LEAVES FROM TREE MEASURER'S DIARIES

THE NEWSLETTER OF THE TREE REGISTER OF THE BRITISH ISLES.

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The year of 1993 has been a stimulating one at the Tree Register, owing in part to a spread in the Telegraph newspaper which many of you will have seen. This gave both myself and Pam Stevenson plenty of work, with 700 letters arriving in a matter of two months; our word processors were kept very busy. Eighty of the letters were from people volunteering to become "tapers", so now we have a good network of keen tree measurers covering practically the whole country. The TROBI Asian Evening which was held at Leonardslee Gardens in Sussex was a great success. The tickets, which due to space were limited to eighty, were sold out within two weeks, and a great evening was had by all. We would like to thank all those who worked so hard to make this evening a success, especially the Loder family and TROBI Trustees; a total of over £600 was made. Since the last newsletter we have visited 130 gardens and taped over 2,000 trees. At our last meeting we welcomed Mr David Alderman as Trustee and he is taking charge of the co-ordination of the volunteers amongst other duties. As you will note, a lot of exciting things are planned for the coming year. As we have now reached the grand figure of over 100,000 tree entries on our records 1994 will be a milestone in TROBI's history. Our thanks must go to the many people who have given us donations during the past year. In particular we would like to thank Farrer and Co., The Body Shop, The Samuel Storey Family Trust, and The Ernest Kleinwort Charitable Trust for their ongoing support and two anonymous donors for their kind support. It is only with continued financial support such as this that TROBI can survive and thrive.

Vicky Schilling. Registrar.

SPONSOR A REDWOOD FOR T.R.O.B.L.

To commemorate the 100,000th tree being recorded on the register, it is proposed that 100 Giant Sequoia (Sequoiadendron giganteum) are planted in suitable locations across the British Isles and Ireland. We need your help to make this happen.

If you would like to sponsor a tree, £1.00 buys a plaque, £5.00 buys a tree, £10,00 buys a plaque, tree and delivery and £15.00 includes rabbit guard and mulch for rapid establishment. Planting will be during the autumn of 1994 and all sites will be publicised so that you can find your nearest tree. A list of all sponsors will be kept by TROBI as a historic record.

Please send your donation to our treasurer, Mrs. P. Stevenson, 77a Hall End, Wootton, Bedford, MK43 9HP and mark your cheques or envelope "Redwood".

We would like to thank both Linda and Paul McCartney and their company MPL for their continued generosity in sponsoring this newsletter.

The Tree Register of the British Isles.

2, Church Cottages, Westmeston, Hassocks, W. Sussex. BN6 8RJ.

Reg No. 801565

THE TREES OF WHITEKNIGHTS PARK - THE CAMPUS OF THE UNIVERSITY OF READING SINCE 1947

Thanks to the kindness of Dr. Charles Nelson, Keeper of the Augustine Henry Archive at the National Botanic Gardens, Glasnevin, Dublin, I have recently been privileged to read several pages of H. J. Elwes's unpublished manuscript notes, made between 1903 and 1907 when he compiling and Henry were monumental work in seven volumes on "The Trees of Great Britain and Ireland." These notebooks contained references to a number of trees seen by E. and H. on their two visits to Whiteknights, the first in August 1903 (apparently by E. alone), and the second in May 1907, when he was accompanied by H.

Many of the trees they recorded are still alive and reasonably well, but many more have, in the meantime, fallen victim to age, - disease, and the vagaries of the weather. The two men were, unfortunately, misinformed on two points before they set foot in the park. The first error arose from the earlier writings of J. C. Loudon who had stated that the Whiteknights estate had formerly belonged to the Duke of Argyll who had planted it with many exotica. This was quite untrue; the Duke (he of the Teaplant) had indeed owned a similar great estate some 20 miles nearer to London which he had planted with many fine and unusual trees; however, no trace of these can now be found beneath the buildings and tarmac runways of Heathrow Airport! The Manor of Earley Whiteknights was formed before the Norman conquest and had been owned by several different families over the centuries, but its chief claim to horticultural fame was initiated by the Marquis of Blandford (later the 5th Duke of Marlborough) between 1798 and 1819, at which latter date he went bankrupt owing to his extravagant taste in exotic plants, fine paintings and early printed books. He was forced to sell the whole of his estate, including not only his house and everything in it, but the park with all its trees, fountains, grottoes, rustic bowers, conservatories, etc. He had made the park, at vast expense, a horticultural showplace which, in the early 1800s, contained plants from all over the world.

