

THE FRIENDS OF THE WAITE ARBORETUM INC.



WAITE
ARBORETUM

NEWSLETTER NO. 68

Winter 2011

Secretary
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FROM THE PRESIDENT

Following the AGM on the 16th April our first committee meeting was held on 1st June. The committee (now of 9) remains the same as previously, except for the loss of Lynda Yates who retired through having reached 10 years of continuous committee membership. Sadly for the same reason we will be losing our very capable Treasurer, Peter Nicholls at the conclusion of this current committee year, the last 5 of which he has held in this position. Anyone who might be interested in standing for the committee would be very welcome as we really do need a few more members.

On Friday 13th May several of the Committee attended the annual morning tea for Volunteers of the University of Adelaide hosted by the Patron, Mrs James McWha. During her address Lindsay made mention of the large number of people, around 1800, involved in volunteering in so many areas of University life. She made special mention of the Waite Precinct and the enthusiastic amount of volunteering which takes place there. In appreciation of all she has done as Patron, a spectacular bunch of banksias from the Arboretum was presented to her.

Plans are in place for two events towards the end of the year for the combined involvement of the Friends of Urrbrae House Committee and the Friends of Waite Arboretum. These are a BYO Teddy Bears' Picnic probably on Tuesday 4th October and in place of the normal late afternoon Christmas drinks in Urrbrae House, a 4 pm BYO picnic on Sunday 4th December with choir singing by a capella group. Both these functions are to be held in or around the House grounds.

This year's Treenet Symposium is now only weeks away, on the 1st & 2nd of September. Jennifer has suggested that we feature some of the trees from South Africa for this year's symposium walk in the Arboretum. This is a good way of having people made aware of the diverse range of plantings that exist in the extensive collections within the Arboretum.

I would like to mention what a stunning sight Elm Avenue was at the height of its autumnal tones with a glorious gold-yellow display for its entire length. Indeed a reflection on the timely rains we had later in summer, supplementary dripper watering and ongoing mulching which assured leaf fall didn't occur too rapidly, following the first of the cold nights.

At our last committee meeting we were surprised to hear of the existence in the Arboretum of two specimens of a very rare pear species *Pyrus tadshikistanica* which is critically endangered in its native Tajikistan. Occurring in limited numbers in a very arid area in Tajikistan this tree is hardly known outside its natural habitat.

The Committee have been maintaining contact with the Blackwood / Belair and District Community Association Inc. in relation to the future of the Wittunga Botanic Garden. There has been much controversy over the possible closure of this irreplaceable asset but assurance has been given by the

State Government and the Board of the Botanic Gardens of Adelaide that this is not on the agenda, certainly at present.

In closing I can't omit mentioning the fact that we are recognising 25 years in the role of Director of the Waite Arboretum of our ever capable and enthusiastic Jennifer. She does indeed, deserve many accolades.

Henry Krichauff

IN THE ARBORETUM



Arboretum groundsperson Mark Ziersch on the new mower purchased with a donation from the Friends of the Arboretum. The mower will be used primarily in the northwest corner of the Arboretum where copses of indigenous understorey species and swathes of native grasses have been established.

FUNGAL WALK

In May, mycologist, Pam Catcheside, hosted a walk in the Arboretum to show FWA members a variety of fungi growing there. She said that most of the fungi present were saprobic, i.e. fungi which break down non-living material by producing enzymes which break down their substrates into small molecules that can be used by plants. Different saprobic fungi produce different enzymes. For example, the brown rot fungi produce cellulases and hemicellulases whereas white rot fungi produce enzymes that can break down lignin. Some fungi can break down both cellulose and lignin.

Pam showed the group several agarics (gilled fungi) namely *Agaricus xanthodermus* (Yellow Stainers), *Gymnopilus junonius* (Spectacular Rustgill), *Leratiomyces ceres* (Brick Caps), *Micromphale* sp., *Parasola plicatilis* (Pleated Inkcap) and *Pluteus* cf. *petasatus*, and pointed out their distinguishing features. For example, *Agaricus xanthodermus* which is similar in appearance to the field mushroom *A. campestris*. These fungi are toxic and so it is important to be able to recognise them. They can be distinguished from the field mushrooms by their squarish caps, pale gills when young, the fact that young ones stain yellow when scratched (hence the specific name) and a distinctive phenolic smell when being cooked.



