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## Room with a view

David Jewell

Few can enjoy such an interesting and aesthetically pleasing view from their office window as I do: from Jermyn's house at the Sir Harold Hillier Gardens, I have an aerial view of the Magnolia Avenue surrounded by woody plants established here more than 50 years ago from around the world. To my right are two fine examples of narrow-columned Dawyck beech trees, one purple and the other golden,

and both noteworthy champion trees. Nearby, with a vertical bole, fissured trunk and mop-headed crown, *Pinus engelmannii* (figs 1 & 2) is a personal favourite; from Mexico, its evergreen, rough, needle-like foliage is almost 25cm long. It twists and turns during windy weather and in winter, when the rest of the garden is laid bare, it is majestic!

The area includes different forms of the Himalayan birch, *Betula utilis*, in shades of white,

subtle-pink, and a chocolate-brown Forrest collection (Forr 15381) (figs 3 & 4). A fine shrubby birch, *B. calcicola* (fig. 5), deserves closer inspection. It has an upright habit, stout twigs and pointed leaves with sixteen or more pairs of closely spaced impressed veins. Collected by plantsman Roy Lancaster, it was found growing in limestone crevices in the Jade Dragon Mountains of north western Yunnan.

To the left a dome of pale foliage rises above the avenue to reveal the Katsura tree from Japan, *Cercidiphyllum japonicum*; in autumn its foliage turns yellow to smokey pink and the candy-floss scent carries well on the lightest breeze. Rhododendrons and a wide range of camellias including *sasanqua*, *japonica* and *williamsii* hybrids complete the picture with their evergreen foliage and seasonal colour.



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Figs 1 & 2 *Pinus engelmannii*

In 1977 the Gardens and Arboretum were gifted to Hampshire County Council, which remains the sole trustee and has responsibility for managing and developing the site.



Fig. 3 Different forms of the Himalayan birch, *Betula utilis*



Fig. 4 Forrester collection birch (Forr 15381)

The balance of evergreen and deciduous trees and shrubs adds key structural elements to the landscape, important in any garden however large or small. Especially in winter they give height, shape, texture and foliage colour, later providing a backcloth to highlight the colourful tapestry of perennial climbers, perennials and bulbs. All combined, the sum of their parts creates a cohesive whole and the effective plant associations which we gardeners continuously strive to achieve.

I know when spring has finally arrived when pockets of colour filter through the trees from the aristocratic pink Himalayan tree magnolias. In particular, *M. campbellii*

(fig. 6) and *M. c.* 'Charles Raffill', together with a flash of white from the hybrid *M. x veitchii* 'Peter Veitch', produce a sublime display. The Magnolia Avenue (fig. 7) contains largely *soulangeana* hybrids, which are a short-lived delight in full flower in April; their crowns have been lifted to enable perennials to thrive in their borders, albeit with some shade. Here at the end of July is seen the quiet charm of *Eucomis bicolor*. From

South Africa, its flowers are notably long-lasting with compact heads, waxy purple-edged green petals, and its wide basal leaves bright green. It prefers a sunnier position and is particularly good for container planting providing interest from late summer through to the first frost; it should be used more often. Adjacently *Bergenia* 'Bressingham Ruby' provides good winter foliage colour and lends itself to a variety of spring bulb associations using



Fig. 5 Shrubby *Betula calcicola* (left) next to a bust of Sir Harold Hillier



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Fig. 6 *Magnolia campbellii*



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Fig. 7 The Magnolia Avenue



Fig. 8 *Populus x canescens* 'Macrophylla'



Fig. 9 *Lathraea clandestina*

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*Crocus tommasinianus*, *Scilla siberica*, or the particularly elegant snowdrop, *Galanthus* 'Magnet'. Indeed, there's a flowering bulb to be found for every month of the year to enrich plant combinations or extend the period of display.

Nearer the central path, *Buxus sempervirens* 'Graham Blandy' provides evergreen accents in winter, and from mid-summer onwards two Clematis cultivars literally lift the greenery, with purple-flowered C. 'Jackmanii Superba' and powder-blue-flowered C. 'Prince Charles'. Sometimes the simplicity of a single flower can brighten a quiet corner and white will always draw your eye, no more so than the May-flowering *Allium nigrum*; the distinct white golf-ball flowerheads are repeated on both sides of the avenue, helping to make the design more cohesive.