The second error which confronted E. and H. was that they were told (by whom I know not) that the estate had been divided up into three properties in 1867: (1) White

Knights Park owned by Mr. Friedlander, (2) White Knights owned by J. Heelas, Esq., and (3) The Wilderness owned by Mr. Raufman. In actual fact the estate had been divided into **six** leaseholds from 1867 onwards, so that E. and H. were apparently unaware of the three remaining properties. Fortunately, the three areas which they did investigate were the ones richest in trees, including the whole of The Wilderness.

A further area of great confusion is the similarity of the names of the various houses and parts of the park - for instance, The Wilderness can mean either the wild area planted with trees, etc. or the house on the edge of this area and known as The Wilderness; similarly, White Knights Park (the house of that name) and the park itself. This makes it very difficult and often impossible to pinpoint the various trees noticed by E. and H. - especially if they are no longer there!

A case in point is that of the hybrid Poplar described by Henry in an article headed Populus Henryana Dode in the volume of "The Trees published in 1907. After giving a detailed description of this unusual tree he ended by writing: "The only tree which we have seen is in the park in front of the house at The Wilderness, White Knights, Reading. It measured in 1907 100 ft. by 14 ft. and was probably obtained as a young plant from France, where M. Dode has observed trees of a similar kind". This is clearly the same tree to which E. refers in his notes as having been seen in the vicinity of White Knights Park (the house) in 1907. I have searched both these areas for any remaining traces of this interesting tree (now known as P. x canadensis) but without success. I have also questioned both academic and grounds staff about it but failed to find any subsequent record or personal recollection of it. Since Poplars are not noted for their longevity, one can only suppose that at some time in the 40 years between 1907 and 1947 the tree must have died.

Other trees mentioned in the notes which can no longer be found are as follows:

- (1) Hemlock Spruce very fine.
- (2) Cupressus sempervirens old but sound.

- (3) Four Sassafras not very large, probably suckers from an old, dead tree.
- (4) Liquidambar imberbe. (What could that be, I wonder?)
- (5) Pinus pinea (Stone Pine).

All these five trees were seen by E. on his first (solo) visit in August 1903, and must have been in the grounds of either White Knights Park (House) or White Knights (House) because the note ends by saying: "Must come again as I had not time to see The Wilderness". The following nine trees were seen by both E. and H. on their visit in May, 1907:

- (l) Nyssa aquatica. (Did he mean sylvatica, l wonder?)
- (2) Gleditsia old, misshapen, very large thorns.
- (3) Acer negundo old, thick-trunked.
- (4) Pinus inops (we think) (sic).
- (5) Carya cinerea. (Species unknown to this author).
- (6) Pinus muricata (Bishop Pine) large, well-grown.
- (7) Corylus colurna well-grown.
- (8) Quercus rubra (at The Wilderness)
 very tall.
- (9) **Pinus rigida** (Northern Pitch Pine) 8'2" x 47'.