Gymnopilus junonius has golden to rust-brown caps, creamy yellow gills and a bulbous stalk with a ring near the top. It is often found growing on cut stumps of *Pinus radiata*. *Leratiomyces ceres* has an orange-brown to orange-red cap, pale gills and a whitish stem. It is an Australian native and has become

naturalised in the UK. *Micromphale* sp. a delicate, bell-shaped fungus with a red-brown cap, appears striped because the gills show through it. The gills are dullish grey-fawn and the stalk is dark brown. *Parasola plicatilis* is a delicate fungus whose cap resembles a pleated parasol. The gills become black from the spores and the stem is white. *Pluteus cf petasatus* is a brittle fungus with a white flattened cap with brownish scales at its centre. The gills are whitish becoming grey-pink and the stalk is white and smooth.



Two species of Stinkhorns were also found in the Arboretum. These were *Phallus rubicundus* (above left) and *Aseroe rubra* (above right). The fruit body of *Phallus rubicundus* has a reddish stalk with a conical cap. The spore mass on the cap produces a foetid smell that attracts flies which land on it and collect spores which they then distribute. The fruit body of *Aseroe rubra* (Anemone Stinkhorn) has a soft, pinkish stalk topped by a circular disc with 5-11 red "arms" which bifurcate towards their tips. The evil smelling, olive green to black spore mass is spread on the disc.

The upside down pear-shaped fruit bodies of the puff ball *Lycoperdon perlatum* consist of a spherical puff ball on a sterile base. They are white when young and covered with creamy white soft spines which fall off as the puff ball matures. The spore mass inside is white at first and then becomes an olive brown mass of powdery spores which are released from a "mouth" that opens at the top of the sphere.

The mycorrhizal (myco = fungus, rhiza = root) fungi form partnerships with plants from which each partner benefits. The fine threads (hyphae) of the fungus grow within or around the root cells and provide the plants with water and nutrients. The plants' role in these associations is to provide energy for the fungi. Earthballs in the genera *Scleroderma* and *Pisolithus* (Dyers's Ball, Horse Dropping Fungus) are examples of mycorrhizal fungi having symbiotic relationships with plants. *Scleroderma* spp. have a dry, thick, dirty-yellow 'skin'; the interior spore mass is purplish-black and powdery on maturity. Most *Pisolithus* spp. have a round to pear shaped fruit body with a rooting base. They do not release their spores through an apical "mouth" but become eroded at the top as the spores mature. The interior of the fruit body consists of masses of spore cases resembling rice grains encased in a sticky black substance which dries out and becomes a dry brown-black powdery mass as the spores mature.

I am very grateful to Pam Catcheside who provided all the information from which this article was taken. Photographs by Jennifer Gardner

Jean Bird

POT POURRI

AN ELEGANT ARBORETUM

A two to three hour visit to the Tasmanian Arboretum will be very rewarding. This delightful arboretum is located in the hinterland behind Devonport Tasmania, and is a short (15 minute) drive from there. Meg and I, who were taken there on a pleasant Sunday afternoon last April by Meg’s cousins, were pleasantly delighted by its setting and location in an open valley.



There is a range of habitats from the open valley floor with scattered plantings and an adjacent lake with a couple of islands to hillsides with quite dense plantings from various parts of the world.

The Tasmanian Arboretum was founded in 1984 on a 58 ha. site on the confluence of the Don River and Melrose creek and has a growing collection of Tasmanian and Gondwanaland species appropriate for a cool temperate climate. Many of the imported species are related to the indigenous Tasmanian flora. However, there are other appropriate temperate species from New Zealand,

South America, East Asia, Europe, North America and the Mediterranean region. The Arboretum’s maintenance is supported by an enthusiastic group of volunteers. It is open daily from 9am to sunset and admission is by donation.

There is more information about the arboretum on its website www.tasmanianarboretum.org.au

It has a kiosk, delightful function area, a visitor centre (not always open as it is staffed by volunteers) and a number of self-guided walks. Several of these walks are along hillsides, which enable one to get an overall view of the arboretum. The curator has planted trees and shrubs from the various geographic locations in groups throughout the area, e.g. most of the North American specimens are located in a group.



I was particularly taken with one collection, which is based around the Tasmanian flora I came to know, when I was a student in Dr Winifred Curtis’s classes in the Botany Department of the University of Tasmania. Here there was a range of shrubs, a lichen interpretation centre as well the cool temperate rainforest species so well known in Tasmanian forests.

Nearby, there is a magnificent stand of *Eucalyptus viminalis* (Tasmanian White gum, Manna gum in SA), (it may now be known as *Corymbia viminalis*), growing on the side of a hill, with their clean white bark shining in the autumn late afternoon sunshine.

