

Tender Trees Project

Owen Johnson

Last season, a £2000 bursary from the Royal Horticultural Society helped me visit gardens in the south where half-hardy trees of all kinds are being tested. This filled in many gaps in the Tree Register's records, forgotten gardens like the old Penmere estate where weird and wonderful trees survive on suburban Falmouth lawns, and far-flung places like Tresco Abbey where every other tree seems a 'champion', simply because nowhere else grows it.



Araucaria heterophylla at Tresco (Owen Johnson)

Curiosities

By the end of the year I had found that some 1100 tree species of borderline hardiness have been cultivated in Britain. Many come from climates so much milder or sunnier than ours that they seem bound to languish as curiosities in the odd collection. Many more have been brought back, by intrepid plant hunters like Tom Hudson of Tregrehan, too recently for it to be clear yet how they will perform. The remainder includes many superbly ornamental trees which deserve wider exposure.

Global warming

A list of southern trees raises hopes that here will be species suited to global warming, but, for all I know, a volcanic eruption next year might filter out our sunshine and plunge us back into 1980s-style winters and kill off half the current flush of tender trees. Some half-hardy species come from dry sunny places like Australia or South Africa; others

from the Andes or New Zealand are used to mild and rainy weather; a preponderance, from the evergreen forests of Florida and especially southeast Asia, expect hot and humid summers. Different gardens and different climatic trends may suit some of these trees, but none will ever please them all.

Exciting trees

Selecting from the hundreds of exciting garden trees, and the hundreds of surprising finds, is hard. Here are just a few.

Two Asians used as street trees in warmer climates, Parasol Tree (*Firmiana simplex*) and Bead Tree (*Melia azedarach*), are each represented in England by one young planting full of promise. In the Ventnor Botanic Garden, the *Firmiana* - with leaves like a Paulownia and late-summer blossom more like Golden Rain Tree - is 7m height x 20cm trunk diameter. A *Melia* planted in 2001 in St Leonard's Terrace, Chelsea, was a spreading and shapely 6x15 after four years' growth and producing masses of starry mauve flower among the elaborate spring foliage.



Arbutus xalapensis, Ventnor BG (Owen Johnson)

For delicacy of leaf and spectacular Laburnum-like flowering, nothing surpasses Cootamundra Wattle (*Acacia baileyana*), while the silvery-mauve foliage of 'Purpurea' is a special joy. This acacia grows fast enough to make good use of a run of mild winters even in the east, but is hardly seen here.

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Blackwood (*Acacia melanoxylon*) stands apart in growing as a handsome if slightly gloomy tall tree. In England it is frequently killed to ground level by moderate frosts, but has reached 13m in Cardiff's Alexandra Gardens. A spire-shaped youngster in the Old Mill Gardens, Lewisham, is now the same height and very promising.

Silky-oak (*Grevillea robusta*) is a giant eastern Australian flowering tree popular in warm climates. A shapely 12m spire in Swansea's Brynmill Park significantly began its life in a since-demolished greenhouse. In Lower Road, Rotherhithe, a recent street planting has been less successful; the two survivors in 2005 were growing fast but misshapen from early damage.

South Africa

Among South African trees, Silver Tree (*Leucadendron argenteum*), with its brilliant silver-woolly foliage, seems much at home on Tresco, though mainland Cornwall is too damp for it. Keurboom (*Virgilia oroboides*), with finely pinnate sea-grey foliage and pink pea-flowers, is also a splendid 7m x 35cm in the Abbey Gardens. Favoured London gardens might just suit these.



Leucodendron argenteum at Tresco (Owen Johnson)

Avocado (*Persea americana*) would hardly be seen out-of-doors in Britain were it not so easy for optimistic gardeners to plant the stones. In London, optimism can get rewarded and a slender straight 6m tree in a frost-free sunny basement yard in St Leonards Terrace, Chelsea, brings with it some

serious tropical glamour. (The *Melia*, mentioned earlier, is on the pavement next door.)

Palms

Many palms, hardly tenderer and certainly handsomer than the common *Trachycarpus fortunei*, have until very recently been scandalously overlooked. *Washingtonia filifera* and *W. robusta*, from Mexico into California, are sturdier, spruced-up alternatives now thriving and adding height in several warmer gardens.

Canary Palm (*Phoenix canariensis*) is the best-proven palm with feather-like foliage. Twenty old trees are now known, but only from the Channel Islands, Torquay, Tresco and Co. Cork, implying stricter limits to its hardiness than are obvious today. The Guernsey and Tresco trees, enjoying sunnier summers, have thicker trunks (up to 84cm) than the Irish or Devon ones.