All these trees, including the hybrid Poplar described by H., have either died or been felled to make way for buildings-or roads. However, some interesting trees still remain and are even now coming into leaf. Of-those noticed by E. in 1907, many Cedars of Lebanon are still standing, though some have lost limbs in the various gales. E. gave no measurements for these but they are all of much the same size and age, approaching 200 years old. E. remarked upon a Deodar of 10' x 75' "supposed to be one of the first introduced". This tree still stands in front of Park House (formerly White Knights Park) and today measures 10'3" x (about) 80'. In The Wilderness E. saw two interesting hybrid Oaks, both semi evergreen. The first, the Lucombe Oak (Quercus x lucombeana) is a cross between Q. cerris and Q. suber and is grafted a few inches above the ground on to a Q. robur stock. E. gave no measurements for this tree, but it is now 13'112" x (about) 95'. The second hybrid, Turner's Oak (Q. x turneri), is a cross between Q. ilex and Q. robur and is grafted at about four feet above ground level on to a Q. robur stock. E.'s measurements for this tree were 6'10" x 52' and it is now 11'1" x (about) 70' but has lost a number of limbs in recent gales. Also in The Wilderness was (and still is) "a fine Carya alba" (Shagbark Hickory) - now C. ovata (Mill.) K. Koch. This was 5'8" x 55' in 1907 and is now 8'6" x (about) 75'. Several Swamp Cypresses were seen by E. in The Wilderness, but although they are still just alive, they are horribly misshapen, though they are putting on a brave show of leaves near their tops. The only Taxodium distichum worth measuring is the splendid tree noted by E. at Mr. Friedlander's (White Knights Park) "... with twisted branches, much later in leaf than the rest". It is now 11'6" x at least 100' and I have immense admiration for its sheer persistence and will to live, as it stands a mere 12 yards from the south-west corner of the University Library where, swathed in plastic sheeting, it endured, with great fortitude, the appalling trauma of dust, dirt and possible damage throughout the construction of this building, to emerge from its swaddling clothes as good as new! The Fastigiate Oak, noted by E. as "the finest Cypress Oak I have seen, very well shaped and 7'10" x 75", is still in excellent shape and now measures 10'312' x (about) 85'. It has given rise to a large number of seedlings of various sizes and similar shapes all over the park. Finally, the Acer creticum (now A. sempervirens L.), described by E. as "... a small tree", is still more of a large bush than a tree. Its trunk is divided into two almost equal stems at ground level; - one is 4'1" and the other 4' only. The height is not more than about 15' but it is very wide and bushy and in good health.

The Wilderness is now a Conservation Area where much replanting has taken place in the last few years, so that its appearance is considerably altered. However, it is still a place of mystery and green thoughts, filled with birdsong and a refuge for foxes and other wild creatures, and when the bats emerge from their roosts at nightfall it seems that ghosts of the past come forth to walk these woodland ways, remembering their days of glory - or was that a Tawny Owl gliding silently through the trees?

Carol Hora 6th June 1993

SOME TREES AT CRARAE

No one can wander through the garden at Crarae without glancing up in awe at the towering European larches grouped on the flat area of land just at the foot of the glen. Of course these far pre-date the garden itself, being planted by Crawford Tait who owned the estate between 1800 and 1818, in which year he sold it to his brother-in-law, Sir Archibald Campbell of Succoth, 2nd Baronet.

Tait's main home was at Harviestoun near Dollar, and he had been given by his father the newly acquired Lands of Cumlodden, named after his mother's ancestral home Cumloden in Galloway. Where he lived when he visited his -Argyll Estate is not known. Perhaps he stayed in the inn which occupied the site of the present Crarae Lodge, and which he also owned; or, more likely, like his successors, he stayed in the farm of Goatfield some two and a half miles village eastward the near Inverleachan, now known as Furnace.

In any case he must have seen the site as highly suitable for a group of Larix decidua, which probably came from Inveraray Castle where, the Atholl strain had long been established. In 1979 the largest of these handsome species had reached 33.44m in height, with a 97.96cm breast height circumference. Celastrus scandens was planted at the foot of one of these great mast-like poles - in about 1930, and has since spiralled its way to the very top, forming a veritable pillar of yellow foliage in October, before its host's needles have even begun to change colour. At much the same time, groups of Scots pine (Pinus silvestris) were established on two rocky eminences in what is now the garden. They have not been measured, but have made impressive trees. Unfortunately they begin to show signs of their advancing years, two indeed having lately died, posing certain extraction problems.

In 1898, Margaret, Lady Campbell, widow of Sir George, the fourth Baronet,

decided to pull down most of the old inn, and rebuild it in granite from the estate's own quarry, as a shooting lodge where she could entertain her friends in August and September. From the rubble of the demolished parts of the building she formed a curved bank, immediately to the west of the house, on which she somewhat surprisingly planted a Rose Garden, now long gone.