Figure Captions: General view of the arboretum; *Richea curtisiae*; stand of Tasmanian white gum with Meg Nicholls and cousin the foreground





INTERNATIONAL YEAR OF THE FORESTS – Celebrating Forests for People – 2011

South Australia's Forests – their contribution.

The International Year of Forests was launched on the 2nd February at the general Assembly Hall of the United Nations in New York City. The Australian official launch was timed, appropriately, to coincide with this year's celebration of World Forestry Day on 21st March.

The theme is dedication to promoting and celebrating people's action towards sustainable management of forests around the world. This is not just another slogan but is a reminder that the purpose of these activities is not just about trees it is about people. Forestry is only about trees insofar as trees serve the needs of the people. Peoples since prehistoric time have depended on forests for their basic needs ever since they were able to gather food berries and seeds, as well the means of building shelter. All the agricultural land taken in since the spread of Neolithic farmers, 6000 to 8000 years ago, across Asia Minor and Europe, has been derived from soils in climates able to support natural forest, especially the on the fringes where tall trees grew above natural grasslands. These fringe ecosystems we call savannah. Since the development of the first flint and stone tools, people have tried to emulate this more open country for thousands of years to help in the hunter-gather economy and subsequently, once metals, bronze and iron were smelted, to build stronger tools, to make larger and larger inroads into the closed forest. Their tools enlarged the scope to cut the biggest trees and split them into boards to build houses, halls, defensive paling fences and bridges. It is significant that the soils which have persisted longest under farming, from 1000 to over 4000 years, have been, and still are, where natural forest was one of many flourishing ecosystems. Some areas of natural forest land remain to this day 'sustainably renewing' themselves (in the modern idiom), but most have been modified intentionally or indirectly by the local people. What today are being called 'ecosystem services' are unquestionably being delivered; some, like 'carbon storage' are being given economic value, reflection of our global population's over-abundant 'carbon footprints', but many defy appraisal this way although much appreciated by people. It was not until well into 19th century of the present era that rising populations, industrial inventions and movements of populations from rural to factories in towns and cities linked by faster transport nationwide, that trees in forests yielding timber began to be superceded by steel and concrete. Declining yields of timber and the steady market demand in Europe, led to realization that professional managers were needed and university courses began about the time the industrial revolution began in Europe. This coincided with a period when many European people felt social pressures to emigrate and to settle in the New World and Australasia. University taught forestry, as art coupled with science, produced the complex planning and practices essential for delivering valued forest products for people and environmental care. Products include not only solid timber but recreational opportunities, not just hunting and fishing, as well as clean water and clean air (Take a moment to study the logo at the head). This signifies a fact not often mentioned nowadays with the clamour about global concerns, that forestry and the presence or absence of forest impinge at the local scale of living. What is done, and how it is done depends on the dispersal of the local people and the ways to support or even enhance their prosperity. We forget that timber has been a standby for building essential framework for houses and furniture for millennia. Trees are cheap to grow, (energy from sunlight, water and carbon dioxide for food and a few minerals for complex chemicals ensuring longevity). Hence, renewable, timber is reliable, easy to shape and join, and using it adds to the time carbon is stored.

This need for forestry to consider the local demands and opportunities on their merits was to impact strongly on the immigrants of the early 19th century. South Australia was such a place. The colonists virtually found themselves in the situation their forebears many millennia before had faced. Faced with natural ecosystems adapted to the native hunter-gatherer peoples lacking sophisticated tools, the settlers had to emulate their ancestors. The settlers wished to establish and sustain an agrarian tradition but had to virtually start from scratch, enhancing the natural woodland on the Adelaide Plains and adding to the native gum savannah. Full clearing was needed for grain crops, however, and since these soon lost their original prosperity, needed to move on to fresh ground. Similar conditions obtained in the other

region of rainfall sufficient to support natural forest and tall gum savannah in the Lower South-east. This amounted to less than one per cent of the total area of the state. It transpires that less than half of the most climatically-favoured regions could be retained as forest under the conditions that existed when land-use priorities were being decided in the mid-late 19th century. The net result of the government pursuing a managed forest option for the benefit of current and future generations in SA has been that South Australia, least forested of all the states, holds what is probably the best-kept forestry secret in the World.

