Irish Vegetation Classification (IVC)

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Community Synopsis

Scientific name	*Juncus bulbosus* aquatic community
Common name	Bulbous Rush aquatic community
Community code	FW1C

Vegetation

This community brings together a variety of vegetation assemblages for which *Juncus bulbosus* is a key indicator. *Juncus bulbosus* is a constant here, but no other species are more than occasional in the community as a whole, therefore further details on the vegetation are described under sub-communities.

Ecology

Juncus bulbosus vegetation is typically associated with nutrient-poor and acidic, aquatic or sub-aquatic conditions. It may be found on the shores of oligotrophic lakes and the margins of peaty dystrophic pools. It also occurs in drainage ditches and erosion channels in degraded bog.

Sub-communities

Two distinct sub-communities are described. The *Ranunculus flammula – Mentha aquatica* sub-community (FW1Ci) unites the examples from lakeshores and pool margins. Here, *Juncus bulbosus* is omnipresent and *Ranunculus flammula* is fairly frequent. They are occasional accompanied by *Mentha aquatica, Potamogeton natans*, *Hypericum elodes*, *Eleocharis multicaulis*, *Potamogeton polygonifolius*, *Menyanthes trifoliata*, *Hydrocotyle vulgaris* or *Eriocaulon aquaticum*. In the *Juncus effusus – Polytrichum commune* sub-community (FW1Cii) of degraded bogs, *Juncus bulbosus, Campylopus introflexus*, *Juncus effusus* and *Polytrichum commune* are constant species, with the bryophytes *Lophocolea bidentata*, *Kindbergia praelonga*, *Sphagnum subsecundum* agg. and *Aulacomnium palustre* all frequent.

Similar communities

Sub-community FW1Ci occurs in similar situations to the FW1A *Littorella uniflora – Ranunculus flammula* community but *Littorella uniflora* is seldom present in the sub-community and never abundant. Sub-community FW1Cii differs from the degraded bog represented by BG1 *Eriophorum angustifolium – Campylopus introflexus* bog by the greater frequency *of Juncus bulbosus* and the absence of bog species such as *Eriophorum angustifolium*, *Calluna vulgaris* or *Molinia caerulea*.

Records and distribution

Number of records (all)

Clearly assigned:	51
Transitional:	31
Total:	82

Number of records (mapped)

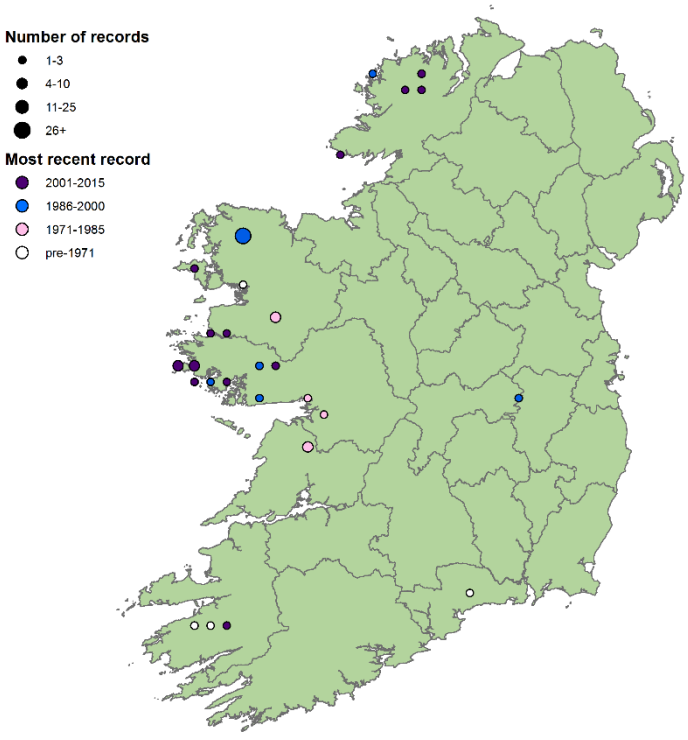
2001-2015:	25
1986-2000:	33
1971-1985:	13
Pre-1971:	5
Total:	76

Number of hectads (most recent records)

2001-2015:	13
1986-2000:	6
1971-1985	4
Pre-1971:	4
Total:	27

Number of hectads (all mapped records)

