

<b>Scientific name</b>	<i>Betula pubescens</i> – <i>Vaccinium myrtillus</i> woodland
<b>Common name</b>	Downy Birch – Bilberry woodland
<b>Community code</b>	WL4A

### Vegetation

*Betula pubescens* dominates the medium-height canopy of this community, usually accompanied by *Sorbus aucuparia* (mean canopy height = 14.7 m,  $n = 61$ ). *Ilex aquifolium* forms the understorey, but other tree species such as *Quercus* spp. or *Fagus sylvatica* are infrequent. In the field layer, *Rubus fruticosus* agg., *Dryopteris dilatata*, *Hedera helix*, *Vaccinium myrtillus* and *Lonicera periclymenum* are constants, and indeed few other vascular plants tend to occur. The chief bryophyte is *Thuidium tamariscinum* which can form the bryophyte layer with other pleurocarps such as *Kindbergia praelonga*, *Hypnum cupressiforme*, *Isoetecium myosuroides*, *Scleropodium purum* and *Eurhynchium striatum*.

### Ecology

This birch woodland is a community of humid, acidic and organic soils (mean organic content = 74.9%,  $n = 66$ ). It develops typically on the drier parts of degraded raised bog sites (basin peats) in the lowlands but also on podzolised soils on slopes in the uplands (mean slope = 3.7°,  $n = 66$ ; mean altitude = 81 m,  $n = 66$ ). Soils are typically quite infertile.

### Sub-communities

No sub-communities have been described for this community.

### Similar communities

The occurrence of *Vaccinium myrtillus* will help to differentiate this birch community from the other drier birch categories in this group. These stands lack the grassiness and rich bryophyte flora often found in WL4B, and have a greater diversity of trees than occurs in WL4F. Stands on podzolised slopes in particular are successional to the acidic oakwoods of group WL1; oaks are infrequent in this present community, however, and rarely abundant.

### Records and distribution

#### Number of records (all)

Clearly assigned:	78
Transitional:	18
Total:	96

#### Number of records (mapped)

2001-2020:	80
1986-2000:	14
1971-1985:	1
Pre-1971:	1
Total:	96

#### Number of hectads (by most recent time period)

2001-2020:	68
1986-2000:	5
1971-1985:	0
Pre-1971:	0
Total:	73

#### Number of hectads (records in each time period)

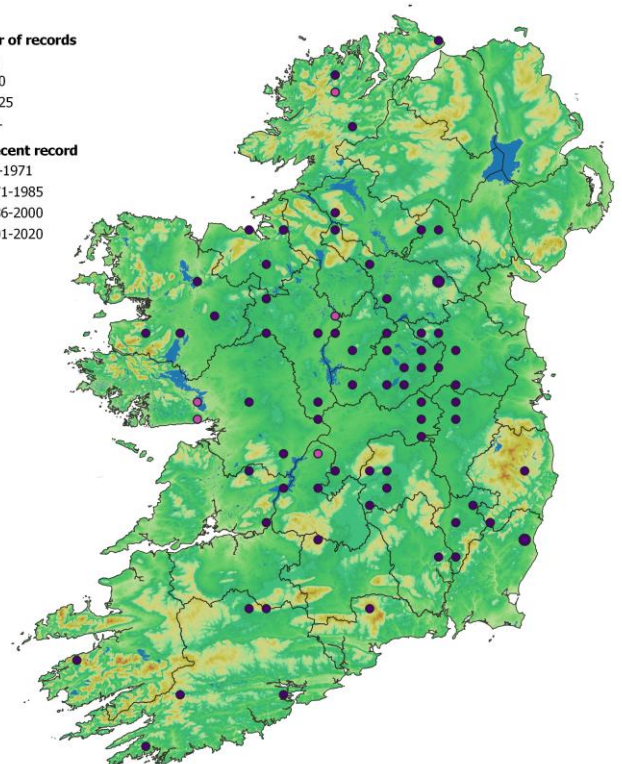
2001-2020:	68
1986-2000:	9
1971-1985:	1
Pre-1971:	1

