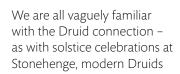


istletoe must be one of the most widely known of British plants, but also one of the least understood. Its extraordinary appearance, with plants growing apparently rootless on tree branches above the ground, has always made it seem magical, mysterious, and unusual powers have been attributed to it since prehistory.

Now it's a degraded icon, a compulsory part of Christmas frenzy when a bunch has to be hung somewhere to allow for the traditional kisses – all too often from relatives with bad breath or the person you least want to engage at close quarters at the office party. It's ironic perhaps that this modern fragment left from a rich history of extraordinary beliefs owes much of its survival to two characters who could fit really well into our current world of fake news and spin!

are enthusiastic about keeping the plant alive in some of their rituals. But it all started with a Roman chronicler, Pliny the Elder (23-79AD), who reported on the Roman invasions of Western Europe. The Druids he described as having a reverence for mistletoe were not actually British at all, but among the Celtic peoples of Gaul. A cosmic coincidence is that most mistletoe for sale in the UK now is imported from France! His account also had a key point which seems to have been lost in translation - mistletoe favours poplars, limes, willows, and the Rosaceae family, notably apples and hawthorns,

but is actually really rare on oak. Pliny's point may have been that if Druids did find a population on oak its rarity would have invested it with extra power, but the enduring image of white-robed priests with golden sickles cutting ritual bunches in oak woods must always have been an exception. The threads of this story then got a huge boost in the eighteenth century when an energetic antiquarian called William Stukeley (1687-1765) read Pliny and spun a vivid and detailed theory which was filled with white bulls and virgins, as well as the compulsory gold sickles. As a gardener who values her











Felcos highly, I can't imagine a pruning tool which would hold a worse edge than anything made of that metal! 'Druidism' became a national craze. Stukeley was a genuine enthusiast for prehistory, but also a brilliant publicist and his largely fictitious 'accounts' still inform most of today's popular beliefs. I wish I could have seen the 'Druidic temple' he built in his garden in Lincolnshire, constructed round an old apple tree with plenty of mistletoe!

Mistletoe is indeed a remarkable and fascinating plant. It's a hemiparasite, anchoring itself in a bark crevice on a compatible tree, but using its own evergreen leaves to photosynthesise and taking only some nutrients from its host. The belief that it's a killer, draining the host of strength, is untrue. Heavy growths can do damage, by shading out surrounding leaves in summer or by simple weight breaking branches, but only many years of a great deal of mistletoe would actually kill a tree. Some of its former reputation for possessing special powers must have been enhanced by its extraordinary appearance on bare branches in winter making memorable and awe-inspiring silhouettes.

It's just as remarkable at close quarters, and here must lie the origin of the kissing tradition. The plump shining white berries, growing in pairs at junctions of the leg-like twigs, are inevitably suggestive of manly equipment! The plant has therefore always been associated with fecundity, with starting new life, with getting pregnant, with encouraging crops to bear.

For such a national icon its distribution in England is remarkably restricted. The heartland is the Severn area, Worcestershire, Herefordshire, Gloucestershire. South Somerset has plenty, and parts of Gwent. This is thought to be because of particular climatic conditions rather than the many apple orchards in these areas. Otherwise it's only scattered in smallish populations and is absent from Ireland and most of Scotland. So it's in these counties that we find traces of the fertility rituals which must always have been associated with it. One practice in Herefordshire sounds marvellous, as elaborate globes of mistletoe and hawthorn were woven and then taken out and burnt on a field of first-sown corn, in a big straw fire on New Year's Day.

The medieval 'doctrine of signatures' which decreed that medicines should be made of the parts of plants which most resembled parts of the body inevitably gave mistletoe a prominent place in treatments for infertility and sexual problems, but it also gained a particular reputation for treating epilepsy and dispelling tumours. Here, too, its history reaches into the present as it does contain anti-spasmodic and sedative properties, and experimental work is underway to test some mistletoe chemicals for new cancer treatments.









Facing page, top and two central images bottom: Now a rare event in England, a mistletoe auction in Tenbury Wells (Jonathan Briggs).

Facing page, bottom left: Christmas greetings with a Canadian species! (Paul Green).

Facing page, bottom right: Bright berries of the continental **Viscum cruciatum** (Bob Gibbons).

Below: Winter silhouettes on the Bridgwater Canal (Steve Parker). Below, left: Summer ash leaves and mistletoe coexist (lan Salmon).















Our mistletoe is *Viscum album*, which is a pan-European species, though many mistletoe relatives (about 1,500 of them) are tropical or sub-tropical. Another European species, *V. cruciatum*, is enjoyable to find as its berries are red and highly decorative! I've seen it in Morocco, familiar-shaped bunches taking me by surprise when they show this bright colour. The question of what mistletoes choose to grow on interests many botanists, and most of us have a little list of unusual hosts, while in West Somerset there is another challenge to keep in mind. Mistletoe does not like to grow near the coast, or up on moors, so on Exmoor itself, it is really quite rare, and I would be very glad to hear of any finds! Some clumps on a tall lime at the gate to Dunster Castle park are well known, and show up well in winter, and one on a street rowan in Ermington Road in Minehead gets respectful looks.

Wherever it grows, mistletoe seems special, and a close look at a plant makes it even more extraordinary. The flowers are especially weird, tiny yellow structures like pursed lips which open a little in April, but its whole ongoing life cycle in every stage is usually present on the twigs at any one time. It is also vitally connected to birds as the berries can't just fall and grow but have to be moved into a possible crevice where they can begin to develop an attaching 'root'. Usually this is thought to be by the bird cleaning its beak after eating the berry but not the hard seed - the flesh is very sticky, so a good wipe on clean bark before flying off is needed. There is some suggestion, too, that seeds passing through a bird's digestive tract is helpful, as after a meal some are seen to make rather revoltingly syrupy messes containing seeds! Whichever transfer method is most important, the birds are crucial for the plant to be able to spread. Mistle thrushes are named for the association, though sadly becoming more and more scarce, even among the rowan berries they also enjoy on Exmoor and the Quantocks. Blackcaps (a warbler species now over-wintering in England) are known to take the berries, as are the occasional beautiful little visitors to Somerset, waxwings. As with so many of the current threats to biodiversity, danger to one organism has endless knock-on effects, so grubbing out an old orchard will do away with the mistletoe too, leaving less food for birds and so on and so on...

If you live deep into Exmoor, you may have to take drives around Taunton (West Monkton has incredible mistletoe clumps growing on old limes in the former Rectory garden where a great botanist, the Rev E.S.Marshall, lived) or past the cider orchards on the road from Glastonbury to Frome, to be a mistletoe tourist, and buy a French bunch for your Christmas party, but we can all be glad that Somerset in general is one of the heartlands of this remarkable plant.

For much more information look at The Mistletoe Directory at mistletoe.org.uk.

Top: The bizarre tiny spring flowers (Jonathan Briggs). Second from top: Birds eat and move the seeds. The mistle thrush (on the left) is named for the association and more exotic visitors like waxwings also like the berries (thrush Bob Gibbons; waxwing Brian Gibbs).

Third down: Winter in the Moroccan Middle Atlas - a hawthorn tree full of mistletoe (Bob Gibbons).

Left: Mistletoe near and far, in the Chihuahuan Desert, Texas, and on a farm much closer to home! (Bob Gibbons; Jonathan Briggs).