

LEAVES FROM A TREE MEASURER'S DIARY

THE NEWSLETTER OF THE TREE REGISTER OF THE BRITISH ISLES.

Patron: The Duchess of Devonshire

Trustees:

A.F. Mitchell	J. Workman
The Earl of Rosse,	C. Hall
Sir Ilay Campbell	A.D. Schilling
D. Alderman	M. Foster

The year 1994 has been one of great advancement and excitement for TROBI. When this newsletter goes to press the 100 Redwoods will have been planted around the British Isles and Ireland to commemorate the 100,000 records on the Tree Register.

Over 5,000 records will have already been put onto the new TROBI computer system, increasing the speed, efficiency, and availability of our data bank of information.

In the past year over 160 estates have been visited thanks to our widely spread network of 'Tapers' that is now active. Only a fraction of this valuable work would have been done without the help of these unsung heroes of the register who chase up many out of date records in out of the way places across the country.

Our thanks must also go to many people who have given us financial help. These include the Guinness Book of Records, the garden owners of Jersey, and many other tree enthusiasts who have helped us over the last year. We would like to thank Linda and Paul McCartney for their great enthusiasm and ongoing support of our charity.

We also wish to record here our sincere condolences regarding the death of Sir Kenneth Kleinwort. The enthusiastic financial support of Mrs Kleinwort and latterly Sir Kenneth have been a mainstay of TROBI since its inception.

V.E. SCHILLING

FOR YOUR DIARY:

TROBI CHINESE EVENING –
TO BE HELD AT LEONARDSLEE GARDENS,
LOWER BEEDING, WEST SUSSEX ON THE 22ND APRIL at 6 P.M.

TICKETS £18 (MAXIMUM SEATING 100)
TO INCLUDE AN ESCORTED WALK LOOKING AT CHINESE PLANTS,
CHINESE BUFFET SUPPER AND LECTURE BY ROY LANCASTER V.M.H.
ON HIS TRAVELS IN CHINA.

BOOK EARLY TO AVOID DISAPPOINTMENT.
TICKET SALES CLOSE FEBRUARY 1ST, 1995.

We would like to thank both Paul and Linda 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

COMPUTERISATION OF RECORDS

1994 was the year T.R.O.B.I. took a massive step forward and entered the modern world of computerisation in a big way. Masterminded by T.R.O.B.I. trustee David Alderman, help was enlisted from Sue Thomas, Computer Technical Support Manager for Penta Technologies Ltd. Stevenage, Herts. Together, they designed a suitable working database on arguably the best software available, Microsoft's Access. Within three months a database was up and running with records being entered.

The next major obstacle was overcome in the form of Dennis Watson of Lancing, Sussex, who generously offered, for a minimal fee, to help enter the records. 100,000 records is no mean feat and realistically will take at least three years to accomplish. Dennis' computer skills have made possible the rapid inputting of the T.R.O.B.I. records and without his help we may still have been just talking about this project.

5,000 individual trees representing 869 different species from 131 genera, covering over 900 properties have already been entered on the database. The advantages of computerisation for quick analysis and reporting are dynamically apparent, it has already yielded information of great value and interest regarding size, growth and distribution of many rare species.

It highlights the true value of T.R.O.B.I. and the unique information the register holds. It will revolutionise the working and accessibility of such a vast and ever increasing volume of current and historical tree records. Now, more than ever, we need the financial support to keep inputting records and for better computer hardware to cope with this massive database. We must ensure that T.R.O.B.I. can continue this important and monumental task and achieve the completion of the computerised Tree Register by 1997.

D. ALDERMAN

CHAMPION TREES IN THE BRITISH ISLES

by

Alan Mitchell, Victoria Schilling and John White

Measurements of well over two thousand trees are given in the new edition of this popular listing of champion trees. In the decade since it was first published the number of entries has grown from 1093 in 1985 to 1169 in 1990, and has now almost doubled to 2118 in 1994. Excellent collaboration between specialists together with information from interested readers has resulted in a new and increasingly valuable compilation of tree data.

The number of species and varieties included, down to a considerable degree of rarity, reflect the increased public interest in the performance of both well-known and less frequently seen trees.

