# Irish Vegetation Classification (IVC)

www.biodiversityireland.ie/ivc

## Community Synopsis

| | |
|---|---|
| **Scientific name** | *Corylus avellana – Potentilla sterilis* woodland |
| **Common name** | Hazel – Barren Strawberry woodland |
| **Community code** | WL2E |

**Vegetation**

*Corylus avellana* dominates the low canopy of this diverse woodland community (mean canopy height = 12.3 m, *n* = 68). *Crataegus monogyna* usually joins the hazel or persists beneath, frequently in a spiny understorey with *Prunus spinosa*. *Fraxinus excelsior* is also frequent, occurring as young trees or saplings, or sometimes as emergents above the hazel. Spindly shrubs of *Euonymus europaeus* may also be found here. In the field layer, the constants are *Rubus fruticosus* agg., *Hedera helix*, *Viola riviniana/reichenbachiana*, *Potentilla sterilis*, *Geum urbanum* and *Fragaria vesca*. Frequent forbs include *Geranium robertianum*, *Oxalis acetosella*, *Arum maculatum*, *Circaea lutetiana*, *Veronica chamaedrys*, *Primula vulgaris* and *Sanicula europaea*. The chief ferns are *Dryopteris filix-mas*, *Polystichum setiferum* and *Phyllitis scolopendrium*. There is usually a luxuriant bryophyte layer coating the ground, rocks and lower trunks, primarily consisting of *Thuidium tamariscinum*, *Eurhynchium striatum*, *Thamnobryum alopecurum*, *Plagiomnium undulatum*, *Kindbergia praelonga*, *Rhytidiadelphus triquetrus*, *Hylocomium brevirostre*, *Plagiochila asplenioides* and *Ctenidium molluscum*.

**Ecology**

This is a base-rich scrub woodland community primarily associated with well-drained mineral soils (mean organic content = 21.6%, *n* = 72). It is found on flat or sloping ground in the lowlands (mean slope = 11.1°, *n* = 72; mean altitude = 57 m, *n* = 72), often where there is outcropping limestone. Soils are of fairly average fertility.

**Sub-communities**

Two sub-communities have been described for this community. The *Ctenidium molluscum – Epipactis helleborine* sub-community (WL2Ei) largely represents species-rich stands associated with limestone pavement complexes. *Ctenidium molluscum*, *Epipactis helleborine*, *Tortella tortuosa*, *Lejeunea cavifolia*, *Fissidens taxifolius* and *Plagiochila asplenioides* are more frequent in this sub-community, as are a number of the forb species listed above. The *Fraxinus excelsior – Ilex aquifolium* sub-community (WL2Eii) represents a more general assemblage with fewer karst indicators.

**Similar communities**

Hazel-dominated stands are also included within community WL1C but those occur on more acidic soils and generally lack the suite of forbs occurring in the present community that are indicative of basic conditions.

**Records and distribution**

*Number of records (all)*

| | |
|---|---|
| Clearly assigned: | 469 |
| Transitional: | 34 |
| Total: | 503 |

*Number of records (mapped)*

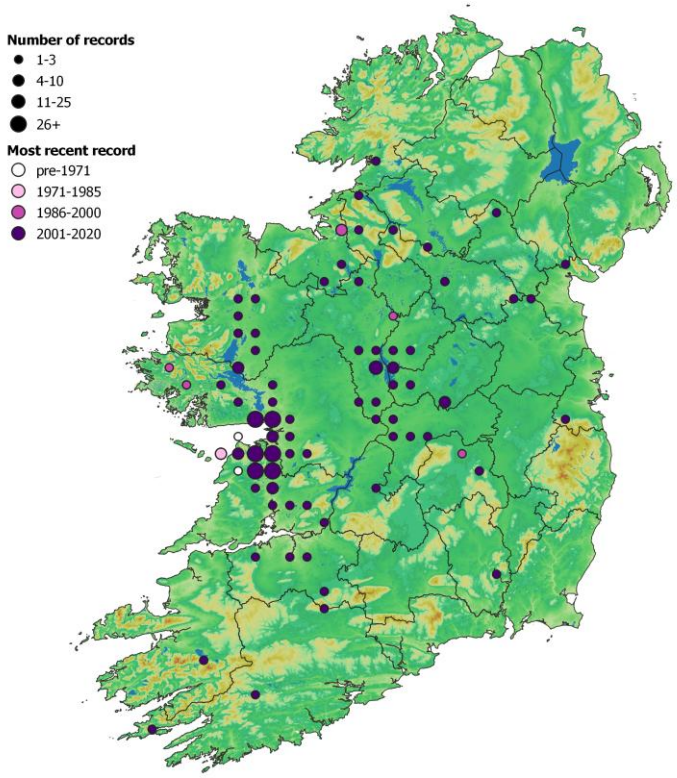
| | |
|---|---|
| 2001-2020: | 226 |
| 1986-2000: | 17 |
| 1971-1985: | 226 |
| Pre-1971: | 33 |
| Total: | 502 |

