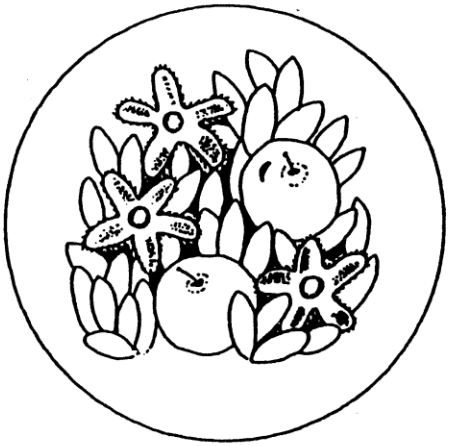
PENTACHONDRA

NEWSLETTER OF THE AUSTRALASIAN PLANT SOCIETY



ISSUE 26 MAY 2001

AUSTRALASIAN PLANT SOCIETY

Newsletter No. 26
May 2001

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EDITORIAL

I don't suppose anyone needs me to tell them that we have had a very wet winter. If you are interested in facts the following may be of interest.

The year 2000 was the wettest year across England and Wales since 1872. October 2000 was also the wettest October since 1903, making it the wettest autumn on record since 1766. There was widespread flooding at the end of October and the start of November. November 2000 is known as the wettest since 1970. Late December had the most widespread snow for any month since February 1994. January 2001 started wet and mild, then colder air and snow arrived. Supposedly, this was the sunniest January since 1959. February 2001 was very wet, particularly the first half. Frost, fog and snow epitomised the latter half, making this the coldest February since 1996 and the wettest since 1995. March started off cold with snow cover especially in the north. The second week was again wet. The third week saw more rain, sleet and snow showers followed in the latter part of the month by easterly winds and cloud. This made it the wettest March since 1988. At the time of writing (mid April) it is still unsettled and cool.

Until the middle of March I began to think that I had not had any winter losses. But since then, *Clianthus puniceus* (beautifully green a month ago) is now straw-coloured (dead?). *Celmisia spectabilis* gradually rotted away last summer, and now *C. ramulosa* has some dead patches. Non-Australasians *Teucrium fruticans* and *Melianthus major* both appear dead after thriving outdoors for several years. In the greenhouse, *Sollya heterophylla* succumbed just like my *Clianthus*. I have pruned it but all the wood seems dead. Cold also affected *Indigofera australis*, also in the greenhouse. Many stems just shrivelled up and had to be removed.

By the autumn issue of Pentachondra I hope to have a proper report of losses and survivors.

AGM 2001 - This year you are invited to a tour around the garden of APS member Doug Smith, holder of the National Collection of Eucalyptus. **Date - Saturday June 16th**. Meet at 2pm at Meon Orchard, Kingsmead, Wickham, Hants. For directions, see Doug's article elsewhere in this issue. If you really get lost! give Doug a ring on 01329 833253.

CAN I 'PHONE/EMAIL A FRIEND?

The autumn issue will contain an updated members list. If you have a telephone number or email address that you are happy to have published, please let me know. If you are applying for seeds, just jot your contact number/address on your order form and forward it to Jeff

Greg Plenty of South View Barn, The Mount, Batley, W. Yorkshire invites you to look round his Australasian collection when he holds a Northern Meeting on Sunday July 8th. If you plan to attend this meeting, can you contact Greg so that he has some idea of numbers.
Telephone : 01924 477793
Email :
gregplenty@svbarn.freeserve.co.uk

TREASURER'S REPORT

Please see balance sheet for 2000 enclosed

This has been a satisfactory year The only change to report is the transfer of our reserve account from the Abbey National back to the Natwest Societies Reserve - the reason being that the interest rates at the former had become minuscule and the Natwest can offer three times the interest and without tax.

Numbers reached 200 at the end of 2000 but have now settled at around 175 (April 2001) We lose 25 or so members each year, simply because they do not pay subscriptions despite reminder, and we do not know why except for a very few cases. Most have only joined the preceding year, so we must assume that they did not get what they wanted from the Society But it would be interesting to know what they did expect.

On this subject, I had to send out over 90 reminders to members this year in February - which is 50% of the membership. This costs the Society over £20, so can I please ask you to act when you receive the reminder in the December newsletter? More members are paying by Standing Order, and I have forms for this. Or you can do it at your bank yourself, for which you will need the following information:

National Westminster Bank plc
146 Widnes Road
Cheshire WA8 6BB

Code 60-19-24
Account of Australasian Plant Society
Acc. No. 29865832

£6 (or £9 joint) annually on Jan 2nd 2002 and thereafter until further notice. Ask them to quote your name as reference with the payment - this is vital so that I know who has paid...

A word to overseas members. Now that Eurocheques have unfortunately ceased, I am aware that there are difficulties in sending your subscription money. Unless you have a UK bank account, the cost of sending a cheque in sterling is quite prohibitive (it costs £10 here); and if you send a cheque in your own currency the bank here charges £5.50 to cash it, which does not leave much left! So I suggest (1) you either get hold of some sterling notes and send these - if you send £10 I will note your credit and after some years you will only need to send £5! Or (2) send the nearest amount in notes of your currency, which I can change with a friend going on holiday or business to your country, at the going rate of exchange.

Finally, we propose at this year's AGM to recommend an increase in subscription for overseas members, and I am sorry this includes the Irish Republic, from £6 to £9 (and joint from £9 to £12) The reason for this is that postage abroad costs twice as much as that to our UK members you already do not have to pay the £3 for seeds and this privilege will continue

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THE JOYS OF PUBLICITY
(That was the week that was)

Jeff's excellent article, "Antipodean Adventures", appeared in the November issue of "The Garden". It was published on the day he departed to Australia, and as he had - so kindly!- published my telephone number as well as his, my telephone became red-hot for the rest of the week. The commonest request was for our seedlist; the explanation that this meant membership and a wait until next May seemed, for some reason, to be unacceptable to many callers - no, they didn't want to join anything, they just wanted the seedlist and now!

This "seminal obsession" apart, the next most frequent demand was in the belief that we ran a nursery, which was very odd, as there was nothing in Jeff's article to suggest this: - send me your mail order catalogue; where was our nursery sited; our opening hours; even a peremptory "send me all your Telopeas in stock". Then there was the "Agony Aunt" section - how do I prune my Eucalyptus, why won't my Boronia flower, etc; but my halo self-inflated when I was able to tell a lady from Ireland that her Gungurru in a pot was *Eucalyptus caesia*.

All in all, an interesting week and not in fact without benefit; we have gained from that week and since some 25 new members as a result of this publicity.

EXCHANGE AND MART

Tony Entwistle has the following non-Australasian seeds available, some in limited quantities. So first come, first served; simply send him a SAE if you want any.

Abutilon vitifolium album
Aquilegia vulgaris vervaeneana (variegated)
Aralia elata
Beschorneria yuccoides
Bomarea caldasii
Bupthalmum salicifolium
Caesalpina pulcherrima
Campsis grandiflora
Ceratonia siliqua
Chelidonium majus fl pl
Clematis rehderiana
Cornus kousa
Cyclamen hederifolium
Cercis siliquastrum
Dipelta floribunda
Echium boissieri
Helleborus argutifolius
Kolkwitzia amabilis
Inula "sonnenstrahl"
Luzula nivea
Magnolia hypoleuca
Mutisia ilicifolia
Musschia wollastonii
Nicotiana glauca
Puya alpestris
Puya chilensis
Viburnum opulus fructo-luteo
Vitex agnus-castis

Thanks once again to all members who have sent in articles and snippets of news, especially Jeff Irons who has an endless supply of articles, or donated seeds to the seedbank, including Murray Macdonald of Skye who sent in seed from *Libertia grandiflora*. Deadline for the autumn issue is October 16th. Articles can be sent on disk - acceptable formats are Microsoft Word, RFT and TXT. Send to Sue Hyams (address on inside of back cover). Don't forget to jot down your 'phone number/email address on your seed application form.

Canberra, Cooma and Katoomba

By Jeff Irons

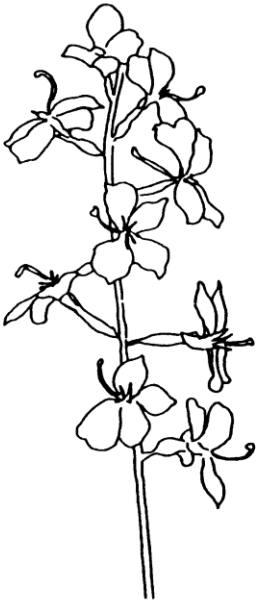
Last November my wife and I visited the Australian Capital Territory and some of the higher parts of New South Wales. Unlike earlier trips this was intended to be mainly a touring trip, with only the final portion spent with long standing friends in the Blue Mountains. We landed in Canberra on a glorious sunny spring day, collected the hire car, and set off for our motel. I was struck by the enormous amount of colour in the gum trees. Young foliage was in varying shades of yellow and red, while mature foliage was both bright and glaucous green. Later on, in the Blue Mountains I was to see trees with young foliage as bright as that of *Pieris forrestii*. Canberra has been designed around roads and it is easy to get around the city. However there is one very big hazard for the visitor. The road system has three things called 'circles'. Each is rather like two giant concentric roundabouts, with traffic moving clockwise on one ring and anti-clockwise on the other. Motorists need to know which ring to get on (and then achieve it) and where to leave. Failure to get on the correct ring results in a detour of several miles before one can restart the exercise. Nevertheless by the end of my stay there I had decided that Canberra is a very pleasant place in which to work and live. It is also a good base for a holiday. There is much going on, and the city is a very convenient starting point for day excursions to places round about. Parliament House is a magnificent building, constructed from the finest materials. My visit coincided with the Melbourne Cup, and I was amused to find that Question Time was interrupted, so that MsP could get its result.



Tetratheca ciliata and *Indigofera australis*

One of my excursions was to Shanahan's Mountain in the Namadgi National Park. This is at the northern end of the Brindabella Ranges, on the western side of Canberra and has peaks going up to over 1500m (5000 ft). On the way up there were many plants of *Eucalyptus dives* in bloom. I had always imagined it to be a tall narrow forest tree, but these plants were spreading, with branches almost to the ground. A recent addition to the National Collection of APS member Doug Smith, this species has glaucous young foliage that can be perpetuated by coppicing. Trees will flower at a fairly small size. The shady bank of the road was bedecked with the purple flowers of *Indigofera australis*. Large purple patches, about 10cm high, on the sunny side of the road, turned out to be a *Tetratheca*, possibly *T. ciliata*. On parking the car I was confronted by masses of a purple-red *Tetratheca*, and the white flowered *Leucopogon fletcheri*. Both were about 20cm tall, and growing under eucalypts. Alongside the track were many *Grevillea lanigera*, quite variable in the colour of their flowers, with a dark red the most common. In the more open parts of the woodland a reddish coloured form of *Viola betonicifolia* speckled the ground

The Grass Trigger-Plant is a perennial with numerous, effect, grass-like basal leaves. A stiff and leafless flower stalk upto 90cm long arises from the centre of these leaves; the top third to half of the stalk is covered with numerous pink to magenta flowers with a white centre.



