

## The History of Woodlands in the Dane Valley

Woodland exists in the Dane valley largely as a result of steepness of slope and wetness underfoot, but given that there are plenty of steep slopes and wet boggy conditions, in and around the river Dane and its tributaries, then it is no surprise that woodland exists in reasonable quantities.



If we look at early history we can guess that following the retreat of the last ice age, only about 14,000 years ago, woodland developed slowly as the ice retreated, first alder, willow and birch and then pine and later rowan and oak with hazel. The first tree seeds were wind-blown and only later as mammals and birds carried heavier seeds and soils developed, did the woodland we know today begin to take shape. The vegetation would almost certainly have been heathland underneath a light canopy of trees, and this can still be seen today where heather and bilberry with gorse sit happily under birch and rowan in places like Backforest and the Swallowdale area of Bosley Minn.

The stream side and valley bottom woodlands and where the soils are often waterlogged, would have been dominated by alder and willow and here the trees may have been closer with less light and lush vegetation such as rushes and reeds.

This varied mix of woodland types would have had little interference for about 6,000- 8,000 years possibly, and would have been almost continuous woodland cover across the whole of the country during this period with animals such as wild cattle, red and roe deer and wolves and an abundance of small predators like wildcats, pine martens and polecats.

Human impact on these woodlands would have started slowly but may have moved faster from around 4,500BC to 2,000BC, the Neolithic (new stone age) period, as woodland was cleared gradually to provide open areas for farming. The fastest clearance would have followed this from 2,500BC to around 500BC by which time the woodland cover in this area may not have looked that different to what we see today. Although the surrounding fields and hilly areas would have been very different with much more heathland, flower rich grassy areas and scrubby areas of gorse and hawthorn, and no hedgerows or walls. Remember our ancestors, although very strong, did not possess chain saws. They would have cleared smaller trees for firewood, but would have probably killed older trees by ring-barking due to their size. Once dead these trees would have fallen and been easier to break up for firewood.

The Dane Valley woodlands we see today may look very similar from a distance to those Bronze Age woodlands of 3,000 years ago, but their structure and the species within them were very different indeed. We call these woodlands that are thought to have been woodland since the last ice age 'Ancient Semi-Natural Woodland' (ASNW). They may have changed over the millennia, but one of the giveaways that they have been continuous woodland are the plant species that occur on the ground. Plants that don't move easily, don't tolerate disturbance or removal of trees well and rare plants that are specific to ancient woodlands. This group of plants are generally known as ASNW indicator plants, examples being bluebell, wood anemone, wood sorrel, ramsons, primrose, greater woodrush, barren strawberry, violets and yellow archangel. All these regularly occur in the Dane valley woodlands together with some ferns and mosses that also indicate ancient woodland.



**Bluebell**



**Ramsons**

The trees of the vast majority of these woodlands are another matter completely, and although there are no written records of the history of woodland here, we can look closely at them and link their appearance to historically known facts and deduce what may have happened to them over time, especially more recent history of the last few hundred years.

If you look at the woodlands of the core area around the river Dane corridor and the estate of Swythamley, the woodland type stands out clearly as well managed woodland grown for timber, but with possibly some trees planted to enhance the landscape. The inclusion of larch and beech with some hornbeam and sweet chestnut together with the more frequent oaks shows that care and attention to detail was given to the planting design of around 220 years ago (a fallen beech of a size similar to others within the area was ringed and the annual growth rings counted to 200+ seasons). This takes us back to the 1790's and not surprisingly, the Napoleonic wars, when oaks were in huge demand and possibly the whole woodland area of the core Dane was felled over a period of a few years. Whether the felled oaks were used for ship building or whether they were felled as an investment to replace the old woodland that existed previously we may never know. The woodland area is often steep, rocky and with generally poor soils, far from the best conditions to grow large quality oaks for the ship building industry. It is hard to imagine the owners of Swythamley estate (the Trafford's at this time), taking the decision to clear fell steep sided woodland and replant with oaks. They must have been convinced that woodland was a good investment for the future. It also says something about the skill of our ancestors who clearly didn't worry about extracting large trees on steep slopes with horses and hand saws!

So although woodland has probably been continuous in the core Dane area, as indicated by the ground flora, these woodlands either side of the Dane are relatively recently planted woodlands with evenly spaced trees but on ancient woodland sites. To get a feel for more irregular and natural woodlands you have to generally break out of the Dane river corridor and get into the tributaries such as Shell brook and Swallowdale, where woodland that existed far from the estate centre may have been left more to its own devices.



**Even-aged oak trees over bluebells indicating planting on an ancient woodland site**

The exception is one area alongside the river near Back Dane where ancient ash and oak appear older than the Napoleonic period but even here these are in the minority.

If you want to see ancient trees generally, you have to come out of the woodlands and into the edges of woods and surrounding hedgerows. Whether these trees were less valuable as they were possibly shorter and less straight therefore left to grow old we can only guess. Other old trees exist in pockets or as individuals. The oldest probably being the oak on the drive down to Whitelee farm. Other older trees also exist, but are probably easily overlooked as they may not be large or have huge girth like the Whitelee oak.

Locally areas of woodland were clear felled during or after the second world war. Some of these, for example Cartlidge Wood, were left to regenerate naturally whilst others such as the larch dominated woodland west of Hangingstone Farm, were planted largely with conifers. More recently the woodlands have fallen into disuse with the exception of sporadic tree felling for personal use and game management in specific locations.

No records of any woodland management have been unearthed as yet, but there may well be early writings that exist. The most likely being the monastic records of Wincle Grange and possibly records from the Trafford family that owned Swythamley from 1654 to 1832.



**Bank at the margin of the wood. The Swythamley Estate boundary?**