Wine Palm (*Jubaea chilensis*) from the Andes is not so graceful in its head of foliage but given patience will grow an elephantine grey trunk. At Noirmont Manor on Jersey it is one of the most spectacular trees in Britain, 109x16m to the leaf-tips. The other old ones, on Tresco and in the garden of 'Palm Trees', Torquay, are spoiled a little by curiously bulbous, parsnip-like boles, presumably because conditions were not always warm enough for proper growth. *Jubaea* is somewhat tender at first but once established it adds height fast; one even survived outside at Kew through the worst winters of the early 19th century.



Butia, *Brahea* and *Jubaea* at Tresco (Owen Johnson)

Pindo Palm (*Butia capitata*), from the highlands of Brazil to Argentina, carries gracefully arching soft grey leaves. Old trees (on Tresco and with three found in Cornwall) grow tapering, rather ungainly trunks and seem prone to butt-rot, so the long time the tree can take before it adds height here is less of an issue.

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South Asia

Most of the trees from the vast, broad-leaved evergreen communities of south Asia are likely to appeal only to the collector. Among those of quite exceptional glamour, *Eriobotrya deflexa* is beginning to appear as a straight young tree. It is 5m at Tregrehan but seems as happy in Nigel Muir's front garden in Chichester, and at Buckingham Palace. The long leaves, with boldly scalloped margins, flush deep red. *Magnolia nitida*, found as an old tree (to 9m) only at Caerhays Castle and certainly tender, has brilliantly glossy leaves which also open maroon, and among which the white flowers nestle in spring.



Magnolia nitida (Owen Johnson)



Lithocarpus cleistocarpa at Caerhays (Owen Johnson)

Euonymus lucidus from the Himalaya is an exceptional spindle with glossy leaves, ruby-red as they flush and golden through summer in some apparently healthy specimens. Its flowers are also unusually large. It is 13x44@0.8m at Killiow near Truro and there are mature specimens as far east as Sidbury Manor in east Devon and Rosel Manor on Jersey.



Euonymus lucidus at Overbecks, Devon (Owen Johnson)

Lithocarpus pachyphyllus, with four big examples at Caerhays, is possibly the most glamorous of its huge genus. Its softly olive-green leaves are silver underneath and boldly corrugated; none of these trees have retrenched and early pruning could presumably sort out any tendency to bushiness. *L. cleistocarpa* is also gloomily magnificent at Caerhays, though two big ones have died back badly. However, in an avenue across a field at Stanage Park near Knighton, hardly a mild place, a healthy tree was 13m x 50cm in 1995.

Andes

The tree flora of the southern Andes is full of eccentrics, some of which are highly gardenworthy and all of which prefer a cool moist microclimate. None is more desirable than Chilean Myrtle (*Luma apiculata*) with its tissue-paper, orange-and-white bark, neat blackish crown, and masses of scented white blossom in late summer. It self-seeds prolifically when happy but, in smaller gardens, is only really frequent in Penzance and Guernsey. In Ireland and Cornwall it can reach 17m; further east it is hardy - one claimed to have been grown from a sprig in a wedding bouquet has survived in a Hastings garden since the 1940s - but tends to remain stunted. A good young 6m tree at Feeringbury Manor in the heart of rural Essex, however, ought to inspire gardeners to keep experimenting.

New Zealand

The nine old New Zealand Christmas Trees (*Metrosideros excelsus*) on Tresco are some of the most astonishing trees in Britain. Their boles, fantastically overlain with aerial roots, are up to 223cm thick; in high summer, their huge billowing

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crowns turn scarlet and are visible from far out to sea. They weathered the frost of 1987 and are so wind-firm and salt-tolerant that Mr Dorrien-Smith considered in retrospect that they should have been used instead of Monterey Pine and Monterey Cypress for the garden's principal shelterbelt. At Lamorran House, St Mawes, the larger of two young plants (3.5m) already flowers well, but attempts to grow this species elsewhere have failed. It could perhaps be tried in favoured spots in inner London.



Metrosideros and *Luma* at Tresco (Owen Johnson)

Most of the Totaras (*Podocarpus totara*) recorded 70 years ago in Cornwall and Ireland survive, and promise to grow big; 19x117@1.1m at Heligan is the best so far. Totaras thrive as far north as Inverewe but, as the foliage is not particularly exciting, a thin struggling example is no ornament at all, and this is not generally a tree to try in the east. That said, the biggest 'Aureus' (8x32) grows in Swindon's Queens Park and puzzled me no end, until I found that it had done its growing in a since-demolished hothouse.