This new edition features an introduction which

- describes listing methods
- gives guidance on selecting trees for measurement
- explains measurement methods
- includes metric/imperial conversion tables.

Champion Trees in the British Isles is the latest in the Technical Paper Series launched in 1993 by the Forestry Commission to cover a wide range of specialist topics. To order your copy please contact:

Forestry Commission Publications
The Forestry Authority, Research Division
Alice Holt Lodge
Wrecclesham, Farnham
Surrey, GU10 4LH
Tel: 01420 22255 Ext: 2305

Price	£5 (+ 50p P & P)
Size	297 x 210 mm
Pages	88 + iv
Publication	end November 1994
ISBN	0 85538 322 4
Ref	TP7

A TALL ORDER . . .

Tree Surgeon Mike Kemp climbed the three highest trees in Powis in the summer of 1994 to raise money for charity.

The trees were at Lake Vyrnwy, and the Leighton and Powis estates near Welshpool. Mike who is based in Meifod, near Welshpool said "I bought a new rope and harness for the climb, but obviously couldn't use climbing irons because of the risk of damaging the trees." We would like to thank Mike for including TROBI amongst the charities which benefitted from his climbs (each climb took approximately 90 minutes). The trees were as follows:

Douglas Fir	203ft	Lake Vyrnwy
Grand Fir	198ft	Leighton
Giant Redwood	130ft	Powis Castle

THE TULIP TREE

The North American Tulip Tree (*Liriodendron tulipifera*) is thought to have been first introduced into England in the late 1600's as Bishop Compton was known to have cultivated it at Fulham in 1688. The tallest in the country grows at Stourhead in Wiltshire to a massive 37 metres in height whilst the largest grows at Golden Grove in Dyfed, Wales and is an amazing 270cm diameter.



This drawing, by the artist Moira Hoddell ARCA, shows a good specimen of Tulip tree growing at Southover Grange in Lewes, East Sussex, where the diarist, John Evelyn, (1620-1706), spent part of his childhood. The little tree alongside it is a specimen of Black Mulberry (*Morus nigra*).

(For the record, readers will be interested to know that the successful bidder for Moira Hoddell's card of East Chilmington's ancient yew tree, featured in TROBI newsletter No. 3, lives in Sussex.)

HIGH BEECHES GARDENS

Handcross, West Sussex.

Everyone interested in trees and designed landscapes will know that it takes more than one human lifetime to bring any planting scheme to maturity. The planting of these gardens was started in 1906 by Colonel Giles Harold Loder. He died in 1966 and Edward Boscawen bought the gardens.

In 1988 the Boscawen and Bray families formed a Charitable Trust, the High Beeches Garden Conservation Trust, to care for these thirty acres, situated in that part of the High Weald of Sussex, known as the Forest Ridges. The whole of the High Weald is now designated as an Area of Outstanding Natural Beauty.

The tall straight native oaks, which are such a feature of the gardens are about two hundred years old and a part of the ancient forest. The soil is a thin layer of forest litter over clay and sandstone. The ground has never been cultivated so that the very interesting native flora still flourishes both in the gardens and on the four acres of wildflower meadows.

Colonel Loder was in touch with most of the knowledgeable gardeners of his day and in many ways ahead of his time with his ideas. He refused all grafted plants and attached great importance to the open spaces. He liked every plant to have room to develop its natural shape and he had a very discerning eye for good colour and form. This was particularly important when so many new plants were coming in to cultivation. He was interested in all hardy woody plants especially rhododendron species and hybrids, and trees and shrubs with brilliant autumn foliage. Colonel Loder was continuously planning and planting at High Beeches for sixty years.

He kept careful lists of his plants in fixed-leaf note books, some as early as 1914. Unfortunately he rarely put dates. He did use coded location references, but the relevant maps were never found, even if they existed. When the Boscawens took over the gardens in 1966 these records were invaluable, if at times frustrating, as he seldom noted if a tree had died. Unfortunately, in common with most plantsmen of his date, he seldom recorded sources of plant material except for collectors numbers for rhododendrons. These still apply to the correct plants.

