

<b>Scientific name</b>	<i>Atriplex portulacoides</i> – <i>Puccinellia maritima</i> saltmarsh
<b>Common name</b>	Sea-purslane – Common Saltmarsh-grass saltmarsh
<b>Community code</b>	SM2B

### Vegetation

This is a distinctive saltmarsh community as it is dominated by shin-high, shrubby expanses of *Atriplex portulacoides* (mean maximum vegetation height = 40.9 cm,  $n = 33$ ). *Puccinellia maritima* is also a constant species and if there are patches between the *Atriplex* it can be abundant. Frequently found in these patches are *Aster tripolium*, *Limonium humile*, *Spergularia media* and *Plantago maritima*, while *Suaeda maritima*, *Spartina* agg., *Triglochin maritimum*, *Salicornia* agg. and *Armeria maritima* are occasional. *Limonium binervosum* agg. can be plentiful locally on sandy shingle banks. There can be an extensive algal mat but generally few macroalgae. *Bostrychia scorpioides* is often found growing epiphytically on the woody stems of the *Atriplex*.

### Ecology

This is a lower marsh community often found on top of the marsh cliff or next to creeks. It can occur on sand or shingle and is fairly frequently inundated. *Atriplex portulacoides* is sensitive to grazing which may explain the limited occurrence of this community along the west coast. Conditions are base-rich (mean pH = 7.6,  $n = 33$ ).

### Sub-communities

No sub-communities have been described for this community

### Similar communities

This is a distinctive community that should be easily identified. In no other community does *Atriplex portulacoides* achieve such abundance.

### Records and distribution

#### Number of records (all)

Clearly assigned:	124
Transitional:	7
Total:	131

#### Number of records (mapped)

2001-2020:	94
1986-2000:	0
1971-1985:	36
Pre-1971:	1
Total:	131

#### Number of hectads (by most recent time period)

2001-2020:	19
1986-2000:	0
1971-1985:	0
Pre-1971:	1
Total:	20

#### Number of hectads (records in each time period)

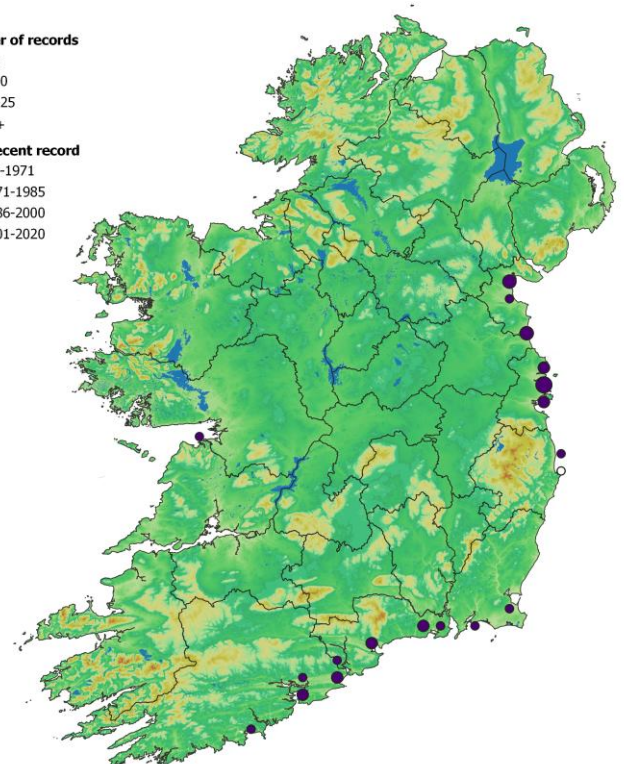
2001-2020:	19
1986-2000:	0
1971-1985:	6
Pre-1971:	1

