

Nature and Weather in South East England

Tree by tree - the autumn sequence

Saturday Walkers Club

When different tree species shed their leaves can vary from tree to tree, place to place, and year to year. Nevertheless here is a list of them roughly in the order they are noticed in a typical autumn, with some approximate timings:

One of the earliest trees you may notice is the **horse chestnut**. Traditionally these produced good yellow and gold colours from mid October to the first week of November, but from 2006 onwards were badly affected by the caterpillars of a leaf mining moth, which caused their foliage to shrivel from late summer. This made them a very prominent sight in September and early October for all the wrong reasons. From a distance they looked like normally tinted trees but a closer view revealed the sad sight of curled-up dead leaves. In 2009, 2012 and 2015 some managed to beat the blight and produce reasonable leaf colour, however, and that has also been true in all years since 2019, with most horse chestnuts in 2021 showing at least some tint, and some fully coloured.

Otherwise among the first trees to shed are **crack willows**, which often grow beside rivers. They can have a mottled effect, with some dull yellow leaves mixed in with green ones, or just lose their leaves while they are green. They can already be quite thin in the first half of October and bare by the fourth week, though a few leaves may remain on them well into November. The very similar **white willows** often do not shed to any significant extent until mid October and may not go bare till the end of general leaf fall. They scarcely tint at all, at most turning slightly yellowy. **Goat** or **grey willows**, the ones that produce pussy willow catkins in spring, are rather inconspicuous at this time of year: they go mottled (ie with dull yellow or gold leaves among green ones) and can shed quite early, but then paradoxically hold onto some leaves into December, well after the end of general leaf fall.

Another tree that can turn early is **hornbeam**. It can produce quite large patches of tint early in October, or even in late September, often with the surface leaves colouring over a large area while the ones underneath remain green. It then usually starts to turn more generally mid month. Colours include yellow, gold, and sometimes a reddish tinge. Full tint is not usually achieved until the first or second week of November, but in 2011 and 2012 all hornbeams were bare by the end of October. (By contrast in 2021 there was very little tint till mid October and the best colour was not until the third week of November.) There is a pyramid-shaped ornamental variety of this tree found in suburban streets which can shed earlier or last longer than the wild species.

All three of our wild maples also start to turn quite early, but then go on to keep some leaves until the end of leaf fall. **Sycamore** can show some tint as early as late September (early September in 2017), and many go bare by the start of November. However some - often smaller ones - keep some leaves till the end of leaf fall in mid to late November. Unlike other maples, sycamore does not produce great colour - usually just muddy yellows and greens - but there can be exceptions that go a bright yellow or even gold. (This happened in later October in 2020 and throughout the season in 2021.) The leaves also often have black

blotches, which are a fungus; this is actually an indicator of clean air: the more blotches, the cleaner the air.

Also early to show tint are the dainty leaves of **field maple** (the only truly native maple in the UK, the other two species being introduced) which produce a mottled effect - some leaves green, some leaves yellow, and some a mixture of the two - from quite early in October, or sometimes mid September. As leaf fall progresses these can evolve into showers of the purest yellow, occasionally even golds or bright reds. Some yellow showers then dot the hedgerows right to the end of leaf fall in mid to late November - or even into December some years.

Our other wild maple, **Norway maple**, can easily be mistaken for sycamore but can be distinguished by the pointed tips to its leaves. It usually starts to tint in mid October but is at its best in late October and the first ten days or so of November, when it can produce bright yellow colours (very occasionally golds or even reds).

There are lots of other ornamental maples in our parks and city streets which tint at similar times to Norway maple. One that finishes a good deal earlier is the **red maple**, which brings a touch of the American fall to our suburban streets with a spectacular display of red foliage in mid October, but is bare by the end of the month.

Shrubs are thinning out in October too. Many are dealt with on the [next page](#), but two worth mentioning here because they are very prominent in the countryside and contribute a lot to autumn colours are **hawthorn** and **blackthorn**. They are slowly shedding leaves from early September (even August) onwards and can be bare as early as the third week on October. That being said some foliage invariably manages to hold on in some places until the end of leaf fall. Their leaves can be almost any colour at any stage - yellows and golds among green leaves quite early in the autumn, but also some green leaves left well into November. Blackthorn sometimes adds pinkish tones, and both species can produce vibrant red tones due to anthocyanins (see [Introduction to Leaf Fall](#)). Notice too how blackthorn twigs, which are soft and flexible in summer, harden into sharp thorns as the leaves fall.