Stylidium graminifolium

In *Stylidium* the two stamens are united into a single flexible strap which carries the anthers at its tips. When the flower first expands, the strap bends backwards and downwards between the two lateral lobes of the corolla. It remains poised in that position until a pair of nectar-secreting glands at the base are touched by the proboscis of a browsing insect. The minute stimulus caused, triggers off an instant response. Pollen is shed from the two terminal anthers onto the visitor. In older flowers the plant fails to react to inquisitive insects. This allows an already-dusted insect to visit such a flower to enjoy the nectar while managing to transfer the pollen to the tip of the stigma.

carpet. *Acacia dealbata* was very different from plants that I had seen in Tasmania. Here mature plants were about 2m high and later I was to discover that all plants around Canberra are similar. Seed from the area should give plants hardy in Britain.. On the mountain's summit patches of bright green *Scleranthus biflorus* covered rocks protruding from the turf. Along with *Scleranthus uniflorus* this *Dianthus* relative, which is alpine in Australia but lowland in New Zealand, is believed to have migrated eastwards before the onset of alpine conditions in the latter country. There conditions were suitable for it to speciate, giving rise to the country's endemic *Scleranthus*. The trigger plant *Stylidium graminifolium* grew nearby. Usually about 30cm high, it has spikes of purple flowers in late spring. In garden cultivation it often dies after flowering, though pot grown plants are long lived . The APS seed is of an alpine form from Victoria's Mnt. Buffalo. *Oreomyrrhis eriopoda* grew nearby. The symmetrical leaf rosettes on young of this genus look nice, but all the species are disappointing in both flower and in seed. Add to that a propensity to attack by carrot root fly, and you have a genus not worth growing. In spite of that it has a quirky following in alpine circles. Those Boeotian enough to want it will find garden grown seed (Tas origin) of *O. argentea* in our seedlist. There was the odd Yam Daisy (*Microseris lanceolata*). In my garden this perennial has about three flushes a year of its yellow dandelion like flowers. They are a good yellow, rather like that of *Grindelia chiloensis*. Returning to the car I noticed many *Derwentia (formerly Parahebe) perfoliata* in the dense understorey, and saw a few *Polyscias sambucifolia*. This shrubby evergreen, which resembles elderberry, would make a good garden plant here. *Lomandra longifolia*, was widespread. I like this lily relative and value the display of creamy white flowers put out by male plants. Because of my absence when it ripened I was unable to collect seed this year, so there is only one packet in our seed bank. However members in the south- east may like to know that County Park Nursery's Tasmanian selection is hardy. Stopping to photograph some resting



Convolvulus erubescens

This 'Blushing Bindweed' can also be found in New Zealand. It is a trailing perennial with rich pink cup or funnel-shaped flowers with green hairy sepals. The leaves are variable from ovate-oblong to palm-like, sometimes lobed, sometimes hairy.

kangaroos in a paddock at the mountain's foot I noticed the yellow flower heads of *Craspedia variabilis* and at ground level many pink flowers could be seen. They were those of *Convolvulus erubescens.* Superficially similar to an introduced weed (our own *C. arvensis*) it is easily separated by the hairy leaves. In places the silvery leaves of a *Leucochrysum* could be seen, while *Brachyscome rigidula* made patches of blue. I was reminded of the saying "Kind spring paints the meadows in many colours."

One afternoon we visited the 8 hectare (20 acre) garden of a woman encountered by chance the previous morning. Superficially a sloping patch of woodland, with a creek, it was actually a very clever example of naturalistic planting to give a minimum maintenance garden. Incidentally in Australia woodland is defined as having a tree canopy cover between 10 and 30%. This garden was near the bottom end of the range. Greater percentages of tree canopy are either open forest (30-70%) or closed forest (>70%). Native shrubs had been planted throughout the area, and both drifts and single plants of native herbs gave a continuum of low colour. Since the owner belongs to WIRES – an organisation that rescues injured wild animals- there was plenty of wildlife. Rescued animals graze the native grasses and make cutting unnecessary. All litter is left to decay naturally. One obvious consequence of this is a possum nest under a fallen tree. The only obviously cultivated area is a small patch near the house, smaller than an English backyard.

The afternoon of my visit to the Australian National Botanic Garden was marred by heavy rain. At the entrance a 2m high *Grevillea iaspicula* was covered with its red and cream flowers. It should be hardy here, but the only time I was able to get cutting material it did not root. The Waratahs *(Telopea spp. & hybrids)* were in full bloom, except that "Wirrimbira White" was past its best. This selection is not a good white, and John Wrigley has described it as "more of a novelty than a thing of great beauty." In many places bushes of the Mint Bush *Prostanthera ovalifolia* created patches of purple. On the rockery there was a specimen of the dwarf conifer *Microstrobos fitzgeraldii.* I did not think to ask how old it is, but although around 15 years old my own is as far across, but only half as high. Several celmisias were evident from their leaves and, much to my surprise, the pleated leaves of *Pleurophyllum hookeri* from Macquerie Island were prominent in a cleft between two rocks at the path edge. This handsome sub-antarctic daisy is also found on the Auckland and Chatham Islands. Four *Eucalyptus caesia,* placed in front of a north facing building for warmth, displayed their large red flowers. From Western Australia, it needs very little space and three, or perhaps four, trees can be fitted into a square meter. It would be ideal for Mediterranean gardens. Canberra is quite chilly in winter, and has about 100 frosty nights a year. If it flowers when young,

this species could be grown in British conservatories, and perhaps in a sunny porch. Just outside the glasshouse was a Scribbly Gum. Five species have this common name. All are attacked by insects that burrow under the bark. Their larvae leave tracks that are exposed when the bark peels off

Grevillea lanigera - woolly grevillea

Linear leaves with rolled under margins are covered with soft hairs. The flowers are red or pink and cream curled tubes, arranged in terminal clusters.

The trip south-west from Canberra, across the high cold plateau of the Monaro, and in the rain shadow of the Australian Alps, was made in fine weather. In places we were intrigued to see large isolated boulders. Sometimes they stuck up like groups of nunataks. Occasionally the bright green young growth on northern hemisphere trees added interest to the landscape. Cooma made a good place to stop for lunch. Now a centre for mountain sports it was formerly the base for the workers on the Snowy Mountains Hydroelectric Scheme. This is perhaps the place to insert the first and only mention of Katoomba in this article. We did not go there. I just thought that it gave a snappier title than Mount Wilson or Mount Tomah (both mentioned later) would have done. Just outside Cooma the small elevation of Mount Stirling had more *Grevillea lanigera*, and some of the 1-2m tall, white flowered *Ozothamnus stirlingii* on its summit. The latter was seen in many places, at both high and low elevations, always in bloom. After Cooma the road climbed, dipped and wound about as we made our way to Thredbo and the comfortable Thredbo Alpine Hotel.

As we booked in it began to rain. Next morning we went up the mountain, part of the main Kosciusko Range, using the Snowgums chairlift (the only one open, and the lowest) in pouring rain. During the journey I reflected on the fact that Australia is the only country in the world where a single genus extends from the coast to the tree line, and where at that limit the evergreen trees have a canopy more suited to shedding rain than snow. *Richea continentis* and *Ozothamnus hookeri* were just a few feet away from the chairlift terminal, even growing underneath the Snow Gums. Along with *R. victoriana* this species is one of only two richeas found outside Tasmania. It was growing in really wet soil about 10m below the snow line, and a few meters above the snowgums. Between the path and the snow there was a dense bank of closed heath, with many legumes. Here I am using heath not to denote a heather moorland, but in the sense of a community of low woody plants. It is called closed when the canopy cover is greater than 70%. Botanists believe that leguminous plants are able to grow in these acid conditions because of a relationship with *Rhizobia* bacteria, which secrete alkali. The occurrence of leguminous plants in the alpine zone is very different from New Zealand, where they are confined to recent lowland soils with a high phosphorus content. There was no point in trying to walk over wet frozen snow to the summit of Mount 'Kos' so we went back down on the chairlift in drenching rain. There seemed little reason to stay in the Alps so we changed our plans and pulled out, in search of better weather.

The rain continued for the next 11 days and nights. Everywhere we went there was rain. Indeed at one time two-thirds of New South Wales was under water. One day we were on the Southern Highlands, south of Sydney, near Robertson. The rain seemed to be very heavy and next morning we discovered that "Robbo" had received 230mm of rain while we were there. Stephen Gibson's seed of *Telopea mongaensis* in our seedlist came from Robertson. Nothing is entirely bad, and the wet weather resulted in us seeing the Fitzroy Falls in full flow. On the road from Nowra to Moss Vale, and at the edge of Morton National Park, they have an excellent visitor centre, which even has its own herbarium. There are many excellent walks in the vicinity.

Near the town of Orange, on the Central Tablelands and west of the Great Divide, the 1395m (4545ft) summit of Mount Canobolas is the highest point between Sydney and the Pacific Ocean. The ascent of its dirt road – in rain and fog- was rather scary in places, and even more so on the way down! A flat picnic area part way up was a sea of pink from the blooms on 20-50cm tall plants of the shrubby *Leionema* (formerly *Phebalium*) *squamulosa*. I felt that it would make a good show on our rock gardens or in general borders, and resolved to try to get seed If it is like *Leionema phylicifolia* the flowering season will be long, yet in spite of that I think it could be a good Show plant. The *Brachyscome ptychocarpa* in the APS seedlist originated from Mnt. Canobolas. Incidentally Orange is named after William of Orange, and the area grows apples, not oranges.



Leionema squamulosa

Woody plant upto 3m high. Creamy yellow flowers with protruding stamens, arranged in terminal clusters of 4-8 flowers.

After Orange we headed south-eastward towards Oberon. Until someone decided that it needed a better name the town was called Bullock Flat. In recent years it has become something of an 'arty' place, and our visit co-incided with the annual Arts and Crafts Festival I was surprized by the extent and quality of the work exhibited. There were over 500 paintings, some of them by well known Sydney artists, and a wide range of ceramic wares, from as far away as Mudgee. Local sempstresses and children contributed too. The visit there turned a ghastly wet afternoon into an enjoyable one. The atrocious weather caused us to cancel a proposed visit to the 900m (3000ft) high cliffs at Kanangra Walls, but a few dry hours enabled us to see the garden of one of the Festival's organizers. I came away with a list of cold tolerant plants to try to obtain for the APS seed list – the average winter minimum in Oberon is +1°C - less than in many parts of Britain.