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

| | |
|---|---|
| 2001-2020: | 70 |
| 1986-2000: | 5 |
| 1971-1985 | 1 |
| Pre-1971: | 2 |
| Total: | 78 |

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

| | |
|---|---|
| 2001-2020: | 70 |
| 1986-2000: | 7 |
| 1971-1985 | 7 |
| Pre-1971: | 10 |



## Synoptic table (*n* = 415)

| Species | Frequency (from I-V) | Cover min (med) max | Species | Frequency (from I-V) | Cover min (med) max |
|---|---|---|---|---|---|
| *Corylus avellana* | V | 2-(8)-10 | *Oxalis acetosella* | III | 1-(3)-8 |
| *Thuidium tamariscinum* | V | +-(5)-8 | *Brachypodium sylvaticum* | III | +-(2)-9 |
| *Eurhynchium striatum* | V | +-(5)-10 | *Geranium robertianum* | III | +-(3)-7 |
| *Rubus fruticosus* agg. | V | +-(3)-9 | *Neckera complanata* | III | +-(2)-5 |
| *Crataegus monogyna* | V | +-(4)-9 | *Arum maculatum* | III | +-(2)-4 |
| *Thamnobryum alopecurum* | V | +-(5)-8 | *Veronica chamaedrys* | III | +-(2)-5 |
| *Hedera helix* | V | +-(5)-8 | *Metzgeria furcata* | III | +-(2)-5 |
| *Viola riviniana/reichenbachiana* | V | +-(2)-7 | *Circaea lutetiana* | III | +-(3)-7 |
| *Plagiomnium undulatum* | IV | +-(2)-5 | *Lonicera periclymenum* | III | +-(3)-6 |
| *Ctenidium molluscum* | IV | +-(3)-7 | *Carex sylvatica* | III | +-(2)-5 |
| *Rhytidiadelphus triquetrus* | IV | +-(3)-8 | *Phyllitis scolopendrium* | III | +-(2)-6 |
| *Potentilla sterilis* | IV | +-(2)-5 | *Fraxinus excelsior* | III | +-(5)-9 |
| *Hylocomium brevirostre* | IV | +-(5)-7 | *Epipactis helleborine* | III | +-(2)-3 |
| *Kindbergia praelonga* | IV | +-(3)-7 | *Vicia sepium* | III | +-(2)-5 |
| *Fragaria vesca* | IV | +-(3)-5 | *Lophocolea bidentata* | III | +-(2)-3 |
| *Plagiochila asplenioides* | IV | +-(2)-5 | *Sanicula europaea* | III | +-(3)-7 |
| *Prunus spinosa* | IV | +-(3)-7 | *Primula vulgaris* | III | +-(2)-5 |
| *Geum urbanum* | IV | +-(3)-5 | *Polystichum setiferum* | II | +-(3)-8 |
| *Dryopteris filix-mas* | III | +-(2)-8 | *Tortella tortuosa* | II | +-(2)-5 |
| *Fissidens taxifolius* | III | +-(2)-5 | *Poa trivialis* | II | 1-(3)-5 |

**Affinities**

GHI: WN2 Oak-ash-hazel woodland / WS1 Scrub

ZM: CD01E Astrantio-Corylion avellanae Passarge 1978

EUNIS: F3.171 Atlantic and sub-Atlantic hazel thickets

NVC: W9 *Fraxinus excelsior-Sorbus aucuparia-Mercurialis perennis* woodland (51.9%)

Annex I:8240 Limestone pavement*

**Proxy environmental data**

Light: 4.6 Reaction: 6.1 Wetness: 5.4 Fertility: 5.3 Salinity: 0.0

**Conservation value**

This is quite a species-rich woodland community (total species/100 $m^2$ = 37.5, *n* = 102) with a fairly diverse bryophyte flora (bryophyte species/100 $m^2$ = 13.3, *n* = 102). Stands do not qualify as any of the EU HD Annex I woodland habitats, but stands on thin soils occurring in association with karst limestone could be considered under habitat 8240 Limestone pavement*.

**Management**

One of the main threats to these woodlands is woodland or scrub clearance. Conversely, abandonment of grazing in some areas has led to significant increases in hazel scrub. These stands may be grazed by livestock (often cattle) or feral goats and overgrazing can be an issue. Sites can also be lost due to quarrying of limestone.

**Key references**

Kirby, N. E. (1981) An ecological and phytosociological study of *Corylus avellana* L. in the Burren, western Ireland. (Ph.D. thesis). National University of Ireland Galway.

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.

**Synopsis version:** V2.1 **Synopsis date:** March 2025 **Synopsis author(s):** P.M. Perrin

Photo 1. WL2E *Corylus avellana – Potentilla sterilis* woodland, Bealnalicka, Clare (S. Barron/P. Perrin, September 2006)

Photo 2. WL2E *Corylus avellana – Potentilla sterilis* woodland, Reduff, Monaghan
(S. McCormack/P. Perrin, September 2005)