#### Number of records

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

#### Most recent record

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



### Synopsis table (n = 71)

Species	Frequency	Cover	Species	Frequency	Cover
	(from I-V)	min (med) max		(from I-V)	min (med) max
<i>Betula pubescens</i>	V	5-(8)-10	<i>Frullania dilatata</i>	II	+-(+)-2
<i>Thuidium tamariscinum</i>	V	+-(-)5-9	<i>Hypnum jutlandicum</i>	II	+-(-)2-5
<i>Dryopteris dilatata</i>	V	+-(-)3-8	<i>Hypnum andoi</i>	II	+-(-)2-3
<i>Rubus fruticosus</i> agg.	V	+-(-)4-7	<i>Rhytidiadelphus triquetrus</i>	II	+-(-)3-6
<i>Hedera helix</i>	V	+-(-)3-8	<i>Blechnum spicant</i>	II	+-(-)2-5
<i>Ilex aquifolium</i>	V	2-(5)-9	<i>Dicranum scoparium</i>	II	+-(-)2-5
<i>Sorbus aucuparia</i>	V	1-(4)-8	<i>Luzula sylvatica</i>	II	+-(-)5-8
<i>Kindbergia praelonga</i>	IV	+-(-)3-7	<i>Quercus robur</i>	II	+-(-)3-6
<i>Vaccinium myrtillus</i>	IV	+-(-)4-9	<i>Mnium hornum</i>	II	+-(-)1-3
<i>Lonicera periclymenum</i>	IV	1-(2)-5	<i>Quercus petraea</i>	II	+-(-)4-8
<i>Hypnum cupressiforme</i>	III	+-(-)2-3	<i>Rhytidiadelphus loreus</i>	II	+-(-)2-5
<i>Scleropodium purum</i>	III	+-(-)2-7	<i>Salix cinerea</i>	II	+-(-)3-5
<i>Isoetes macrospora</i>	III	+-(-)2-4	<i>Brachythecium rutabulum</i>	I	+-(-)1-3
<i>Lophocolea bidentata</i>	III	+-(-)1-4	<i>Fagus sylvatica</i>	I	+-(-)2-6
<i>Eurhynchium striatum</i>	III	1-(2)-7	<i>Polytrichum commune</i>	I	1-(2)-5
<i>Polytrichum formosum</i>	III	+-(-)2-4	<i>Metzgeria furcata</i>	I	+-(-)1-2
<i>Molinia caerulea</i>	II	+-(-)2-5	<i>Polypodium vulgare</i>	I	+-(-)2-3
<i>Oxalis acetosella</i>	II	+-(-)3-6	<i>Neckera complanata</i>	I	+-(-)1-2
<i>Ulota bruchii/crispa</i>	II	+-(-)1-2	<i>Corylus avellana</i>	I	+-(-)3-5
<i>Pteridium aquilinum</i>	II	+-(-)2-5	<i>Rhododendron ponticum</i>	I	+-(-)5-8

#### Affinities

GHI: WN1 Oak-birch-holly woodland / WN7 Bog woodland

ZM: CC02B Lonicero periclymeni-Betulia pubescentis Géhu 2006

EUNIS: G1.9112 Medio-European dry acidophilous birch woods

NVC: W4a *Betula pubescens*-*Molinia caerulea* woodland *Dryopteris dilatata*-*Rubus fruticosus* sub-community (49.3%)

Annex I: No significant correspondence

#### Proxy environmental data

Light: 5.9 Reaction: 4.3 Wetness: 6.1 Fertility: 4.2 Salinity: 0.0

#### Conservation value

This is on average a rather species-poor woodland community (total species/100 m<sup>2</sup> = 22.7, n = 68) with a reasonable bryophyte flora (bryophyte species/100 m<sup>2</sup> = 10.0, n = 68).

#### Management

The main threats to these woodlands include overgrazing, woodland clearance and invasion by non-native species such as *Rhododendron ponticum*. Upland sites are vulnerable to deer grazing.

#### Key references

Perrin, P.M., Martin, J.R., Barron, S.J., O'Neill, F.H., McNutt, K.E., Delaney, A. (2008) National Survey of Native Woodlands 2003-2008. (unpublished). National Parks and Wildlife Service, Dublin.

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Synopsis author(s): P.M. Perrin



Photo 1. WL4A *Betula pubescens* – *Vaccinium myrtillus* woodland, Girley Bog, Meath (F. O'Neill/J. Roche, May 2005)



Photo 2. WL4A *Betula pubescens* – *Vaccinium myrtillus* woodland, Aughnaglanny Valley, Tipperary  
(P. Moran/P. Perrin, September 2007)