

1 Irish Hare

Lepus timidus hibernicus
Length 50-60cm
Native and unique to Ireland, the Irish hare is a sub-species of the mountain hare found throughout northern Europe. Hare numbers have declined due to changes in lowland farming practice, but they remain relatively common in the uplands. Neat, flattened vegetation amongst grassy tussocks is an indication of a hare's resting place called a form. Forms provide concealment, shelter and a view of the surrounding area. As the hare's eyes are set in the side of its head its field of vision is almost 360°. When disturbed, the hare dashes across hillsides at speeds up to 50km/hr. During snowy winters white or partially white hares can occasionally be seen in Ireland.



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2 Fox

Vulpes vulpes
Length (inc. tail) 100-120cm
A member of the dog family, though some scientists now claim foxes share more characteristics with cats, the red fox has the largest natural distribution across the globe of any land mammal other than humans. Foxes are extraordinarily opportunistic, omnivorous predators, feeding on carrion, small mammals (particularly rodents) and ground-nesting birds. Depending on habitat and season, invertebrate prey can contribute 30% or more of the diet. As food is scarce in the uplands a fox's territory can range up to 10 square kilometres. Although the fox's night vision is five times better than humans they hunt more by sound than sight.



3 Badger

Meles meles
Length (inc. tail) 90-95cm
A shy, nocturnal hunter, with an omnivorous diet similar to the fox's, badgers are rarely seen on the hills in daylight. Evidence of their presence

4 Ground Beetle

Carabus nitens
Length 13-18mm
This distinctive member of the ground beetle family (or 'clocks' as they are often known) may be found on upland blanket bog. Northern Ireland holds important European populations of *Carabus nitens*, yet there are no recorded sightings south of Carlingford Lough. Many ground beetles vomit on their prey and then wait for the digestive enzymes to make their food more fluid and easier to eat. Beetle species make up 25% of all known life forms



5 Common Heath Moth

Ematurga atomaria
Wingspan 22-34mm
Flight May – June
The delicate, common heath moth can be seen flying above heather on warm days in late May and June. Males are easily identified by their large combed antennae which they use to seek out females. The caterpillars feed off heather. Common heaths and other moths are an important food source for many upland animals. Only a tiny fraction of eggs laid by a female will successfully survive to adulthood, most being taken by birds during their larval or caterpillar stage to feed to hungry nestlings.



6 Emperor Moth

Saturnia pavonia
Wingspan 50-80mm
Flight April – May
The emperor is the largest moth in Ireland. In spring you may see a red blur as the males hurtle

could be the discovery of a sett (with signs of fresh digging or discarded bedding by the entrance), a 5-toed footprint, or tufts of stiff grey hair caught on a fence. The sett is a system of underground tunnels and chambers which may be occupied for hundreds of years. Badgers typically live in social groups of two to six. In the uplands groups tend to be smaller and badgers can be solitary.



7 Lizard

Zootoca vivipara
Length (inc. tail) 10-16cm
Hibernates: Oct – March
The lizard, Ireland's only native reptile, may be spotted near warm, dry walls and rocks. Your attention may be caught by the sight or sound of this shy creature quickly disappearing after basking in the sun. Lizards hibernate under thick grassy tussocks or deep inside stone walls. While other reptiles lay eggs, young common lizards break free from their eggs while still inside their mother. If caught, a lizard can avoid death by shedding its tail, leaving the hunter with a twitching stump. It can grow a new, shorter tail, but this will take much valuable energy. Due to its elusive nature, record all sightings through CEDaR (see Signposts).



8 Frog

Rana temporaria
Body length 6-9cm
Hibernates Nov – Jan
Frogs are surprisingly common in the uplands, where wet vegetation and open water provide safety to breed, hibernate and hunt. The frog's skin colour is highly varied and can change tone to match its surroundings within a few hours. The females lay large numbers of eggs (1,000-5,000) as a natural way to counter the range of predators that eat spawn and tadpoles. Around one in fifty of the eggs laid will actually survive to become a froglet, and the very lucky ones might live to be eight! All sightings should be recorded. In winter frogs hide in frost-free sites, such as under old heather stumps, grassy tussocks and deep inside dry stone walls.