By 1981, it was obvious that Colonel Loder's records with the Boscawen's additional

notes, should be updated and transferred to a botanically acceptable format. With much help and advice from professional taxonomists and others the T.R.I.M. card index system was devised and the plants at High Beeches are now fully recorded on this method which is compatible with that used by the Kew Woody Plant Data Bank.

At the same time, a group of dedicated conservationists were working to conserve Alan Mitchell's very comprehensive list of important trees, and they subsequently set up the Tree Register of the British Isles (a registered charity) in order to achieve this. With their help the T.R.I.M. system is now available to all, at cost price.

These High Beeches plant records, with the survey and maps prepared for English Heritage, will form part of the Management Plan now in preparation. One thousand of these Tree Records are currently being entered into the Kew National Woody Plant Data Bank. The T.R.O.B.I. measurements are entered on all the cards with dates and show interesting rates of growth etc. Once a plant has a card record, research will quite often provide much more detail. Important cultivation details can be entered on the back of the card and these are essential for continuity of management. The whole thing will eventually be transferred to disks.

High Beeches holds the National Collection of *Stewartia* including the 'Champion' *S. monodelpha* and a big specimen of the rare *S. rostrata*. There is a small, but interesting collection of rhododendron species many with Forrest or Kingdon-Ward numbers and more are being added from botanical expeditions in which the Boscawens took part, and from other sources of known wild provenance. Two notable *Rh. falconeri* came from Reuthe in 1914 and the two *Rh. hypoglaucum* (W. 311) are very big plants. There is also a selection of the best of the old rhododendron hybrids and some of the newer ones including some raised in the gardens. Unfortunately, few of the azaleas are named.

English Heritage gave High Beeches help after the great gale of 1987 on condition that the gardens were restored and maintained as they were first planned by Colonel Loder. they also insisted on a comprehensive survey and it was therefore very fortunate that the

T.R.I.M. survey had just been completed. The present management works to keep the essential and very special woodland character of the gardens. This is not difficult as the planting is largely dictated by the soil and climate but great care was taken to extract the great quantity of fallen timber by hand after the great gale, in order to protect the soil structure. In consequence, High Beeches recovered more quickly than most gardens.

There has never been a large staff of gardeners here. There is one full time post with some student and part-time help. The gardens are now open to the public on ninety days each year. Skilled management is important and care

is taken not to introduce excessive nutrients which encourage weeds. Heavy applications of forest mulch, much of it bought in, are a regular maintenance chore. Grass management consists of reducing fertility by removing all mowings and allowing all desirable wild and introduced plants to set seed. A professional survey of the wildflowers is in progress and is of especial interest as native flowers are not deliberately introduced. There are many rare plants, including some indicators of 'ancient woodland.'

There is so much potential interest here, and so little time to research and record it all!

MRS. A. BOSCAWEN

THE GREAT WALNUT TREE AT CAWDOR CASTLE

Some authorities ascribe the introduction of the Walnut to the Romans during their occupation of Britain, but certainly very much later in Scotland. Few, if any, Walnuts appear to have existed north of the Tweed, earlier than about the year 1600.

The venerable old Walnut tree at Cawdor stood for the best part of 250 summers, and maybe even more, on the lawn, between the north side of the castle and walled garden. Perchance the tree was coeval with the Elms that were planted each side of the drawbridge in 1717, after the death of Sir Hugh Campbell of Cawdor, 15th Thane who died on 11th March 1716 and when cut in 1937 a ring-count put their ages at 220 years old.

When Mr Charles Clark, completed his list of tree measurements, for the 1891 Conifer Conference Report, he gave details of the Walnut in the remarks section. "A fine Walnut on the Castle lawn is 60 feet high, 15 feet 6 inches in girth (at 5 feet) and 69 feet diameter of branches."

The next mention of the tree we get is from a Col. Thynne, in the great masterpiece "The Trees of Great Britain and Ireland" by Elwes and Henry. 1907-1913. Thought by many to be the finest book on trees this century. Elwes states, "Col Thynne has given me a photograph of a fine Walnut tree at Cawdor Castle, Nairnshire, which measures 65 feet by 15 feet 7 inches at 5 feet." This shows an increase of 5 feet in height and 1 inch in girth in about 15 years.

