

Region ✓



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**Leader and editor Pat Webb**  
 18 Landscape Court, Balnarring, Vic., 3926  
 ph. (03) 5983 2163; fax (03) 5983 2173

**editor's bit**

This Newsletter contains several articles which, by chance, are connected; **Jeff Irons** from England, writes about his experiences with alpine plants, an interest which is reflected in **Sue Forrester's** talk to the Maroondah group of the Australian Plants Society. Sue also spoke of her hand-made pots, made by her mother and Edna Walling - and these have their echoes in **Geof Simmons'** article about making hypertufa pots. Very serendipitous! I am grateful to the Maroondah Group for permission to use the report of Sue's talk, and to Helen Morow for sending it to me.

Now three months into the year 2000, with summer coming towards autumn - where is the Study Group going? I have some concerns - the major one being that too few people are sharing their experience, their knowledge and their ideas.

If we are to be a viable Group, I feel there needs to be more involvement of members generally. Should we ask the question "*Is there a need for this Study Group?*"

I would feel more comfortable if we had more contributions and ideas coming in. I do not see myself as a person with wide experience of growing Australian plants in containers, I only started to do this ten years ago. Oh yes, I'm hooked and now enjoy the challenge; the intimacy of having the plants on my back patio where John and I enjoy a coffee or lunch. And I like a welcoming pot or pots near the front door, often a talking point with visitors. I took on the role of Leader/Co-ordinator when this Group was in recess. Since starting as a Group in early the 1980s it has had a chequered history with many stops and starts. I am happy to continue as Leader and editor but only if the participation and input grows. Over to you. Cheers and good growing.

*Pat*                      *RRR*

**Australian Plant Society in the UK**

In January I heard from **Jeff Irons** who lives in England in a place called Heswall at the mouth of the River Dee, not far from Birkenhead (central west coast). He had seen my letter in the December issue of the Tasmanian regional newsletter *Eucryphia*. I quote from his letter...

"In Britain, most Aussie plants are grown in containers. They are used as house plants, as conservatory specimens, in cool and frost-free glasshouses, some as tender specimens in a sheltered spot in the garden. The glasshouse plants are put outdoors in the summer.

*Correas* are popular winter-blooming plants; specialist growers have plants in containers which they exhibit. I have *Microstobos niphophilus* in a container, also *Diselma archeri* (Cheshunt pine) "Red Dwarf". In the garden I grow a Huon Pine. (Recently on television, John and I saw a lovely Huon Pine specimen growing in a botanical garden in Bantry Bay, southwest Ireland - ed.).

I grow an *Isopogon anemonifolius* in a large pot. Most of the *Epacrids* are in pots because I believe drought causes Calcium++ to rise up through the soil and poison them. (I find *Brachyscome nivalis* a very good pot plant here. (I don't remember droughts in England!! - ed).

I grow about 70 Australian species in pots of various sizes. They are there for various reasons.

- 1 Temporary accommodation for seedlings.
- 2 Temporary accommodation for a shrub until I can get a propagule and then can put the parent in the garden.
- 3 Too tender to survive the British winter outdoors - this includes alpiners from parts of Australia with a Continental climate. Tasmanian alpiners are OK outdoors in our Maritime winters.
- 4 Winter hardy, but bloom earlier under glass.
- 5 To give specific soil conditions such as high acidity or high moisture retention.
- 6 Rather small and best grown in pots.
- 7 To ensure isolation so that I can harvest seed which has not hybridised.
- 8 To reduce competition from other plants, eg I've decided that *Telopea* is better pot grown rather than in the ground.

(Jeff is English. He has made several trips to Australia and is coming again in November this year. He plans to tour southeast New South Wales, and hopes to visit the Burrendong Arboretum (of which he is a 'Friend'). I have seen letters from Jeff before in one of the Regional newsletters and was delighted when he responded to mine in *Eucryphia*. I wrote to him and he has sent the following article for our newsletter.)



### Exhibiting Australian Plants in England

Life is not easy for Australian plant enthusiasts in Britain. Quite a number of Aussie species can be bought from British nurseries, but they are mostly house plants or largish shrubs. The most suitable plants for our small gardens are alpiners. The problem is that very few of them can be obtained from nurseries here - even specialist ones. Australian Plant Society seed lists don't help either, for few Australians grow their own alpiners. When we do manage to get hold of some Aussie alpiners, they follow the standard rule that 90% of introductions will be dead within two years. In spite of the difficulties I have managed to build up a small collection of Australian alpiners. In order to publicise the plants and their virtues, I exhibit some of them from time to time.