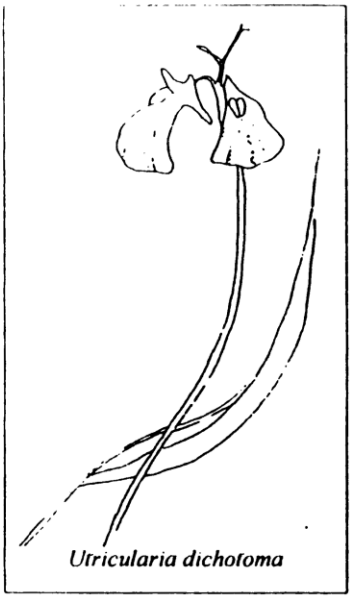
Rain could not dim the yellow flowers of *Isopogon anemonifolius* (Drumsticks). They stood out like beacons as we drove westwards through the sandstone parts of the Blue Mountains. A plant grown from Blue Mountains seed has proved hardy in my garden. Now eight years old and about 50cm high, it has still to produce flowers, but is nonetheless a valuable foliage plant. Its leaves become purplish-red in winter. The meter high shrub *Lambertia formosa* (Mountain Devil) was displaying its orange-red flowers This was not surprizing, because it blooms for most of the year. As we approached Bell, along Darling Causeway, Waratahs *(Telopea speciosissima)* were visible through the rain. Many more were seen in the next few days. Trevena Cross Nursery stocks some named selections of this, the tender NSW Waratah. Plants must have well aerated soil, and the ANBG recommends mounding up, if necessary, to give a drained soil depth of 45cm . Bought plants should be sufficiently large to have a noticeable swelling



Lambertia formosa

Shrubby member of he Proteaceae family found in NSW. Clusters of orange-red flowers are surrounded by reddish bracts.

(lignotuber) at the base of the stem. The tubular flowers of a pretty white *Epacris* lined the sides of The Five Mile (the road from Bells Line of Road to Mount Wilson). There is a dramatic change in vegetation when the road bends round for the climb up to Mount Wilson. Just before we reached this climb up to the 'Mount Wilson Log' (a log by the side of the road, bearing the peak's name) a prominent display of pink flowers turned out to be Matchheads (*Comesperma ericinum*). It is an erect shrub, about 1m high, in the Milkwort family. When not in bloom it merges into the general shrub community. The common name is an apt description of its appearance, for the flower heads resemble a bunch of red match heads. Round the bend the rich volcanic soil resulted in walls of dense vegetation on both sides of the road, with tree ferns *(Cyathea australis)*, bushes of Australian Snow' (*Prostanthera*), *Clematis*, and mossy banks. Manna Gums *(Eucalyptus viminalis)* topped them all. This part of the road is frequented by Lyre Birds, which are often seen, and at night heard too.

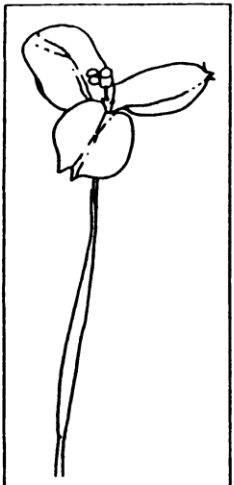


Utricularia dichotoma

Amazingly during our penultimate day the rain stopped for a while and I was able to make a brief excursion along the Mount Wilson Fire Trail. One of the nice things about the bush is its quietness. Often it is totally silent. On this occasion the only disturbance was the occasional crack of a Whipbird. The uphill side of the trail verge behaved like a linear swamp and flashes of yellow apparently floating in the air indicated the presence of a *Xyris*. I am not sufficiently knowledgeable to be able to say whether they were *X. pustulata* (more likely) or *X. opercula*. Most members of this family of tufted rush-like plants are found in tropical and sub-tropical regions of America, Africa, Asia and Australia. They are related to *Commelina*. In one place red leaves drew my attention to the Sundew, *Drosera spatulata*, growing on a wet rock, and in bud. The little blue 'purses' of *Utricularia dichotoma* were everywhere. This carnivorous genus has bladders at ground level, borne on modified stems. The bladders are at negative pressure, so that when triggered they can open quickly, and the rush of water carries in the insect that triggered their opening. Unlike some others, this species grows not in water, but in wet soil. Higher up the bank there was the odd Rice Flower, *Pimelia linifolia ssp. linifolia*, with its white drumstick heads of flower. Only about 10cm high, it is much showier than the *P. filiformis* beloved by alpine gardeners. A small purple Boronia was plentiful. In one spot I was surprised to see a young *Dracophyllum secundum*. This Blue Mountains endemic is usually found growing out of the faces of wet cliffs in the dark canyons. In habit and flower it resembles a small *Richea scoparia*. In places the small greeny-yellow bells of Dumplings (*Billardiera scandens)* were easily noticeable. Usually the plant trails along the ground, and only rarely does it climb. Paul Allanson has found that the form he sells is winter hardy in the Isle of Man.

In my friend's Mount Wilson garden the ungrowable *Lycopodium deuterodensum* made a dense patch. It looks like a miniature pine forest. *Lomatia silaifolia* abounded under eucalyptus trees in the uncleared part of his garden. This particular group does not flower very often, possibly because the eucalyptus now cast too much shade. We tried digging up some of the small plants. Each had a large lignotuber and at least one thick root. It made me wonder whether they were not seedlings, but rhizomatous offsets from a few parent plants. Known locally as Christmas Bush, because of its use in making wreaths, it is one of several plants with this common name. Others include

Ceratopetalum gummiferum and *Prostanthera lasianthos*. When the APS visited Wakehurst Place it was told that the specimen labelled *L. silaifolia* had been found to be L *tinctoria*. This does raise doubts about the validity of plants sold in Britain as *L. silaifolia*. After about 5 years the cones of many *Banksia* species are attacked by fungi and any fruits inside them are destroyed. This was the case with some cones that I collected from the uphill (and unburnt) side of the fire trail.



Patersonia glabrata
Silky Purple-Flag
Flower stem is silky-hairy and upto 30cm long. Leaves are woolly at the base, 30cm long and 4-5mm wide.

On Mount Tomah I was interested to see a grove of *Echium pininiana* raised from my seed growing on one partly cleared slope of another friend's garden. *Meconopsis x sheldonii* obviously found the local conditions to its liking. Large clumps of hole-free hostas made an attractive sight. Being carnivorous the indigenous snails keep introduced ones in check. If snail baits are used the balance changes, and hostas are attacked. The Andean *Polylepis australis*, about 2m tall displayed very attractive peeling bark. It had been raised from seed sent by me six years ago. Because their seeds can carry the disease Fireblight imported *Rosaceae* are banned in Australia, but fortunately my friend works for the quarantine service, and was able to grow the plant in isolation for three years before transferring it to his garden. His block was the source of the *Calostemma purpureum, Eustrephus latifolius* (Wombat Berry) and *Gymnostachys anceps* (Settler's Flax) offered in the APS seedlist. They were harvested during ground clearance. Commenting that this year there were no Plume Bushes (*Calomeria)* to be seen on Mount Tomah I was told that they come up in profusion after a bush fire. *Xanthorrhoea* is another genus that blooms after a bush fire. In this case because flowering has been initiated by exposure to ethylene. Clumps of their grassy leaves were plentiful in the heath areas. However there were no flower spikes. The Blue Mountains species do not have a trunk, any caudex is subterranean. The same is true for the hardy *X. resinifera* formerly available from the APS seedlist. It came from Newnes Plateau, west of the Blue Mountains. The Gardens of Stone National Park lies in the same general area, between Newnes and the Wollemi National Park. Although we drove past it, the bad weather stopped us visiting. I was told that a third colony of the Wollemi Pine has been discovered there. It will be interesting to find out whether its genetic make-up is different from that of the two existing colonies.

The last day dawned sunny and bright, so before leaving the car in Lithgow, and catching the train to Sydney, we stopped off en route to look at some of the heath plants. Among the first to be seen along the roadside were the bright blue flowers of the Native Iris *Patersonia sericea*, almost at ground level. Preferring damp sandy soils, it is common in the moister parts of the heathland. There were two different leptospermums, one of them with quite large, pure white flowers. The large white heads of Flannel Flower *(Actinotus helianthi)* were mixed in where Drumsticks *(Isopogon)* was present. In fairly shady parts the blue of *Lobelia dentata* was prominent. About 20cm tall, it has heads of about 8 flowers. One solitary blue flower enabled me to spot the small bulbous *Sowerbaea juncea*. It has clumps of soft hollow rush like leaves that give rise to the common name of Rush Lily. The other specimens there were 'over', but had not yet ripened seed. Inhabiting wet or permanently waterlogged sites, it is another small "lily"- in the same 'order' as *Arthropodium*, the *Anthericaceae*. Identification of the many shrubby plants in the heath is just too

difficult a task for an ignorant visitor, especially one without a hand lens, but I'm fairly confident that one small shrub with pearly white flowers was the semi-parasitic *Choretum candollei*. About 50cm tall, with apparently leafless branches and tiny flowers scattered singly along the branchlets this species is common on dry sandy heath.

Australia is still a reasonably priced country for the tourist The Blue Mountains are particularly good There is much to see, in a compact area. There are heath, swamp, forest and canyon plants. The RBG Sydney has its cool climate annexe there, and the 1000 acre Mount Annan annexe is only one and a half hours drive away. Known in England for his RHS book on wisteria, Peter Valder is actually a retired Australian botanist. The gardens of his former family home on Mount Wilson are open to the public. Apart from wisterias they have over 600 rhododendrons of Peter Valder's raising, many of them scented. The Blue Mountains have plenty of good quality accommodation in quiet locations away from the towns. They are best visited in spring and autumn. If anyone wants to visit the area and has difficulty finding out about it I'd be pleased to help them. The alpine regions are at their best in January and the first half of February.



Actinotus helianthi

Annual woolly plant commonly called the flannel flower. Flowerheads are white/grey-green, also hairy, comprising a globular cluster of many tiny florets surrounded by 10-18 white, petal-like bracts, covered in soft hair.

THE AUSSIE-INFO-PACK

New Millennial Edition

This has now been updated, re-edited and enlarged. It contains directories of nurseries, seed suppliers, cultivars, books threatened spp, websites etc, plus a wealth of botanical and ecological facts and info on the main genera, with maps and line drawings, and a short section for visitors.