We have to go to another Mr. Clark for the next phase in the history of the old tree., this

time to the diaries of Mr. James Clark:- Tuesday 18th October 1949.

"Severe gale all day. Cleaning the cesspools around the castle. F. MacKintosh cutting the lawns again. About 2.30pm the Walnut tree on the lawn came down with the gale and crashed into the garden wall and broke part of it. F. MacKintosh and I were near it at the time. The tree was quite rotten at the roots and dying for some time, so another old landmark has gone."

But the old Walnut tree still has a part to play, having served Cawdor Castle for the best part of three centuries with nuts and shade, it has moved on to Cawdor Church, I quote from Jimmy Clark's Diaires again:- Sunday 17th April 1955.

"In the old Parish Church, Cawdor, on Sunday 17th, Earl Cawdor presented the church with a handsome Walnut Communion Table and chair, also a plinth for the Baptismal Font. The Rev John H. MacDonald thanked Lord Cawdor and referred to the kindly spirit which prompted such handsome gifts. On the plaque on the back of the chair is the following inscription. 'This Chair, Communion Table and plinth for the Baptismal Font was made of Walnut wood from a Walnut tree 260 years old, containing 607 cubic feet of timber, blown at Cawdor Castle in 1949. Robert Stewart, Clerk of Works, Robert Hay, Foreman Joiner. Presented to the Kirk of Calder by Earl Cawdor (1952-1955).'

So the old tree will serve The Parish of Cawdor for many years to come.

JIM PATERSON

ALLOWING FOR IVY

by John White

Common Ivy (*Hedera helix*) is our only British native evergreen shrub that can trail over great distance and climb to considerable heights. It has a prolonged juvenile stage which lasts for as long as it grows in the shade. Once in full light it changes irrevocably to the flowering stage, but it then loses any further ability to climb and grows slowly, and becomes dense.

Trailing ivy produces groups of roots along its length which persist as the shoot increases in diameter. On soil these roots nourish the plant, but on a support such as a tree or a wall they have an anchoring role only. They do not absorb nutrients or moisture but simply hold on. Ivy shoots do not exert pressure on the stem and, unlike honeysuckle, do not strangle trees. The main damage caused by ivy is when its sheer weight and bulk in old age may cause its support to fall over or become smothered. The latter is unlikely if the support is a healthy and intact tree.

The conservation benefits of ivy are numerous. It provides small animals, birds, tree trunks, and even the ground, protection from winter cold and frost. The flowers occur 'out of season' in the autumn much to the delight of the last bees, wasps and flies. The berries ripen in April which is also a lean time for berry eaters. The foliage and fruits are poisonous however to birds and mammals if eaten in large quantities. Contact with ivy can cause skin reactions in some humans, especially the sap and crushed foliage.

Once ivy is established it is difficult to get rid of. If a section is cut out of the base of a stem the plant above will die but not go away. It will not be long however before new shoots grow up to replace it. The best way to get young ivy off a tree is to carefully pull it off and lay the shoots on the ground pointing outwards. The plant is not then stimulated by pruning to re-grow, and with luck it will happily keep going away from the particular tree.

