



Scientific name	<i>Sphagnum cuspidatum</i> – <i>Sphagnum subsecundum</i> agg. bog
Common name	Feathery Bog-moss – Cow-horn Bog-moss bog
Community code	BG1A

Vegetation

Sphagnum mosses dominate this low-growing community, with *Sphagnum cuspidatum* and/or *Sphagnum subsecundum* agg. (typically, *Sphagnum denticulatum*) filling bog pools or forming luxurious quaking mats or carpets. *Eriophorum angustifolium* is the only other constant species. *Rhynchospora alba* is frequently found growing through the *Sphagnum* layer and can be abundant, as can *Menyanthes trifoliata* in wetter areas. *Drosera* spp., *Molinia caerulea* and *Narthecium ossifragum* are occasionally encountered, and *Schoenus nigricans* can be found on blanket bogs, but diversity in terms of species numbers is quite low. Other *Sphagnum* species, including *Sphagnum papillosum*, *Sphagnum magellanicum*, *Sphagnum capillifolium* and *Sphagnum palustre*, each occur only infrequently.

Ecology

This is a frequently inundated community of wet hollows, pools and pool margins of raised bogs and blanket bogs in the lowlands (mean altitude = 79 m, $n = 10$). It primarily occurs on deep, acidic, oligotrophic, ombrogenous peats.

Sub-communities

Two sub-communities have been described for this community. The *Sphagnum cuspidatum* sub-community (BG1Ai) represents this niche on midland raised bogs on which *Sphagnum subsecundum* agg. seldom occurs. The *Sphagnum subsecundum* agg. – *Schoenus nigricans* sub-community (BG1Aii) represents western raised bogs and blanket bogs, where both of these *Sphagnum* species are usually found.

Similar communities

In no other community are *Sphagnum cuspidatum* and *Sphagnum subsecundum* agg. as dominant as they are here and this serves to differentiate this community from others in which *Eriophorum angustifolium* or *Rhynchospora alba* may be abundant (e.g. BG1B or BG1D).

Records and distribution

Number of records (all)

Clearly assigned:	130
Transitional:	5
Total:	135

Number of records (mapped)

2001-2015:	34
1986-2000:	54
1971-1985:	2
Pre-1971:	5
Total:	95

Number of hectads (most recent records)

2001-2015:	7
1986-2000:	8
1971-1985:	1
Pre-1971:	3
Total:	19

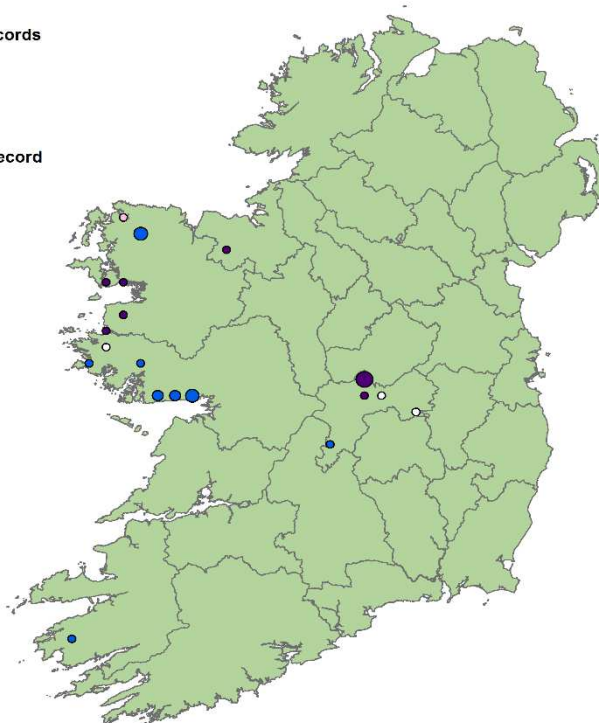
Number of hectads (all mapped records)

2001-2015:	7
1986-2000:	8
1971-1985:	1
Pre-1971:	3

Number of records



Most recent record



Synoptic table (n = 115)