Full contents supplied on application.

It comprises over 130 sheets of A4, presented bound in a plastic folder. Price including P&P is £5 This may seem a lot, but P&P alone will cost £1.25 and there is no profit to the Society.

I should mention that the office which produces this for us at a rock-bottom price will close later this year, so future editions are likely to be much more expensive.

CORREAS - FROM CALIFORNIA?!

By Tim Longville

Correas may not yet have caught on in British gardens - as Einion Hughes pointed out with a mixture of sorrow and astonishment in the last issue of *Pentachondra* - but they've certainly caught on in California. Clearly these are distinctly clever plants: climatic cross-dressers, no less, equally at home basking in Californian heat or slacker-slouching in quite damp and shaded positions in the comparatively cool UK...

And of course, Californian go-getters being Californian go-getters, no sooner do they spot a group of exotics which adapt well to their conditions, than faster than you can say Zowie or Dweezil they've started breeding their own cultivars. And, in my limited experience (number of cultivars=1; should I put in for a National Collection of Californian hybrids...?) – which, even so, is probably greater than that of anyone else in the UK (probably the only time when and the only subject on which I shall be able to say that, so I was determined to get it in) -, the results are remarkably attractive.

The one I'm growing, which is in full flower as I write in November and is clearly going to go on being in full flower for many months, bears the proudly Californian name of 'Dawn Over Santa Cruz'. It, like most other Californian cultivars, is a product of the discerning eye and educated hands of Ray Collett, recently retired as the Curator of the University of California's Santa Cruz Arboretum, an arboretum which he founded and developed over more than a quarter of a century.

If 'Dawn over Santa Cruz' is anything like a representative example of 'A Collett Californian Correa,' my advice would be: Grab as many of them as you can, as soon as you can, once they become available within the U.K. (None of them is 'in commerce' over here at the moment).

Why? Because certainly 'DOSC,' at least, is exceptionally attractive under just about every possible heading: growth habit, foliage, flower colour, flower shape, flower texture, or sheer floriferousness.

The growth habit is sturdily upright but densely branched. End-result: a dapper, compact, well-clothed little shrub. I say 'little' because that's what my plant is at the moment (no more than 30cm tall). In California it apparently makes a bush up to 1.2m high and wide. From its speed and style of growth so far, I'd guess that in the U.K. this is going to make quite a small shrub, naturally neater in shape than, say, *C. x* 'Harrisii' and less adolescently leggy than 'Marian's Marvel'.

The leaves, meanwhile, are small, ovoid, pale-ish but unshiny, with a slightly puckered or pimpled surface. (I want a dress material comparison but don't know enough about dress materials to find the *materiel juste*! 'Seersucker' isn't quite right but suggests *some*thing of the effect.) As a bonus, the leaves are profusely borne, so that the plant doesn't have the slightly 'naked' look of some correas.

The closest correa to it in flower colour (and in general attractiveness) is my previous favourite, 'Marian's Marvel'. 'Dawn over Santa Cruz' has similar bi-coloured flowers but in this case the red is a soft pinkish red (not a a genuine and quite deep red), while the yellowy green tips to the petals are much more a soft yellow (and much less a slightly muddied green).

In shape, its flowers are shorter and 'fatter' than those of 'Marian's Marvel' but are saved from dumpiness and promoted to a cuddly elegance by their much more widely flared mouths. (The garden the last refuge of sexism?!)

In texture, they are much thicker than those of any other correa I know, producing something of the 'orange peel' effect of, say, the flowers of *Clematis* 'Bill Mackenzie'.

And as for floriferousness... My 30cm-high plant already has several dozen flowers either in bud or fully out. I have to keep on returning to it to check, the quantity is so unbelievable. I suppose I should disbud it of at least some of this improbable burden but I just can't bring myself to. This is an 'If you've got it, flaunt it' sort of plant and it seems daft to force discretion and good taste on its natural extravagance.

The one disadvantage of the combination of profuse leafing and profuse flowering is that it's almost impossible to get a really good close-up photograph of a single flower: another flower or a pushy leaf always intrudes into the shot.

As for hardiness: ah, there may be the rub. At least, that's what I thought in the beginning. After all, resistance to cold and damp is not, I said to myself, likely to be high on anyone's list of priorities in California. However, thanks to a Californian friend who asked questions on my behalf – and thanks to Ray Collett's own generous and anything but commercial openness with information ('He's shy and retiring, not to say more than a touch eccentric,' said my friend fondly, 'but he's also terribly nice and wise') -, I now know the species which went into making 'Dawn over Santa Cruz': and they're much tougher than I'd suspected-cum-feared.

The male parent was a hybrid known as 'Ivory Bells,' which Ray says was the creation of Victor Reiter of San Francisco, arrived at by crossing what were then the only plants available in California of *C. alba* and *C. backhouseana*. The female parent, meanwhile, was *C. reflexa* 'Yanakie,' 'which,' Ray added, 'is the name we use for a very nice plant that came from Yanakie Tip, which is perhaps 2km north of the boundary of Wilson's Promontory National Park, Victoria.' ('Tip' used in the English sense of rubbish dump.) His note containing this information finished with the sly dig, 'We don't know about authority and just slap on cultivar

names the way it pleases us.' The accompanying grin was almost visible even at however-many-thousands of miles. I had the distinct feeling the prissily pedantic Limey was having his leg ever so gently pulled...

My feeling is that that combination might well have produced a plant able to cope with at least West Coast conditions in the U.K. Opinions, anyone? At least, next season I shall attempt to root cuttings. (My plant arrived as an unrooted cutting so rooting is at least possible. That is, it's not one of those correas, such as *C. baeuerlennii,* which defeats anyone without sophisticated equipment or serious skills, i.e., me.) If I succeed, the original plant will go in the ground and no doubt I'll be reporting later on its progress or lack of it.

There are already several others of these Collett hybrids available in California, at least among the considerable network of correa enthusiasts there. 'Sister Dawn' is apparently a miniature version of 'Dawn over Santa Cruz,' produced from the same two parents, and 'Ray's Tomato' tells its own story (but doesn't 'speak its own weight' so I don't know how sizeable a tomato it gets to be!). And my friendly Californian mole says that the retiring (in every possible way) Mr C. has several others up his sleeve, in his garden, and on his propagating bench.

So my suggestion is: get a head start, and begin buffing up your list of Californian gardening pen-pals - right away...

Growing Australasian Plants in Hampshire - we can you know

By Doug Smith

Having agreed to host this year's AGM, Jeff has asked me if I would put pen to paper to give members who will be visiting us a foretaste of what they may expect to see and, for those in the frozen north who would find the journey excessive, an insight into what we try to grow. It appears, from the newsletter, that no one south of the M25 grows Australasian plants.

So, greetings from the balmy south - barmy seems a better description of the last 6 months weather. A pathetic summer and near continuous rain from October until - well actually it's still raining as I write this. There was a break at the end of December - a few days of snow followed by clear skies with night temperatures plummeting to between -5 and -7 8°C. I can't think of worse conditions for Australasian plants - poor summer ripening, continued soft autumnal growth with ice freezing in growing points.

As readers are probably aware, we are home to the National Collection of *Eucalyptus*, the majority of these (42 species at the last count) were planted between 1990 and 1994. A number have suffered from freeze-dried leaves, generally on the lower shoots - a perfect example of damage in a frost pocket. However, the story with 8 "new" three-year-old species is less promising, with not a green leaf in sight.

We occupy a 1½ acre plot in the Meon Valley in Hampshire, one field from the river and about ½ mile upstream from a railway embankment - now disused - which crosses the river and causes even worse backing up and flooding of the valley with cold air. Ten miles south as the crow flies, they experienced only two air frosts, with a minimum of -2.5°C.

The situation with the wattles is similar to the young gums. *A. dealbata* (regular South of France seed from the Var), plus high altitude provenance seed from both NSW and Tasmania plus *melanoxylon* and *riceana* are all defoliated. More upsetting is the state of a 15ft *Melaleuca pustulata* which has never suffered before, flowered every year for the last four years, but now looks terminal. However, a newly planted *A. pateczekii* looks good. We did have an excellent specimen of *A. rubida* (from Celyn Vale) which flowered prolifically for several years before succumbing to honey fungus

The Cordylines are a mixed bag, *indivisa*, "Kaspar" and *banksii*, plus all the variegated versions of *australis* are happy in the greenhouse; a number of the basic *australis*, in the open ground - where accumulated snow re-froze in the crowns, look likely to collapse; those where the ice was shaken out look OK.

The story with Leptospermums is mixed, some looking fine, others poor (I gave up on *scoparium* some years ago). Similarly the Phormiums - here I think provenance is as important as species. Plants of *cookianum* from seed I collected in Auckland, grown under winter cover for several years and now out in the garden, seem to get smaller every year, whilst those bought in the UK appear stronger. Straight *tenax* and its variations survive well as do a number of the red leaved varieties of both species and their crosses (other than "Jester" which only hangs on - which is a shame). A number of the yellow variegated types seem to have been hit hard - a likely function of wet cold. The Hoherias and a range of young *Sophora* are leafless but hopefully will recover.

Surprisingly, in the open ground, shrubby Coprosmas such as *cunninghammi, lucida* and "Lemon Drops" have been knocked back for the first time, as have *Corokia* x *virgata* - but all were probably due for a prune anyway. The prostrate *Coprosma* species such as *brunnea* and *propinqua* "Violet Drops" continue to spread. It is surprising that these are not grown more widely, they must be the perfect ground cover shrubs (visit Graham Hutchins for a selection). Surprisingly "Beatson's Gold", now at around 1m x 1m seems very cold resistant, albeit growing close to a south facing wall; *rugosa*, another good divaricating, suckering species seems rock hardy (bought as a male pollinator - but I think the flowering is out of synch).

We grow a range of *Podocarpus nivalis*, including "Spring Sunshine" "Little Lady", "Park Cover", "Green Queen" and "Havering" (all from County Park) and consider them good value in winter. I know "County Park Fire" has had a lot of media hype, but I think "Young Rusty" is a hard one to beat. Like an idiot, all the plants I have bought have been female so I am lacking berries! I must buy a pollinator. *Podocarpus totara* and *totara aurea* are slowly developing into small trees.

Of the Proteaceae, *Grevillea* "Canberra Gem" and *juniperina f. sulphurea* both appear fine down to at least -8°C. Similarly *Lomatia myricoides* and *silaifolia* do well here, although the latter is suffering from doses of lime from an adjacent, disintegrating, flint wall. A number of others of the family are kept frost free and planted out in summer, both S. African Proteas and Australasian *Hakea teritifolia, Banksia baxteri* and *Grevillea crythmifolia* (which seems to respond to a regular water supply).

