

Scientific name	<i>Quercus robur</i> – <i>Circaea lutetiana</i> woodland
Common name	Pedunculate Oak – Enchanter's-nightshade woodland
Community code	WL2A

Vegetation

Quercus robur dominates the canopy of this high forest community (mean canopy height = 22.8 m, $n = 98$), accompanied by *Fraxinus excelsior* and, frequently, *Acer pseudoplatanus* and *Fagus sylvatica*. Beneath, a mixed understorey can be found of *Crataegus monogyna*, *Corylus avellana* and *Ilex aquifolium*. There are few constants in the field layer, just *Rubus fruticosus* agg., *Hedera helix*, *Dryopteris dilatata* and *Lonicera periclymenum*. Brambles can form extensive thickets here when grazing is light or absent. *Circaea lutetiana* is the only frequent forb, although *Geum urbanum*, *Viola riviniana/reichenbachiana*, *Hyacinthoides non-scripta*, *Geranium robertianum*, and *Oxalis acetosella* are all occasionally encountered, as are the ferns *Dryopteris filix-mas*, *Dryopteris affinis* and *Athyrium filix-femina*. This community includes bluebell woodlands and carpets of these flowers may be seen during the spring. The bryophyte layer consists primarily of *Kindbergia praelonga*, *Thuidium tamariscinum*, *Isoetes myosuroides* and *Eurhynchium striatum*.

Ecology

This is a base-rich woodland community primarily found on well-drained mineral soils (mean organic content = 19.4%, $n = 105$). It occurs on flat or sloping ground, usually in the lowland landscape (mean slope = 7.2°, $n = 112$; mean altitude = 81 m, $n = 112$). Soils are of average fertility relative to other woodlands.

Sub-communities

No sub-communities have been described for this community.

Similar communities

Quercus robur can be the main canopy species in community WL1A, but that community occurs on more acidic soils. *Luzula sylvatica* and *Sorbus aucuparia* are usually found in that community but are typically absent from stands of WL2A. *Quercus robur* is seldom as abundant as it is in the present community elsewhere in group WL2.

Records and distribution

Number of records (all)

Clearly assigned:	122
Transitional:	14
Total:	136

Number of records (mapped)

2001-2015:	125
1986-2000:	10
1971-1985:	0
Pre-1971:	0
Total:	135

Number of hectads (most recent records)

2001-2015:	88
1986-2000:	1
1971-1985:	0
Pre-1971:	0
Total:	89

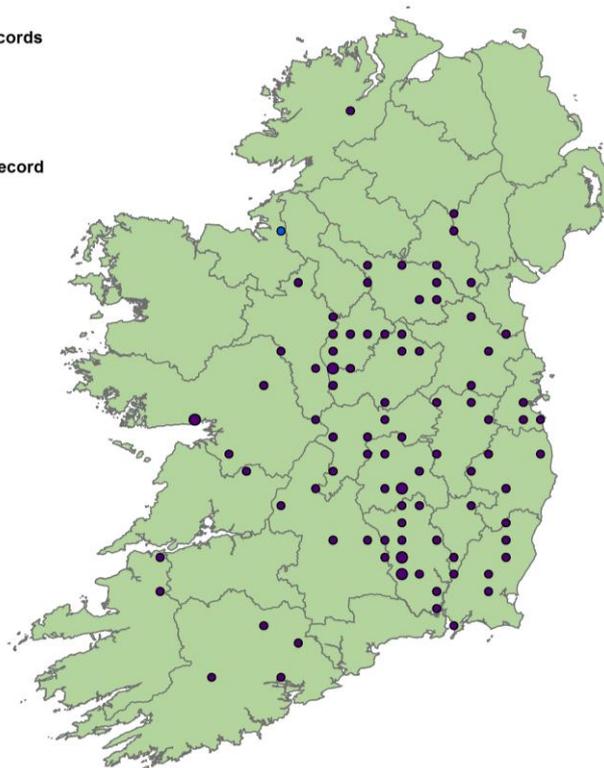
Number of hectads (all mapped records)

2001-2015:	88
1986-2000:	4
1971-1985:	0
Pre-1971:	0

Number of records



Most recent record



Synopsis table (n = 118)