Whilst this may seem an extraordinary claim to most people, it has its origins in an SA family that still has links with "real trees" (akin to "real ale" with the Cooper family). It was FWA's current president Henry Krichauff's great-great-grandfather, F.E.H.W Krichauff, who made the first move in the House of Assembly on 7th September, 1870 for the reservation of land for 'the best and most economical means of preserving the native timber thereon, and planting or replanting the reserves as permanent state forests'. The inspiration for this move was the concern of one of the most far-sighted and capable men in our history, the Surveyor-General George Woodroffe Goyder, who in the course of his duties of surveying lands for release into agriculture, had become aware of the alarming proportions of trees felled on the better-timbered land in the 35 years since the colony was founded. This was followed by an Act of Parliament in 1873 'To Encourage the Planting of Forest Trees'. A second move in parliament by Mr Krichauff, on 10th November, 1875, led to the appointment of the Forest Board whose members included Goyder (Chairman), and Dr. Schomburgk, Director of the Botanic Garden was given control of 195,000 acres (78,900 ha) in a number of Forest reserves on sites largely selected by Mr. Goyder from the records and experience of the State Survey.

Forests by definition occupy significantly large areas of land for they are ecosystems physically dominated by trees. Woodlands, which tended to predominate in the higher rainfall areas of SA, are ecosystems where trees as they mature become a major component of an ecosystem and they come to dominate that ecosystem in zones where rainfall is less than supports tall natural forest (in SA less than 800 mm), or in which soil factors combined with aspects of climate, restrict the opportunities for many large trees to grow. Individual trees originate as seedlings, and may regenerate naturally, in some cases in tens of thousands per hectare. This is usually after favourable rains following a catastrophic end to a forest of fully mature parent trees. Thereafter, systematically, but by no means gradually at first, a forest once renewed becomes composed of fewer and fewer individuals each vying to gradually dominate and consolidate access to the site's resources of air, water and nutrients. Catastrophic finality to a forest ecosystem is more liable to be drastic in Australia but fortunately is rare whereas lesser harm occurs more often. Then there can be a steady but slow-paced regeneration as older or larger individuals succumb to storms, pests or disease. Opportunity for this form of renewal, however, becomes more difficult as the vicariousness of the climate affecting rainfall intervenes. Trees already established, especially in Australia, have evolved vegetative methods that allow the existing trees to recover vitality faster than weak seedlings can establish, except in a few years with unusually favourable conditions.

Iron and metal goods all had to be imported: clearly, there was a desire not to have to import too much timber from the other States. This added to the large-scale of tree clearance on the Adelaide Plains and of forest in the Adelaide Hills.

The Forest Board's directives for action have been described as 'could hardly have been a sounder set of forestry principles with which to begin plantations in a new land.' (Lewis, 1975). Nurseries were begun at Wirrabara and Bundaleer in the mid-North and at Mt Gambier Lakes in the lower South-east. The first plantation was established (on naturally-open country) at Bundaleer, near Jamestown, in 1876. Not all went well at first. Dry summers and grass fires blighted efforts and ploughing was introduced to reduce grass and weeds and wheat sown to prevent fire when still green. The need for professional advice and direction was seen as a necessity and in 1878 John Ednie Brown was appointed with the title 'Conservator of Forests', common across the far reaches of administration within the British Empire.

The question of the 'best and most economically-valuable species' raised in 1870, was the first priority and sought 'winners' from trials of over one hundred species from Australia and overseas. Initiated by

the Board itself and greatly expanded after Ednie Brown was appointed, these had inaugurated the first of six phases of research over the next century that established SA forests and 'its best-kept secrets' at the forefront of timber plantation management, certainly in the Empire. This was necessitated by local foresters perceiving needs to cope with a range of specific situations realized decades ahead of trends in conventional forest management. Not least of these imperatives was the fact that all the plantations were established with financial loans. Other forestry organizations world-wide of the time were able to reforest with money derived from sales of standing native timber, a natural resource that was virtually lacking in SA. It meant each plantation was set up with invested funds and carried a debt that built up at compound interest (at Bank rates of 4%-5%). Income to offset debt was realized from what the Board called 'intermediate trees' large enough to be felled and sold. By the turn of the century, the trials not only identified six clearly superior species for SA but also the most suitable areas for pursuing building up the forest estate. To cut a long story, pines from similar climates around the world (Mediterranean) especially radiata pine, predominated, and areas with lighter textured soils, mainly sands, in areas receiving over 650 mm average rainfall were dependable (Lewis, 1975). Not surprisingly, these were in the most favoured of the Settled Areas of the state, and were the areas left by agriculturists of the time as too infertile, too shallow or deep, or just difficult. That all this has succeeded has been in the face of a number of unprecedented crises. Each was tackled scientifically, limited only by the state of knowledge at the time and each provided opportunities and led to discoveries by some outstanding Australians. Five pioneered remedies for a new set-back that arose when an old one was ameliorated. Three more phases of research were aimed to develop gains in quality and quantity timber production to enhance the financial returns to Treasury. (Boardman, 1988). Trials of wood preservatives, to extend the economic life of timber, were mooted as early as 1908 and began in 1913. All phases have helped forest managers, both public and private, and the state government to gain confidence and continue investment of loans in softwood silviculture.

