

Scientific name	<i>Philonotis fontana</i> – <i>Chrysosplenium oppositifolium</i> spring
Common name	Fountain Apple-moss – Opposite-leaved Golden-saxifrage spring
Community code	FE4A

Vegetation

This is a diverse spring community of which some of the main hallmarks are mats of *Chrysosplenium oppositifolium* and the pale, rod-like shoots of *Philonotis fontana*. There is usually some grassy cover provided by *Anthoxanthum odoratum*, *Holcus lanatus* and *Agrostis capillaris*, with some straggling stems of *Galium palustre*. Apart, from *Philonotis*, the main bryophytes are *Calliergonella cuspidata*, *Scapania undulata*, *Brachythecium rivulare*. Frequently, one will spot the conspicuous basal rosettes of *Saxifraga stellaris* in this community. Light green patches of *Dicranella palustris* (= *Dichodontium palustre*), with its squarrose leaves, are also characteristic.

Ecology

This is a community of circumneutral or mildly basic springheads and stony rills mainly found on upland slopes amongst grassland or heath. It may also occur on wet cliff faces.

Sub-communities

No sub-communities are currently described.

Similar communities

There is some overlap in species with the more base-rich springs of the FE4B *Palustriella commutata* – *Bryum pseudotriquetrum* spring community. However, *Palustriella* is seldom found in FE4A while *Chrysosplenium oppositifolium* is scarce in FE4B. Sedges are more prominent features in FE4B.

Records and distribution

Number of records (all)

Clearly assigned:	13
Transitional:	3
Total:	16

Number of records (mapped)

2001-2020:	6
1986-2000:	7
1971-1985:	2
Pre-1971:	1
Total:	16

Number of hectads (by most recent time period)

2001-2020:	6
1986-2000:	2
1971-1985:	2
Pre-1971:	0
Total:	10

Number of hectads (records in each time period)

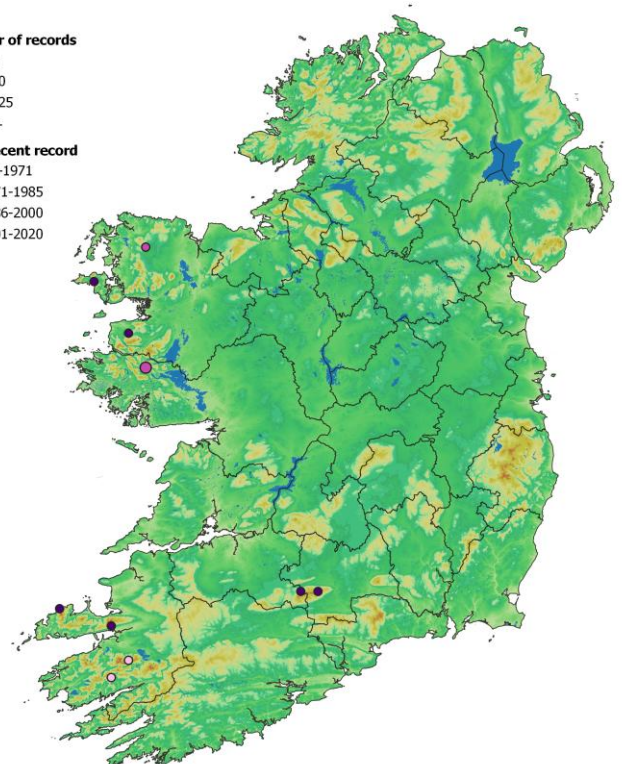
2001-2020:	6
1986-2000:	2
1971-1985:	2
Pre-1971:	1

Number of records

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

Most recent record

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



Synoptic table (n = 11)

Species	Frequency (from I-V)	Cover min (med) max	Species	Frequency (from I-V)	Cover min (med) max
<i>Chrysosplenium oppositifolium</i>	V	3-(5)-9	<i>Stellaria uliginosa</i>	III	2-(3)-3
<i>Philonotis fontana</i>	V	3-(4)-7	<i>Agrostis stolonifera</i>	II	+-(3)-4
<i>Anthoxanthum odoratum</i>	V	2-(3)-5	<i>Cerastium fontanum</i>	II	2-(2)-3
<i>Calliergonella cuspidata</i>	V	1-(3)-7	<i>Chiloscyphus polyanthos</i>	II	+-(1)-3
<i>Holcus lanatus</i>	V	2-(3)-5	<i>Festuca ovina</i>	II	3-(3)-3
<i>Scapania undulata</i>	V	2-(3)-3	<i>Festuca vivipara</i>	II	+-(3)-5
<i>Agrostis capillaris</i>	IV	2-(3)-5	<i>Hieracium</i> agg.	II	3-(3)-3
<i>Brachythecium rivulare</i>	IV	1-(4)-7	<i>Ranunculus ficaria</i>	II	2-(3)-3
<i>Galium palustre</i>	IV	1-(3)-3	<i>Rhizomnium punctatum</i>	II	+-(1)-3
<i>Cardamine pratensis</i>	III	1-(2)-3	<i>Rhytidadelphus squarrosus</i>	II	2-(3)-3
<i>Epilobium brunnescens</i>	III	+-(3)-4	<i>Sagina procumbens</i>	II	1-(2)-2
<i>Festuca rubra</i>	III	1-(2)-3	<i>Trifolium repens</i>	II	3-(4)-5
<i>Juncus bulbosus</i>	III	+-(3)-5	<i>Carex echinata</i>	II	2-(3)-3
<i>Juncus effusus</i>	III	+-(2)-4	<i>Juncus articulatus</i>	II	3-(3)-4
<i>Rumex acetosa</i>	III	+-(3)-5	<i>Luzula sylvatica</i>	II	+-(2)-3
<i>Bryum pseudotriquetrum</i>	III	+-(3)-5	<i>Montia fontana</i>	II	1-(2)-3
<i>Carex viridula</i>	III	2-(3)-5	<i>Nardus stricta</i>	II	2-(3)-3
<i>Dicranella palustris</i>	III	1-(4)-8	<i>Poa pratensis/humilis</i>	II	1-(3)-4
<i>Lysimachia nemorum</i>	III	2-(3)-3	<i>Thuidium tamariscinum</i>	II	2-(2)-2
<i>Saxifraga stellaris</i>	III	2-(4)-6	<i>Taraxacum officinale</i> agg.	I	2-(2)-2

Affinities

GHI: FP2 Non-calcareous springs
 ZM: OA02C Cardamino-Montion Br.-Bl. 1926
 EUNIS: C2.11 Soft water springs
 NVC: M32 *Philonotis fontana*-*Saxifraga stellaris* spring (52.1%)
 Annex I: No significant correspondence

Proxy environmental data

Light: 6.4 Reaction: 5.1 Wetness: 7.9 Fertility: 3.9 Salinity: 0.1

Conservation value

This is a very species-rich assemblage (species/4 m² = 28.3, n = 8), but it is not protected as an EU HD Annex I habitat nor does it support significantly rare plant species.

Management

The main threat to these springs is probably trampling by livestock as they are easily damaged by disturbance.

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.

Synopsis version: V1.1

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Synopsis author(s): P.M. Perrin



Photo 1. FE4A *Philonotis fontana* – *Chrysoplenium oppositifolium* spring, Laghta Oughter, near Lough Brawn, Mayo
(J. Denyer/P. Perrin, September 2010)



Photo 2. FE4A *Philonotis fontana* – *Chrysoplenium oppositifolium* spring, Laghta Oughter, near Lough Brawn, Mayo
(J. Denyer/P. Perrin, September 2010)