2001-2015:	13
1986-2000:	6
1971-1985	7
Pre-1971:	5



Synoptic table (*n* = 50)

Species	Frequency (from I-V)	Cover min (med) max	Species	Frequency (from I-V)	Cover min (med) max
Juncus bulbosus	V	3-(5)-9	*Aulacomnium palustre*	I	2-(4)-4
Ranunculus flammula	II	+-(2)-7	*Lobelia dortmanna*	I	2-(3)-3
Juncus effusus	II	3-(6)-8	*Littorella uniflora*	I	2-(3)-4
Potamogeton natans	II	+-(2)-5	*Phragmites australis*	I	3-(5)-8
Mentha aquatica	II	+-(2)-5	*Carex viridula*	I	2-(2)-3
Campylopus introflexus	II	3-(7)-8	*Myriophyllum alterniflorum*	I	2-(3)-4
Polytrichum commune	II	2-(3)-7	*Utricularia intermedia*	I	2-(2)-3
Eleocharis multicaulis	I	3-(3)-5	*Isolepis fluitans*	I	3-(3)-7
Eriocaulon aquaticum	I	2-(3)-7	*Anagallis tenella*	I	2-(3)-5
Hydrocotyle vulgaris	I	2-(3)-4	*Sphagnum cuspidatum*	I	3-(4)-7
Menyanthes trifoliata	I	2-(3)-5	*Holcus lanatus*	I	+-(2)-7
Potamogeton polygonifolius	I	+-(4)-8	*Pellia neesiana*	I	3-(4)-7
Sphagnum subsecundum agg.	I	+-(3)-9	*Peltigera polydactylon*	I	2-(3)-3
Hypericum elodes	I	2-(5)-8	*Juncus articulatus*	I	2-(2)-4
Baldellia ranunculoides	I	2-(2)-3	*Eleocharis palustris*	I	2-(3)-7
Potamogeton gramineus	I	2-(2)-3	*Scorpidium scorpioides*	I	2-(4)-5
Kindbergia praelonga	I	2-(3)-4	*Carex nigra*	I	+-(2)-2
Lophocolea bidentata	I	2-(4)-7	*Agrostis canina/vinealis*	I	2-(4)-8
Agrostis stolonifera	I	2-(3)-3	*Apium nodiflorum*	I	2-(3)-3
Schoenoplectus lacustris	I	2-(4)-5	*Racomitrium aciculare*	I	+-(2)-4

Affinities

GHI: FL2 Oligotrophic lakes / PF2 Poor fen and flush / FL1 Dystrophic lakes

ZM: LIT-01F Hyperico elodis-Sparganion Br.-Bl. et Tx. ex Oberd. 1957

EUNIS: C3.4134 *Juncus bulbosus* communities / D1.215 Western Irish *Juncus bulbosus* flush communities

NVC: A24b *Juncus bulbosus* community *Sphagnum auriculatum* sub-community (40.3%)

Annex I: 3110 Oligotrophic soft water lakes / 7130 Blanket bog (active)* / 3160 Dystrophic lakes

Proxy environmental data

Light: 7.1 Reaction: 4.3 Wetness: 9.0 Fertility: 2.8 Salinity: 0.1

Conservation value

Examples of sub-community FW1Ci are likely to correspond to EU HD Annex I habitats 3160 Dystrophic lakes or 3110 Oligotrophic soft water lakes. Examples of sub-community FW1Cii are likely to correspond to the inactive variant of EU HD Annex I habitat 7130 Blanket bog.

Management

This vegetation is typically unmanaged. Lakeshore and pool margin stands may be impacted upon by drainage and eutrophication. Stands of FW1Cii are typically a result of turf-cutting, either by machine or by hand, or erosion, which may be linked to extensive sheep grazing.

Key references

van Groenendael, J., Hochstenbach, S.M.H., van Mansfeld, M., Roozen, A.J.M., Westhoff, V. (1982) The influence of the sea on the vegetation of lakes in southwest Connemara. *Journal of Life Science of the Royal Dublin Society* 3, 221–242.

Farrell, C.A., 2001. An ecological study of intact and industrial cutaway Atlantic blanket bog at Bellacorick, north-west Mayo (Ph.D. thesis). University College Dublin, Ireland.

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