



Scientific name	<i>Carex rostrata</i> swamp/fen
Common name	Bottle Sedge swamp/fen
Community code	FW3C

Vegetation

This community consists of glaucous, usually dense beds of *Carex rostrata*. No other species is more than occasional in the community as a whole, therefore further details on the vegetation are described under sub-communities.

Ecology

This vegetation type occurs around the margins of mesotrophic and slightly dystrophic lakes and pools. Stands have also been recorded in turloughs. It may also be found in poor fens and in upland flushes amongst blanket bog and wet heath.

Sub-communities

Two distinct sub-communities are described. In the *Phragmites australis* – *Equisetum fluviatile* sub-community (FW3Ci) of mesotrophic lakes, *Carex rostrata*, growing in standing water, may be the only species present. Some sparse cover of *Phragmites australis* is frequent, however. *Equisetum fluviatile* is occasionally present but can be abundant. Less often found are *Typha latifolia*, *Mentha aquatica*, *Menyanthes trifoliata* and *Schoenoplectus lacustris*. In the rarer *Sphagnum cuspidatum* – *Warnstorfia fluitans* sub-community (FW3Cii) of acidic fens and flushes, *Carex rostrata*, and frequently *Juncus effusus*, grow through a quaking carpet of *Sphagnum cuspidatum*, more rarely containing *Sphagnum subsecundum* agg. or *Sphagnum squarrosum*. In this bryophyte layer may also be encountered the long shoots of *Warnstorfia fluitans* or some cover of *Polytrichum commune*, *Aulacomnium palustre* and *Campylopus introflexus*.

Similar communities

Sub-community FW3Ci is related to the FE2D *Carex rostrata* – *Menyanthes trifoliata* mire community. In that assemblage, however, *Menyanthes trifoliata* and other marsh and fen species, such as *Galium palustre*, *Potentilla palustris*, *Agrostis stolonifera* and *Hydrocotyle vulgaris*, are more likely to be recorded. Some confusion could arise between FW3Cii and the FE2E *Menyanthes trifoliata* – *Sphagnum recurvum* agg. mire, which also combines *Carex rostrata* with high *Sphagnum* cover, but in the present community *Menyanthes* and *Sphagnum recurvum* agg. are typically absent.

Records and distribution

Number of records (all)

Clearly assigned:	68
Transitional:	16
Total:	84

Number of records (mapped)

2001-2015:	24
1986-2000:	44
1971-1985:	16
Pre-1971:	0
Total:	84

Number of hectads (most recent records)

2001-2015:	13
1986-2000:	15
1971-1985:	8
Pre-1971:	0
Total:	36

Number of hectads (all mapped records)

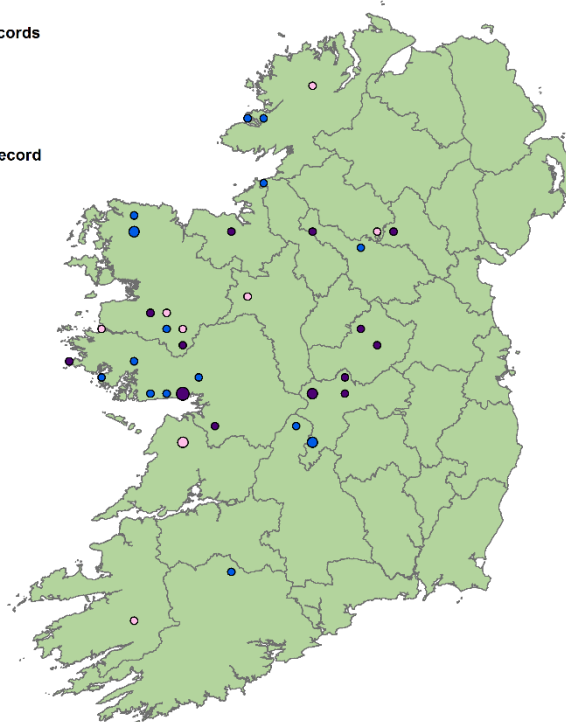
2001-2015:	24
1986-2000:	2
1971-1985:	1
Pre-1971:	6