Another rock hardy with a long flowering season is *Prostanthera cuneata*. *P. lasianthos* was killed outright within a few months of planting in the open ground, whilst *melissifolia* did well on a west facing wall for a couple of years before succumbing to stem splitting - whilst trying to flower - lag the main stem perhaps?

As for "hardy" herbaceous plants, *Astelia nervosa* is easy (we must hunt around for some of the good leaf colour forms - are these available in UK?) and *A. chathamica*, although damaged, has always come through. *Libertia grandiflora* and *ixioides* spread and seed themselves prolifically and *peregrinans* continues its steady peregrination. Aciphylla leaves are certainly good protection against grazing by Moas but less effective against carrot fly! (One down and two to go).

Entelea arborescens - in the NZ Exhibition of 1865, it was reported that the native cork wood, would make 'admirable fenders, linings for life-boats, and filling for life-belts' due to the timber being possibly the lightest in the world. This NZ evergreen tree makes a good conservatory specimen preferring a sunny situation sheltered from cold winds.

As far as grasses are concerned, I think my 2 specimens of *Cortaderia richardii* (Toetoe) - the only "Pampas" we have - probably suffered from inadequate summer moisture (difficult to believe) and will need a tidy up (sturdy gloves or shredded hands seems to be the choice with this plant). We grow the usual range of *Carex comans*, "Frosted Curls", "Bronze" and other forms and species such as *Uncinia rubra*. *Carex dallii* (ex APS seed) - the things with the long hair - will be tried out in very tall pots this year to show them off. We grow (or rather it grows itself all over the place) is a grass I obtained as *Oryzopsis lessoniana* (ex Ventnor), listed in Cave and Paddison as *Anamathele lessoniana* (gossamer grass) but, I believe, considered by Kew as *Stipa arundinacea* (pheasant grass). Whatever the correct nomenclature, we find the long flowing tresses extremely useful for covering up large unsightly black plastic containers of tender exotics moved outside for the summer. A new grass to us is *Carex berggrenni* (from last year's APS seed list). As well as being fully hardy - left out in pots all winter- it is very well coloured and should look good once well established.

That logically brings us to what is kept frost-free in our two greenhouses. Each is heated with 3Kw electric fan heaters set to maintain a minimum of 5°C. Everything comes out for the summer.

We try to reserve space in the smaller of the two for propagation, but the larger (28 x 14ft) is packed with a range of tender plants, many of them from Australia and New Zealand. A 3.6m (12ft) Entelea (Whau) will have to be written off in the ground this year, but new plants are growing on, both from cuttings and seed (both easy). Whilst the flowers are insignificant compared to its nearest relation - *Sparmannia*, the latter is difficult to control and to flower, as one objective defeats the other, and anyway Entelia has greater architectural (Whau) value. Standby Japanese bananas (the biggest clumps are planted in the garden protected by straw bales), *Ensete ventricosa* and *Alocasia macrorrhiza* take up a great chunk of space, but one side of the greenhouse is reserved for a collection of tree ferns. These include *Cyathea australis, dealbata* (Ponga) and *smithii, Dicksonia antarctica* and *Asplenium bulbiferum* (hen and chicken fern). These continue to grow throughout the winter and early spring, giving an instant and impressive display of their 1.2-1.8m (4-6ft) fronds when moved outside in May. Care is needed to avoid sunburn and it is worth marking the pots to ensure plants continue to face the same direction and don't twist their fronds backwards to face the sun.

Two other genera, which we are keen on, are classic examples of good New Zealand shrubs, namely Pseudopanax (the Lancewoods or Horoeka) and Metrosideros (Pohutaukawa and Rata). We now have good-sized specimens, which we stand out by the Koi pool for the summer. Of the former we have *laetus* (seems rather susceptible to root rot), *linearis, discolor, lessonii* "Gold Splash", "Cyril Watson", "Trident", *crassifolius* and *ferox*. The last two will be planted out later this year. As for the latter genus, the naming is tricky - a cross between Duncan and Davies and Burncoose and Southdown. I think we have *excelsus, excelsus* "Spring Fire", *kermadecensis* "variegatus", *robustus, umbellatus*, "Parnell" and *villosus* "Tahiti". The "Spring Fire" some 2m high,

flowered prolifically last summer. Let's hope it does the same this year.

On finishing off this article, and a quick walk around, I realise how many plants I have missed - quite a list Hardy *Olearia, Brachyglottis, Cassinia, Aristotelia, Pittosporum, Hebe, Ozothamnus* (probably not any more), all the new Zealand brooms, now comfortingly grouped under *Carmichaelia - curta, flagelliformis, robusta, stevensonii* and *muritae, Billardiera longifolia* (we find this hardy) as, once established, is *Dunalia australis* (was *Acnistus* now I understand is *lochroma*). On the intermediate to tender list: a range of *Callistemon, Pseudowintera colorata, Westringia, Corynocarpus laevigatus* "Picturatus" (Karaka), *Meryta sinclairii* (Puka), *Tristania, Dodonea viscosa* "purpurea" (akeake), *Brachychiton acerifolium* and *populneus* and *Arthropodium cirratum* (Rengarenga lily) - if we can beat the slugs and caterpillars off quickly enough.

And if you just want to grow annuals why not *Hibiscus trionum*. We do every year, from our own collected seed, and only recently discovered it was a New Zealand native.

Who says you need to live down under (or north of Watford) to grow Australasian plants!

Meryta sinclairii - also known as the NZ Puka. This evergreen shrub with leathery leaves upto 50cm long makes a good conservatory plant. Clusters of grape-like fruits follow long flower panicles in the summer.

We will be very happy to host members and their friends for a garden visit (to accompany the AGM) on 16th June (see details elsewhere in this issue).

Meon Orchard is situated off the A32 1 ½ miles north of Wickham. Turn left into Kingsmead at the Roebuck public house. The house and garden are ½ mile on the left. Parking outside in the lane. See "Yellow book" for other opening times.

SNIPPETS OF NEWS

By Greg Plenty, West Yorkshire

HAPPY HAKEAS

Despite the long wet cold winter, my hakeas continue to do well. In the open garden with no shelter, *H. microcarpa, H. lissosperma* and *H. sericea* are just coming into growth again at the beginning of April, with no sign of winter damage. This in contrast to some well-known grey leaved Mediterranean shrubs which have suffered and sometimes died this time. Against the front, south-facing, wall of the house, *H. salicifolia* continues to grow in an alarmingly fast fashion. A few outer leaves have been nipped by frost but nothing more. It will still need pruning back hard again soon to keep it within bounds. It flowered well and set seed last summer. There should be some available in the seed list if I can work out how to get them from their pods. Jeff Irons to the rescue!

OLEARIAS THIS WINTER

Olearias have survived the winter well except 'Comber's pink' Are the coloured forms generally worth growing outside in the long run? 'Master Michael' (blue) survived ten years against a south wall near here for me (Leeds).

TRENDY TREE FERNS

Tree ferns are trendy. Are any other members growing them? Dicksonia antarctica grows steadily for me (2.5cm a year). This winter, fronds have been damaged by -10 degrees C but I expect it to sprout new fronds by the end of April.

The Stirling Mr Stirling

By Tim Longville

I don't see why Jeff should have *all* the fun of writing mini-biographies of those too-often-forgotten worthies commemorated in plant names.

What, for instance, about James Stirling, for whom the well-known whipcord hebe, *H. ochracea* 'James Stirling,' was named? Who was he?

It appears that he was in effect New Zealand's answer to Percy Thrower, since he presented the first-ever TV gardening programmes over there – programmes which were described as 'remarkably effective,' 'even though hampered by the fact that the transmissions of the time were still in black and white' - and, again like Percy T., he had risen to the top as 'a Parks man' long before he became a TV personality.

In Mr Stirling's case, his 'long-stay parking' was as Superintendent of Parks in Wellington, 'for many years.' As such, he was responsible for the planting alongside the area's first motorways, his treatment of which is described as having been 'both innovative and effective.' (Sorry, I don't have any more details - though they'd be interesting to have – either about the plants he used or about how he used them.)

In character he is described by someone who knew him well as having been 'a delightful and knowledgeable man, with a passion for gardening and a broad Scots accent.' (Where would supposedly English gardening have been – both at home and abroad –, without the contribution made to it by generation after generation of Scots?)

Mr Stirling sounds like a man altogether worthy of having a plant named in his honour though perhaps that rather gnarled little bronze-green hebe was a less than kind or appropriate choice of plant...

Note

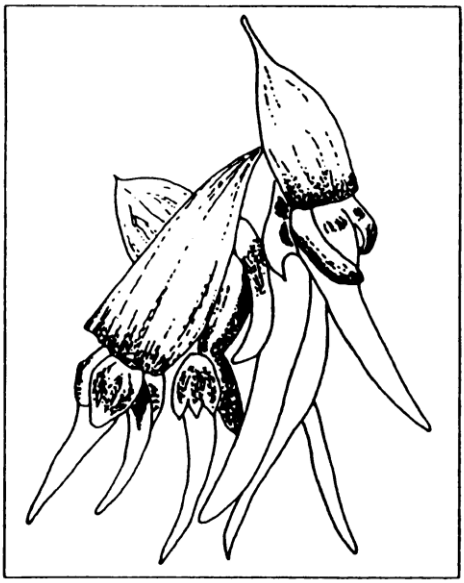
Thanks to Moira Ryan of Lower Hutt for her memories of Mr Stirling.

2001 COUNTY WICKLOW GARDENS FESTIVAL, IRELAND

This festival takes place between May 18th and June 21st and its an opportunity to visit many private gardens not normally accessible to the public, as well as a number of famous heritage properties. A brochure listing the gardens and other events can be obtained from Wicklow County Tourism, St Manntan's House, Kilmantin Hill, Wicklow, Ireland.
Tel: 0404 66058. E-mail: wctr@iol.ie. Wicklow website: www.wicklow.ie

KAKA BEAK

Dr John Clemens has been awarded a Peter Skellerup Plant Conservation Scholarship to study kaka beak. The extract, from the Newsletter of the Royal New Zealand Horticultural Society, describes the Award.