Champion trees have been mentioned and all play their part at The Sir Harold Hillier Gardens. These are individual trees that are exceptional

To date the Sir Harold Hillier Gardens has a remarkably impressive 416 champions in total – more than any other garden, adding another dimension to the collection as well as to the Garden landscape. Of course, it is perfectly feasible to grow a champion within a domestic garden, which you may wish to do after being inspired by a full-size specimen!

examples of their species because of their enormous size, or great age, rarity, or historical significance. A tree can be a champion because of its height, or girth, or both. It may be designated in the Tree Register as the largest, i.e. the tallest or having the greatest trunk circumference at breast height (1.5m) of its kind in the UK.

It may also be a champion if it is the only known specimen in the British Isles, providing it has a minimum height of 2 metres and a girth not less than 20cm.

It's a pleasure to walk around the Gardens to admire our champion trees, but clearly there are far too many for me to describe them all here.

At 32m high, Picart's Poplar, *Populus x canescens* 'Macrophylla' (fig. 8) is our tallest champion, growing on the northern bank of the pond. Few domestic gardens will be able to cope with its size, although the grey foliage associates well with other tall trees in this area of the Gardens, particularly the swamp Cypress, *Taxodium disticum*, and several *Nyssa*

*cultivars*. However, at the end of winter the real star of the show may be seen growing at its base in the form of the purple toothwort, *Lathraea clandestina* (fig. 9). Increasingly popular as a decorative garden plant, it is a root parasite with explosive seed capsules. It has rich mauve flowers borne just above ground and from a distance you could be forgiven for thinking it could be a type of orchid or crocus. It has been recorded growing on a wide range of plants both in the wild and in cultivation, including poplar, willow, alder, acer and hazel. Our colony thrives in a damp location with some shade from the poplar, conditions which seem to suit it well as it's spread slowly as ripe seed is scattered.

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Fig. 10 *Sequoia sempervirens* 'Cantab'

## Champion trees

The Tree Register of the British Isles (TROBI), also known as the Tree Register of Britain and Ireland, is a registered charity collating and updating a database of notable trees throughout Britain and Ireland. Founded in 1988 by dendrologists Alan Mitchell and Victoria Schilling (née Hallett), its success is due to a network of enthusiastic volunteer measurers. The database is an important tool in helping to locate champion trees, protect them, monitor their growth and their success in relation to their surroundings, study the associated wildlife and their historic management, and support work to propagate rare or exceptional specimens.

Trees are measured using the American Forest system, whereby a points value is calculated based on the circumference of the trunk, and the height and the average spread of the crown. Anyone can nominate a tree, and most trees are nominated by non-specialists. Nominations are sent to the national register of big trees (or to the state registry in the USA); once a nomination is received, field work begins to confirm the tree's size before it can be declared a champion.

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Fig. 11 *Magnolia* 'Athene'



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Fig. 12 *Magnolia fordiana*

It is more widely available now with specialist bulb suppliers and seed companies offering spring divisions.

In another part of the Gardens known as Ten Acres West, the conifer *Sequoia sempervirens* 'Cantab' (fig. 10) is superb as an individual specimen, though clearly most gardens have insufficient space for such a statement tree. However, try placing large plantings of a lighter colour such as *Magnolia* 'Athene' (fig. 11) in the foreground for effective contrast against the dark foliage background. 'Athene' has an upright habit, white tepals fading to pink at the base, and a hint of scent – a beautiful spring combination and its foliage will last the whole season through. Evergreens with different coloured foliage are a useful foil for seasonal plants, offering the keen gardener opportunities to experiment and to enjoy.

Not far away, *Betula utilis* var.

*jacquemontii* 'Jermyn's' grows in a mixed birch roundel at the end of the Centenary Border. The vigour of 'Jermyn's' is clear to see, with its broad bole and tall crown, and as compared with its neighbours it certainly requires space.