#### Number of records

- 1-3
- 4-10
- 11-25
- 26+

#### Most recent record

- pre-1971
- 1971-1985
- 1986-2000
- 2001-2020



**Synoptic table (n = 124)**

Species	Frequency	Cover	Species	Frequency	Cover
	(from I-V)	min (med) max		(from I-V)	min (med) max
<i>Atriplex portulacoides</i>	V	3-(8)-10	<i>Cochlearia anglica</i>	I	2-(2)-2
<i>Puccinellia maritima</i>	IV	+- (4)-7	<i>Juncus acutus</i>	I	8-(8)-9
<i>Aster tripolium</i>	III	+- (2)-8	<i>Ammophila arenaria</i>	I	3-(3)-3
<i>Limonium humile</i>	III	+- (3)-7	<i>Beta vulgaris</i>	I	2-(2)-2
<i>Plantago maritima</i>	III	1-(3)-7	<i>Carex arenaria</i>	I	3-(3)-3
<i>Spergularia media</i>	III	+- (3)-5	<i>Elytrigia juncea</i>	I	2-(2)-2
<i>Suaeda maritima</i>	II	+- (3)-5	<i>Elytrigia repens</i>	I	4-(4)-4
<i>Triglochin maritimum</i>	II	1-(3)-8	<i>Juncus gerardii</i>	I	9-(9)-9
<i>Spartina</i> agg.	II	1-(3)-7	<i>Silene uniflora</i>	I	1-(1)-1
<i>Salicornia</i> agg.	II	+- (2)-6			
<i>Armeria maritima</i>	II	+- (3)-7			
<i>Limonium binervosum</i> agg.	I	+- (4)-8			
<i>Cochlearia officinalis</i> agg.	I	+- (3)-4			
<i>Festuca rubra</i>	I	2-(3)-7			
<i>Glaux maritima</i>	I	+- (3)-4			
<i>Juncus maritimus</i>	I	2-(3)-7			
<i>Pelvetia canaliculata</i>	I	2-(5)-5			
<i>Spergularia marina</i>	I	2-(2)-3			
<i>Agrostis stolonifera</i>	I	3-(4)-4			
<i>Atriplex prostrata</i>	I	+- (2)-3			

**Affinities**

GHI: CM1 Lower salt marsh

ZM: MF03A Festucion maritimae Christiansen 1927)

EUNIS: A2.5421 Sea purslane-saltmarsh grass meadows / A2.545 *Halimione portulacoides* low-mid saltmarshes

NVC: SM14c *Halimione portulacoides* salt-marsh community *Puccinellia maritima* sub-community (74.5%)

Annex I:1330 Atlantic salt meadows

**Proxy environmental data**

Light: 8.9 Reaction: 7.7 Wetness: 7.8 Fertility: 5.7 Salinity: 5.6

**Conservation value**

Almost all examples of this vegetation qualify as EU HD Annex I habitat 1330 Atlantic salt meadows. It is typically a rather species-poor saltmarsh community (species/4 m<sup>2</sup> = 5.7, n = 94), but the species that do occur are specialists.

**Management**

The main immediate threats to this saltmarsh community are probably grazing by livestock and invasion by *Spartina* agg. It is usually absent or scarce where sheep or cattle grazing occur. Sea-level rises as a result of climate change will have an impact, particularly in areas susceptible to coastal squeeze.

**Key references**

McCorry, M., Ryle, T. (2009) Saltmarsh Monitoring Project 2007-2008. 5 volumes. (unpublished). National Parks and Wildlife Service, Dublin.

Penk, M.R., Perrin, P.M., Kelly, R., O'Neill, F., Waldren, S. (2020) Plant diversity and community composition in temperate northeast Atlantic salt marshes are linked to nutrient concentrations. *Applied Vegetation Science* 23, 3–13.

Ní Lamhna, É. (1982). The vegetation of saltmarshes and sand-dunes at Malahide Island, County Dublin. *Journal of Life Sciences - Royal Dublin Society* 3, 111-129.

**Synopsis version:** V2.1

**Synopsis date:** March 2025

**Synopsis author(s):** P.M. Perrin



Photo 1. SM2B *Atriplex portulacoides* – *Puccinellia maritima* saltmarsh, Tramore Backstrand, Waterford  
(M. Penk, July 2016)



Photo 2. SM2B *Atriplex portulacoides* – *Puccinellia maritima* saltmarsh, Dundalk Bay, Louth, (M. Penk, July 2016)