Kaka Beak *(Clianthus puniceus)* is one of New Zealand's endangered species, with a diminishing occurrence in the wild It is now believed to occur only between East Cape and in national park land close to Lake Waikaremoana, and in Northland. Several of these sites bear only one plant. At the same time kaka beak is a familiar garden favourite, with a few named cultivars available as seedling plants. However we do not know how well plants in cultivation are representative of wild kaka beak populations, and more crucially, we have no measure of the genetic diversity of this endangered species in the wild. Therefore the aim of the project is to provide this information so that it will be possible to conserve kaka beak more effectively in the wild and in cultivation.

GULF STREAM GARDENING

BY LEE MULLEN

My introduction to Australian plants started when I was working as a trainee gardener in Manchester in the late eighties Amongst propagating and growing various glasshouse plants, I was partly responsible for growing on a batch of large seedlings of Eucalyptus "Unwins mixed" in a cold house, which contained both hardy and tender species Different shapes, colours, aromas and sizes of the leaves and the beautiful uniqueness gave me a love for them, which has never ceased

I was absolutely excited with these unusual plants which I had never really seen before apart from in the background of some Australian TV programme and I already had a fascination for anything "Aussie" incuding the formidable Kangaroos Rugby League team! From this I started to notice more mature eucalypts planted in suburban gardens and this led me to grow them in my mother's

garden which I was looking after in my late teens.

One day I saw some huge 3m *Eucalyptus globulus* growing in a nearby garden, and being bold I knocked on the door of the house and got chatting to the owner, who told me that this species wasn't fully hardy in the area and he grew it as a dynamic large, silver-leafed bedding plant!

I managed to scrounge a young plant out of him and planted it in the garden at home. It grew like mad during the summer, from 45cm to 2.5m. Being the experimental person I am, I tried to overwinter it in situ, but one morning in November 1989 stood a 2.5m brown crispy gum tree looking very sad! However one of the plants from the "Unwins mixed" seeds planted nearby was hardier and this established my confidence in exotic plants.

It wasn't until 6 years later that this new interest continued. When my wife and myself bought our first house in Radcliffe, Lancashire, the bare garden attached was full of typical heavy clay and builders' rubble.

I wanted to slowly create a Mediterranean type garden around the abundance of lawn present. I also wanted plants that would grow fast to give a mature effect in a short time, so I made an order for various gums from Celyn Vale Nursery in North Wales. I received *Eucalyptus glaucescens, viminalis, nitens, rubida, gunnii* and *unigera* as small 45cm plants complete with their typical black polythene rootbags.

I also grew many others at work such as *E. stricklandii*, and *regnans* from seed. The latter never really thrived and always got cut back by the annual frosts of -7°C. To compliment and continue the Aussie-Med garden theme I planted a large *Callistemon citrinus, Acacia dealbata, Acacia pravissima* and many *Cordyline australis* I was given. The NZ Cabbage Trees grew fast too and all these combinations of plants certainly did give a mature feel after a year! The *Eucalyptus viminalis* grew at an astonishing rate of 3m a year! Having my own small greenhouse gave me the ability to try other antipodean plants from seed. So various orders were sent to Chiltern Seeds. I did successfully grow other exotics like *Euphorbia mellifera*, and Melaleucas from seeds!

Cutting the story short, we decided that we wanted to move, lock, stock and barrel load of plants down to Cornwall! But not just anywhere in Cornwall, it had to be in a very mild area near to Penzance! After spending a miserable year in Chester (job), we acquired a house with a small 4 square metre (approx 44 square foot) garden, 55m (180 feet) up in Helston. Again a new house with heavy soil that bakes dry in summer. It is in a very windy spot (where in Cornwall is it not windy?), but the advantage of wind keeps out the frost! Being a neighbour (3 miles away) to fellow APS member Graham Jeffery and his great nursery which specialises in "our" plants, Trevena Cross, this is certainly an advantage to buy the lesser known and increasingly exotic plants like *Brachyglottis repanda*.

Being a lover of a wide range of hardy and semi-tender tropicals from Agaves, Aeoniums and cacti, to bananas, aroids and Hedychiums, I have decided that I would like to create a truly exotic small

garden featuring as many plants as possible from every continent. I do however have to work around my local climate and environment to offer the best possible conditions to grow these plants well. I have discovered that the local climate consists of high yearly rainfall, strong salty winds in winter, and little frost, although every five-ten years can result in a hard winter!

The average lowest minimum night temperature is approx -2/3°C on a couple of nights per year, whilst it rarely drops below 8°C in the day due to the influence of the Atlantic Ocean. My soil as mentioned is a slightly heavy (very heavy during all the winter rain) silty loam on the neutral side. It is ideal for damp loving plants like bananas and *Hydrangea aspera macrophylla*.

The Pseudopanax genus are present in Tasmania, New Zealand and Chile. These evergreen members of the Araliaceae family exhibit different juvenile foliage and habit from their adult forms. This difference is so marked that early botanists gave these two forms different names thinking they were in separate genera. Young lancewoods can have single straight stems and narrow, downward-pointing, tough, stalkless, leaves which vary greatly from simple to palmate, usually toothed. When plants reach three to six metres they branch to form a crown of shorter, softer, stalked leaves. Male and female flowers usually grow on separate plants. They need a warm sheltered spot in the garden or, better still, a cool greenhouse or conservatory.

My collection of Australian and New Zealand plants is slowly picking up again after having to offload a number to fit into the seven and a half ton truck that brought my plants down here! The lucky recipient was another fellow APS member and friend Phil Durrant of Chester.

I am currently growing as I write this in November 2000 (I'm sure it will have changed by the time this article is published):
Acacia melanoxylon, baileyana purpurea, pravissima, cultriformis and *dealbata subalpina*
Eucalyptus 'Baby Blue'
Cordyline indivisa, australis, banksii, 'Red Fountain', *stricta*, 'Red Star', and *kaspar*
Pseudopanax 'Sabre', 'Trident', *crassifolius, lessonii* 'Gold Splash'
Corokia x *virgata*
Dicksonia antarctica
Astelia chatamica 'Silver Spear'
Hibbertia aspera
Phormium 'Apricot Queen', 'Sundowner', 'Yellow Wave', 'Cream Delight', 'Pink Stripe' and *tenax*
Pimelea ferruginea
Entelea arborescens
Banksia robur (having become deciduous because of wind damage)
Xanthorrhea australis
Metrosideros excelsa

Corokia x virgata - a New Zealand shrub with spoon-shaped leaves, green above and white beneath, often taking on a bronze appearance in the colder months. In late spring, 5-petalled small star-shaped fragrant yellow flowers are produced in clusters of 3 from the leaf axils. These are followed by yellow/orange fruit.

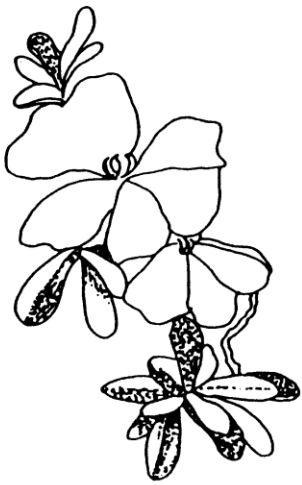
Aciphylla aurea
Dianella tasmanica 'Variegata'
Leucophyta brownii

I do hope to buy the following in spring (if I have room alongside my non-Australasian plants):
Anigozanthos flavidus
Pandorea jasminoides
Eucalyptus globulus, eximia nana, nitens
Acacias
Myosotidium hortense
Banksia serrata
Kunzea baxteri
Melaleuca squarrosa
Leptospermum 'Silver Sheen'
Callistemons
Cordyline petiolaris 'Torbay Dazzler'
Telopea speciosissima
Correas

So to sum up my interest in Australasian plants, like many of you, I too am still learning and this makes my job as a gardener interesting too because I usually add an exotic influence to the places I work.

If you have access to the Internet, there are possibly hundreds of worthwhile sites to visit... There are a number of US based websites like:

Hardy Eucalyptus Page -
http://www.angelfire.com/wa/margate/ (US)



Hibbertia aspera

This is a prostrate or climbing shrub with hairy branches. Leaves are spathulate to obovate, also hairy with curved back margins. The flowers are open and yellow, upto 25mm across with 5 overlapping rounded and notched petals, and 4-16 stamens grouped at one side of the hairy ovary.

Kernxotica (my own website) - http://members.tripod.co.uk/kernxotica/index.html (UK)

Eucalyptus Message Board -
http://www.insidetheweb.com/usr/local/itw/docs/messageboard/mbs.cgi/mb149950

UK Exotics Discussion Board - http://members3.boardhost.com/Kernxotica/ (UK)

Eucalyptus Nurseries (Celyn Vale) - http://www.eucalyptus.co.uk/index.htm (UK)

Hardy Tree Ferns - http://angelfire.com/wa/margate/treefernspage.html (US)

Trevena Cross Nursery -
http://www.trevenacrossnurseries.co.uk/ (UK)

NZ Tree Seeds -
http://www.voyager.co.nz/~nzseeds/intro.html (NZ)

NZ Gardens Online - http://www.gardens.co.nz/ (NZ)

Society for Growing Australian Plants -
http://www.ozemail.com.au/~sgap/ (AUS)

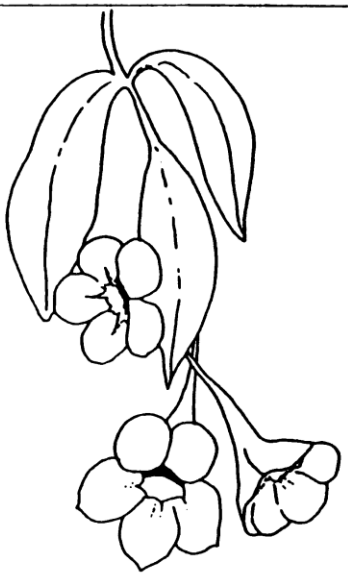
Milligan's Seeds (NZ) -
http://mysite.xtra.co.nz/~Milligans/ (NZ)

.....and of course this Society's very own site -
http://www.anzplantsoc.org.uk/

APS WEBSITE

I know that some members have previously experienced difficulty finding the website but they should have no trouble now. If I can find it, anyone can! Many thanks to Jeff Layman and David Gallacher for designing it. If anyone has suggestions or comments to make, please drop me a line or email me.

Sue Email sue.hyams@ic24.net



Pandorea jasmonoides

Vigorous twining, climbing plant with terminal clusters of white to pink tubular flowers, with maroon throats, each upto 3cm long and 5cm across, with four stamens.

CYCADS

Because their seeds have to be sown when fresh, and do not keep, cycads are not in our seedlist. Members wanting to grow them may find the information below useful. Macrozamia might survive outdoors in very warm places, but is really best considered as an indoor plant. In the wild it grows in moist forests, and can reach a height of 2m.

