



<b>Scientific name</b>	<i>Festuca rubra</i> – <i>Plantago lanceolata</i> – <i>Carex arenaria</i> duneland
<b>Common name</b>	Red Fescue – Ribwort Plantain – Sand Sedge duneland
<b>Community code</b>	DU2C

### Vegetation

In this dune grassland community the main sward species is *Festuca rubra* with other constant graminoids being *Poa pratensis/humilis* and *Carex arenaria*. The chief forb species to be found are *Plantago lanceolata*, *Galium verum*, *Trifolium repens* and *Lotus corniculatus*. Other frequent or occasional plants tend to be characteristic of mesotrophic soils, including *Bellis perennis*, *Senecio jacobaea*, *Luzula campestris*, *Achillea millefolium* and *Taraxacum officinale* agg. Bryophytes are not always present but can be very abundant when they are, with the moss layer most usually containing *Rhytiadelphus squarrosus*, *Homalothecium lutescens*, *Syntrichia ruraliformis*, *Brachythecium albicans* and *Calliergonella cuspidata*. Apart from *Carex arenaria*, psammophilic (sand-loving) species are infrequent.

### Ecology

This community represents the standard type 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

This community lacks the tussocks of *Ammophila arenaria* found in the DU2A *Ammophila arenaria* – *Festuca rubra* duneland. Bryophytes are less frequently abundant here than they are in the DU2B *Festuca rubra* – *Syntrichia ruraliformis* where *Hypochaeris radicata* is more commonly encountered and *Plantago lanceolata* and *Trifolium repens* less commonly so. The DU2D *Festuca rubra* – *Thymus praecox* grassland contains a suite of calcicole species not often found in the DU2C. The GL3C *Festuca rubra* – *Plantago lanceolata* grassland community is also closely aligned, but supports meadow species such as *Dactylis glomerata*, *Centaurea nigra* and *Trifolium pratense* not found here, whilst *Galium verum* is much less common.

### Records and distribution

#### Number of records (all)

Clearly assigned:	234
Transitional:	46
Total:	280

#### Number of records (mapped)

2001-2017:	13
1986-2000:	234
1971-1985:	26
Pre-1971:	7
Total:	280

#### Number of hectads (most recent records)

2001-2017:	9
1986-2000:	33
1971-1985:	1
Pre-1971:	3
Total:	46

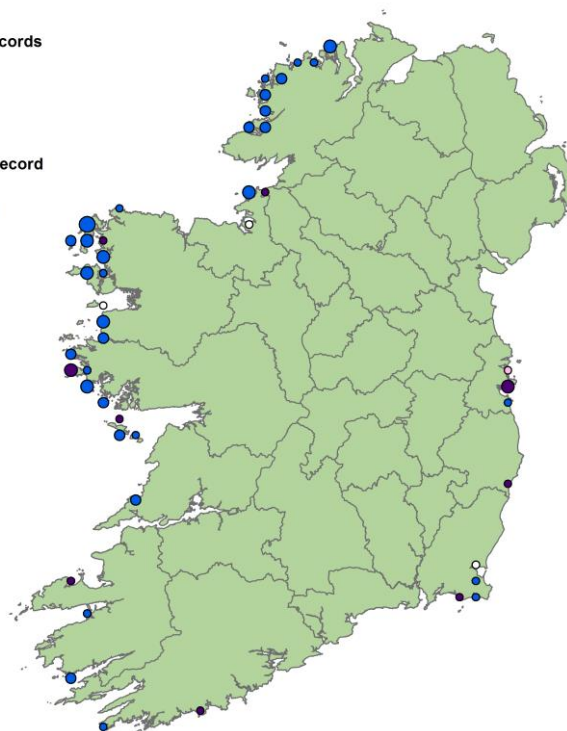
#### Number of hectads (all mapped records)

2001-2017:	9
1986-2000:	36
1971-1985:	5
Pre-1971:	5

#### Number of records



#### Most recent record



**Synoptic table (n = 222)**

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)-9	<i>Calliergonella cuspidata</i>	II	+- (3)-7
<i>Plantago lanceolata</i>	V	1-(3)-8	<i>Euphrasia officinalis</i> agg.	I	1-(3)-8
<i>Galium verum</i>	V	2-(5)-8	<i>Holcus lanatus</i>	I	1-(3)-6
<i>Trifolium repens</i>	V	2-(5)-9	<i>Ammophila arenaria</i>	I	1-(4)-7
<i>Lotus corniculatus</i>	V	2-(4)-8	<i>Cerastium diffusum</i>	I	1-(2)-4
<i>Poa pratensis/humilis</i>	IV	1-(4)-7	<i>Elytrigia juncea</i>	I	+- (3)-5
<i>Carex arenaria</i>	IV	1-(3)-7	<i>Plantago coronopus</i>	I	1-(3)-7
<i>Bellis perennis</i>	III	+- (3)-7	<i>Cerastium glomeratum</i>	I	1-(3)-5
<i>Senecio jacobaea</i>	III	+- (3)-5	<i>Agrostis stolonifera</i>	I	2-(3)-7
<i>Rhynchospora squarrosus</i>	III	1-(5)-10	<i>Leontodon saxatilis</i>	I	1-(3)-5
<i>Luzula campestris</i>	II	+- (3)-5	<i>Lolium perenne</i>	I	1-(3)-6
<i>Hypochaeris radicata</i>	II	+- (3)-7	<i>Carex flacca</i>	I	1-(3)-4
<i>Achillea millefolium</i>	II	1-(3)-7	<i>Dactylis glomerata</i>	I	+- (3)-7
<i>Taraxacum officinale</i> agg.	II	+- (2)-4	<i>Leontodon autumnalis</i>	I	+- (3)-5
<i>Ranunculus bulbosus</i>	II	1-(3)-6	<i>Campanula rotundifolia</i>	I	1-(3)-6
<i>Homalothecium lutescens</i>	II	2-(5)-9	<i>Prunella vulgaris</i>	I	1-(3)-6
<i>Cerastium fontanum</i>	II	1-(3)-5	<i>Sedum acre</i>	I	1-(3)-4
<i>Rumex acetosa</i>	II	+- (3)-5	<i>Daucus carota</i>	I	+- (3)-7
<i>Syntrichia ruraliformis</i>	II	2-(4)-9	<i>Cynosurus cristatus</i>	I	2-(3)-6
<i>Brachythecium albicans</i>	II	1-(4)-8	<i>Linum catharticum</i>	I	1-(3)-5

**Affinities**

GHI: CD3 Fixed dunes / CD6 Machair

ZM: CM Molinio-Arrhenatheretea (87.7%)

EUNIS: B1.411 Crested-hairgrass dune communities / B1.9 Machair

NVC: SD8a *Festuca rubra* – *Galium verum* fixed dune community typical sub-community (75.0%)

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

**Proxy environmental data**

Light: 7.5    Reaction: 6.0    Wetness: 4.6    Fertility: 3.9    Salinity: 0.8

**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 recreation 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. DU2C *Festuca rubra* – *Plantago lanceolata* – *Carex arenaria* duneland, Doo Lough, Mayo (K. Duff, August 2011)



Photo 2. DU2C *Festuca rubra* – *Plantago lanceolata* – *Carex arenaria* duneland, Castlegregory, Kerry  
(A. Delaney, September 2011)