

## The Birch

There are two different species of birch which are both widespread and native to Britain. The layperson tends to call both trees the 'silver birch' but the two are readily distinguished. The black diamond shapes on the whitish bark and the weeping nature of the outer crown betray the true silver birch, *Betula pendula*. (The dark ridges represent the breathing-pores of the bark) *B. pendula* is common on dry heathland, in open woods and on the well-drained slopes of mountain glens. *Betula pubescens* (or downy birch) copes better with soils that are less well drained; it is found in damp hollows on heaths, and by streams running through woodland or along the bottom of highland glens. Unlike *B.pendula* it does not weep; its outline is somewhat 'fuzzy'.

Most of us readily recognise the true silver birch as a most attractive tree and this led Coleridge to bestow upon it the title, Lady of the Woods. *B.pendula* is a true pioneer species; it is the first to appear on cleared or disturbed land on open ground for its tiny light seeds can be blown in from afar. In the absence of shade its early growth is rapid and soon it will rise above the slow growing plants. Consequently in The Blean *B.pendula* will invade after coppicing.



In forestry terms, the tree is a nuisance and is often regarded as a weed. Its commercial value is small; it is used only for fuel and turnery. In the 19<sup>th</sup> century the Lake District was home to an industry that supplied bobbins, spools and reels to the Lancashire cotton mills. In Westmorland there was ample water power to drive the wheels of the turneries and a plentiful supply of birch poles obtained by coppicing the lakeland shaws. Since then the wood turning industry has declined but individual craftsmen still operate and they much appreciate birch wood that has been infected by a particular fungus for this enables them to fashion artistic products with an attractive pattern to the grain.

*B.pendula* is relatively short lived; typically it may reach an age of 50 to 100 years. However, in the Scottish Highlands its growth is slow and a specimen may survive for two centuries. Here no broadleaved tree but the birch can thrive sufficiently to compete

with the Scots pine. With slow seasoning the Highlanders of former times discovered that birch timber could resemble oak in hardness and strength. Unseasoned, untreated birch timber derived from the fast growing trees of southern England has a very poor reputation since it rapidly decays. It may be of interest to note that when our herring industry was at its peak the barrels for the fish were regularly made of birch.

Birches regularly tend to be shedding one thing or another. In spring this might be the bud-scales, later the catkins and from late summer onwards dead twigs. The bark also is readily peeled and in past centuries woodmen used this material for making rough roofing for their shelters. The paper birch, *Betula papyrifera*, is a North American species. Famously the Indians of Canada made portable birch bark canoes caulked with a resin obtained from silver fir. These wonderful craft were a testament not only to the woodworking skills of their makers but also to an intimate understanding of the trees native to that area.

Our ancestors also found interesting uses for birch. Twigs of the tree were used to make coarse brooms known as *besoms*. North Americans tap their maple trees to obtain a sap rich in sugar. In the past much the same was done with birch in this country. In the late 17<sup>th</sup> century Moses Cook wrote that in early spring one might “with Chizzell and Mallet cut a slit, almost as deep as the very Pith, under some Bough or Branch of a well-spreading Birch; cut it oblique, and not long ways, inserting a small Stone or Chip to keep the Lips of the Wound a little open; fasten thereto a Bottel, or some other convenient Vessel appendant; out of this Aperture will extil a limpid and clear Water, retaining an obscure Smack both of the Taste and Odour of the Tree.” He goes on to give a recipe for making birch wine from the “limpid and clear Water” which was so rich in sucrose.

Today the economic importance of birch is small but we should not underestimate its ecological value. Fungi are found linked to its root system. These associations are known as *mycorrhizae* and their significance is slowly being revealed. Some will fix nitrogen from the air thus improving nutrient levels. In the context of a wood it is now understood that the fungus element may have the capacity to be “free-living” so that a network of mycelium might extend to link neighbouring trees under the forest floor. Thus the health of one tree may depend upon another. This science is still in its relative infancy but it seems to indicate that we should by no means despise the birch!

*Researched by David Shire & Ken Martin of Blean Heritage & Community Group ©*