To her we probably owe the fine Thuya plicata, 33.33m high in 1979, which once formed one of a line of conifers planted at the foot of this feature, along the Crarae burn. Now the only survivor, it has spread its progeny all around, some of them having attained a height of at least 10m.

In 1904 Lady Campbell died, and was succeeded by her late husband's first cousin, my grand-father, Sir Archibald Campbell, 5th Baronet, and it was his wife Grace, who started gardening in earnest at Crarae.

On the steep bank west of the burn stand two stately trees of Picea sitchensis, probably planted in about 1912, part of a former forestry stand. Though they are yet to be measured, they must have reached at least 35m in height and are still growing!

In 1926 Sir Archibald handed over the estate to his son Captain George Campbell, later to succeed him as 6th Baronet, who made his home at Crarae until his death in 1967. It is to him that we owe the development of the garden and the careful selection and placing of the trees and shrubs that grow there.

Sir George's first love was for trees, particularly conifers, and it is lucky for us that it was so, as it is in the shelter of his early plantings that our many interesting shrubs have flourished.

When he was fourteen, in 1908, he was given by the Duke of Argyll a young plant of Abies grandis which he and his sister drove home in the governess cart. It was planted hard by the East Glen path, some 60 yards from the house

where it has flourished mightily ever since. When measured in 1993 it was 41m high and 122cm diameter.

Nearby grow several other members of the fir family, including two Japanese species: A. veitchii, its trunk convoluted and rumpled like scrunched up packing paper, and A. homolepis, which in 1976 was 29.10m in height.

In 1917, as a young officer in the Argyll and Sutherland Highlanders, stationed in Edinburgh, Sir George used to visit that most celebrated of plantsmen F. R. S. Balfour at Dawyck in Peeblesshire. One day his host presented him with a small plant of Cunninghamia lanceolata in a pot, saying, "I can't grow this thing here, you'd better take it to Crarae, it might grow there." Grow it has, having reached 2.17m in 1931, 12.6m in 1969, 12.76m in 1976 and 15m when last measured in 1987. A root cutting taken in the late 1930's flourishes nearby and stood at 12.16m in 1976.

Belonging to the same period of planting are several specimens of the Serbian spruce (Picea omorika) two of which have developed a particularly elegant columnar habit of growth, the Bosnian pine (P. leucodermis) and a group of hybrid larch, from the mating of which with L. decidua have sprung the many self sown larches which are such a feature of Crarae both in spring with their vivid green young growth and in late October in the golden magnificence of their autumn hues.

Cupressus lusitanica 'Glauca' of which seed was brought back by my father from Rome Botanic Gardens in 1926, was not long ago one of the glories of the garden, listed as a "Champion Tree" by Alan Mitchell in 1986 when it was 20m high by 58cm in circumference.

Shortly afterwards, alas, its top mysteriously died, and during operations to remove it, several of the lower branches were so damaged that they too had to be amputated, although perfectly healthy. It must be admitted that the tree is unsightly, and consideration is being given to felling it. Luckily a number of its

children of various ages flourish, one of which, also measured in 1993, had reached 16m in height by 45cm diameter.

The first Eucalyptus to be planted at Crarae were believed to have been given to my grandmother by her nephew Reginald Farrer, though I don't believe he ever collected in Australia. These two specimens of E. urginera, a Tasmanian species, planted just across the drive from the front door grew to over 60 feet. The handsome and graceful trees were my father's pride and joy, and it was perhaps in a way a mercy that he did not live to see their destruction in the gale of 1968. The progeny of these two pioneers are everywhere at Crarae, and their success inspired Sir George to plant more members of this lovely genus.