The exhibiting is done at the Shows run by the Alpine Garden Society. In the course of a year there are over 20 of these Shows, held in different parts of the country. I am a reluctant traveller so confine myself to the Show in my own area, which is held in the autumn. That raises difficulties, for at that time of year most flowering alpiners are bulbous, and consequently I confine myself to non-competitive classes.

In 1998 I staged an exhibit of 52 Australian alpiners, which gained a silver medal. Most of the plants exhibited were in 19mm pots. Nearly all of the larger plants had been lifted from the garden about three weeks before the Show, and placed in containers. This exercise was not without its hazards. *Epacris palludosa*, for example, showed its dislike immediately and by the Show day was completely dead. On the other hand, a 25 year old *Richea scoparia* and a 15 year old *Trochocarpa thymifolia* behaved impeccably. I was able to pot up a *Dislema archeri* which had been bought in 1971 and is now about 4 feet (1.3m) high. All these plants subsequently went back into the garden and grew away without check.

When asked for a definition of an alpine, I usually reply that it is a plant grown by the Alpine Garden Society! This is because about half the plants entered in competitive classes are not alpine; what they have in common is that they are small. Because of this I had no qualms about exhibiting *Isopogon anemonifolius* coming from Newnes Plateau in NSW - my specimen has been containerised for all of its 10 year life. It spends summers outside and winters in an unheated glasshouse which is shut up only in the severest weather. Another container plant exhibited was *Grevillea alpina*. Although perfectly hardy to -14°C, this species flowers much earlier under glass. My specimen enjoys the protection of a glasshouse in winter. These large plants were not given any special treatment. Some of the smaller ones had been grown especially for the exhibit. In these cases, the best of several pots was selected. *Brachyscome nivalis*, for example, had been grown as an annual and disbudded repeatedly in order to delay flowering. Even though it is summer flowering, *Brachyscome rigidula* had been treated in the same way. Because I consider them attractive the seedheads had been left on *Calotis cuneifolia* and *Vittadinia muelleri*. These four species could all be used as filler plants in mixed container displays. Some of the small shrubs in my exhibit would lend themselves to a container display for a shady site in the cooler parts of Australia. *Gaultheria* springs to mind as an excellent genus. All its members have delightful bell-shaped white flowers in spring, and follow them with white, pink, red or yellow berries in late summer and autumn. They will bloom in three years from germination - say 1

to 7 years after sowing. A container of *Aciphylla glacialis* would make a fine sight, for each plant is different. This almost unknown Australian is one of the finest *Aciphyllas*. It is devoid of vicious barbs and germinates easily from seed which has been cold stratified. Male plants are very showy when in bloom, and you need to grow several in order to get one male. I imagine that a *Trachymene anisocarpa* in the centre of a container would add height.

This year I aim to branch off in a new direction. Even though autumn AGS Shows have plenty of green, I intend to mount a display of dwarf conifers from Australia, New Zealand and South America. Some will have been lifted from the garden, while others will be pot grown. As far as I know, such an educational exhibit has not been mounted before

(Jeff - the wide variety of plants and the energy and enthusiasm is quite inspiring. Thank you for contributing to our newsletter - ed.)



#### another daisy

*Brachyscome formosa* "Pillaga Posy". A delightful little perennial herb - .05 - .25m tall with pink/mauve flowers on short stems. We are growing this daisy in an open shallow container along with *Brachyscome angustifolia*, a small tufted plant. Both like damp areas when growing in the bush so need to be kept well watered. These little plants have grown happily on the patio over the summer; I have had their container sitting in a dish of water - a water-well pot would be ideal I imagine.

#### letter from Barbara Melville, Wyoming, NSW

Happy New Year! Hope it's a year of flourishing potted plants for you and fellow members.

You may remember me writing to you about my *Diaspasis ficifolia* growing in a hanging water well. It did not flower in the summer of 98/99 but has been putting on a magnificent show since about October (*written in January*) with no sign of stopping.