Species	Frequency		Cover		Species	Frequency		Cover	
	(from I-V)		min	(med) max		(from I-V)		min	(med) max
<i>Quercus robur</i>	V		5-(8)-10		<i>Hyacinthoides non-scripta</i>	II		+(4)-10	
<i>Rubus fruticosus</i> agg.	V		+(5)-10		<i>Dryopteris filix-mas</i>	II		+(2)-5	
<i>Hedera helix</i>	V		+(4)-10		<i>Geranium robertianum</i>	II		+(2)-7	
<i>Fraxinus excelsior</i>	IV		+(4)-9		<i>Oxalis acetosella</i>	II		1-(2)-7	
<i>Kindbergia praelonga</i>	IV		+(2)-7		<i>Brachythecium rutabulum</i>	II		+(2)-5	
<i>Dryopteris dilatata</i>	IV		+(2)-7		<i>Thamnobryum alopecurum</i>	II		+(2)-8	
<i>Lonicera periclymenum</i>	IV		+(3)-6		<i>Hypnum andoi</i>	II		+(2)-4	
<i>Thuidium tamariscinum</i>	III		+(3)-7		<i>Agrostis stolonifera</i>	II		1-(3)-7	
<i>Crataegus monogyna</i>	III		1-(3)-7		<i>Dryopteris affinis</i>	II		+(2)-5	
<i>Corylus avellana</i>	III		+(5)-9		<i>Athyrium filix-femina</i>	II		+(2)-4	
<i>Isoetecium myosuroides</i>	III		+(2)-3		<i>Atrichum undulatum</i>	II		+(2)-3	
<i>Ilex aquifolium</i>	III		+(3)-7		<i>Rhytidiadelphus triquetrus</i>	II		+(3)-8	
<i>Circaea lutetiana</i>	III		+(2)-5		<i>Ulota bruchii/crispa</i>	II		++(+)-2	
<i>Eurhynchium striatum</i>	III		+(3)-5		<i>Hypnum resupinatum</i>	II		+(1)-2	
<i>Fagus sylvatica</i>	III		+(4)-8		<i>Urtica dioica</i>	II		1-(2)-7	
<i>Acer pseudoplatanus</i>	III		+(3)-7		<i>Mnium hornum</i>	I		+(2)-3	
<i>Hypnum cupressiforme</i>	II		+(2)-3		<i>Frullania dilatata</i>	I		+(1)-2	
<i>Neckera complanata</i>	II		+(1)-2		<i>Polystichum setiferum</i>	I		+(3)-6	
<i>Viola riviniana/reichenbachiana</i>	II		+(2)-5		<i>Arum maculatum</i>	I		+(2)-3	
<i>Geum urbanum</i>	II		+(2)-4		<i>Isoetecium alopecuroides</i>	I		+(2)-3	

Affinities

GHI: WN1 Oak-ash-hazel woodland (59.8%) / WD1 (Mixed) broadleaved woodland (19.6%) (n = 112)

ZM: Carpinion betuli

EUNIS: G1.A11 Mixed Atlantic *Quercus* forests with *Hyacinthoides non-scripta*

NVC: W8e *Fraxinus excelsior-Acer campestre-Mercurialis perennis* woodland *Geranium robertianum* sub-community (48.9%)

Annex I:91A0 Old oak woodlands (10.7%) (n = 112)

Proxy environmental data

Light: 5.7 Reaction: 3.5 Wetness: 5.9 Fertility: 3.6 Salinity: 0.0

Conservation value

This is on average a fairly species-poor woodland community (total species/100 m² = 24.0, n = 112) with a very limited bryophyte flora (bryophyte species/100 m² = 6.9, n = 112). A low proportion of these stands may qualify as EU Annex I habitat 91A0 Old oak woodlands. Stands with high cover of non-native species (e.g. *Fagus sylvatica* or *Acer pseudoplatanus*) are typically of lower conservation value.

Management

The main threats to these woodlands include woodland clearance and invasion by non-native species such as *Fagus sylvatica*. They may be grazed by deer or livestock so overgrazing can be an issue. Undergrazing may also occur, however, resulting in dense thickets of bramble that reduce field layer diversity.

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. WL2A *Quercus robur* – *Circaea lutetiana* woodland, Rahin Wood, Kildare (M. Gabbett/J. Martin, June 2005)



Photo 2. WL2A *Quercus robur* – *Circaea lutetiana* woodland, Garryland Wood, Galway (P. Perrin/G. Smith, August 2006)