Irish Vegetation Classification (IVC)

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Community Synopsis

Scientific name	*Palustriella commutata – Bryum pseudotriquetrum* spring
Common name	Curled Hook-moss – Marsh Bryum spring
Community code	FE4B

Vegetation

This bryophyte-rich spring assemblage is typically dominated by *Palustriella commutata* often accompanied by the tufted shoots of *Bryum pseudotriquetrum*. Also frequently present are some patches of *Fissidens adianthoides* and *Philonotis fontana*. Thallose liverworts are often found, usually *Aneura pinguis* but also *Pellia endiviifolia*, *Pellia epiphylla* and *Riccardia multifida*. Vascular plants are usually not abundant and their main cover is provided by graminoids, particularly *Carex viridula*, *Carex panicea*, *Agrostis stolonifera* and *Festuca rubra*. Some creeping stems of *Anagallis tenella* may occasionally be seen, however, as may the rosettes of the insectivorous *Pinguicula vulgaris*.

Ecology

This is a community of base-rich springheads, upwellings and seepage points. It can occur on upland hillslopes, within fens and on the coast. Precipitation of calcium carbonate can lead to the deposition of tufa and the creation of petrifying springs.

Sub-communities

No sub-communities are currently described.

Similar communities

The abundance of *Palustriella commutata* differentiates this community from other wetland types, including the otherwise rather similar FE1C *Carex viridula – Carex panicea* fen.

Records and distribution

Number of records (all)

Clearly assigned:	18
Transitional:	1
Total:	19

Number of records (mapped)

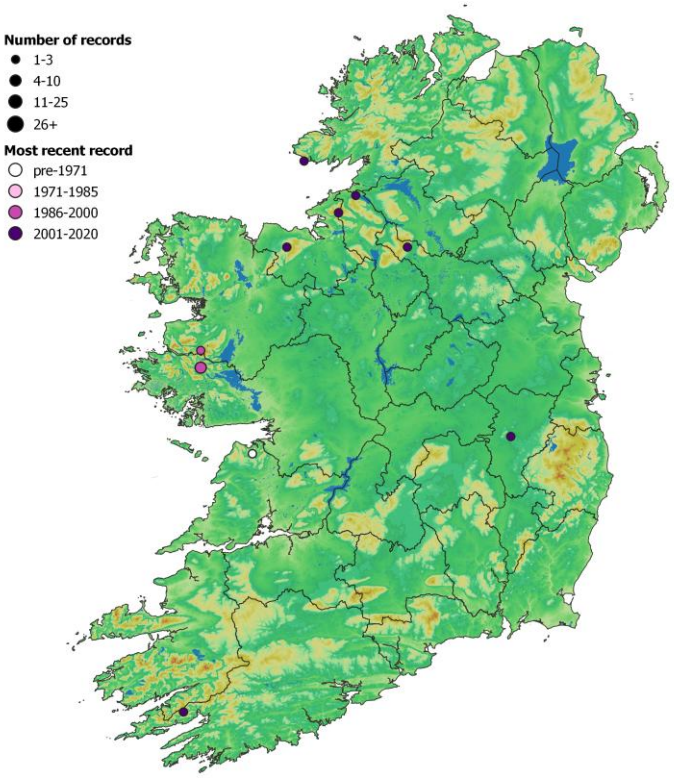
2001-2020:	9
1986-2000:	6
1971-1985:	1
Pre-1971:	3
Total:	19

Number of hectads (by most recent time period)

2001-2020:	7
1986-2000:	2
1971-1985	0
Pre-1971:	1
Total:	10

Number of hectads (records in each time period)

2001-2020:	7
1986-2000:	2
1971-1985	1
Pre-1971:	1



Synoptic table (*n* = 17)