Notable among the successes is E. coccifera, another "champion" planted in 1941 which by 1987 has soared to 30m with a beautiful spreading shape. Despite losing a large limb about Christmas time 1990, it proudly dominates the garden from its eminence just below the viewpoint we call 'Sir George's seat'

Nearby, is a fine grove of E. urginera grown from seed gathered at Lake Fenton and sent to my father shortly after his visit to Tasmania in 1952; these are 'Glauca'. Among other species represented are E. gunnii E. delegatensis, E. niphophila-the Snow Gum from the mountains of Eastern Australia and extremely hardy-and E. viminalis.

In 1989 we were proud to be registered by the National Council for the Conservation of Plants and Gardens as one of the three National collections of the genus Nothofagus, the others being Tavistock Woodlands, created by the late Earl of Bradford, who did so much work with the genus, and the Royal Botanic Gardens, Kew, (Wakehurst Place).

My father planted the first Nothofagus here in 1936, the species chosen being N. antarctica, N. dombeyi, N. obliqua and N. procera from Chile, and N. cliffortioides from New Zealand. All

flourished and have made fine trees, though N. obliqua never recovered from being struck by lightning about twenty years ago, eventually having to be felled. N. procera is now 25m high and N. cliffortioides 16m. N. antarctica, though having a massive bole, has, in the manner of its kind, performed such aerial acrobatics that measurement would be a useless exercise!.

Most of the other known species are now represented at Crarae, including N. betuloides, N. cunninghamii, N. fusca, N. pumilio and N. menziesii, as well as the small-leaved southern-most form of N. antarctica which, planted as N. antarctica 'Prostata' lived up to that name for a few years until discovering that it was not going to be blown off its cliff, it thrust up several perpendicular stems. Its foliage has the pleasing habit of turning bright yellow late in November.

Foliage colour is one of the great features at Crarae when, from mid September right on into November the various decorative hardwoods successfully don their autumnal dress, while fruiting trees and shrubs are bowed down with their berries of many different shades.

The genus Acer is well represented A. pennsylvanicum, our largest example, was 14m high in 1981. It is one of the most effective of the American snakebacks and has clear golden autumn foliage, the very similar A. rufinerve from Japan was 14m in 1993. There are several examples of A. rubrum which turns any colour from scarlet to rust-red quite early in the season. A. platanoides the Norway Maple, another yellow-leaved species some years colouring better than others was one of the earliest planted by my father in the late 1920s. We have an impressive line of these trees on the slope above the car park and Visitor Centre, while there are various forms of the A. japonicum scattered all about the garden. The most glamorous perhaps is A. japonicum 'Vitifolium' its leaves turning an almost unbelievably brilliant scarlet flecked with primrose. But undoubtedly supreme in their impact are the large groups of the

Japanese A. micranthum, which is not normally a large tree, though some of ours had reached 6m by 1987, with their masses of vivid carmine leaves and pink winged seed capsules, the latter often persisting long after the former have long fallen.

Among the Sorbus family space only allows mention of S. cashmeriana, with bunches of unusually large pure white berries, S. prattii, also white fruited but more graceful with delicate-looking fernlike foliage, S. vilmorinii whose berries, starting rich crimson, and gradually turning to pearl pink, contrast so interestingly against orange autumn foliage, and remain well into winter on the bare branches, S. hupehensis, not dissimilar but bigger in all its parts, of which we have some handsome examples, and S. 'Joseph Rock', whose vivid yellow fruit also remains after leaf fall.

Among the white beams are S. cuspidata, planted in 1936, which had reached a height of 10m by 1976, S. folgnerii, dating from 10 years later, which was only a metre less tall in 1986, some interesting hybrids between the two, and a truly sumptuous creature with 6inch long leaves which turn a very unusual buff yellow above while remaining silvery white beneath. It has been suggested that this is S. thibetica.