The main reason I grow natives in containers is because of the lack of western conditions in our often humid east coast climate. The drainage provided in a pot seems to encourage the plant to keep going. Even some NSW plants like *Eriostemon australasius* which grow and flower brilliantly in our coastal areas, don't live long (if at all) in many garden situations. A suggestion was made at one of our meetings that maybe the root system was heating up too much. Several of our 'plants in pots' members have been able to grow them very successfully in large tubs/pots, myself included. One possible solution which I have used is to stand the pot inside a larger pot - this creates a cooler buffer zone around the plant.

A couple of other plants I have grown successfully in pots are *Crowea* 'Festival' and *Tetradlea thymifolia* - both of which have proved difficult (for me) to grow in the garden. The *croweas* tend to live about 4 - 5 years. Another favourite is *Eremophila nivea*; mine has been in a pot for about five years, however after a somewhat damp summer so far, it is not looking its usual best. It is also currently mulched with sugar cane mulch - I may remove this and instead mulch with small pebbles. This will reduce the humidity around the plant.

While browsing in a local nursery recently I spotted a very unloved *Eremophila nivea* which had been reduced in price by 50%. I still could not imagine anyone paying the new price, so I made an offer - the nurseryman was very happy to part with it! Now I just hope my rescue mission works.

My major concern is that I tend to build up too big a collection! After every flora festival I plant out some that will/might grow in the garden. Finding homes for plants/trees the size pot that I (or my husband Andrew) are prepared to lug around, is a hassle. We grew a Norfolk Island pine in a tub for several years. It would no longer fit inside our home at Christmas so we pruned it. (This was before we gained a little knowledge of Aussie plants!). Two tops grew and grew. It now resides on my sister's farm, still with two tops - and about 60 feet high - thriving!

I loved the idea of Cherree's "sparky combination". Are they in full or filtered sun?

Thank you Barbara - a most interesting letter. Barbara also writes suggesting a book she has found valuable: "Native Gardens in Miniature" - Australian Plants in Containers by Bill Molyneux and Sue Forrester. Published 1986 & 1990 by Kangaroo Press. ISBN 0 86417 463 2  
Barbara says there are lots of good ideas, charts, photos, notes on maintenance etc, etc. She has found it difficult to purchase some of the plant combinations mentioned. - ed



## Make your own Container - Geoff Simmons

The reader who prefers neat terracotta or smooth plastic pots should skip this contribution! And one could ask why, with such a multitude of plastic, terracotta and glazed pots of both Australian and overseas origin, should time and effort be put into home-made containers.

Several reasons can be listed:

- 1 Pride in one's own creativity
- 2 Single or multiple shapes not available commercially
- 3 Able to make containers that reflect Australian values and some of the special characteristics of the Australian flora.

For the purpose of this article, only one type of composition will be discussed as the material used in the manufacture of the containers. The objective is not to imitate terracotta either in design or appearance, consequently no kilns or special clays are required.

Probably most gardening magazines have featured articles about **hypertufa** containers - this is the material to be described in this article, not in detailed exposition of using the material but in a more general discussion on the versatility and convenience of easily obtained materials and the lack of necessity to have special tools.

Hypertufa was devised as a sort of imitation stone when gardeners no longer had access to stone water troughs and suchlike. Many professional landscapers construct artificial rocks but this is a different subject.

The basic formula for hypertufa is a mixture of equal parts of sand, cement and peatmoss. These are mixed with sufficient water to form a mix, moist enough to hold together over the form to be used as the basis for the design, or to be able to hand-form shapes. Cement pigments of many colors are available from hardware stores if desired, but it is necessary to keep in mind that these colors may fade or alter when continually exposed to sun and rain. This is a factor that lends interest to this type of container. In addition the peat will eventually decompose so a more porous structure is produced. This pot will, by virtue of the peat, be lighter than a concrete pot and a trifle more fragile.

How can a shape be created? The simplest method is by hand. However most containers need a reasonable size cavity to accommodate the soil and plant. Fortunately, modern food and beverage plastic containers come in many shapes and sizes, so there is no lack of possibilities in regard to form. Large soft drink bottles, filled with water to retain their shape, are good for this purpose, as when the hypertufa is set the bottle can be pulled or cut out. At least two days should be allowed before removing any framework or handling, otherwise the material may crumble. Some articles advise a setting period of several weeks before usage but my experience suggests that several days to a week are sufficient. Large containers may require wire netting as reinforcement, but for smaller ones a thread type mesh may be used.