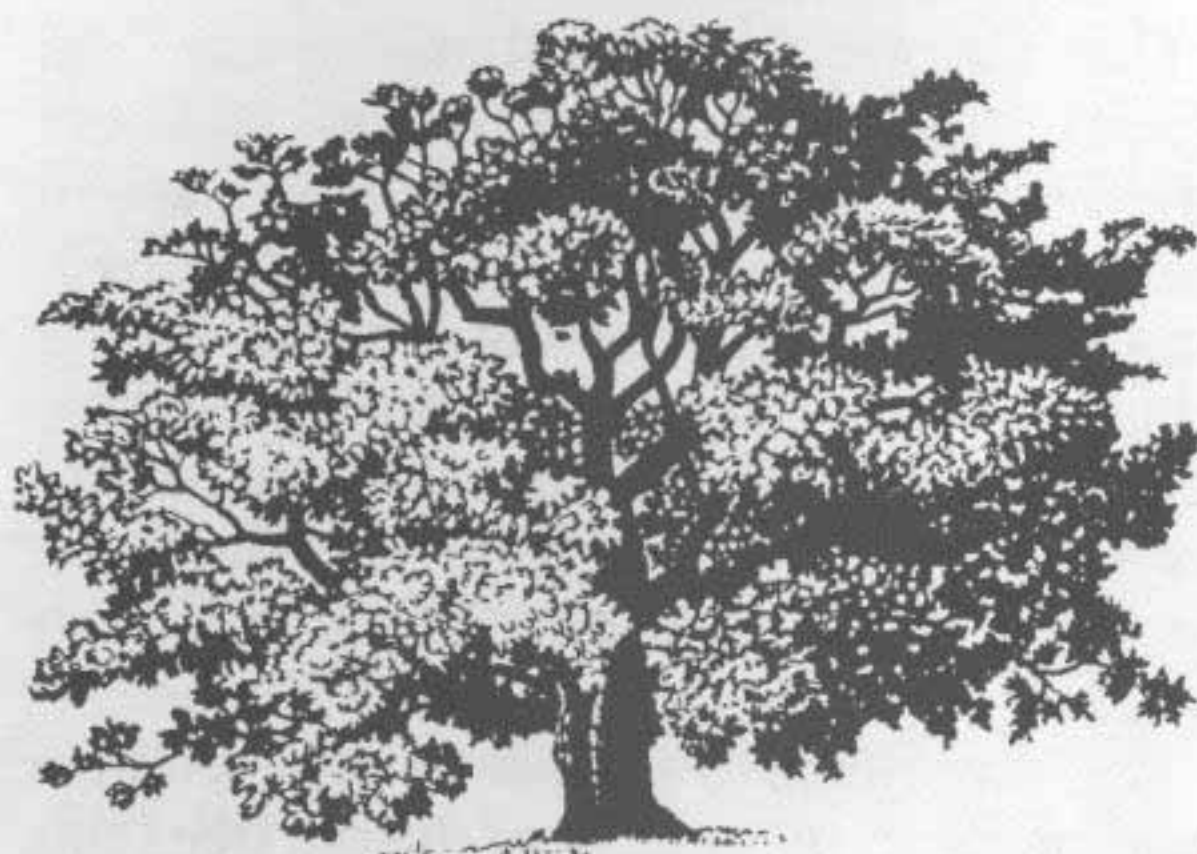
As tree measurers we generally encounter other people's ivy, and we are not usually at liberty to interfere with it. So, if the ivy stays, what should we knock off of the girth to compensate for it? Stems soon become inflexible so the tape can't be squeezed under

them, and as they are irritant it is best not to do this anyway. The majority of ivy stems are less than 1½ inches (4cm) thick but there are usually several or a lot of them. Rough barked trees tend to absorb a proportion of this thickness. A one inch ivy stem cut in Worcestershire recently was found to be over 40 years old. Anything thicker than about 6 inches is exceptional and may be reckoned to be more than 100 years old.

Measurements of ivy stems on a 160 year old oak tree, an ideal ivy habitat, have provided some hard data. The girth of the tree on its own was 6ft 5 inches (62.2cm diameter), with ivy the measurements increased as opposite:-

From this we can see that even if a whole tree of this size is encased in ivy stems up to 1¼ inches thick, the girth is only increased by about 6%. On larger trees the percentage is less, and on smaller trees it is more. Often ivy seats itself into natural hollows and crevices in the stem and the tape may not even be touched by it and the girth not affected.

Finally could measurers please look out for champion ivy stem diameter: so far we don't have one even in the newly revised Champion Trees booklet. Please send your information to: Mr John White, Forestry Authority Research Dendrologist, Westonbirt Arboretum, Tetbury, Glos.

