



Scientific name	<i>Festuca rubra</i> – <i>Thymus polytrichus</i> duneland
Common name	Red Fescue – Wild Thyme duneland
Community code	DU2D

Vegetation

This is a dune grassland community in which the main constituents are *Festuca rubra*, *Thymus polytrichus* and *Galium verum*. Other constant herbaceous species are *Trifolium repens*, *Lotus corniculatus*, *Plantago lanceolata*, *Luzula campestris* and *Bellis perennis*. In addition to *Thymus*, with its delicate pink-purple flowers, several calcicole turf species may be encountered here, including *Linum catharticum*, *Euphrasia officinalis* agg., *Carex flacca*, *Ranunculus bulbosus*, *Koeleria macrantha* and *Campanula rotundifolia*. Tussocks of *Ammophila arenaria* are frequent. A typically modest moss layer occurs composed of *Rhytidiadelphus squarrosus* and *Homalothecium lutescens*.

Ecology

This community represents a variant of dune grassland found on fixed dunes and machair plains, occurring on sandy soils which have developed some mor-humus.

Sub-communities

No sub-communities are described.

Similar communities

The suite of calcicole species, particularly *Thymus polytrichus*, separate this DU2D assemblage from the other dune grassland communities. In the calcareous swards of the GL3A *Briza media* – *Thymus polytrichus* grassland, several different grasses are found, notably *Briza media*, *Anthoxanthum odoratum* and *Sesleria caerulea*, but psammophilic species, such as *Ammophila arenaria* and *Carex arenaria*, are lacking.

Records and distribution

Number of records (all)

Clearly assigned:	262
Transitional:	37
Total:	299

Number of records (mapped)

2001-2017:	18
1986-2000:	213
1971-1985:	39
Pre-1971:	29
Total:	299

Number of hectads (most recent records)

2001-2017:	16
1986-2000:	22
1971-1985:	2
Pre-1971:	4
Total:	44

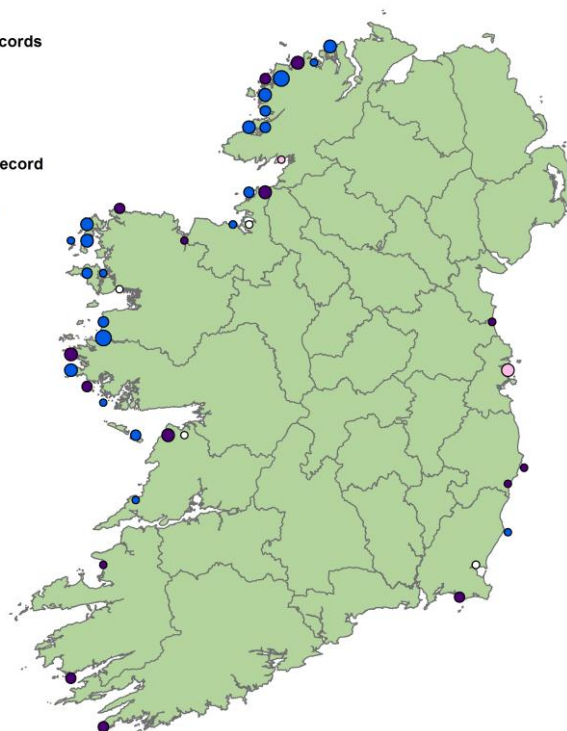
Number of hectads (all mapped records)

2001-2017:	16
1986-2000:	32
1971-1985:	5
Pre-1971:	7

Number of records



Most recent record



Synoptic table (n = 229)