The next point to consider is the type of plant to complement the pot or pots. I feel that small species are ideally suited and multiple cavities in one object can be used to create something different. Because of the texture of hypertufa it is not well suited to bonsai where regular removal for root pruning may be necessary.

As I have a small number of native ferns that I would like to keep separate in a fern area where native trees supply some shade, I have made a few pots using an up-turned plastic hanging-basket as a form. These individual pots can be placed at different heights or positions, but at the same time keep the ferns from coalescing. The appearance of the containers is rough earthlike and blends well, especially when leaves drop from the trees. Terracotta pots stand out like sore thumbs and do not add to the general aesthetic like hypertufa pots nestled amongst leaf litter.

*Jeff adds:* "If anyone has experience in hypertufa work, you may get comments, eg technical facts such as a different ratio of sand, cement and peat, use of gloves when handling cement. For my part I keep it simple. If there are growers of alpine plants, there is an article "Pacific Horticulture" vol.51, no.1, page 31, (1990), on Trough Gardening, by J.MacPhail - the hypertufa method is described by the author. I have completed my tubs for individual ferns as stated in the article, the pots when blended with leaf litter will not look so rough.

*(This sounds like lots of fun Geoff. I expect there is a fair bit of "trial and error" in the early stages, gauging how thick to make the material, etc. Jeff sent some excellent photos but I don't think they would reproduce well in the Newsletter. I have put them in the Study Group album which I take with me when visiting Groups - ed).*



## The Daisy Group

In December, several members of the Australian Daisy Study Group came down to the Western Port area for their 'Christmas Breakup' meeting. We were most fortunate to have them here for morning tea. A very enthusiastic and knowledgeable group of people they are too; working hard on producing another book for publication this year.

I was very lucky - I was given some new plants too. One in particular which I have kept in a container as I am fearful of losing it in the garden is *Brachyscome tenuiscarpa* var. *pubescens*, (Mountain Daisy). I do hope it survives this hot weather - it flowered over Christmas and I was quite delighted. The flowers are mauve, 2-3 cm across on a slender upright stem.

I quote from "Australian Brachyscomes" - published by the Australian Daisy Study Group in 1995 :

Cultivation and Uses *B. tenuiscarpa* var. *pubescens* is sturdier and more easily grown than var. *tenuiscarpa*. A cool climate suits it best. Plants prefer sun in winter, dappled shade in summer and an enriched soil. The roots should be protected and kept moist by deep mulch. If the soil dries out, plants will die back and regenerate after autumn rains. It is frost tolerant to  $-5^{\circ}$  and susceptible to slug and snail attack - *another good reason to keep it in a pot. It is sitting outside my kitchen window under the Huon pine and reminds me of a very happy morning in December.* - ed.

## ✂ from Liesbeth Uijtewaal-de Vries, The Netherlands

Liesbeth wrote with Greetings in December. She has just moved to a new home at Neer, in the southeast of the Netherlands near the River Maas.

"There's a lot of space around the new house so Bert is happy with his future garden and I'm looking forward to the glasshouse but it will be a while before its all finished.

There isn't much to say about the plants, I'm afraid. the larger ones are in the glasshouse of a colleague of Bert, which is great because I can (have to) look after them myself. It's not too far away.

The smaller ones are in their rack under tube lights again, in the garage this time which is considerably colder than the guest room - but they'll survive.

Some 16-months old seedlings of *Hakea nodosa* have flowered! Tiny flowers, but still interesting on such small seedlings (some 20cm high in 7cm square pots). The wattles are flowering beautifully in the glasshouse too; lovely, I can see them each week".

We shall enjoy hearing about all your plants and your new glasshouse soon. Bert - Liesbeth's husband - visited Melbourne in October 1999, and loved his outing to the Cranbourne Botanic Gardens.

## ✂ from John Emms, Loch, Victoria

John has sent an excellent photograph of his *Diploleana angustifolia* "Yandup Rose".