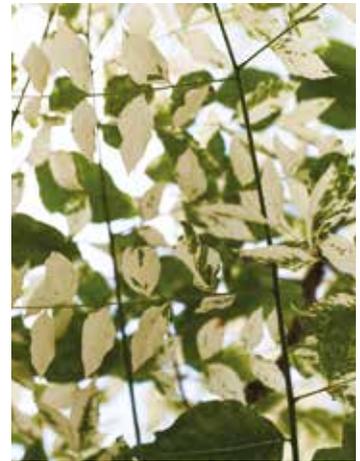
As a possible future project, I still have in mind retaining the existing groups of the graceful wintergreen fern, *Polystichum setiferum*, and interplanting them with larger drifts of *Lilium martagon*. This tough lily naturalises well and is happy on acid or alkaline soil. In June, the deep-pink flowers are set all around the dark stems and the reflexed petals contrast delightfully with the ginger anthers. Imagine the end result: the creamy birch trunks, and green pools of ferns interspersed with lilies – a bold effect achieved by keeping things simple!

The champions continue with the glossy, green, elliptical foliage of *Magnolia fordiana*



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Fig. 13a & b *Gymnocladus dioica* 'Variegata'



(fig. 12). From mid-summer onwards the sporadic flowers have noticeably thick tepals and a centre of pinkish red stamens. In a sheltered location it looks comfortable with seasonal shrubbery and a spring carpet of dwarf narcissus mixed with hellebores, or alternatively a single carpet of the pink dog's tooth violet, *Erythronium dens-canis*. Out of flower, the lightly branched framework could



Fig. 14 Common spotted orchid, *Dactylorhiza fuchsii*, naturalised in the meadow

easily support *Tropaeolum speciosum*, a climbing perennial whose vibrant red flowers should be allowed to scramble through for dramatic effect.

Another champion, the Kentucky coffee tree, *Gymnocladus dioica* 'Variegata' (figs 13a & b), is rare in cultivation and tricky to propagate with stems that have a pithy hollow core. The pleasing variegation of the blue/green compound foliage is subtle and, when you stand underneath its canopy in the summer sunshine, warm light filters through. Pause, take a moment and look up to admire the green/white myriad of colour tones; trust me, you won't be disappointed. Around the base, as simple groundcover, *Geranium x oxonianum* f. *thurstonianum* bears a pink-to-purple flowers display from June to September, which is all that's required.



Fig. 15 *Acer palmatum* 'Sango-kaku'

A similar, equally rare relation, is *Maackia hupehensis* standing quietly in a corner of the adjacent meadow as a small broad-headed tree. In spring its new, silky-down foliage is attention grabbing, later to be followed by terminal panicles of dull-white pea flowers in July and August. Meadow plantings are a pleasing trend, and in one area of the Sir Harold Hillier Gardens mixed ornamental trees and shrubs sit comfortably in long grass and contrasting close-mown pathways. The informal paths lead you round, enabling you to admire the trees and explore the naturalised meadow. In early summer the common spotted orchid, *Dactylorhiza fuchsii* (fig. 14), and yellow rattle, *Rhinanthus minor*, are a delight mixed with ox-eye daisies (*Leucanthemum vulgare*), bugle (*Ajuga reptans*), common vetch (*Vicia sativa*) and lady's

bedstraw (*Galium verum*).

One or two maples skirt the area including a mature specimen of *Acer palmatum* 'Sango-kaku' (fig. 15) behind Jermyn's House. This coral-bark maple is appropriately named, with the distinct colouration of its young branchlets. I also enjoy seeing the fresh spring growth followed by lovely canary-yellow autumn colour towards the end of the year. Around the base of the tree, drifts of snowdrops and *Cyclamen coum* are perfect companions and such an encouragement in the middle of winter.