Species	Frequency	Cover	Species	Frequency	Cover
	(from I-V)	min (med) max		(from I-V)	min (med) max
<i>Festuca rubra</i>	V	2-(5)-9	<i>Holcus lanatus</i>	II	1-(3)-5
<i>Thymus polytrichus</i>	V	2-(5)-9	<i>Koeleria macrantha</i>	II	1-(3)-6
<i>Galium verum</i>	V	+(4)-7	<i>Pilosella officinarum</i>	II	1-(3)-5
<i>Trifolium repens</i>	IV	1-(3)-7	<i>Prunella vulgaris</i>	II	1-(3)-4
<i>Lotus corniculatus</i>	IV	1-(3)-6	<i>Senecio jacobaea</i>	II	+(2)-5
<i>Plantago lanceolata</i>	IV	1-(3)-6	<i>Ditrichum gracile</i>	II	1-(3)-8
<i>Luzula campestris</i>	IV	+(3)-6	<i>Peltigera canina</i>	II	1-(2)-5
<i>Bellis perennis</i>	IV	1-(3)-7	<i>Taraxacum officinale</i> agg.	II	1-(2)-4
<i>Rhytiadelphus squarrosus</i>	III	+(4)-9	<i>Polygala vulgaris</i>	II	+(2)-4
<i>Linum catharticum</i>	III	+(3)-7	<i>Scleropodium purum</i>	II	+(3)-9
<i>Homalothecium lutescens</i>	III	1-(4)-8	<i>Campanula rotundifolia</i>	II	1-(3)-5
<i>Euphrasia officinalis</i> agg.	III	1-(3)-7	<i>Calliergonella cuspidata</i>	II	2-(3)-8
<i>Poa pratensis/humilis</i>	III	1-(3)-7	<i>Hypnum cupressiforme</i>	II	1-(3)-9
<i>Carex flacca</i>	III	1-(4)-7	<i>Cerastium diffusum</i>	II	1-(2)-4
<i>Ranunculus bulbosus</i>	III	1-(3)-7	<i>Rumex acetosa</i>	II	1-(3)-6
<i>Ammophila arenaria</i>	III	1-(4)-7	<i>Viola riviniana</i>	II	1-(3)-7
<i>Hypochaeris radicata</i>	III	1-(3)-5	<i>Syntrichia ruraliformis</i>	II	1-(3)-6
<i>Carex arenaria</i>	III	1-(3)-8	<i>Centaurium erythraea</i>	I	+(2)-3
<i>Leontodon saxatilis</i>	II	+(3)-5	<i>Agrostis stolonifera</i>	I	1-(3)-6
<i>Cerastium fontanum</i>	II	1-(2)-5	<i>Arenaria serpyllifolia</i>	I	1-(3)-5

Affinities

GHI: CD3 Fixed dunes / CD6 Machair

ZM: CM Molinio-Arrhenatheretea (53.4%) / DA Festuco-Brometea (39.5%)

EUNIS: B1.411 Crested-hairgrass dune communities / B1.45 Atlantic dune *Mesobromion grassland* / B1.9 Machair

NVC: SD8 *Festuca rubra* – *Galium verum* fixed dune community (73.0%)

Annex I: *2130 Fixed dunes (grey dunes) / *21A0 Machair

Proxy environmental data

Light: 7.4 Reaction: 6.0 Wetness: 4.5 Fertility: 3.3 Salinity: 0.5

Conservation value

Most examples of this vegetation correspond to EU HD Annex I habitat *2130 Fixed dunes (grey dunes). On the northwest coast, this assemblage can be a component of priority habitat *21A0 Machair.

Management

This dune grassland is often grazed by livestock and rabbits, and overgrazing or undergrazing can be a problem, as can disturbance due to recreational activities in popular coastal areas.

Key references

Crawford, I., Bleasdale, A., Conaghan, J. (1996) Biomar survey of Irish machair sites 1996. Volume 2: Plant communities. (unpublished). National Parks and Wildlife Service, Dublin.

Gaynor, K. (2007) Flora and vegetation of Irish sand dune systems. (Ph.D. thesis). University College Dublin.

Synopsis version: V1.0

Synopsis date: November 2019

Synopsis author(s): P.M. Perrin



Photo 1. DU2D *Festuca rubra* – *Thymus polytrichus* duneland, Rinclevan, Donegal (M. Swann, July 2011)



Photo 2. DU2D *Festuca rubra* – *Thymus polytrichus* duneland, Rinclevan, Donegal (A. Delaney, July 2011)