Number of records

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

Most recent record

- 2001-2015
- 1986-2000
- 1971-1985
- pre-1971



Synoptic table (n = 67)

Species	Frequency (from I-V)	Cover min (med) max	Species	Frequency (from I-V)	Cover min (med) max
<i>Carex rostrata</i>	V	3-(7)-10	<i>Nymphaea alba</i>	I	2-(4)-5
<i>Phragmites australis</i>	II	2-(2)-5	<i>Berula erecta</i>	I	2-(5)-6
<i>Equisetum fluviatile</i>	II	2-(3)-8	<i>Alisma plantago-aquatica</i>	I	2-(2)-6
<i>Typha latifolia</i>	I	2-(4)-7	<i>Warnstorfia fluitans</i>	I	+-(4)-7
<i>Mentha aquatica</i>	I	1-(3)-7	<i>Galium palustre</i>	I	+-(2)-3
<i>Menyanthes trifoliata</i>	I	2-(3)-5	<i>Lemna minor</i>	I	2-(2)-2
<i>Molinia caerulea</i>	I	1-(2)-5	<i>Juncus effusus</i>	I	3-(5)-8
<i>Schoenoplectus lacustris</i>	I	2-(2)-7	<i>Potentilla palustris</i>	I	2-(2)-5
<i>Carex viridula</i>	I	2-(3)-5	<i>Aulacomnium palustre</i>	I	2-(3)-4
<i>Eriophorum angustifolium</i>	I	3-(5)-5	<i>Polytrichum commune</i>	I	3-(8)-8
<i>Potamogeton polygonifolius</i>	I	3-(4)-8	<i>Campylopus introflexus</i>	I	3-(4)-8
<i>Sphagnum cuspidatum</i>	I	3-(9)-9	<i>Hippuris vulgaris</i>	I	2-(3)-4
<i>Agrostis stolonifera</i>	I	2-(3)-6	<i>Baldellia ranunculoides</i>	I	3-(3)-7
<i>Potamogeton natans</i>	I	2-(3)-5	<i>Carex nigra</i>	I	3-(5)-7
<i>Juncus articulatus</i>	I	3-(3)-3	<i>Littorella uniflora</i>	I	2-(5)-5
<i>Eleocharis palustris</i>	I	1-(2)-3	<i>Sphagnum subsecundum</i> agg.	I	5-(7)-9
<i>Hydrocotyle vulgaris</i>	I	2-(2)-3	<i>Potentilla anserina</i>	I	2-(2)-2
<i>Ranunculus flammula</i>	I	3-(3)-3	<i>Juncus acutiflorus</i>	I	2-(2)-5
<i>Sparganium erectum</i>	I	2-(4)-7	<i>Lemna trisulca</i>	I	2-(4)-7
<i>Juncus bulbosus</i>	I	2-(3)-4	<i>Ranunculus lingua</i>	I	2-(2)-5

Affinities

GHI: FS1 Reed and large sedge swamps / FL6 Turloughs / PF2 Poor fen and flush

ZM: PHR-04A Magnocaricion elatae Koch 1926

EUNIS: C3.29 Water-fringing large sedge communities / D2.331 Acidocline bottle sedge quaking mires

NVC: S9a *Carex rostrata* swamp *Carex rostrata* sub-community (66.7%)

Annex I: 3180 Turloughs* / 7140 Transition mires

Proxy environmental data

Light: 7.7 Reaction: 4.6 Wetness: 9.7 Fertility: 2.9 Salinity: 0.1

Conservation value

This is a species-poor community in terms of plants. However, some examples of sub-community FW3Ci form part of the priority EU HD Annex I habitat 3180 Turloughs*. Stands of FW3Cii are likely to correspond to habitat 7140 Transition mires. In addition, the EU HD Annex II species Desmoulin's whorl snail (*Vertigo moulinsiana*) has been recorded from multiple stands of this vegetation.

Management

This community is typically unmanaged. Threats include eutrophication and drainage.

Key references

Conaghan, J. (1999) An assessment of the conservation value of blanket bog landscape to the west of Galway city (unpublished). The Heritage Council, Kilkenny.

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Photo 1. FW3C *Carex rostrata* swamp/fen, Fin Lough, Offaly (J. Brophy, November 2014)



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