *Festuca rubra* – *Lotus corniculatus* grassland Glannafeen, Cork (C. MacMahon/K. McNutt, September 2008)