9 Bog Moss

Sphagnum spp.
Bog mosses (*Sphagnum*) have vivid green and red hues. They form spongy hummocks on wet peat and bog pools. Their acidic nature inhibits the decomposing action of bacteria and fungi, the consequent build-up of dead plant matter forms peat, at a rate of approximately 1mm every year. The specialised water-retaining cells of Bog moss allow it to absorb up to 20 times its own weight of water by capillary action. Both these special characteristics led Bog moss to be harvested, dried and exported for use as an antiseptic wound dressing during World War I.



10 Fir Clubmoss

Huperzia selago
Named for its resemblance to a miniature fir tree, fir clubmoss is one of Ireland's four species of clubmoss. A characteristic mountain species, which thrives above 300m. Clubmosses are amongst the oldest known plants. During the Carboniferous period (350 million years ago) clubmosses were the dominant plant life and are likely to have grown up to 30m tall. Today's clubmosses are much smaller (5-12cm) but their basic structure has altered little.



11 Bog Asphodel

Narthecium ossifragum
A bog plant with a delicate yellow flower and upright leaves. The flower spike turns into a deep orange seed-head, which lasts well into winter. The species' scientific name 'ossifragum' means 'bone breaker' referring to the old belief that after grazing on it the bones of sheep and cattle became brittle. In fact, most bog vegetation is calcium deficient and unless supplements are given, livestock can suffer mineral deficiency.



12 Heathers

All three heathers commonly found in Ireland provide vital food, offer stability to friable peaty soils and create habitats essential to the life cycle of many of the species featured in this leaflet. When all stages of growth from young shoots to aged woody plants are present, heather plays a central role in a healthy upland habitat. Healthy heathlands are not only priority habitats under EU directives they also provide valuable year-round grazing, recognized by their eligibility for Single Farm Payments. Without grazing heathland would gradually develop into woodland. The loss of heather to wildfire or severe overgrazing has disastrous effects on the many animals, birds, frogs and insects that shelter beneath its evergreen canopy, feed on shoots or sip nectar from its flowers. You may notice tiny holes in Bell Heather flowers; drilled by bees to extract the nectar. This nectar when processed by honeybees makes much sought-after honey, most notably the Mourne Heather Honey.

13 Heath Spotted Orchid

Dactylorhiza maculata
Ireland's most common orchid, the Heath Spotted Orchid has pink-mauve flowers and dark spots on its leaves; it occurs on on heath and bogs. Orchids grow slowly, taking several years to flower. Orchid seeds carry no food reserves, making them incredibly light for successful wind dispersal. Survival after germination depends on tapping into a soil fungus which helps the young orchids gather essential nutrients.



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14 Heath Milkwort

Polygala serpyllifolia
Heath Milkwort grows on acid, peaty soils, and blanket bogs. A low-growing plant with several stems; the flowers (usually blue, but occasionally pink, mauve or white) are said to be shaped like tiny udders. Its name, milkwort, comes from the fact that this plant was traditionally used to make an infusion which, when ingested, would help to increase the flow of mothers' milk. This belief and the name Polygala, meaning 'much milk' come from Ancient Greece.



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12a: Ling Heather (*Calluna vulgaris*) is the most abundant of our heathers; it is tolerant of moist soils and found almost anywhere in the mountains. Note the very small, and very pretty flower. The leaves are overlapping and appear to cling to the stem.



12b: Cross-leaved Heath (*Erica tetralix*) is found in wetter places. Plump bell-shaped pink flowers hang in a bunch at the top of the stem. Cross-leaved Heath is named for the way its blue-green leaves are arranged in fours around the stem in a cross formation.