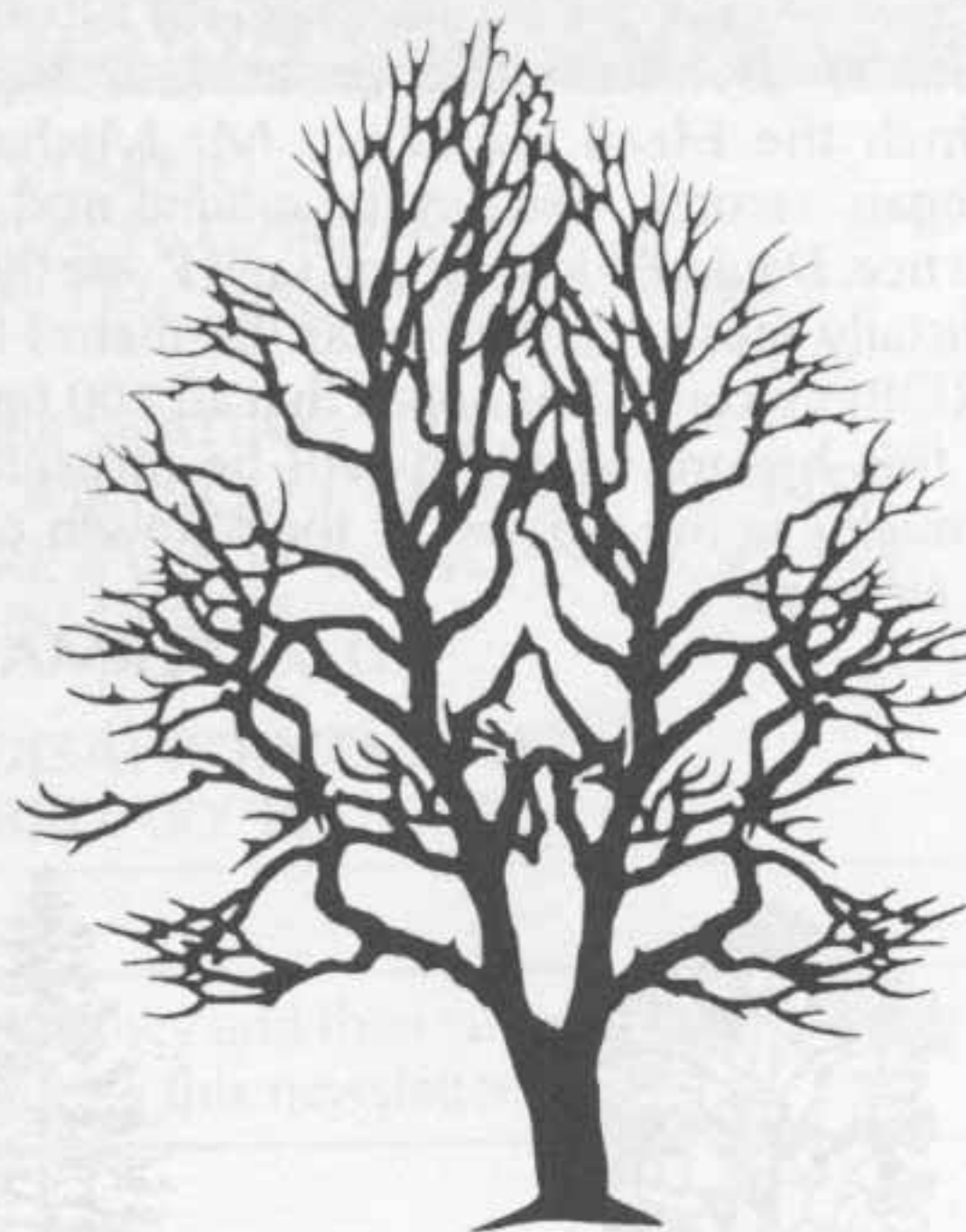


Ivy position and size	Stems	Tree and ivy girth (ins.)	Diam. (cm)	Allowance (cm)
Single stem 1 inch	1	6 feet 5½ inches	62.5	0.3
Spaced "	2	6 feet 5¾ inches	63.0	0.8
Spaced "	3	6 feet 6¼ inches	63.3	1.1
Adjacent "	3	6 feet 5½ inches	62.5	0.3
Single stem 1½ inches	1	6 feet 5¾ inches	63.0	0.8
Spaced "	2	6 feet 6¼ inches	63.3	1.1
Spaced "	3	6 feet 7¼ inches	64.1	1.9
Adjacent "	2 or 3	6 feet 5¾ inches	63.0	0.8
Spaced 1¼ inches	6	6 feet 8 inches	64.6	2.4
Spaced 1¼ inches	10	6 feet 9 inches	65.6	3.4
Ten Ivy stems hold the tape off the tree all round its girth)				
Single stem 3 inches	1	6 feet 8 inches	64.6	2.4
Single stem 4 inches	1	6 feet 9 inches	65.6	3.4
Single stem 5 inches	1	6 feet 10¾ inches	66.8	4.6
Single stem 6 inches	1	6 feet 11¾ inches	67.8	5.6

DID YOU KNOW?

That the Sweet Chestnut (*Castanea sativa*) at Tortworth in Gloucestershire is not only marked on Ordnance Survey maps but was said to have been a tree of some stature in the reign of King Stephen in the 12th Century.

In 1891 the tree measured x 460 cms diameter. In 1965 x 340 cms diameter at 1-1.5m. Because its huge, gnarled, gargantuan and twisted Bole has heavy lateral branches, some of which touch the ground, it is difficult to get exact measurements.



CEREMONIAL REDWOOD PLANTINGS

In September 1994 on a glorious day of blue skies and sunshine Sir Ilay Campbell Bt., invited over thirty keen tree people to Crarae Gardens in Argyll to witness the planting of two giant redwoods (*Sequoiadendron giganteum*) by Tony and Vicky Schilling to celebrate TROBI's 100,000 trees on record. A very interesting afternoon was had by all present, this included members of the press, and representatives of Scottish Landowners Association and other interested associations. Shortbread and tea was good social time for people to learn more about the aims of TROBI and of the Crarae Gardens Trust which generously hosted this event.

V. SCHILLING

In October 1994 at Birr Castle in County Offaly, Ireland, a group of TROBI Trustees, friends and a representative of the Irish press watched as the Earl and Countess of Rosse planted the first of a pair of Redwoods. Part of the new landscaping scheme for the Birr Castle grounds.

