



Scientific name	<i>Quercus petraea</i> – <i>Corylus avellana</i> woodland
Common name	Sessile Oak – Hazel woodland
Community code	WL1C

Vegetation

This is mainly a high forest community (mean canopy height = 16.0 m, $n = 89$) dominated by *Quercus petraea* with a dense understorey of *Corylus avellana*. *Betula pubescens*, *Fraxinus excelsior* and *Sorbus aucuparia* are frequently present. *Corylus* is usually joined in the understorey by *Ilex aquifolium* and frequently by *Crataegus monogyna*. The main species in the field layer are *Dryopteris dilatata*, *Hedera helix*, *Lonicera periclymenum*, *Blechnum spicant*, *Oxalis acetosella*, *Rubus fruticosus* agg., *Viola riviniana/reichenbachiana* and *Athyrium filix-femina*. Other frequent species include *Dryopteris affinis* and *Luzula sylvatica*. *Hyacinthoides non-scripta* may form carpets of blue flowers in the spring. In the bryophyte layer, one could expect to find *Thuidium tamariscinum*, *Isoetes myosuroides*, *Eurhynchium striatum*, *Kindbergia praelonga* and *Hypnum cupressiforme*.

Ecology

These are stands of well-drained mineral soils and podzols (mean organic content = 19.7%, $n = 89$) found on sloping ground in upland margins (mean slope = 16.3°, $n = 89$; mean altitude = 93 m, $n = 89$). Soils are rather mildly acidic and infertile.

Sub-communities

The *Quercus petraea* – *Corylus avellana* woodland comprises two sub-communities. The *Quercus petraea* sub-community (WL1Ci) is the more typical variation in which sessile oak is always present in the canopy. The *Fraxinus excelsior* sub-community (WL1Cii) is more mesotrophic and sessile oak is often absent; included here are some low canopy *Corylus* stands on mildly acidic soils.

Similar communities

The greater abundance of *Corylus avellana* is the main way of differentiating between this community and others in group WL1. This community may be regarded as transitional to group WL2, and stands of WL1Cii could be confused with the hazel woodlands of WL2E. Those stands typically occur on shallow base-rich soils, however, and support a suite of species indicative of those conditions (e.g. *Geum urbanum*, *Potentilla sterilis*, *Fragaria vesca*, *Brachypodium sylvaticum*).

Records and distribution

Number of records (all)

Clearly assigned:	113
Transitional:	20
Total:	133

Number of records (mapped)

2001-2015:	112
1986-2000:	14
1971-1985:	0
Pre-1971:	0
Total:	126

Number of hectads (most recent records)

2001-2015:	89
1986-2000:	2
1971-1985:	0
Pre-1971:	0
Total:	91

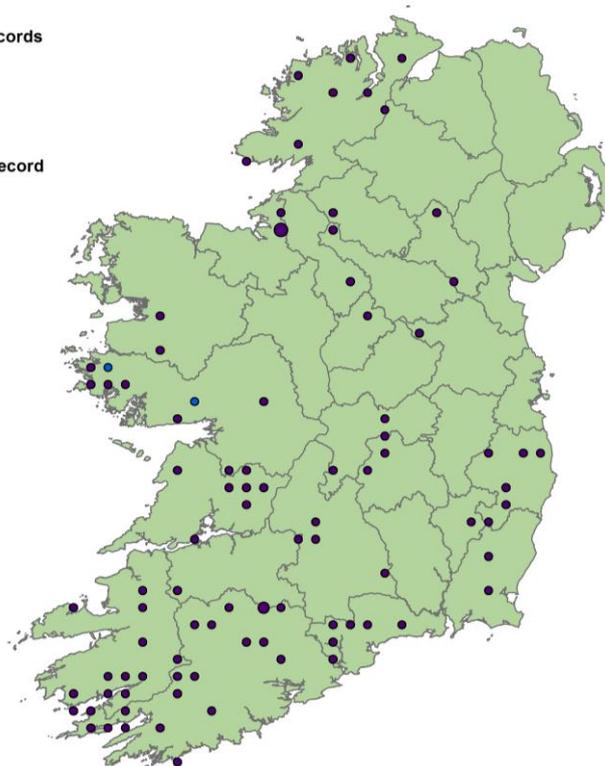
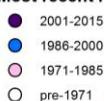
Number of hectads (all mapped records)

2001-2015:	89
1986-2000:	4
1971-1985:	0
Pre-1971:	0

Number of records



Most recent record



Synopsis table (n = 104)