Species	Frequency	Cover	Species	Frequency	Cover
	(from I-V)	min (med) max		(from I-V)	min (med) max
<i>Sphagnum cuspidatum</i>	V	3-(8)-9	<i>Calluna vulgaris</i>	I	+-(2)-4
<i>Eriophorum angustifolium</i>	V	2-(3)-9	<i>Phragmites australis</i>	I	2-(3)-5
<i>Sphagnum subsecundum</i> agg.	IV	2-(7)-9	<i>Odontoschisma sphagni</i>	I	1-(2)-5
<i>Menyanthes trifoliata</i>	III	2-(3)-8	<i>Juncus bulbosus</i>	I	2-(3)-5
<i>Rhynchospora alba</i>	III	2-(4)-8	<i>Sphagnum capillifolium</i>	I	1-(3)-4
<i>Molinia caerulea</i>	II	+-(3)-5	<i>Riccardia multifida</i>	I	3-(3)-3
<i>Narthecium ossifragum</i>	II	+-(3)-8	<i>Carex rostrata</i>	I	3-(3)-3
<i>Drosera rotundifolia</i>	II	+-(3)-3	<i>Carex panicea</i>	I	1-(2)-5
<i>Drosera intermedia</i>	II	+-(3)-5	<i>Utricularia intermedia</i>	I	2-(3)-8
<i>Schoenus nigricans</i>	II	2-(3)-7	<i>Vaccinium oxycoccos</i>	I	3-(3)-3
<i>Drosera anglica</i>	I	+-(2)-3	<i>Scorpidium scorpioides</i>	I	2-(3)-5
<i>Erica tetralix</i>	I	+-(2)-4	<i>Rhynchospora fusca</i>	I	2-(7)-8
<i>Sphagnum papillosum</i>	I	2-(3)-7	<i>Hypnum jutlandicum</i>	I	+-(3)-3
<i>Eleocharis multicaulis</i>	I	3-(5)-8	<i>Cephalozia bicuspidata</i>	I	+-(3)-3
<i>Eriophorum vaginatum</i>	I	+-(3)-5	<i>Myrica gale</i>	I	2-(3)-5
<i>Carex limosa</i>	I	2-(3)-5	<i>Potentilla erecta</i>	I	1-(2)-2
<i>Sphagnum magellanicum</i>	I	+-(3)-7	<i>Sphagnum palustre</i>	I	2-(3)-5
<i>Potamogeton polygonifolius</i>	I	2-(5)-7	<i>Andromeda polifolia</i>	I	+-(3)-3
<i>Gymnocolea inflata</i>	I	2-(2)-3	<i>Nymphaea alba</i>	I	2-(3)-3
<i>Utricularia minor</i>	I	+-(6)-7	<i>Trichophorum cesp./germanicum</i>	I	2-(2)-3

Affinities

GHI: PB3 Lowland blanket bog / PB1 Raised bog

ZM: SCH-04A Scheuchzerion palustris Nordhagen et Tx. 193

EUNIS: D2.38 *Sphagnum* and *Eriophorum* rafts / D1.212 Hiberno-Brittanian lowland blanket bog sphagnum carpets

NVC: M1 *Sphagnum auriculatum* bog pool community (54.3%)

Annex I: 7130 Blanket bog (active)* / 7150 Rhynchosporion depressions / 7110 Raised bog (active)* / 7120 Degraded raised bog

Proxy environmental data

Light: 7.8 Reaction: 2.3 Wetness: 9.5 Fertility: 1.9 Salinity: 0.0

Conservation value

Many examples of this community qualify as EU HD Annex I habitat 7130 Blanket bog (active)* or 7120 Raised bog (active)* although some examples could potentially be from 7120 Degraded raised bog. Wherever *Rhynchospora alba* is abundant in hollows, however, this type of vegetation is better treated as habitat 7150 Rhynchosporion depressions. This is on average a very species-poor community (species/4 m² = 11.0, n = 30), but supports several specialists.

Management

The main threat to the bogs supporting this vegetation is turf-cutting, either by hand or machine, and associated drainage. Some sites have also suffered from afforestation. Locally, action has been taken to address these impacts and some sites are managed strictly for conservation.

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, Department of Arts, Heritage and the Gaeltacht.

Synopsis version: V1.0

Synopsis date: November 2017

Synopsis author(s): P.M. Perrin



Photo 1. BG1A *Sphagnum cuspidatum* – *Sphagnum subsecundum* agg. bog, Clara Bog, Offaly
(G. Smith, October 2013)



Photo 2. BG1A *Sphagnum cuspidatum* – *Sphagnum subsecundum* agg. bog, Cregganawoddy, near Cregganbaun, Mayo
(J. Denyer/K. McNutt/F. Devaney, October 2010)