SPECIES	CLIMATE
Bowenia serrulata	temperate/warm temperate/sub-tropical
Bowenia spectabilis	temperate/warm temperate/sub-tropical
Cycas media	tropical/sub-tropical
Lepidozamia hopei	tropical to temperate
Lepidozamia peroffskyana	sub-tropical to temperate
Macrozamia lucida	sub-tropical to temperate
Macrozamia miquelii	sub-tropical
Macrozamia reidleri	sub-tropical to temperate
Macrozamia moorei	warm temperate
Macrozamia communis	temperate
Macrozamia secunda	temperate

A REPORT FROM STOCKPORT
BY DENNIS ROWLINSON

Over the previous years I have tried many types of materials for germination of seed with varying success. This year I felt that I would like to do something simple so I bought some Seramis and followed their instructions, more or less. All my AGS seed was sown this way. I had tried some of the material to strike cuttings in last year, and it seemed to me to be suitable for most seeds. The material leaves a lot of spaces between the granules and as it is expanded clay compound it is a continual source of moisture for the seedlings.

Fine seeds are just surface sown and watered in. Larger seeds were sown at the usual depths recommended.

I took some half trays and filled them with Seramis and sowed the seed and watered it in. These half-trays were then placed within a covered unheated tray and placed on a windowsill. The ambient temperature in the trays averaged 15°C. Date of the sowing was 7th January and a total of 30 packets were sown.

The first seedlings to show were from *Calotis cuneifolia*, which was sighted on 18th January. By 22nd February, 22 lots of seed had germinated and 5 lots of these had been potted on. The ones which haven't germinated are 5 Clematis, 2 Gaultheria, 1 Tropaeolum and an Uncinia. The first two species I wouldn't have expected to see germination for some months.

The root systems are very good and easy to remove from the material, which is quite loose. This made the potting on very simple and very little damage occurs. Any roots entering the material bring the particles with them. The material leaflet suggests leaving the more delicate seedlings in place and giving them a dilute feed. This I have done and only the larger ones have been potted on.

The speed of germination was as good as or better than other materials I have used and the ease of potting on is an improvement on the other material. It was originally an idea of ease and comfort that made me choose the material for all types of seed, but it has worked out very well. As an added bonus most of the cuttings struck in it have grown away.

Seramis bought from Queenswood is available in 2.5L, 7L and 15L. Tel. 01432 830015.
Website www.queenswood.co.uk

Name changes

Chordospartium, Corallospartium and Notospartium have all been absorbed into Carmichaelia.

The New Zealand Cassinia have been transferred to Ozothamnus. The two species are Oz. leptophylla and Oz. vauvilliersii

Melaleuca smartioroum is to become M. sapientes

Just one big frost

Dr. Graham Sumner, Aberaeron, West Wales

Just one big frost, thats all it took. I have tried to be philosophical and told myself that this provides the ideal opportunity to replant with hardier species, but, ... the previous three winters had not produced anything below -4C and I had become just a tad too adventurous. We had returned from a six week trip to Australia just three weeks before Christmas, having driven 8,500 km from Darwin to Adelaide and then running the advancing gauntlet of the New South Wales floods across to the Pacific coast by mid-November. According to our loyal neighbour at home to whom we had entrusted the precious indoor and conservatory plants, there had been just one slight frost (my garden minimum thermometer showed -1.8C). Everything was verdant after the copious rainfall in our absence, and the two *Acacia retinodes* bushes were already in flower.

Then came the night of 28th/29th December and a -6.7C frost, and the temperature remained sub-zero until around dusk on the 29th, virtually a full 24 hours. There had been an hour or two of snow during the evening of the 27th, which, unusually for us, settled and some of it remained over the subsequent three days and nights. There were then rain and sleet showers, leaving just that critical amount of water and fallen snow to throttle the Cordylines when the frost came.....

In the hope the information may be of use and interest to others I am cataloguing the effects on my garden of this cold snap the deaths; probable deaths; possible deaths; the injured, and, oh yes, the survivors, think positive! The winter and early spring, since, have been mixed, rarely very mild, but never below -2.9C, often sunny, and with less rain than we usually have. The Welsh climate can be cruel So, this year, it is still too early (in mid-March) to see any regrowth on Australasian species. Typically, apart from obvious candidates in pots for death by frost (*Albizzia lophantha, Eucalyptus leucoxylon-rosea, Syzigium australe*), too large (for my ailing back) to move into the conservatory during the early autumn, there was little immediate evidence of damage or death. However, of course, as the weeks unfolded large parts of the garden became browner or greyer as die-back proceeded I have now removed and burnt most of the obviously dead, often leaving the roots in the ground (well, you never know ..!). The resultant bonfires constantly reminded me of why Australia burns so well: even a handful of dead branch and leaves can be explosive My garden must be quite a fire hazard, alive as well as dead!

I have left intact (if thats the right word) the larger plants which currently look dead, notably an *Acacia mearnsii* and an *Acacia retinodes*, not having the heart to chop them down, and having noted that beneath the bark of their main stems the wood is still green. I live in hope. A *Callistemon citrinus*, which regrew from the ground following our previous major frost in December 1995 (-8.8C) seems just to be holding on. About 10% of the leaves have remained green. I shall also miss our *Sollya heterophylla* whose blue flowers had given us so much pleasure over the previous three summers, but maybe it too will come again. The *Cordylines* are (mostly) turning white at their growth centres, but these were also collared by snow in 1995 and regrew from their bases then. I have few *Eucalyptus* these days. Most had grown too large for the garden (and possibly the drains!) and the last two large ones were chopped down last July (*E. glaucescens* and *E. viminalis*). Both are sorely missed, they survived well only 300 metres from Cardigan Bay and were real beauties. Of course, a good old faithful *E. niphophila* survived the frost, as did one or two others whose name plates have long since disappeared, but these are all small. I had thought, until late February at least, that a 2 metre tall *Allocasuarina littoralis* had survived, but now I'm increasingly doubtful. The quite large specimen of *Dicksonia antarctica* (its trunk is about 30 cm long) which had survived the last two winters outside, and which is one of two surviving having been grown from spores in 1990, is now mostly brown leaved. I have left it, because I am hoping it will soon recommence growth. The second tree fern is still in its pot, safe in the conservatory.



Atherospermum moschatum

Atherospermum moschatum - this small tree with a nutmeg-like aroma is common is cool temperate rainforests in NSW, Vic and Tas. Creamy-white flowers upto 20mm across are solitary or in pairs in the leaf axils.

However, not all is depressing! I have been amazed at the hardiness of my single olive (*Olea europea*), grown from seed in 1993, and which is now about two metres tall and flourishing. I know its not Australasian, but nor are my carob (*Ceratonia siliqua*) and Canary date palm (*Phoenix canariensis*), which have survived (just, in the case of the former!). I have numerous examples of the three *Callistemon* species which survived untouched (*C. linearis*, *C. rigidus*, *C. subulatus*), and they

reliably flower every year even though still small. The *Libertias* will also give their usual pleasure this coming May/June. I had initially thought that my *Atherospermum moschatum* was tender (when I bought the seeds, the catalogue said it was), but this is looking rudely healthy, and I now note from checking the literature that it is allegedly snow tolerant as well as frost tolerant. And I never expected my single *Grevillea* (Canberra Gem) to survive such a low temperature, let alone the larger of my two *Correas* (Marions Marvel). The survival (virtually untouched) of the two species of *Eucryphia* (*E. milliganii*, *E. cordifolia*) surprised me, as did both *Leptospermum scoparium* and *L. humifusum*. *Melaleuca squamea*, alone amongst the paper-barks, always sails through and is currently in flower (mid-March), and I still have a large variety of *Hebes* (not listed - I've lost the name tags on most, the penalty of a windy garden!) and daisy bushes (*Olearia*), though I was disappointed to lose my two *Hebe hulkeana*.

It was a very crowded small garden, and is now a little less crowded, and in May when the possibly or probably dead become really dead, I'll have a few gaps to plug. Now where was that rare and exotic plant catalogue....?

Survivors (little or no damage)	**Damaged**	**Almost Certain Deaths**
Australasian		
Atherospermum moschatum	Acaena microphylla	Acacia baileyana
Callistemon linearis	Callistemon citrinus	Acacia longifolia
Callistemon rigidus	Correa 'Marions Marvel'	Acacia melanoxylon
Callistemon subulatus	Corokia buddleoides	Acacia riceana
Cassinia fulvida	Dicksonia antarctica	Acacia ulcifolia
Drimys winteri	Drimys lanceolata	Agonis flexuosa
Eucryphia cordifolia	Grevillea 'Canberra Gem'	Albizzia lophantha
Eucryphia milliganii		Callistemon viminalis
Hoheria lyallii		Hebe hulkeana
Leptospermum grandiflora		Melaleuca bracteata
Leptospermum humifusum		Melaleuca decussata
Leptospermum scoparium		Westringia fruiticosa
Libertia grandiflora		
Melaleuca squamea		
Olearia x haastii		**Jurys Out**
Olearia ilicifolia		**(prayers encouraged)**
Olearia macrodonta		Acacia mearnsii
Prostanthera cuneata		Acacia retinodes
Sophora microphylla		Allocasuarina littoralis
		Correa speciosus
Other (surprising) survivors		Hymenosporum flavum
Olea europea	Ceratonia siliqua	Sollya heterophylla
	Phoenix canariensis	

Book Reviews



The Gardener's Encyclopaedia of NEW ZEALAND NATIVE PLANTS
by Cave and Paddison. ISBN 1 86962 043 7
Jeff Irons

There are plenty of books about New Zealand's alpine plants, but the only ones dealing with the general range are Laurie Metcalf's two volumes, one covering woody plants and the herbs, other forbs and ferns This book breaks new ground by covering about 1000 plants from the whole range of New Zealand natives. Over 300 of them are listed (but not necessarily available) in the 2000-2001 Plant Finder.

Unusually for a book of this type, all the colour illustrations are gathered together at the front. Several of them are of cultivars, and this is the book's great strength. Many purchasers will know something about a plant, or have a rough idea of what they want. They will find that they need do no more than look at the pictures before deciding whether to get the plant or not. Those wanting to go further will find brief descriptions in the rear part of the book. The authors have tried not to denigrate anything and at times this results in tongue in cheek descriptions, for example Haloragis "Wellington Bronze" is described as a "useful gap filler". The nomenclature is up to date. No book is perfect and this one describes Donatia nova-zelandiae as a New Zealand endemic. Unless the authors know something that I do not, the species is found in Tasmania as well as in New Zealand. The description of Leucopogon fraseri does not mention the important fact that it is self-incompatible. Like many New Zealand books it has a parochial outlook, and mentions only the New Zealand locations of a plant, not its wider occurrence. These are minor criticisms of a book that can be recommended in the knowledge that purchasers will consult it frequently.