12c: Bell Heather (*Erica cinerea*) is found on thin peat and stony soils, often with Ling. Vivid purple bell-shaped flowers grow in groups along the plant's wiry stems. The leaves grow in threes, with tufts of shorter leaves where the longer leaves join the stem.



21 Purple Moor-grass

Molinia caerulea
A coarse perennial grass, characteristic of wet peaty slopes and valley bottoms. In early spring its fresh green leaves are grazed by livestock before they become unpalatable. In late summer the flower-heads (below) turn purple, whilst in autumn the leaves turn red-brown bringing delightful shades to the hills, before dying off to a light buff colour. Its characteristic tussock growth creates a mosaic of humps and hollows that add refuge value for wildlife but can make for difficult walking.



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22 Bilberry / Blaeberry

Vaccinium myrtillus
Found growing on heaths and dry bogs, this dwarf shrub is deciduous. Leaves return in spring and pink bell-shaped flowers follow soon after. Harvesting the delicious black fruits in summer is a celebrated ancient folk ritual. The local community around Slieve Croob still gathers to pick bilberries on Blaeberry Sunday at the beginning of August. In many parts of Ireland the highly nutritious berries were picked for export to Britain, especially during the two world wars. Bilberries are closely related to the blueberries of North America.



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23 Bracken

Pteridium aquilinum
(Height up to 2m)
In spring, Bracken's curled leaves emerge from the soil and unfurl into a branched leaf (this branching distinguishes it from other ferns). Bracken is poisonous to livestock and if uncontrolled, can extend over large areas of hillside (as seen on the lower slopes of the Mournes and the Antrim Plateau). The spread of Bracken has been favoured by the dominance of sheep on the hills, as the heavier hooves of cattle would damage its emerging fronds. Bracken's dense canopy provides shade for primroses and bluebells and important breeding habitat for birds, but is also known to harbour ticks. Bracken dies off with the first frost and brings beautiful colours to the hills in autumn.



24 Gorse or Whin

European Gorse *Ulex europaeus* (70 – 200cm high)
Western Gorse *Ulex gallii* (photo above) (up to 80cm high)
Spiky shrubs with distinctive yellow flowers that provide shelter and protection for ground nesting birds, and young saplings. Like clover, gorse is a nitrogen-fixer and effectively makes its own fertilizer. Harvested in the past as winter fodder for cattle and horses, and for use as domestic fuel, gorse is highly flammable and burns at a high temperature. The taller European Gorse, with bluish-green stems and thorns, flowers in spring, and gives off a coconut smell on sunny days in May and June. European Gorse is found almost everywhere, it needs deeper soils and indicates land abandonment. Western Gorse (also known as Autumn Gorse) is characteristic of dry heath habitat, it grows as a dense, spiky mat, and flowers in the autumn.

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20 Bog Cotton

Eriophorum angustifolium (Common Cottongrass)
Eriophorum vaginatum (Hare's Tail Cottongrass)
The white heads of Bog Cotton or Cottongrass are easily recognised, but look more closely and you may see two species. Common Cottongrass has multiple white seed-heads and long, smooth grass-like leaves (often tinged reddish purple at the end). The leaves emerge (in triangular formation) from wet peat and bog-pools. The leaves and roots of Common Cottongrass have chambers that conduct air

down to the root tips in the oxygen-deficient peat. However, Hare's Tail Cottongrass lacks this feature; it has a single white seed-head in a dense tussock of wiry leaves and will be found growing on firm peat. The minute seeds of Bog Cottons have fine white hairs, for wind dispersal. Unlike true cotton, the hairs of Bog Cotton lack tensile strength. Up to about 100 years ago they were mixed with wool or cotton and used in the manufacture of cloth, carpets and roofing felt. It was also used to stuff pillows, make candle-wicks and as tinder to start fires.