I am indeed fortunate to have such an inspiring view every working day; an endless source of delight, in the dark days of winter it prompts me to wonder what the next season may offer when the cycle begins once more. 🌸

## Current tree planting practice

Much has been written on the important subject of tree planting as techniques evolve and continue to change. When you look at trees which have apparently self-seeded, the ground-level root-flare at the base of the tree is usually clear to see, so this is thought to be the optimum planting depth. Such trees begin life without fertilisers or supports, and may simply rely on leaf litter cast in the autumn for a modicum of moisture-retaining mulch and basic nutrition. Gardeners would say that the plant is 'grown hard' from day one, without any fuss or intervention which can sometimes lead to the tree failing some years on. The old adage of being cruel to be kind certainly chimes with current tree planting techniques.

1. The tree: plant small, as the tree is likely to establish itself more easily; 1.2m tall, with a single, straight leader and good fibrous roots is ideal.

2. Timing: plant field-grown trees from November to March, subject to the weather, though I've found planting before the end of December gives the best results. Container-grown trees may be planted year-round as long as irrigation is available when required.

3. The planting hole: prepare a square hole 3 times the width of the root ball but no deeper than the distance between the topmost root and the base of the root ball. Spike the sides of the hole with a fork, more so on heavy soils to loosen the soil and avoid a polished surface. In a square hole, roots tend to follow the side until they reach a corner, encouraging them to grow into undisturbed soil. (Even on a sandy soil, a circular hole risks roots tending to circle without growing outwards, known as girdling.)

Planting too deep and a confined rooting zone are the two main causes of failure.

4. Planting: It is easy to identify the root flare on bare-rooted trees, whether bare-root or container grown. Before planting, prune away any 'high' roots above this point. Lay a cane or thin piece of wood horizontally across the hole, stand the tree upright in the centre of the hole and compare the level of the root flare against it. The root flare must be level with the surrounding soil, or up to 5cm higher to allow for settlement, particularly on wet sites.

5. Fertiliser: adding fertiliser or organic matter to the planting hole is no longer recommended. Roots will be reluctant to spread outwards to find nutrition and/or moisture if the rooting zone is too rich. Also, the tree may sink as any compost or manure decomposes. Adding products containing mycorrhizal fungi to the excavated soil before it is used to backfill is said to help the tree roots to absorb water and nutrients; although the benefits have yet



to be confirmed in field trials, many horticulturists have adopted this practice.

6. Root protection: it is essential that the roots of bare-root trees are not allowed to dry out. They should be kept covered and in shade: also commercial root dips are available to reduce any dehydration as soon as trees are lifted. Container-grown trees should be thoroughly watered before planting. Remove the pot and check to ensure there are no circling roots. Tease the roots out carefully to encourage lateral growth; alternatively, some experts suggest cutting the roots vertically down the sides of the root ball. Scrape away any surface compost from the top of the root ball to find the root flare (the point at the base of the trunk from which the topmost roots emerge). Quite often trees have been planted too deeply in their containers leaving a clear tide-mark ring on the trunk.



7. Staking: where practical, and if the tree is small and has reasonable shelter within a domestic garden situation, I would resist the temptation to stake at all. Swaying in the breeze is beneficial for a tree, helping to increase girth diameter and stimulating root vigour. In exposed situations staking should be no higher than 60cm above ground. Any higher runs a risk of poor trunk development and root growth. To avoid any root damage drive the stake in at 45 degrees beyond the root ball on the side opposite to the prevailing wind. Alternatively use 2 vertical stakes each side of the root ball and secure with a cross bar and flexible or padded ties to minimise bark injury.



8. Backfilling: with bare-root plants the stake can be driven in first to avoid any root damage. Ensure the tree is straight, and the excavated soil has been broken up. Shake the tree as you back fill to avoid any air pockets. Carefully cover the roots and gently firm the tree with your heel, even more gently on a heavy clay soil as too much compaction can turn a clay soil into an airless mass. Water in thoroughly to settle the roots before an application of surface mulch.



9. Mulching: use well-rotted organic mulch around the base of the tree to conserve moisture and suppress weed growth. Spread it 8-10cm deep but a little thinner over the root ball itself. Keep a mulch-free collar from around the base of the tree, about 8-10cm from the trunk, to prevent bark decay.

**David Jewell** was trained at RBG Kew. For 11 years he was Floral Superintendent at RHS Garden Wisley, and for 7 years he has been Head of Collections at The Sir Harold Hillier Gardens.