The plant is grafted onto a *Correa alba*. He is delighted with the large pendulous blooms - orange/red in color. He says "The flowers are larger than those of *Diploleana dampiera* and have all come into bloom in a period of two weeks" The plant is in a large container with a northerly aspect. John has had the plant for eighteen months and uses a standard Australian potting mix with some coarse sand added for better drainage.

## pat's pots

A newcomer to Pat's pots is *Tripladenia cunninghamii* (previously known as *Kreysigia multiflora*) - don't get me started on all these taxonomist's - name changes! The last newsletter for 1999 from Kuranga Nursery mentioned that this plant was available and so a Christmas gift arrived. This is a dainty rainforest plant - and it's wondering where the rainforest has got to this month. It is sitting under my Huon Pine, and throughout January had small pink flowers. The bright green leaves grow along a zig-zag stem, turning pinky colored as they age. Kuranga say it likes a moist situation in part to full shade. So far, so good.... not quite sure how it will like our cooler winters in Victoria. Perhaps I shall have to bring it indoors - oh dear, I'm not an 'indoor plant' person!

## talk by Sue Forrester to Maroondah Group of APS Victoria, November 1999, reported by Mary Dacy

Plants have been Sue's passion from a very early age, in fact from when she was a toddler. Sue is the daughter of the late Gwynneth Taylor who was a much loved member of the Maroondah Group, and it was largely due to her influence that Sue grew up to love plants with the same sort of passion as her mother.

All of Gwynneth's working life was spent working with Edna Walling at Mooroolbark where she lived and worked up until the time of her marriage and then continued to live and work on the property before moving to the city. Having grown up surrounded by very beautiful gardens and with people who loved, breathed and lived plants, Sue had no option but to simply absorb.

One of the areas her mother became involved in early in her career was a passion for alpine plants from around the world. At the same time, she and Edna were creating quite a wonderful collection of small containers in which to grow plants. In England and throughout Europe, there is a great body of information on the art of growing alpine plants in containers. There is an alpine Society based in England with branches spread all over the world.

The containers which Edna and Gwynneth made were cement pots, made with a great deal of love and utter simplicity, sometimes colored with a little bit of earth tones or some colored powder added to the cement. Sue considers herself very fortunate to now be the safe keeper of about fifteen of these hand-made pots which are about sixty years old, some even slightly older, and feels privileged to have these much loved and still used pots in her possession.

At the age of eight, Sue went with her mother and brother to stay with relatives in Bogong village in the high plains where her uncle and aunt were involved in the design of the Kiewa hydro-electric scheme. It was there that Sue fell absolutely in love with the high country. She says she was so inspired that coming back to the house one evening, she wanted to create what she had seen during the day and she made her first garden in miniature, at that early age of eight. It was a wee terracotta pot which her aunt dug up from under the house. She filled it with little pieces of moss, tiny stones and twisted pieces of snow gum, creating her own little high plains garden. Of course, the little garden has long gone, but another piece of history came to light recently when Sue rediscovered a postcard which she had written to her grandmother telling her all about this little garden that she had made.

After giving us that glimpse of her early childhood, Sue jumped to the 1970's. As we are all well aware, in the mid to late 70's, there was a very strong drive of public interest in the development and use of Australian plants in the landscape which reached a peak in the mid 80's. It is still there now but has, of course, undergone a range of changes.

About this time it occurred to Sue that we had a wealth of Australian plants, but nobody had ever looked at them seriously as subjects for pots and containers. It was then that she began experimenting in her spare time. Her first subjects for containers were many of the Western Australian plants such as *leschenaultias*, *dampieras* and in fact, the full range of W.A. gems. *Hibbertias* became a particular favourite. The temptation to work with alpines was very strong and one of her first containers was a beautiful big tub of snow daisies which grew to perfection, and to her amazement, even set seed - which was most exciting back then.

Sue also used a lot of sandstone flora. The heaths and flannel flowers, which had always proved so difficult in our Melbourne clays, just thrived in a container situation. Heaths from both sides of the continent, *baeckas*, *thryptomenes*; in fact everything thrived.

In those days, the range of pots was very limited. We had come a long way from the hand-made concrete style of pot, but there were few established potteries about. There were occasions when 'seconds' could be obtained, such as breadcrops where lids didn't fit or were a bit lopsided. A few drainage holes in the base made them into attractive pots. Wooden barrels were as scarce as hen's teeth and worth a fortune, but when they were available they were snapped up, and for large scale work they were irresistible.