Elder is another very common shrub, but generally loses its leaves very inconspicuously, showing only a very slight lightening to their green colour, or a faint yellowing. However, exceptionally (and inexplicably) in 2021 - a very mild autumn - lots produced quite bright yellow, pink and maroon tints. Elders can be bare in places even at the start of October, and widely by mid month. But they may then retain a very few leaves on their upper twigs even after general leaf fall has ended.

Back with the trees, **birch** can show some tint as early as late August and reliably does so in September. By the start of October it is producing an attractive mottled effect - some leaves green, some yellowy-gold. Towards the end of leaf fall all the remaining leaves become a wonderful golden shower and on some trees they can linger into late November or even early December. Once the leaves have gone you can see the buds of next year's catkins and, on some trees, desiccated seed cylinders, both of which have actually been on the tree since July.

Limes are another tree that reliably has a few tinted leaves scattered about amid the green ones in September or even late August. As early as the second week of October the tint then becomes more widespread on some trees, but limes are remarkably variable in their timing and some remain green till the end of the month or even into November. Colours are usually a very dull yellow until November, when the remaining foliage can suddenly turn a bright yellow (or more rarely a yellowy-gold) as part of the final phase of leaf fall.

Sweet chestnuts can also show a bit of tint from late August or September and by mid October they can make a wonderful display of yellows, golds and coppers, which lasts into November. They are actually one of our most colourful trees in autumn, though not often noticed as such. Like other species, they somehow seem to keep a few leaves till the very end of leaf fall.

Poplars (for example the **hybrid black** variety) shed leaves gradually, starting in August or early September, and finishing usually by the end of October or the first week of November. They do not produce much colour on the tree - just a muddy yellow, and sometimes not even that - though if you look closely, a tree that seems mainly green from a distance can often have more colour than you expect. Occasionally they manage a much brighter hue, and once fallen the leaves can be a vibrant yellow. **Lombardy poplars** shed at roughly the same time, though possibly finishing slightly later. Usually they only manage a very faint yellow at best, but can produce a muted golden colour under sufficient provocation. On the whole their leaf fall is not much noticed, however.

On the subject of inconspicuous trees, several that are so prominent in the early spring are hardly noticed at this time of year. **Apple** trees, including wild **crab apples**, which are covered in blossom in April, shed slowly during October without any significant tinting, while the leaves of **common whitebeam**, so noticeable for their greyish colour when they come out in late April, often just shrivel up before falling. They can occasionally produce some dull yellow tints before doing so, and once on the ground are distinguishable by being brown on one side and grey on the other. **Swedish whitebeam**, usually a street tree can produce gold or coppery colours, however. Both trees tend to have shed their leaves by the end of October.

Still with the inconspicuous trees, **cherry plums**, which seem so numerous in March when their blossom comes out, produce dull yellow leaves amidst other green ones, but are hard to tell apart from blackthorns. **Rowans** - more often a street tree in this part of the world, but sometimes found in the wild - are already shedding early in September and can produce some gold and even pinkish tints: they are often very thin by mid month, but may then hold onto a few leaves until late in leaf fall. Lastly **elms** can produce a fine yellow, which must have presented a magnificent spectacle before Dutch Elm Disease in the 1970s killed most of them off: nowadays they mostly lurk as shrubs in hedgerows, where at a casual glance they are easy to mistake for hazel, though **wych elms** grow into larger trees which sometimes turn a fine yellow.

Back with common countryside trees, leaves can start to fall from **ash** trees as early as mid September and by mid October you start to see quite a lot on the ground. They often shed almost entirely green, or at most with a pale greeny-yellow tinge, and not untypically are

mainly bare by the end of October. However, they are a quite a variable tree and it is a feature of the end of leaf fall that long after all the ashes seem to have gone completely bare you come across one that has just shed a load of fresh green leaves.

Just occasionally ash foliage turns a bright yellow, sometimes in response to unexpectedly cold nights early in the season (as happened in 2008 and 2018), but at other times towards the end of October. In the former case, do not confuse ash with ornamental **robinias** in parks and gardens, which have similar looking leaves and turn an intense yellow: they are generally bare by the end of the first week of October. From 2016 onwards ash die-back disease also started to impact the south east of England: what effect this will have on the trees remains to be seen, but I am told that the shrivelling to brown of some ash leaves in autumn is *not* a sign of it.

