



Scientific name	<i>Ranunculus penicillatus</i> – <i>Fontinalis antipyretica</i> aquatic community
Common name	Stream Water-crowfoot – Greater Water-moss aquatic community
Community code	FW2C

Vegetation

Mid-channel expanses of the floating leaves of *Ranunculus penicillatus* (subsp. *penicillatus*) are the key feature of this aquatic community, although rarer vegetation with *Ranunculus peltatus* is also included here. *Fontinalis antipyretica* is also a constant species in the channel but is never abundant. Rarely, there may be some sparse floating cover from pondweeds (*Potamogeton* species) or duckweed (*Lemna* species). A minor marginal element to the vegetation is frequently provided by *Phalaris arundinacea*, *Apium nodiflorum* and *Sparganium erectum*, with *Epilobium hirsutum*, *Filipendula ulmaria*, *Mentha aquatica* and *Juncus effusus* occasionally present. The non-native invasive *Impatiens glandulifera* is also only occasional but can dominate margins of watercourses.

Ecology

This vegetation occurs in mildly eutrophic, distinctly base-rich rivers and streams.

Sub-communities

No sub-communities are currently described.

Similar communities

Ranunculus penicillatus and *Fontinalis antipyretica* are also constant features in the FW2D *Apium nodiflorum* – *Ranunculus penicillatus* aquatic community. That community, however, has a more pronounced emergent and marginal element with *Apium nodiflorum* a constant species and *Berula erecta* frequent. Furthermore, *Callitriche stagnalis* is seldom encountered in FW2C unlike FW2D where it is a constant.

Records and distribution

Number of records (all)

Clearly assigned:	94
Transitional:	10
Total:	104

Number of records (mapped)

2001-2015:	103
1986-2000:	0
1971-1985:	0
Pre-1971:	0
Total:	103

Number of hectads (most recent records)

2001-2015:	69
1986-2000:	0
1971-1985:	0
Pre-1971:	0
Total:	69

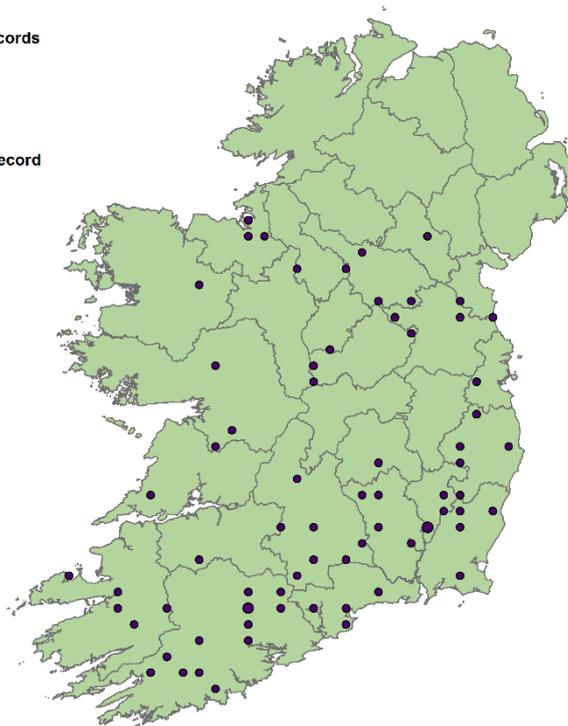
Number of hectads (all mapped records)

2001-2015:	69
1986-2000:	0
1971-1985:	0
Pre-1971:	69

Number of records



Most recent record



Synoptic table (n = 58)

Species	Frequency (from I-V)	Cover min (med) max	Species	Frequency (from I-V)	Cover min (med) max
<i>Ranunculus penicillatus</i>	V	+-(3)-5	<i>Stachys palustris</i>	I	+-(+)-+
<i>Fontinalis antipyretica</i>	V	+-(+)-2	<i>Crocasmia × crocosmiiflora</i>	I	+-(+)-+
<i>Phalaris arundinacea</i>	III	+-(+)-3	<i>Lemna trisulca</i>	I	+-(+)-3
<i>Apium nodiflorum</i>	III	+-(+)-+	<i>Sparganium emersum</i>	I	+-(+)-+
<i>Sparganium erectum</i>	III	+-(+)-+	<i>Potamogeton pectinatus</i>	I	+-(+)-3
<i>Epilobium hirsutum</i>	II	+-(+)-+	<i>Veronica beccabunga</i>	I	+-(+)-+
<i>Filipendula ulmaria</i>	II	+-(+)-+	<i>Caltha palustris</i>	I	+-(+)-+
<i>Mentha aquatica</i>	II	+-(+)-2	<i>Angelica sylvestris</i>	I	+-(+)-+
<i>Impatiens glandulifera</i>	II	+-(+)-8	<i>Equisetum palustre</i>	I	+-(+)-+
<i>Juncus effusus</i>	II	+-(+)-2	<i>Fallopia japonica</i>	I	+-(+)-+
<i>Rorippa nasturtium-aquaticum</i> agg.	I	+-(+)-+	<i>Oenanthe crocata</i>	I	+-(1)-2
<i>Urtica dioica</i>	I	+-(+)-+	<i>Ranunculus peltatus</i>	I	3-(3)-3
<i>Potamogeton crispus</i>	I	+-(+)-+	<i>Fontinalis squamosa</i>	I	+-(3)-3
<i>Leptodictyum riparium</i>	I	+-(+)-+	<i>Lythrum salicaria</i>	I	+-(+)-+
<i>Schoenoplectus lacustris</i>	I	+-(+)-2	<i>Marchantia polymorpha</i>	I	+-(+)-+
<i>Myriophyllum alterniflorum</i>	I	+-(+)-+	<i>Oenanthe fluviatilis</i>	I	+-(+)-+
<i>Rhynchosstegium riparioides</i>	I	+-(+)-2	<i>Scapania undulata</i>	I	+-(+)-+
<i>Lemna minor</i>	I	+-(3)-4	<i>Heracleum mantegazzianum</i>	I	+-(+)-+
<i>Elodea canadensis</i>	I	+-(+)-+	<i>Oenanthe aquatica</i>	I	+-(+)-+
<i>Chiloscyphus polyanthos</i>	I	+-(+)-2	<i>Veronica anagallis-aquatica</i>	I	+-(+)-+

Affinities

GHI: FW1 Eroding/upland rivers / FW2 Lowland/depositing rivers

ZM: POT-02A *Batrachion* fluitantis Neuhäusl 1959

EUNIS: C2.27 Mesotrophic vegetation of fast-flowing rivers / C2.33 Mesotrophic vegetation of slow-flowing rivers

NVC: S14 *Sparganium erectum* swamp (46.1%) (but see also A17 *Ranunculus penicillatus* ssp. *pseudofluitans* community)

Annex I:3260 Floating river vegetation

Proxy environmental data

Light: 6.8 Reaction: 7.4 Wetness: 11.1 Fertility: 5.5 Salinity: 0.1

Conservation value

Due to the relative abundance of crowfoots (*Ranunculus* spp. subgenus *Batrachion*) almost all examples of this community correspond with the EU HD Annex I habitat 3260 Floating river vegetation. Several non-native plants occur in this community and impact on conservation value. *Impatiens glandulifera* and *Crocasmia × crocosmiiflora* are aggressive invaders of bankside vegetation. *Elodea canadensis* is a submergent that is not considered a major ecological threat and has already colonised much of its suitable niche in Ireland.

Management

This community has no specific management. Eutrophication from discharges and agriculture run-off is probably the major threat. Other impacts may come from river engineering, spread of invasive species and trampling from livestock with access to the bankside.

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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