Sue's container family grew from visits interstate and from others given to her. She sees her containers, not just as things to put plants in, but rather as becoming identities in themselves. They have their own life, their very own spirit.

There are a number of practical aspects to be considered when selecting containers, such as width, depth, drainage, actual strength of the pot, how thick or thin it is, and what it is made of. There are more than terracotta pots available these days, including quite fabulous look-alikes which are much lighter, making them easier to move around.

When using a large number of pots, water becomes a consideration. Nearby access to a hose is important as watering from a watering can becomes a bit boring, especially when you have in excess of 100 pots!

To Sue, the style of pot needs a varied approach. She likes to spend a lot of time deciding which plant or plants go into which containers, and this is something which becomes a personal matter. If you become obsessed with pots you develop an instinct for it.

Finally, on the practical side of things, consideration of potting mixtures has always been a bit of a vexed question with Australian plants, largely because they are intolerant of phosphorous. Rainforest plants can take a little more but on the whole, sandplain, alpine and heathland plants are best suited to a mix which contains a low proportion of phosphorous. Basically, a standard commercial mix can be used but it is wise to open it up a bit more with sand: 1/3 sand to 2/3 potting mix is a rough guide. These days many of the commercial mixes contain water-holding granules of some sort. This is all right in summer but not the best in winter as it can result in a very soggy mess. A little trial and error is the best way to discover the needs. Standard potting mixes normally don't contain fertilisers. Add a low-phosphorous, slow-release fertiliser designed for natives. Sue breaks the rules sometimes and

feeds with a liquid aquasol at half-strength. It is far better to feed little and more often. A plant needing a pick-me-up fares better when fed little and more often.

Pruning is the same as in the garden; regular pruning, little and often. Pots need just as much care as garden plants and respond just as happily. Vigorous plants should be cut back quite hard and love having a heavy haircut.

Watering is probably the single most difficult aspect that people have to deal with. Firstly it depends on the potting mix, and secondly on the plant itself. If it is a sandplain lover it is not going to want to be watered to the point where it is soaking wet. Keep it gently moist and that will suit it fine. On the other hand, an alpine plant needs reasonable moisture and its roots kept cool. This can be done with mulch and the plant placed in a sheltered spot. The best 'rule of thumb' is probably to use the thumb. If the plant is dry, water it. If it is still fairly moist and a cool day is following, don't water. but if you know that tomorrow is going to be 40°C with a northerly wind and you haven't watered recently, water that night. A bit of stress doesn't harm them on the whole, but if pushed too far there is a risk of losing something that may be precious. A soft rose is recommended when watering.

A direct quote from Sue - "For those of you to whom I am speaking and know exactly what I am speaking about, please forgive me. For those of you who are new to growing Australian plants in containers, I hope you enjoy for the rest of your lives, something which I have found immensely fulfilling and a great deal of joy to me".  
(I heard it was a very good evening at Maroondah - ed)



**Thelma Wallace**, Secretary of the Central District Group of Australian Plants Society, NSW sent me in November some items from a recent newsletter.

Bruce Wallace had been to a Workshop by the Nursery Industry Association of Australia, Yates and Australian Native Landscapes. He quoted from Kevin Handeck's talk:

"How important is the potting mix you are using? Apart from holding the plant in an upright position in the pot, it must also be able to supply all the moisture and nutritional needs of the plant. To grow healthy the plant must also have healthy roots and the medium it is growing in must be able to supply these. Apart from moisture and nutrients, there must also be air, or to be correct, oxygen.

"Most of the oxygen comes from the medium in which the plant is growing. Oxygen moves more slowly through water than through the air, so there must be air spaces in the growing medium. If the amount of air spaces is low, then root development is reduced; under some conditions this can lead to the death of the plant. As the potting mix drains of water, this water is replaced by air.

