

## Bernard's Blog No.25

Back in Blog 14, a couple of years ago I mentioned the Jays in the Churchyard and their role in oak tree planting. They are at it again and this most handsome and colourful of the crow family, dusky pink with white throat and black moustachial stripe and black and white wings emblazoned with blue are a delight to watch. They do get a bad press however as a robber of birds' nests but like most corvids they are impressive all-rounders, also feeding on a variety of invertebrates seeds and fruits. Their particular speciality however is its skilful habit of burying acorns



We have several oak trees, pedunculate and sessile, in our churchyard and left to their own devices they have a surprisingly poor ability to reproduce. An oak can be twenty years old before it bears its first crop of acorns, and then most of the thousands of seeds that fall to the ground each autumn are eaten by animals or simply rot away. 2022 has turned out to be another 'mast' year. Every few years, some species of trees and shrubs produce a bumper crop of their fruits or nuts. The collective term for these fruits and nuts is 'mast', so we call this a mast year. But why this year? It's likely that the weather plays a part. Mast seeding happens mostly in wind fertilised trees. Having the perfect weather conditions at the most crucial times for the seed development will increase chances of a mast year. This can include weather cues such as spring temperature, summer drought, and spring frost. These weather variables are associated with critical times for fruit maturation and fertilization.



Since the acorn is light-demanding, any seedling that manages to take root beneath the parent canopy is doomed to fail. The acorn needs, somehow, to be buried in the earth to germinate. So the oak must rely on a partnership with another species, the Jay. It is a particularly choosy bird, selecting ripe acorns that are not too small or affected by parasites. These have a high calorific value but also have the best chance of germinating. The jay can carry up to six acorns at a time, stacking them down its gullet before flying to a spot many yards or even miles away from the parent tree. It seeks out areas of open ground where the oak can germinate and then buries each acorn separately about eighteen inches to three feet apart, hammering them deep into the ground where they are less likely to be found by mice or squirrels.

Jays eat these stored, carbohydrate-rich acorns throughout the year apart from April to August, when there is plenty of other food available. This is when the excess acorns can germinate. By June the young oaks, growing in full daylight have put down an extensive root system with long tap roots. If the Jay returns to collect the top of the seedling stems and the cotyledon to feed its young, the oak seedling can survive perfectly, well held and nourished by the tap root.

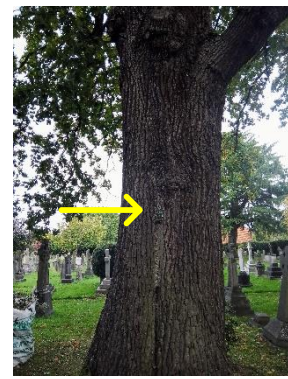
Probably no other tree but the oak is more entwined with our culture. Britain's ancient Druids worshipped in groves of oaks and our first kings adorned themselves with coronets of oakleaves. A symbol of strength and survival, couples would marry under its branches and

carry acorns in their pockets for good luck. Oaks hold key moments in history, King John held parliamentary meetings beneath oak trees. In 1558 Queen Elizabeth I learnt of her succession to the throne as she sat under a great oak in Hatfield House. The tree became a place of pilgrimage and when the old tree died, QE II planted a young oak to replace it. In 1651 after losing the battle of Worcester during the Civil War, King Charles II hid from his Roundhead pursuers in an oak tree at Boscobel House in Shropshire before escaping into exile. A feat immortalised in Royal Oak pubs up and down the country. The day the king returned from exile, 29<sup>th</sup> May 1660, became a national holiday and is still celebrated in some parts of the country as “Oak Apple Day”.

The oak has provided sustenance and livelihood from providing feeding pigs with acorns, bark for tanning leather, fuel for domestic fires, sawdust for smoking meat and fish, charcoal for smelting iron and being one of the hardest and most durable woods is greatly prized for its timber.

It is said that an oak tree has more leaf cover than any other tree and as such supports more wildlife forms than any other native tree. As we approach autumn the rich leaf mould on the ground will become the habitat for scores of fungi and provide us with another season of exciting exploration in our eco-friendly churchyard and another ‘blog’.

Bm 10/22



*Picture shows the Tamberlin Room oak. If you look carefully you can spot the 'fairy door' usually a secret of The Toddlers Group*