

Epitaph to the Ash



Now here is a story about a tree and a fungus. It definitely isn't a love story and it doesn't look like it's going to be much of a come-back story either, more like a prolonged murder mystery where we know who the killer is but can do little to stop its relentless march to infect the victim, strangle its sap flow and leave it weak, ugly and prone to other diseases and eventual death. Another sad step on the road towards a depleted environment. Losing such a useful plant that regenerates prolifically on its own is a disaster.

The fungus is called *Hymenoscyphus fraxineus* (originally described as *Chalara fraxinea*). It causes Chalara Ash dieback disease. The disease has spread across Europe from Poland where it was originally reported in 1992. This fungus can infect every ash tree there is. Diseased trees are already evident in our countryside, for example on the Downs above us, recognisable by dead branches from the top downwards in what should be, at this time of year, a verdant leaf canopy. Many young trees, being more susceptible than mature trees are already completely dead, while others are attempting to produce new growth from lower down the diseased trunks.

The UK currently has an estimated 80-150 million mature ash (*Fraxinus excelsior*) trees. The tree dominates our landscape being a common woodland, hedgerow and roadside tree in both town and country. Here in our parishes, we have Ashurst, Ashingate and Ashcombe, old names that show how ubiquitous and useful the tree is. Old English for ash is "aesc" meaning spear; its timber being perfect for tool or weapon handles, furniture and coach-building.

The ash has spread so successfully by producing vast quantities of seeds or "keys" as anyone who has one near their house will appreciate when clearing seedlings from anywhere they can put down their vigorous tap root. Curiously, despite the ash being a superbly prolific reproducer here in the UK, the UK forestry/horticultural industry imported millions of ash saplings from abroad. Ash dieback was introduced in native woodlands all over the UK and by the time DEFRA banned importing saplings in 2012 it was too late. The fungus probably would have got here eventually as its spore is windblown.

Ash tree flowers are male, female or bisexual with different sorts on the same or different trees. This fact may offer a little light at the end of the tunnel as

some trees are showing 'tolerance' to the disease. If the diverse genome of tolerant trees is investigated a less susceptible tree may be found and it may be possible that tolerant trees may be cloned to provide replacement tree stock. In Denmark, where they have lost 80 per cent of their ash trees, two trees, known as T35 and T18, were found on a plantation originally planted in the 1930s to have some resistance to the fungus. T35 is predominantly female and T18 predominantly male. Evidence shows 1 per cent of ash may be of sufficient resistance to survive and by that the scientists mean survive with less than 10% crown dieback. Young saplings and coppiced regrowth are most susceptible to the fungus. Older trees fare better but they eventually die and there will be no young trees to get old and replace them.

Locally known as widowmakers by woodmen when they are healthy, they are going to become a serious liability in the winds and storms going forward. We can look our last on an amazing species right now. Most big specimens are still looking healthy for the moment but our grandchildren may not see them. The big ash tree will soon be gone like the great elm trees before and you must be over 80 years old to remember what the countryside looked like before they succumbed to Dutch elm disease. The financial cost for felling diseased ashes along roads for safety reasons is almost unquantifiable but estimated at £15 billion.

Natural or unnatural de-selection will create a void in the landscape; other plant species will take advantage of the light that will be let in by the multitude of casualties and there will be dead wood in abundance for beetles and woodpeckers.

Old Norse mythology says the tree of life, an ash 'Yggdrasil' is the most important thing of all. The legend says that when the ash tree dies, the world as we know it will fall.

James Otway