



PENDUNCULATE OAK TREES – one of two native British Oak trees

We have talked before about this well known and magnificent tree, but this year has been particularly marvellous for the sheer number of acorns that have been produced. When I go for walks in my local Cat Lane Woods, the acorns have formed a thick rubble on the ground, which looks fantastic, but are also a bit slithery to walk on.

Huge production of seeds is called a 'mast' year, and it occurs every 2 to 5 years. There are various theories, but good weather in spring, when pollination of the blossom occurs, is the major factor. The very sunny weather we had in spring positively effects all the oak trees in any location, resulting in them all producing excellent acorns now. More seeds means more oak saplings, and the continuation of our most marvellous, common broadleaf tree. The oak supports the widest variety of invertebrates, insect species, lichen and fungi of any tree in the UK, providing a rich habitat for more than 500 species, so it is incredibly

important in maintaining biodiversity.

There is a fascinating, symbiotic relationship between fungi and the oak ecosystem. The Oakbug Milkcap has ultrafine filaments, known as mycorrhiza, which act as extensions to the oaks root system. The fungi collect extra nutrients and moisture from the soil through these fine filaments, which can then be absorbed by the tree, in exchange for constant sugars from the tree, through photosynthesis.

Pedunculate refers to how the acorns grow from the branch, suspended by long, thin stalks - peduncles - often in pairs. The acorns, snug in their tight fitting cups are clearly visible amongst the almost stalkless leaves, and this is a native tree that most people can recognise. Our only other native oak is the Sessile Oak, where the acorns grow tightly against the branch, and these two can hybridise.

Acorns are an important food source for both birds and mammals, and 'pannage' is the term still used for the right to turn pigs loose in woods to feast on the acorns.

Jays are also fond of acorns, and do a great job of increasing the chance of new oaks springing up, away from the shading canopy of the parent tree. Like squirrels, Jays bury lots of acorn seeds as a larder to come back to in cooler months, and like squirrels, they sometimes forget where they put them. They fly with them, secure in their beak for some distance, until they find a spot where they want to store them, and dig a hole with their beak and push the acorn in. It seems a shame that they can then forget where they are, and their larder can also be raided by clever corvids and squirrels watching their efforts. But being forgotten is a positive for the acorn, as it can grow into a new tree. The posh name for seed dispersal by animals is zoochory - which would be a great Scrabble word too!

The botanical name of *Quercus Robur* means sturdy, and the dense, durable timber of oak, together with its lovely colour, made it widely used for construction over many centuries. Laws were passed in Elizabethan times to protect the oak, as too many trees had been felled for house and ship building, and there was a subsequent, extensive planting of new oaks in royal forests; many of which still survive and can be enjoyed today.

Oak has dense timber because it grows so slowly, therefore it is used mainly for furniture rather than in the paper industry. Standard oaks will live easily up to 300 or 400 years, and can reach 140 feet tall, but the much shorter, ancient pollard or coppiced oaks can be up to 1000 years old, and are mostly found in medieval parkland.

If you ever get the chance to visit Wistmans Wood on Dartmoor, do go, or look up some images of it if you can. I used an image of these woods in the October Nature Notes. It looks rather scrubby from a distance, with some oaks clinging to a valley by the West Dart river, and has no signposts to help you find it. But once inside, you are transported to a totally unique and amazing place. The oaks are all ancient, many over 1000 years old, contorted and barely 15 feet tall, because they were all coppiced; and now lie neglected amidst huge granite boulders, all covered in masses of moss, lichen and ferns.

The unique ecosystem of these woods has evolved untouched for so long because the boulders protect them from grazing sheep and deer, and the very difficult, lumpy ground and short trunks means they are of no use to destructive logging, and defeat most walkers.

Hurrah for some truly neglected wild places I say. Long may that wood be left alone, but enjoy some local woods nearby if you can.