Species	Frequency		Cover		Species	Frequency		Cover	
	(from I-V)		min	(med) max		(from I-V)		min	(med) max
<i>Corylus avellana</i>	V		3-	(7)-9	<i>Metzgeria furcata</i>	III		+-	(+)-2
<i>Thuidium tamariscinum</i>	V		+-	(3)-8	<i>Polypodium vulgare</i>	III		+-	(2)-4
<i>Dryopteris dilatata</i>	V		+-	(3)-6	<i>Fraxinus excelsior</i>	III		+-	(4)-8
<i>Blechnum spicant</i>	V		+-	(3)-6	<i>Hookeria lucens</i>	III		+-	(2)-3
<i>Hedera helix</i>	V		1-	(3)-8	<i>Luzula sylvatica</i>	III		+-	(4)-9
<i>Lonicera periclymenum</i>	V		+-	(3)-6	<i>Hyacinthoides non-scripta</i>	III		+-	(3)-8
<i>Oxalis acetosella</i>	V		+-	(3)-8	<i>Ulota bruchii/crispa</i>	III		+-	(+)-2
<i>Rubus fruticosus</i> agg.	V		+-	(3)-8	<i>Crataegus monogyna</i>	III		+-	(3)-5
<i>Isoetes myosuroides</i>	V		1-	(3)-5	<i>Sorbus aucuparia</i>	III		+-	(3)-6
<i>Eurhynchium striatum</i>	V		+-	(3)-7	<i>Hypnum andoi</i>	III		+-	(2)-4
<i>Kindbergia praelonga</i>	IV		+-	(2)-6	<i>Atrichum undulatum</i>	III		+-	(2)-4
<i>Quercus petraea</i>	IV		+-	(7)-10	<i>Rhytidiadelphus loreus</i>	III		+-	(2)-7
<i>Ilex aquifolium</i>	IV		+-	(4)-9	<i>Frullania dilatata</i>	II		+-	(+)-2
<i>Viola riviniana/reichenbachiana</i>	IV		+-	(2)-8	<i>Circaea lutetiana</i>	II		+-	(2)-4
<i>Athyrium filix-femina</i>	IV		+-	(2)-5	<i>Pellia epiphylla</i>	II		+-	(2)-4
<i>Hypnum cupressiforme</i>	IV		+-	(2)-4	<i>Rhytidiadelphus triquetrus</i>	II		+-	(2)-5
<i>Betula pubescens</i>	III		+-	(4)-8	<i>Pteridium aquilinum</i>	II		+-	(1)-5
<i>Dryopteris affinis</i>	III		+-	(2)-5	<i>Sanicula europaea</i>	II		+-	(2)-5
<i>Mnium hornum</i>	III		+-	(2)-4	<i>Frullania tamarisci</i>	II		+-	(1)-2
<i>Polytrichum formosum</i>	III		+-	(2)-3	<i>Neckera complanata</i>	II		+-	(1)-2

Affinities

GHI: WN1 Oak-birch-holly woodland (60.7%) / WN2 Oak-ash-hazel woodland (31.5%) (n = 89)

ZM: Vaccinio myrtilli – Quercion petraeae

EUNIS: G1.831 Irish sessile oak woods

NVC: W9 *Fraxinus excelsior-Sorbus aucuparia-Mercurialis perennis* woodland (43.7%)

Annex I: 91A0 Old oak woodlands (66.3%) (n = 89)

Proxy environmental data

Light: 5.0 Reaction: 4.9 Wetness: 5.6 Fertility: 4.8 Salinity: 0.0

Conservation value

This is a species-rich woodland community (total species/100 m² = 41.0, n = 89) with a diverse bryophyte flora (bryophyte species/100 m² = 17.1, n = 89). Stands with *Quercus petraea* are likely to qualify as EU Annex I habitat 91A0 Old oak woodlands.

Management

These woodlands are commonly grazed, particularly by deer, and overgrazing is an acknowledged problem. Locally, woods have been fenced and deer culling employed to try to promote woodland regeneration. Invasion by non-native species and woodland clearance are also threats. *Rhododendron ponticum* thrives in these moist, acidic conditions. Spraying with herbicide, cutting and removal of seedlings have been used to combat the spread of this species within these woods.

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 report submitted to National Parks & Wildlife Service

Synopsis version: V1.0

Synopsis date: December 2016

Synopsis author(s): P.M. Perrin



Photo 1. WL1C *Quercus petraea* – *Corylus avellana* woodland, Gortacarnaun, Galway (P. Perrin/G. Smith, July 2006)



Photo 2. WL1C *Quercus petraea* – *Corylus avellana* woodland, Mountrussell Wood, Limerick (P. Moran/P. Perrin, July 2007)