



Scientific name	<i>Rhynchostegium riparioides</i> – <i>Chiloscyphus polyanthos</i> aquatic community
Common name	Long-beaked Water Feather-moss – St Winifred's Moss aquatic community
Community code	FW2B

Vegetation

Bryophytes dominate this aquatic community and vascular plants seldom occur. *Rhynchostegium riparioides* is the only constant species and patches of this moss, growing on rocks and stones, usually form the main vegetative cover. The liverwort *Chiloscyphus polyanthos* and the moss *Fontinalis antipyretica* are also frequent components. The thalli of *Conocephalum conicum*, *Pellia endiviifolia* and *Marchantia polymorpha* are occasionally found on shady rocks close to the water. Nutrient-poor, acidic streams in the uplands favour *Scapania undulata* and *Fontinalis squamosa*, the latter of which can grow abundantly in those waters. Conversely, in more base-rich situations, *Cratoneuron filicinum* can dominate. The most frequent higher plants found here are *Oenanthe crocata* and *Phalaris arundinacea*.

Ecology

This community usually occurs in fairly fast-flowing, shaded, mesotrophic rivers and streams with a rocky substrate and beside waterfalls. Waters are typically mildly base-rich, but, as mentioned above, variants can occur in more acidic or alkaline conditions.

Sub-communities

No sub-communities are currently described.

Similar communities

From the other bryophyte-dominated community in this group, FW2A, the present assemblage differs by its greater diversity of species and the lower frequency of *Fontinalis antipyretica*. It is also more confined to watercourses.

Records and distribution

Number of records (all)

Clearly assigned:	111
Transitional:	29
Total:	140

Number of records (mapped)

2001-2015:	139
1986-2000:	0
1971-1985:	0
Pre-1971:	1
Total:	140

Number of hectads (most recent records)

2001-2015:	80
1986-2000:	0
1971-1985:	0
Pre-1971:	1
Total:	81

Number of hectads (all mapped records)

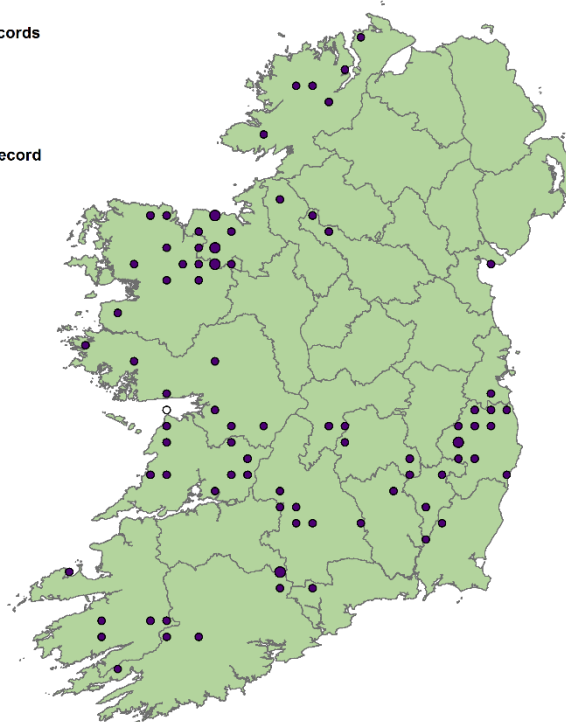
2001-2015:	80
1986-2000:	0
1971-1985:	0
Pre-1971:	1

Number of records

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

Most recent record

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



Synoptic table (n = 94)

Species	Frequency (from I-V)	Cover min (med) max	Species	Frequency (from I-V)	Cover min (med) max
<i>Rhynchostegium riparioides</i>	V	+-(4)-6	<i>Mnium hornum</i>	I	+-(+)-3
<i>Chiloscyphus polyanthos</i>	III	+-(3)-6	<i>Hygrohypnum ochraceum</i>	I	+-(3)-4
<i>Fontinalis antipyretica</i>	III	+-(3)-4	<i>Ranunculus penicillatus</i>	I	+-(3)-6
<i>Cinclidotus fontinaloides</i>	II	+-(3)-4	<i>Apium nodiflorum</i>	I	+-(3)-3
<i>Conocephalum conicum</i>	II	+-(3)-4	<i>Racomitrium aciculare</i>	I	+-(3)-4
<i>Pellia endiviifolia</i>	II	+-(3)-4	<i>Brachythecium rutabulum</i>	I	+-(+)-4
<i>Thamnobryum alopecurum</i>	II	+-(3)-4	<i>Eurhynchium hians</i>	I	+-(+)-3
<i>Brachythecium rivulare</i>	II	+-(3)-5	<i>Didymodon insulanus</i>	I	+-(+)-3
<i>Fontinalis squamosa</i>	II	+-(4)-7	<i>Pellia epiphylla</i>	I	+-(3)-4
<i>Brachythecium plumosum</i>	II	+-(3)-5	<i>Schistidium rivulare</i>	I	+-(3)-4
<i>Oenanthe crocata</i>	II	+-(3)-5	<i>Lejeunea lamacerina</i>	I	+-(+)-3
<i>Scapania undulata</i>	II	+-(3)-5	<i>Hygrohypnum luridum</i>	I	+-(3)-4
<i>Marchantia polymorpha</i>	II	+-(+)-3	<i>Plagiomnium rostratum</i>	I	+-(+)-4
<i>Dichodontium pellucidum</i>	II	+-(2)-4	<i>Sparganium erectum</i>	I	+-(3)-3
<i>Phalaris arundinacea</i>	II	+-(3)-4	<i>Mentha aquatica</i>	I	+-(3)-3
<i>Leptodictyum riparium</i>	II	+-(3)-4	<i>Equisetum arvense</i>	I	+-(+)-3
<i>Cratoneuron filicinum</i>	II	+-(3)-7	<i>Plagiomnium undulatum</i>	I	+-(+)-3
<i>Kindbergia praelonga</i>	II	+-(+)-3	<i>Calliergonella cuspidata</i>	I	+-(2)-3
<i>Fissidens taxifolius</i>	II	+-(+)-3	<i>Hyocomium armoricum</i>	I	+-(3)-5
<i>Rhizomnium punctatum</i>	II	+-(+)-3	<i>Rorippa nasturtium-aquaticum</i> agg.	I	+-(+)-3

Affinities

GHI: FW1 Upland/eroding rivers / FW2 Lowland /depositing rivers

ZM: PLA-01A Racomitrium acicularis von Krustenstjerna 1945 nom. inval. ad interim

EUNIS: C2.27 Mesotrophic vegetation of fast-flowing rivers

NVC: *Philonotis fontana* – *Saxifraga stellaris* spring (15.6%) (bryophyte dominated communities outside scope of NVC)

Annex I: No significant correspondence

Proxy environmental data

Light: 5.3 Reaction: 5.7 Wetness: 9.6 Fertility: 4.9 Salinity: 0.1

Conservation value

This is a fairly bryophyte-rich community but typically of relatively low conservation value.

Management

This community has no specific management. It may be adversely affected by eutrophication, acidification, river engineering and trampling from livestock with access to the bankside. Removal of bankside tree cover may impact upon shade-loving bryophytes.

Key references

Weekes, L., Kaçki, Z., FitzPatrick, Ú., Kelly, F., Matson, R., Kelly-Quinn, M. (2018) An Irish national vegetation classification system for aquatic river macrophytes. *Applied Vegetation Science* 21, 322–340.

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