The book can be bought from the RHS bookshop at Wisley for £29.99. Members living more than about 5 miles from Wisley will find it cheaper to buy from Touchwood Books, PO Box 610, HASTINGS, New Zealand.

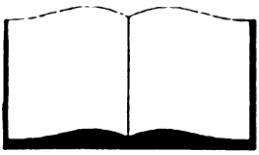
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ARNOLD-FORSTER REPRINT by Tim Longville

A new edition of Will Arnold-Forster's classic *Trees and Shrubs for Milder Counties* has just been published, with updated names (by Peter Clough, previously of Gigha, Tresco Abbey and Inverewe) and with colour photographs (many taken in Arnold-Forster's old garden at Zennor, which subsequently belonged to the painter, Patrick Heron).

It costs £25 including post and packing and is available from Alison Hodge, Tor Mark Press, United Downs Industrial Estate, St Day, Redruth, Cornwall TR16 5HY.

What's more, I'm told that there are plans afoot in Cornwall for what will be in effect a 'Sons of Will' volume, dealing with plants unknown to or thought impossible by The Man Himself. It will be a collaborative affair, with chapters by Peter Clough, Mike Nelhams of Tresco, Mark Brent of Lamorran (on palms), Mike Bell (on bamboos), etc. Start saving now...



Members may like to know of a new book written by our chairman James Harris. He is one of the world experts on the genus *Acer* and consequently 'The Gardener's Guide to Growing Maples' is an authoritative practical guide to all 125 species of these popular plants. The book includes habitat, classification, history and cultivation and is well illustrated.



Orchids galore

By Pat Clarke

In October 2000 I went to Australia for an orchid show and conference. Naturally the show was beautiful, and it was complemented by equally attractive weather. The show took place in Melbournes's Karralyka Centre, which to my delight was surrounded by gardens of native plants. The most fascinating was a prostrate grevillea in full bloom. The native birds obviously enjoyed its nectar.

During my stay a few of us went to the Yarra area, accompanied by three Australian botanists, to look for orchids in the wild. What a day that was! We visited three different places and saw the Spotted Sun Orchid, *Thelymitra ixoides.* Usually blue or purple-blue, its flowers can be pink, so the one species has an enormous colour palette *Pterostylis* (Hooded Orchid) and *Corybas* were abundant, while the quaintly named Donkey Orchid, *Diuris orientis*, added delight to the roadsides. Other orchids seen included *Caleana major, Calochilus robertsonii, Chiloglottis valida,* and *Caladenia gracilis.* There were also hundreds of *Drosera* on the sites. The whole trip was like all my Christmasses come at once. At the end of the week I travelled from Melbourne to Sale by train, and on to Cooma by coach. During the journey through Gippsland and the Snowy Mountains I saw hundreds of Tree Ferns, growing in what I would call light forest. I would think that the areas were subject to frost, and the general conditions ought to tell English gardeners something about how they should be grown.



Caleana major

Large or Flying Duck Orchid. Flowers are red-brown with green lower sepals, resembling a duck in flight.

The following week my friend and I went over the mountains to Tumut, and then on to stay at Batlow. Friends there took me to hills behind their house to see more orchids. I did notice the Scaly Buttons of *Helichrysum scorpioides* around the area.

Sadly the whole area is to be bulldozed to make way for a road. People in the Australian National Orchid Society are currently trying to organize a collection of the orchids before this happens. The remainder of the trip was spent in Adaminaby, where I just spent my time looking round. Most notable in their sheer quantity were the pea flowered *Daviesia ulicifolia* and *Pultenaea tenella.* Although my book states that they are restricted to the Victorian alpine zone, I saw several on the



Calochilus robertsonii
Purplish Beard Orchid
Flowers are greenish brown with red or purple stripes with a long bearded lower lip.

shores of Lake Eucumbene.

After my return to England, at the end of October, the opportunity of a very low cost trip arose. So in November I was back in Adaminaby. Although there were a couple of bad storms we were able to drive to Mount Selwyn, and then on the dirt road across the top to Cabramurra to see the lupins growing in the wild - millions of them in the full colour range, and quite a sight. Even though they are an introduced weed my friends intended to return later and collect seeds. During our return, along the same road, I found *Thelymitra* just coming into flower. My friends would not let me wander far from the roadside because the grass was long and now that the weather had warmed up there was a risk of snakes One thing that I could not fail to notice was verbascums growing in their thousands along the roadside between Cooma and Canberra.

The 150 acre property on which I stayed was rich in gums of various types and near the entrance- which was in full sun, with no trees – there were celmisias. Since they hadn't opened by the time I left it was not possible to identify them. (Ed: probably *C. costiniana*.)

My last week was spent house hunting, because I have decided to live in Australia. In cool Adaminaby most houses have gardens that look very English but the house I intend buying has an English front garden, with grevilleas and succulents at the back. On my first visit to Australia, three years ago, the gardens in the Sydney suburbs were all planted with ferns, banksias and other tropical looking plants. In the Blue Mountains it was predominantly tulips and rhododendrons, but I shall be living where it is cooler still. Fortunately there will be plenty of warm sun – and I won't miss England's clouds.

Pentachondra news item

Members may like to know that the Celmisia species illustrated in the book Kosciusko Alpine Flora can now be named.

They are: Plate 308 C. tomentella, 311 C. costiniana.
Newer members will have missed our earlier identification of the craspedias. They are: Plate 336 C alba, 337-8 believed to be a hybrid, 339 C. maxgrayi, 340-1 C. costiniana, 342 C. lamicola, 343 C. aurantia.

The book has been revised and updated (though not for Celmisia). If anyone would like it we can obtain it for A$50 (surface mail) or A$55 (Economy Air). At the time of writing there were about 2.4 dollars to the pound.

There is also a less comprehensive Field Edition for A$28 (surface) or A$30 (Economy Air).

PLANT PROPAGATION NOTES

On her recent visit to Australia, Pat Clarke picked up a leaflet from Kuranga Native Nursery, Melbourne (www.kuranga.com.au) entitled 'Growing Australian Plants From Seed'. Some tips are mentioned below.

WHEN TO SOW SEED

In temperate regions, the best results with seed propagation are achieved mainly from spring through to mid-autumn. If seed is planted in summer, it is important that the propagation mix should not be allowed to dry out as the seed germinates. Seed sown in winter is likely to be slow to germinate, and may rot during this cool, moist season.

PRE-SOWING TREATMENT

Most Australian seed can be planted without any pre-sowing treatment. An exception is the seed produced in pods, including *Acacia* species and members of the Pea family. In these plants each seed has a hard outer coating which gives it protection and a long viability period. By cracking or breaking down this hard outer coat, moisture will penetrate through to the seed more readily, and this assists in germination. The easiest method of achieving this is by pouring hot water over the seed the day before planting. Allow the seed to soak overnight then plant on the following morning. It will be seen that the seeds have become swollen. If some remain unaffected, the above treatment can be repeated prior to planting.

PLANTING THE SEED

Choose a pot with adequate drainage holes and fill to within 2cm of the top with a good

More about Acacia germination - the information below has been reprinted from the Newsletter of the Central West Group of the Australian Plant Society.

"Germinating *Acacia* seed is easy. The boiling water method can be very harsh on some Acacia seed adapted to "quick and cool" fires. The treatment is basically to provide an artificial fire to the seed which initiates germination.

Many people pour boiling water on the seed and allow it to cool down, then sow the seed. But, if the species is adapted to a "cool" and quick grass fire (as opposed to a hotter forest or woodland fire) then the boiling water treatment can cook the seed embryo and reduce germination.

We grow thousands of wattles of many species for large scale farm plantings sown directly into the ground after hot water treatment and get enormous success.

Our method of treatment using boiling water is to pour very hot water just off the boil onto the seed. Wait one minute only and then pour cold water over the seed. Then sow it"

Ed: the purpose of the water treatment is to crack the seed coat, hence the importance of it being as hot as possible. It is the initial shock that cracks the coat. A few species will not stand this treatment. *A. suaveolens* needs 3 to 10 mins at 80°C, *A. terminalis* is 30 secs max at 100°C or 2 to 10 mins at 80°C.

quality propagation mix. Place the seed on top of the mix and cover with a layer which is roughly equivalent to the size of the seeds. Large seeds will therefore have a deeper covering of potting mix than those which are smaller. Water lightly but thoroughly, then place the pot in a warm, sheltered location. Maintain regular light watering during the period of germination.

THE BOG METHOD OF SEED PREPARATION

This is an excellent method for those who may be unable to water seed pots at regular intervals but nevertheless do not want them to dry out. After planting the seed, the pot is initially watered carefully then placed in a tray of water about 2.5cm deep. The moisture is absorbed by the seedling mix during the germination period. This ensures that the pot does not dry out, and also avoids disturbance of fine seed which can occur during watering from a hose or watering can. The pot should be removed from the tray as soon as germination occurs, then watered from overhead from that time until transplanting.

MORE ABOUT WARATAHS By Jeff Irons

Members who requested Waratah seeds in 2000 will now have sizeable plants, and may wonder what the next step is.

By now your plants should be in a 15cm pot, and the Waratah expert Paul Nixon says that by the third year they should be in a pot at least 80cm wide and 30cm deep. This is because like most Proteaceae they get most of their nourishment through specialised seasonal roots that are just below the soil surface. After that things are easy for the only ways to kill your plant are to withhold water or poison it. The latter is very easy to do because like other members of the Protea family, Waratahs develop yellow leaves when given fertilizer at rates considered normal for other plants. In extreme cases the leaves will turn brown and drop off, or the plant may die. Although all plants need food, with Proteaceae the lowest rates of fertilizer result in the greatest increase in growth. Australian researchers recommend N:P:K at 17:1.6:8.7 added at 25 to 50g to a 9l bucketful of compost. The easiest way for British amateurs to achieve this is to use a granular zero phosphate fertilizer, supplemented with a small amount of a general purpose liquid feed.

If you want your plant to bloom quickly, do not prune it but leave it to develop a single stem, and form a terminal flower head. After flowering prune by cutting off below the spent flower. A bushy habit can be promoted from the start by pinching out the leader, but this will delay flowering by a year.

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Thanks once again to all members who have sent in articles and snippets of news Deadline for the autumn issue is October 16th. Articles can be sent on disk - acceptable formats are Microsoft Word, RFT and TXT. Send to Sue Hyams (address on inside of back cover) Don't forget to jot down your 'phone number/email address on your seed application form

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