

Cowgate in Winter

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Did you know that almost 20% of this country's trees are not in woodlands? So our lovely Cowgate cemetery, with its moderate tree cover, is in that essential fifth.

And did you know that winter is the most fabulous time to be out in nature? There is the opportunity to actually see more: there are fewer leaves on trees allowing views up into the tree canopies and down on the ground as more light penetrates - it's easy to walk past wildflowers, insects and fungi.

So how do our trees survive the stresses of winter?

Deciduous and coniferous trees have a few different survival strategies, the most obvious being that deciduous trees lose their leaves in a process called abscission that shuts down photosynthesis and reduces water loss. Most evergreen conifers, with their narrow fleshy, needle-like leaves, photosynthesise all year round, their needles are better at retaining water due to the small surface area and waxy coating.

Both types, though, enter a dormant state over-winter and stop new growth above ground. Preparation for this begins in late summer as daylight hours decrease and reach their adaptive tolerance by midwinter. This is at a cellular level with changes that involve shrinkage, dehydration and sugar concentration so that the cells harden and become glasslike, preventing freezing and damage to living cells. Their bark covering also provides insulation and protection against freezing and cracking.

Did you know that the UK's woodland cover;

Has more than doubled in the last 100 years?

But that much of this is non-native?

That existing woodlands are isolated and in poor ecological condition?

That there has been a decline in woodland wildlife?

Factors such as pollution, invasive species, deer browsing and fragmentation - woods chopped up into small parcels - all need to be tackled to redress this state of affairs.

The Committee on Climate Change, the government's independent adviser on tackling climate change, recommends increasing UK woodland cover from its current level of 13% of total land cover to at least 17%, and possibly to 19% by 2050.

We urgently need to scale up the creation of native woodlands, put more individual trees back in the landscape, and restore damaged woodlands.

Woods and trees lock up carbon to fight climate change, improve our health, wellbeing and education, reduce pollution and flooding, and support people, wildlife and livestock.

Green spaces that are rich in wildlife, bird song and blossom are also intrinsically linked to our own health and wellbeing, yet we remain one of the least wooded countries in Europe.

So, find a small amount of time and visit Cowgate to soak in all that nature has to offer. Even in winter.