Professional training in Forestry was inaugurated in Australia (in another 'first' for SA) in 1907 at the University of Adelaide. This continued until 1926 when it transferred to the Australian Forestry School (AFS) when it was opened in Canberra. A pungent review by overseas visitors to the 3rd British Empire Forestry Conference held in Australia and New Zealand in 1928 deplored the 'great field which still lies open to the student of silviculture' (the forestry equivalent of agriculture). This began dedicated programmes of research at State and Commonwealth level with 'special research staff' from the profession. The first field station outside the ACT was opened in 1938 in conjunction with the SA Woods and Forests Department (W&FD) at Mt. Burr, dealing with the needs of softwood plantations. Its diverse programme included not only nursery work, planting practices and pruning, but also a newcomer to forestry, tree selection and breeding, decades before most other growers.

More formal research was delayed early by the 1929 global economic depression and then interrupted in SA with a Parliamentary Enquiry, subsequently rising to a Royal Commission, into all aspects of Afforestation. This reported in 1936 and set the foundations for the sustained (and invaluable) utilization of the timber but also, based on reliable knowledge, the establishment of more intensive tree-growing practices, whereby the potential of the pines, especially the Monterey or radiata pine, could be captured. Both these major demands needed a database that encompassed the normal commercial life span of a plantation (called its rotation) and a bit beyond. This required a long-term approach, measured in decades, but also data-collection techniques that would stand the test of time: consistent now for over 85 years.

All this coincided with the development of the Waite Agricultural Research Institute and in this context with the Waite Arboretum: so forestry was looking at tree species in populations and the latter into tree species as individuals. The coincidences do not stop there: once again the family of our president, Henry Krichauff enters the scene. C.E. Lane-Poole (Meyer, 1985), who was a friend of Henry's grandfather and father, came in 1929 with AFS students to assess over 1900 acres (790 ha) in a trial of methods based on German and French inventory methods. Up to this time, and as still happens in much of the world today, regulation of logging was based on land area. The European tradition was based on the timber resource itself that took into consideration the fertility of the soil. The challenge was to provide an accurate assessment of the amount of timber being offered for sale by the SA Government to a private

papermaking interest. This meant displacing a number of unverified assumptions, which clearly were regarded by the authorities as unsatisfactory (and appear to have led to the initial Parliamentary Enquiry). Lane-Poole's study established a number of sensible measurement conventions that persist in practice to the present day to meet the needs 'of arriving at the [timber] volume of standing woods' (Boardman and Leech, 1994). The net result was a way of forecasting over five-year intervals, not only sustainable supplies of timber in volume of logs to sawmills and other industries, but also that they could do this with double the precision of other grower organizations, and this held up to the 1980s at least. Also, uniquely in SA, were forecasts of sustainable levels of supply in different sizes of logs able to be converted more efficiently in saws and machines tailored to match log size. Advances in thinning out the intermediate trees in the previous phase had shown that remaining trees would respond vigorously in diameter, producing thick trunks. The permanent research plots also showed that around 25 per cent additional standing volume was produced over unthinned plantation over a full rotation.

One sublime result of the development of sustainable management (Lewis *et al*, 1976) was the way the state forests were able to cope with the huge losses in the 1983 Ash Wednesday bush fires; 30 percent of plantations were destroyed in the South-east and 28 per cent in the Adelaide Hills. Notwithstanding the salvage of most of the trees past middle age, the industry supplies were maintained in quality if not in quantity. They themselves opted for having less of the same package as before the fires rather than the same volume in smaller logs. The computer system designed by Dr Jerry Leech to manage log volumes sustainably from the various forests more than coped with the challenge and remains unsurpassed in forestry for its sophistication even now. Private industry, when it became aware of the benefits these moves made, decided to invest and grow and utilize much of their own estates and surplus from the state forest.