Podocarpus henkelii at Treilissick (Owen Johnson)



Acer taiwanica at Treilissick (Owen Johnson)



Polylepis australis (Owen Johnson)



Butia capitata in Burgess Park, Walworth, Greater London (Owen Johnson)

Conifers in the south

Owen Johnson

Traversing southern England last year I was ostensibly hunting half-hardy trees, the potential beneficiaries of global warming. Keeping a weather eye open for other notables, I was aware that spruces, silver firs and other conifers, especially the giants from the American northwest which currently play such a role in the landscape, will be the first to lose out if summers get hotter and the humidity declines. Already, most 'champion' conifers are confined to Ireland and Highland Scotland - a preponderance which was not evident at all to Elwes and Henry a century ago. So it was heartening to find just how well most species are still performing in the south and how few signs of stress are yet in evidence.

Original Douglas Fir

Of all the American giants, the coastal Douglas Fir is perhaps most perfectly suited to the British climate at its more humid. A planting - presumably a David Douglas original - in the pinetum of Eggesford House above the Taw in mid Devon, was the biggest in 1868 when A Spreadbury recorded 28m height x 116cm trunk diameter. It was still pre-eminent in 1908 (39x180), and in 1957 when Alan Mitchell made it 38x225. Today, brooding darkly by the Forestry Commission's Heywood Walk at SS677121, it is 38x246@1.2m and one of that select band of 'originals' which have never really been overhauled. Its monstrous low limbs imply an early struggle, but the single stem can still just be taped between them. Today, with stripling Forestry Commission Douglas Firs approaching 50m nearby, it is well sheltered and in rude health.

200ft tall in England!

Douglas Firs currently hold the county record for height across much of the south: 53m in Polecat Copse in the suburbs of Haslemere, Surrey (and counting), 52m at Puckpits Inclosure in the New Forest, Hampshire (the best of many old trees here; a young stand near the Reptile Centre at Holidays Hill should overhaul them within ten years); 49m by Shear Water near Warminster in Wiltshire (poised to overtake a very slender 50m *Sequoiadendron* under the lake dam); 56m in a 1920s plantation in Sutton Bottom in the Forest of Dean, Gloucestershire. Best of all are in a sheltered 1874 stand along the track to Broadwood Farm in the Crown Estate's Dunster Woodlands in Somerset (SS979421). I found the English champion (not the one with the old 'tallest tree' plaque) to be 59 or probably 60m with a strong leader, and looking good for 200 feet.

Undisputed champion

There are still plenty of places in England for big trees to hide. A country walk in Wiltshire's Nadder Valley (greensand country, always good for conifers) took me past the village of Compton Chamberlayne, where a *Sequoiadendron* in a field

is 29x357cm and joins two Perthshire contenders as the fattest conifers in Britain. The bole is much flared, but growing on a slope it is actually penalised by running the tape conventionally at 1.5m from the top side. At Endsleigh under Dartmoor, where a long-standing champion *Sequoiadendron* for height has since lost a little of its top, the tallest in a very sheltered and fast-growing young grove is 51m or possibly 52m, and will, I think, become the undisputed champion.



Sequoiadendron giganteum, Compton Chamberlayne (Owen Johnson)

Sheltered valley

Sequoia in California get it wet but fairly warm and it is remarkable that specimens perform so commensurably when planted in cool wet Scotland or warm dry southern England. In a sheltered valley at Stonewall Park in the Kentish High Weald, a Redwood was 31x230 in 2004 and adding a good 2cm a year. Youngsters have clocked 43m in 47 years in the Rhinefield Ornamental Drive in Hampshire and 42m in 52 years at Sidbury Manor in east Devon.

Massively layered

Another find last summer was a new champion *Cryptomeria*, on the lawn of the Holne Chase Hotel in Devon, 32x300 but with a gigantic ivy-infested burr all round the trunk from 0.3m to 2.5m. Below the burr, the diameter was about 240cm. Nearby, the Holne Chase Adventure Park has Western Red Cedars to 43x166; the fattest is 32x249 at 1m on a single bole which then disappears into a sizeable tree house and forks or branches hugely. Slightly taller at 44m is the massively layered 1855 tree on the pinetum bank at Stourhead, which is on Wiltshire greensand again and the ideal home for several champion conifers: a remarkable spire-shaped *Pinus parviflora*, 32x85, the giant *Pinus peuce* (35x143) and *Abies firma* and *Picea brachytyla*, both 32m.

Thriving in Hastings

Sitka Spruce is beginning to show a tendency to die or blow down unexpectedly early in even the wettest sites. This said, a thriving 1870s tree in school grounds on the outskirts of Hastings is 36x187.