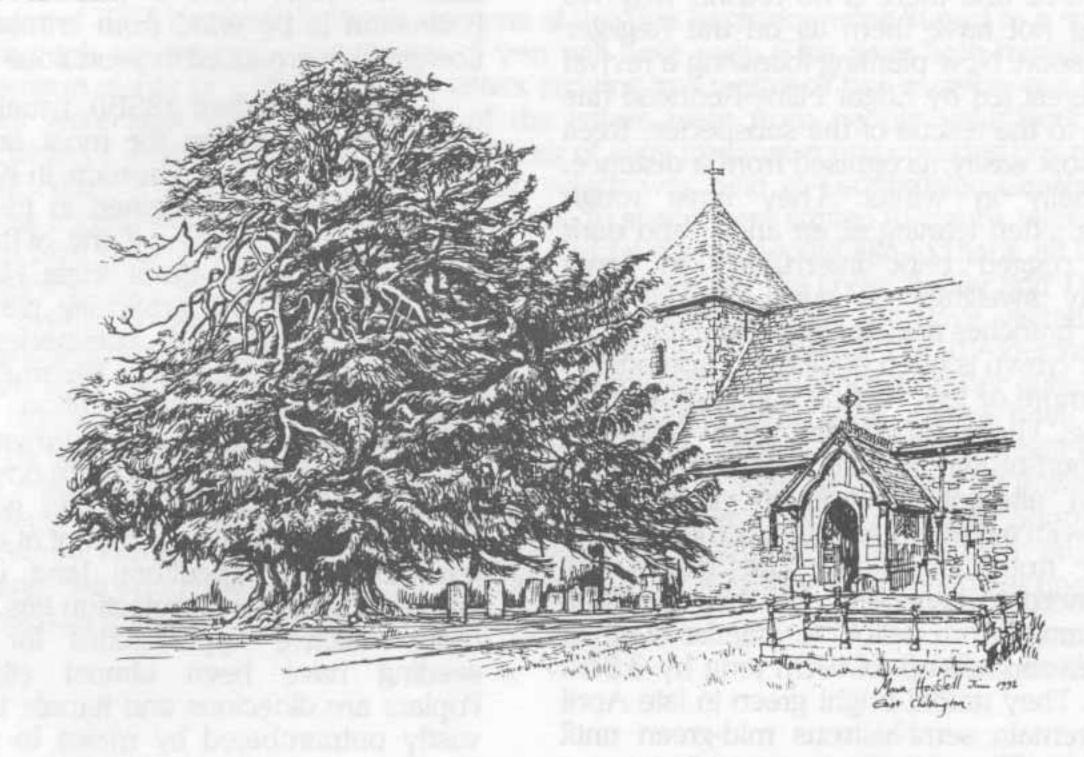
Two rather more unusual trees at Crarae are the Sourwood, Oxydendrum arboreum from the Eastern United States, which was measured in 1976 at 10.95 m with a circumference of 19cm, and Gevuina avellana a Chilean evergreen member of the Proteaceae, with dark, glossy pinnate leaves, its cream coloured flowers, typical of its race, appearing in November.

I could, of course, go on and on but would, I'm afraid, run out of descriptive adjectives! This article, after all, is merely intended to whet the appetite for a visit to the garden, which is owned and administered by the Crarae Garden Charitable Trust, and open to the public every day of the year.

Sir llay Campbell Bt.

THE GREAT YEW TREE AT EAST CHILTINGTON, SUSSEX.

This drawing of the Great Yew at East Chiltington, nr Lewes, East Sussex, reputed to be over 1,000 years old, is reproduced by kind permission of the artist, Moira Hoddell. ARCA. This drawing was used for the 1992 © first edition of cards sold in aid of East Chiltington Church funds, and the artist has given one of the 8" x 5³ 4" prints to be auctioned (by mail) to the highest bidder, with a starting figure of £25. Final bid date is February 28th 1994. Please send your bids to the Treasurer, Mrs Pamela Stevenson, 77a Hall End, Wootton, Bedford MK43 9HP, to arrive before this date. The beautiful print, personally signed in pencil by the artist, is suitable for framing, and goes to the person who sends the highest bid. Proceeds to TROBI, THE TREE REGISTER OF THE BRITISH ISLES.