If you had to give a prize for the best autumn colours to be seen on a wild tree in the south east, it would probably go to **wild cherry**, but only in some years. Found in city streets as well as woods, but not to be confused with the ornamental park cherries (which are cherry plums), its leaves can produce spectacular golds and pinks. This usually happens towards the end of October and is most reliably seen on street trees. It can happen in the wild too, making the trees shine out in the landscape, but conditions only seem to be right for this in some years, and then only on some trees. 2016, 2019 and 2020 were good years - in the case of 2019 despite October being mild and wet, while 2021, another mild October, produced a few nice rural displays. By contrast in 2018 lots of sunshine and cold nights, which should have been ideal for producing the best hues, failed to produce much colour at all in wild trees. 2013, 2014, 2015 and 2017 were similarly disappointing.

The other great autumn spectacle in the south east are **beech** woods. The transformation of these to deep yellows and golds, and then on to a fine copper colour, is breathtaking if you can catch it at just the right time. There are two phases. From mid to late September some years, and certainly from early October, the exposed faces of beeches - the trees on the edge of woods or standing alone in fields - can already be showing good areas of tint. But the colour does not penetrate down inside the wood, where foliage remains largely green.

Phase two is when the colour does reach down to path level, at which time a walk through a beech wood is a riot of colour. This occurred in the last week of October in 2008, 2009, 2010, 2011, 2012, 2015 and 2020; in the first and second week of November in 2019, in the second week of November in 2007 and 2018 and 2021; in the second to third week in 2017 and 2021, and in the third week in 2006, 2013 and 2016. In 2014 some beeches were bare by the fourth week of October but the rest were at their best in the third week of November. Some dead leaves can remain on saplings or lower branches right through the winter, while beech hedges that have been clipped in the past year retain a full set of dead leaves until spring.

Not surprisingly for the king of the forest, **oak** tends to be among the last trees to fully turn colour, usually remaining almost entirely green in October, though it can show patches of tint right from the start of the month, or even from mid September. Don't confuse it in this phase of autumn with the non-native **pin oak**, often planted in parks: this has much larger leaves and produces striking gold and copper colours, peaking in late October.

A few native oaks may be more widely tinted or even bare by the end of October: however full tint mostly occurs in mid November - in the first to second week in 2020, the second week from 2007 to 2012 and in 2017 and 2018, in the second and third week in 2019 and 2021, and the third week in 2006, 2013, 2014 and 2016. In 2015 there was no defined time when the oaks were at their best but rather a slow and patchy tint and shed throughout late October and November. Some oaks then hang on to dead leaves for a time after leaf fall is over - usually into the first ten days or so of December. As with beech, a few leaves may then remain on lower branches or saplings right through the winter.

By the time the oaks are at full tint, leaf fall is about over. **Hazel** is the main tree still retaining leaves in the countryside at this time. It can start showing some minor flecks of dull yellow foliage as early as the end of August and fairly often does so in September, but generally just remains in this state, thinning slowly and still with a lot of green leaves, until (or a bit beyond) the end of leaf fall. (Note the way that individual leaves sometimes turn yellow from the outside edge inwards). It can sometimes produce a brighter yellow at the end of leaf fall. Once the foliage has gone you can see next year's catkin buds, which have in fact been growing since July.

Late in the leaf fall process you may also still find a lot of foliage on the majestic **London planes** of our streets and parks, though they have been quietly shedding leaves (and producing some dull yellowy tints) since early October, or occasionally in a small way from late September. Towards the end of leaf fall you can sometimes get some gold tints (or even red, but this is very unusual), and once they have fallen, the enormous leaves – some as big as soup plates – make the city streets slippery and pile up in golden drifts.

Another late survivor is **alder**, whose leaves never tint, which grows mostly by rivers or in damp places. It sheds slowly throughout October and into November, and then seems to suddenly lose the rest of its leaves around mid November. Having said that, the last few leaves are quite hard to spot among its cones and catkin buds, and may last in places into December.

You might also be surprised to see **weeping willows** still looking quite green in November. This seemingly delicate tree is in fact one of the first to put out leaves in spring (see [March trees](#)) and one of the last to drop them in autumn, routinely having some foliage into November and even the first week of December. Mostly it sheds green, or with some faint yellow tints, but right towards the end of leaf fall it can sometimes produce quite good yellow or even yellowy-gold colours, as was the case in 2018 and, to a lesser extent, 2020. From a distance it can be hard to tell if this is coming from its leaves or from its bare yellow twigs, however.

One last hardy tree, often overlooked but producing a lovely gold colour when it finally turns, is the **larch**, the only needle-bearing tree to lose its leaves. This only happens at the end of the leaf fall, typically in the second or third week of November. Once fallen, the needles make a vibrant orange carpet on the woodland floor.

<https://nature-and-weather.walkingclub.org.uk/p/october-autumn-colours-and-leaf-fall.html?sc=1668334054770#c1806017154761927852>