The tree will also stand as a long lasting tribute to all tree measurers and particularly Alan Mitchell who's tireless work has contributed so much to the wealth of information which is held on TROBI's records.

Sir Ilay Campbell Bt., presented the Earl and Countess of Rosse with a special brass plaque which the Head Gardener, Mr Michael Hogan, securely fixed in the ground next to the tree. David Alderman and Lord Rosse then officially measured the tree as 0.7 metres for TROBI's records. It is hoped that all 100 trees in this historic planting will be measured annually so the progress of their growth can be recorded.

D. ALDERMAN

It was with a pleasurable thrill of excitement that I accepted the invitation of the Garden Heritage Committee of Northern Ireland to be present at the planting of six redwood trees, one for each of the six counties of Northern Ireland in the incomparable arboretum at Castlewellan, in County Down, owned since 1967 and magnificently maintained, by the Forest Service of the Department of Agriculture. This I did on Wednesday 14th September.

My first and only previous visit had been in 1962, with the International Dendrology Society, when I had the luck to tuck myself in behind the then owner Mr. Gerald Annesley, Mr. Bobby Jenkinson and Sir Harold Hillier, superb plantsmen all, now sadly departed from us, and lap up their words of horticultural wisdom, leavened I might add, with wickedly witty comments on plants and people!

I was astonished and delighted with all I saw; in modern terminology 'GOSMACKED'. What would be my impression after thirty-two years I wondered. The same only more so!

At lunch, which was excellent, washed down as it was, by copious drafts of strengthening red wine, I had the pleasure of meeting doctor Charles Nelson and the other members of the Committee as well as representatives of the Forest Service, in particular the enthusiastic and highly knowledgeable Sam Harrison who has looked after the arboretum for 23 years. I was then taken to the area where the holes and the redwoods (kindly presented by Mr Patrick Forde of Seaforde Nursery) awaited.

After posing, spade in hand, for the press and television, I gladly relinquished it to Sam who admirably finished the job, while I briefly addressed the company on the aims, objects and work of T.R.O.B.I.

Sir ILAY CAMPBELL