Species	Frequency (from I-V)	Cover min (med) max	Species	Frequency (from I-V)	Cover min (med) max
Palustriella commutata	V	5-(8)-9	*Cirsium dissectum*	II	1-(2)-3
Bryum pseudotriquetrum	V	+-(2)-5	*Drepanocladus cossonii/revolvens*	II	2-(4)-5
Carex viridula	V	1-(3)-5	*Galium palustre*	II	1-(3)-3
Festuca rubra	IV	2-(4)-6	*Juncus acutiflorus*	II	1-(3)-5
Carex panicea	IV	2-(3)-7	*Juncus bulbosus*	II	2-(4)-5
Agrostis stolonifera	III	1-(4)-5	*Pellia epiphylla*	II	2-(3)-3
Aneura pinguis	III	+-(2)-3	*Riccardia multifida*	II	+-(+)-1
Fissidens adianthoides	III	+-(1)-3	*Taraxacum officinale* agg.	II	1-(2)-3
Philonotis fontana	III	+-(2)-5	*Trifolium repens*	II	2-(4)-5
Juncus articulatus	II	2-(3)-5	*Carex flacca*	I	1-(3)-3
Pellia endiviifolia	II	+-(1)-3	*Chrysosplenium oppositifolium*	I	+-(3)-3
Anagallis tenella	II	2-(3)-5	*Cratoneuron filicinum*	I	+-(2)-3
Calliergonella cuspidata	II	+-(+)-2	*Hydrocotyle vulgaris*	I	3-(3)-5
Campylium stellatum	II	+-(1)-4	*Leontodon autumnalis*	I	+-(2)-3
Carex nigra	II	3-(3)-5	*Molinia caerulea*	I	1-(2)-3
Epilobium brunnescens	II	1-(2)-3	*Prunella vulgaris*	I	1-(3)-4
Holcus lanatus	II	2-(2)-3	*Ranunculus flammula*	I	2-(2)-2
Philonotis calcarea	II	+-(2)-4	*Succisa pratensis*	I	+-(1)-2
Pinguicula vulgaris	II	+-(3)-4	*Thuidium tamariscinum*	I	+-(+)-+
Cardamine pratensis	II	3-(3)-3	*Viola riviniana/reichenbachiana*	I	+-(+)-1

Affinities

GHI: FP1 Calcareous springs

ZM: OA02F Cratoneurion commutati Koch 1928

EUNIS: C2.121 Petrifying springs with tufa or travertine formations

NVC: M37 *Cratoneuron commutatum-Festuca rubra* spring (49.8%)

Annex I: 7220 Petrifying springs*

Proxy environmental data

Light: 7.2 Reaction: 6.4 Wetness: 8.2 Fertility: 2.7 Salinity: 0.2

Conservation value

Examples with tufa formation constitute the EU HD Annex I priority habitat 7220 Petrifying springs*. It is quite species-rich (species/4 m^2 = 21.8, *n* = 13).

Management

These springs can be impacted by alterations to the natural hydrology, high levels of phosphates and nitrates and trampling by livestock.

Key references

Perrin, P.M., Barron, S.J., Roche, J.R., O'Hanrahan, B. (2014) Guidelines for a national survey and conservation assessment of upland vegetation and habitats in Ireland. *Irish Wildlife Manuals* No. 79. National Parks and Wildlife Service, Dublin.

Bleasdale, A. (1995) The vegetation and ecology of the Connemara uplands, with particular reference to sheep grazing. (Ph.D. thesis). National University of Ireland Galway.

Ivimey-Cook, R.B., Proctor, M.C.F. (1964) The plant communities of the Burren, Co. Clare. *Proceedings of the Royal Irish Academy. Section B: Biological, Geological, and Chemical Science* 64, 211–302.

Synopsis version: V1.1 **Synopsis date:** March 2025 **Synopsis author(s):** P.M. Perrin

Photo 1. FE4B *Palustriella commutata – Bryum pseudotriquetrum* spring, Coomarkane, near Toberavanaha Lough, Cork (R. Hodd, August 2014)

Photo 2. FE4B *Palustriella commutata – Bryum pseudotriquetrum* spring, Commas, below Cuilcagh, Cavan (J. Fuller, September 2012)