"One of the skills learned by all gardeners is to be able to find the correct balance between air and water, thus preventing the plant being stressed by either excess dryness or wetness. The amount of air in any mix is measured by the **Air Filled Porosity (AFP)**. AFP is the percentage of the volume of a container that is air-space when drainage has just stopped. AFP can be measured by:

1. Carefully remove the plant from the pot, keeping the root ball intact;
2. Line the pot with a thin plastic bag (the type you get from a fruit shop);
3. Replace the plant in the pot, trimming off the excess plastic;
4. Place pot plant into a bucket of water, enough to cover the top of the pot;
5. Allow 20-30 minutes before removing pot plant from the bucket - this allow all air spaces to be filled with water.
6. Drain off any excess water above the potting mix surface.
7. Cut small holes in the bottom of the plastic bag through the drainage holes in the pot;
8. Place the pot in a saucer to catch all the water draining from the pot - allow 30 minutes to drain;
9. The water which is in the saucer can then be measured. This will give you a percentage of air to water within the potting mix.

$$\text{Air Filled Porosity} = \frac{\text{Volume of air in the mix}}{\text{Total volume of the mix}} \times 100$$

As the potting mix ages, the micro-organisms break down the particles, reducing the number and size of these air spaces this is why a plant growing in a pot for a long period of time can show a decline in health, because these smaller particles can hold much more water which is detrimental to healthy roots".

from **Bruce Wallace** also from the Workshop...

The following information was taken from notes given by Edda Keskula, Plant Protection Society, NSW Dept of Agriculture

"Water can be a big problem for the garden (*Lack of it, at our place!* - ed) Be it too much of it falling from the sky, or what we put on our gardens out of the tap. We cannot do a lot about whats falling except help to let it drain away quickly. Growing plants on raised beds is the easiest way to improve drainage.

"Gardeners using town water supply do not have the problems that gardeners have who use water from dams, creeks rivers and bores. These water supplies can be high in salts, or be contaminated by root diseases. This water should be treated before it is used, if you want a healthy garden.

"How and when diseases occur often depends, not only on the presence of pathogens, but is influenced by environmental conditions and the susceptibility of different plants."



In a letter from **Lorna George** (November last century [!]) she mentioned a meeting at **Central Coast District Group** which discussed root pruning. She feels their Interest Group will be following up on this discussion. It seems to have an important element in maintaining plants in pots. (Ed. - I agree with Lorna - a very important area. I prune roots quite severely when repotting and the top of the plant too - Notably both my *Dacrydium franklenii* (Huon Pine) and *Allocasuarina crassa*, taking one third off the roots and one third off the branches. When talking to Peter Sweeney of "The Imagination tree" - a bonsai specialist, he feels this is why Acacias can last so much longer as bonsai than growing normally - he knows of some which are 30 and 40 years old.

**Perhaps some more comments from you all on this subject. What have been your practices and experiences?)**



#### **top surface finishes - Geof Simmons**

The surface of the potting material can often be seen - so it should be considered when the container, medium and plant are combined. Is there a finish that is typically Australian to match an Australian plant species? This may be so and differ according to locality.

Some of the alternatives are as follow. One can think of small colored stones or crushed blue metal rock. The latter may be crusher dust, 5mm or 20mm gravel. Stones rounded from water wear in streams or wave action offer another source of finish in a variety of colors, shapes and sizes. Crushed white quartz of about 20mm size blends well with green straight leaves and terracotta pots. In contrast, peat moss produces a dark brown or black surface. A brown surface can also be obtained by use of pine bark.

If natural materials are not available or don't find favour, an artificial one can be made. The easiest one that I have used is 5mm gravel mixed with cement and brown cement dye. A slurry is made and allowed to set in a thin layer. This is crumbled when dry and then spread about the plant. Another artificial surface can be created using the plastic artificial bark sold as liners for hanging baskets. This looks neat, suppresses weeds to some extent and allows penetration of water and oxygen.

*(I have found small pebbles work well as a finish/mulch. They discourage birds from digging around the plant and allow free penetration of water. - ed.)*



#### **A very warm welcome to new Members:**

Leearne Neal, 23 Beasley Crescent, Rankin Park NSW 2287  
Dr. J. Ben-Jaacon, PO Box 6, Ben Dagan, Israel, 50250

*We shall enjoy hearing from you and trust that you will benefit from your membership of the Group.*

#### **NEXT ISSUE.....**

The next issue of the Newsletter will be in July/August 2000. Please send all those welcome contributions before **JUNE 30th**. No need to wait - the sooner the better!



**Subscriptions for 2000 -2001 become due in July 2000.**