This period saw the development of the homoclimate species collection in the Waite Arboretum by Professor Prescott and Lindsay Pryor of the ANU. This was an expansion of the multiple genera and species trials undertaken by the W&FD in the late 19th century and included non-timber producing species, but with only a few specimen trees because of space limitations (an arboretum is a tree-garden). This study had the aim of assessing the performance of species here in the Mediterranean climate, the survivors now having lived for more than 50 years.

Breeding has now reached the third generation into seed supply. Bred trees, like those that earlier were fed superphosphate, grow in stands that have a narrower range of sizes than a 'wild' plantation, fewer huge, branchy 'wolf' trees and many fewer runts. Uniformity of this kind alone is more economic to harvest and utilize, this being one of the most costly jobs.

In sum, the success has realized, first the supply of logs managed on a sustained basis, now the whole plantation forest resource is being managed sustainably. SA was probably the first forest estate to achieve such an aim and it has been owned by the people of S.A. from the start. The outstanding result with SA pine plantations, by global standards, owes something to the fact that from the start in SA the total area of public and private plantations has been strongly constrained in an area of superior agriculture to marginal, less-suitable soils so that little expansion over the area originally set up Forest Reserves has been practicable. The limit of net productive land in the state forest is under 80,000 ha, and the Green Triangle region net area less than 140,000 ha (excluding recent blue gum short rotation crops). This is an estate that is *tiny* by world standards. This relative insignificance has, no doubt contributed to the 'best-kept secret' appellation. By any standards, however, it has been 'small and mighty' thanks to outstanding scientific and professional input into its development. It has been a privilege to have served with and stood on the shoulders of, such great practitioners.

Selected Reading

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2. Boardman, R. and McGuire, D.O., 1990b. The role of zinc in forestry. II. Zinc deficiency and forest management: Effect on yield and silviculture of *Pinus radiata* plantations in South Australia. Forest Ecol.Manag., 37: 207-218.
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Robert Boardman

A SINGULAR PEPPER TREE (*SCHINUS MOLLE*)

Pepper trees have long been used in Australia and have been popular in our rural areas. They grow to long-lived, bright green, weeping trees with bunches of red-pink small fruits. Their popularity has waned in recent times due to the fact that they have become feral in most areas and self-sown trees can be found established very widely.

Tree growers have wished for non-seeding sterile forms of our useful street and farm trees to reduce or eliminate the spread of otherwise useful trees e.g. Ash trees, sweet Pittosporum, Aleppo pine to name a few.

While collecting weeds with my colleague Chris Brodie, we stopped to collect some specimens of weedy grasses amongst half a dozen Pepper trees on the roadside. These trees were flowering or fruiting except for one. This tree was noticeably compact, dark green with no visible flowers or fruits. Could this be a key tree to restore the popularity of Pepper trees? The tree was first noted in January and was revisited in mid June in 2011 and still had no flowers or fruits. This time some cuttings were taken.

The popularity of the original trees is due to their hardiness, stability of their branch systems, weeping habit with no spines or prickles, mostly a single trunk and sufficient height to get under them for shade. Will a compact tree be welcome? Will its branches spread sufficiently to be a useful shade tree? Can it be propagated by cuttings? These needs will take some years to find out.

David E. Symon

Editor's note: The Director says that if the cuttings survive, they will be trialed in the Arboretum.

NEW MEMBERS

We warmly welcome the following new member:

Mrs Kathy Heynemann, Surrey Downs;

FORTHCOMING EVENTS

Thursday 1 and Friday 2 September: 12th National TREENET Symposium

Tuesday 4 October: Teddy Bears' picnic in the Arboretum. BYO picnic tbc.

Sunday 4 December: the Friends' Groups will hold their Christmas function the in the form of a BYO picnic in the Arboretum at 4.00 p.m.

Saturday 25 Feb – Sun 5 March 2012: SA Basketry Society Exhibition – opening Friday 24 February

HELP NEEDED

In her report in the last Newsletter, the Director pointed out the need for help with the TREENET symposium. Help is needed at the following times:

Monday 29 August at 10.00 a.m. – packing satchels in the Coach house

Wednesday 31 August – afternoon set up in the National Wine Centre

Thursday 1 September 8 .00 a.m. – 5 00 p.m. (in shifts) –Registration Desk in the National Wine Centre

Friday 2 September 8.00 a.m. – 4.00 p.m. (in shifts) assisting with food and guiding at Urrbrae House

If you can commit to any of these times we shall be extremely grateful. Please contact Jennifer on 8303 7405 if you can help.

Also, we need a Publicity Officer to approach libraries, councils, etc, for space for short displays. Please help if you can.