TALLEST TREES IN BRITAIN

re: Abies grandis at Strone, Argyll

Some time ago I received a telephone call from Mr David Capewell informing me that the above tree had die back. During a visit to Argyll in September 1993, I called at Strone House Pinetum and my worst fears were confirmed. The approximate die back was about 8 feet. From a carefully measured baseline (60m) the reading showed 61.5m to the spot where die back had reached. This made two new contenders for the title "TALLEST TREE IN BRITAIN. First the Pseudotsuga menziesii at Dunans, Argyll and second the Pseudotsuga menziesii at the Hermitage, Perthshire. The afternoon of the 23rd September

1993 found me hacking a path through thick Rhododendron ponticum for my (40m) baseline: unable to get 60m. My hypsometer was reading 65m x 175cm diam for the Dunans tree. Next morning, 24th September, in very heavy rain and a more carefully measured baseline down stream, the Hermitage tree reading was 65m x 132cm diam. JOINT CHAMPIONS: Both trees look the part of Champion. The Dunans tree will need remeasuring when rhododendrons are fully cleared. Then a 60m baseline will be possible.

Jim Paterson 24th October 1993

THE BRITISH BLACK POPLAR (Populus nigra subsp betulifolia)

This noble tree is native to the British Isles and was once widespread over middle England and east Wales. Unfortunately it was almost forgotten once hybrid black poplars, which are perhaps a better commercial proposition, were introduced widely after 1850. By the 1970's it was well on the way to extinction. Only remnants of the old population remain; most are measured and there is no reason why we should not have them all on the Register quite soon. New planting following a revival of interest led by Edgar Milne-Redhead has come to the rescue of the subspecies. Trees are most easily recognised from a distance, especially in winter. They have rough stems, often leaning at an angle, and dark grey rugged bark interrupted by large woody swellings or burrs. The arching lower branches are irregular and untidy. The upper crown is often quite open, sometimes with more or less vertical young growth for a time. These shoots are yellow ochre to pale buff-brown and glabrous, with shining brown alternate prominent viscid buds, each with a sharp point often turned slightly away from the stem. The leaves are polymorphic depending on their position, they range from deltoid to angular ovate in shape, and are up to 10cm long by 3.8cm wide. They unfold bright green in late April and remain semi-lustrous mid-green until October. The petioles and midrib have a thin deciduous pubescence. This appears to be retained longest on the underside of the leaf and may even survive until leaf fall in some individuals. Autumn colour is typically mottled green and gold with a short final pale golden display. At all times the leaves flutter audibly in the slightest breezes, especially prior to a rain shower. Leaf margins have translucent rounded teeth, and the leaf tip is elongated to an

acute point. The petiole is laterally compressed, 3-7cm long, and there are no glandular swellings except sometimes on later produced leaves. Poplars are dioecious so cross fertilisation occurs with each generation. Catkins occur before the leaves from about the last week of March. Females are lime green and semi-pendulous. Individual flowers are about 1.5mm in diameter each with a pair of stigmas. Pollination is by wind from crimson male flowers also produced in pendulous catkins.

County recorders (BSBI) usually have details of distribution for most areas but occasionally new trees turn up. In 1975 only about 1000 trees remained in the British population and very few, if any, of these had any claim to be of natural origin. Had it not been cultivated and artificially planted for hundreds of years this subspecies would probably have probably become extinct long ago. Natural regeneration without hybridisation is almost unknown. Wind dispersed seeds with their fluffy down must fall in June on wet earth and germinate within a short viability period of at the most ten days. As agricultural land use has intensified and flood protection has become more effective opportunities for natural seeding have been almost eliminated. Poplars are dioecious and female trees are vastly outnumbered by males to such an extent that very few are within the pollen range of each other.

I would be happy to identify native black poplars for readers from a foliage sample and description, preferably in the last week of March for catkins, and before July 1st for leaves. Measurements should be sent to Vicky Schilling if identity is confirmed.

> John White, Dendrologist, Westonbirt Arboretum, Tetbury, Glos. GL8 8QS.



CHAMPION TREES 1993 REVISION

Recorders are advised that the new champion trees booklet, which contains over 840 new entries and 570 updated measurements, was submitted to the Forestry Commission publications officer on the 1st December 1993 and we hope it will be on sale shortly.

