

Native Orchid Society  
of  
South Australia Inc.



**NATIVE ORCHID SOCIETY  
OF SOUTH AUSTRALIA INC.**

P.O Box 565,  
UNLEY S.A 5061

*The Native Orchid Society of South Australia promotes the conservation of native orchids through cultivation of native orchids, through preservation of naturally-occurring orchid plants and natural habitat.*

*Except with the documented official representation from the Management Committee of the native orchid society of South Australia, no person is authorised to represent the society on any matter.*

*All native orchids are protected plants in the wild. Their collection without written Government permit is illegal.*

PATRON: Mr T.R.N. Lothian

PRESIDENT:

Mr G. Carne  
Telephone: 332 7730

SECRETARY:

Mr R. Bates  
Telephone: 289 2836

VICE-PRESIDENT:

Mr R. Edge

TREASURER:

Mr R. T. Robjohns

COMMITTEE:

Mr W. G. Dear  
Mr J. Peace  
Mr W. Walloscheck  
Mrs K. Possingham  
Mr R. Hargreaves  
(Special Appointment)

LIFE MEMBERS:

Mr R. Hargreaves  
Mr R. T. Robjohns  
Mr L. Nesbitt  
Mr D. Wells

REGISTRAR OF JUDGES:

Mr L. Nesbitt

EDITOR:

Mr G. Carne  
118 Hewitt Avenue  
Toorak Gardens S.A. 5065  
Telephone 332 7730

TUBERBANK CO-ORDINATOR:

Mr P. Matthews  
Telephone: 261 2359

Views and opinions expressed by the authors of articles within this Journal do not necessarily reflect the views and opinions of the NOSSA Management Committee.

COPYRIGHT: The NOSSA Management Committee condones the reprint of any article within this Journal, provided acknowledgement is given to the source and author.

Price: ONE DOLLAR



## ***NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC***

NOVEMBER 1992    VOL. 16 NO. 10    JOURNAL

### NOVEMBER MEETING

Tuesday 24th November, 1992, 8.00 pm; at St Matthews Hall, Bridge Street, Kensington. Our Annual Auction and Christmas break-up meeting. Members are asked to bring along something to be auctioned on the night - plants or related items, not necessarily orchids. Bring lots of change and pick up some bargains. All proceeds go to you Society and its initiatives and we have a particularly active 1993 already lined up. A supper plate to be shared would also be appreciated. Coffee, tea and cordial will be provided. We look forward to seeing as many Members as possible on the evening.

### COMMITTEE MEETING

To be held at the home of Judy and Gerry Came, 118 Hewitt Ave, Toorak Gardens at 7.30 pm sharp, Friday 27th November.

### DIARY DATES

November 29<sup>th</sup> Sunday: Annual Lamb on a Spit Barbecue. See page 100 for details  
December 8<sup>th</sup> Tuesday: Next Conservation Group Meeting - at Karen's - 61 Salop Street, Beulah Park.

PAGE	CONTENTS	AUTHOR
91	New Members	
92	October Meeting	
93	Open Day Visit to Adelaide Botanic Gardens Conservatory	G. Burford
93	Conservation News	R. Bates
94	Erika Stonor, Botanical Artist	R. Bates
95	Back to Basics - Australian Native Orchids	G. Edwards
97	Pot Sizes	M. Moore
98	<i>Pterostylis plumosa</i> Cady in South Australia	R. Bates
99	Conservation Group Belair Weeding Day	K. Possingham
99	Field Trip Report Hale Conservation Park	G. Guide
100	Special Notices	
100	Dr. L. Peterson, Special Guest at October Meeting	

### NEW MEMBERS

The Committee and Members of the Native Orchid Society of South Australia take great pleasure in welcoming Julie Harlington of Kent Town, Tom Massey of Athelstone and D. F. Koop of Modbury as new Members.

## OCTOBER MEETING

## PLANTS BENCHED

We had a rather disappointing benching of terrestrials with only three pots, all *Diuris*, brought in - three species of *Diuris* representing three States. It is getting a little late in the growing season for terrestrials and several of our keener terrestrial growers were unable to attend the meeting.

Nevertheless, we had a brilliant display of epiphytes. The genus *Sarcochilus* was particularly well represented and the display presented by them was one which will not be readily forgotten. They were, dare I say it, breathtaking and the result of contributions from several Members.

The *Dendrobiums* too were well represented. One very large *Dendrobium x delicatum* occupied an entire table. A relatively small *Dendrobium kingianum* was so top heavy with its profusion of flowers that it was difficult to maintain the specimen in an upright position. *Dendrobium* Ella Victoria Leaney was represented by three plants, each very different to the others. Kevin Western, who is an authority on hybridising Australian natives and who agreed with little prior notice to do the plant commentary, commented that one of the three, a deep red in colour, exhibited qualities of a future champion.

In addition to making comment on the cultural aspects of each plant benched, Kevin focused his discussion on the merits (or lack there of) of the various plants as potential parents for hybridising. As Kevin stated "NOSSA Members have come a long way in the growing of native epiphytic orchids". The following is a list of the plants benched:

## EPIPHYTES:

<i>Sarcochilus</i> Emily	<i>Dendrobium</i> beckerlii
<i>Rhinochilus</i> Rona	<i>Dendrobium</i> Ella Victoria Leaney
<i>Sarcochilus</i> Weinhart	<i>Dendrobium</i> kingianum
<i>Sarcochilus</i> hartmannii	<i>Dendrobium</i> kingianum var. <i>hastings</i>
<i>Sarcochilus</i> fitzgeraldii	<i>Dendrobium</i> King Rose
<i>Sarcochilus</i> Mavis	<i>Dendrobium</i> x <i>delicatum</i>
<i>Sarcochilus</i> Melba	<i>Dendrobium</i> Yondi
<i>Sarcochilus</i> Fitzhart	
<i>Sarcochilus</i> Pinkhart	
<i>Sarcochilus</i> Southern Star	

## TERRESTRIALS:

*Diuris punctata*, *Diuris venosa* (yellow form), *Diuris carinata*

## PLANT COMMENTARY

Plant commentary on the epiphytes was provided by Kevin Western  
Plant commentary on the Terrestrials was provided by Bob Bates

## POPULAR VOTE

TERRESTRIAL: *Diuris punctata* grown by Les Burgess  
EPIPHYTE: *Sarcochilus hartmannii* grown by Don Wells

## COMMENTATORS CHOICE:

TERRESTRIAL SPECIES: *Diuris punctata* grown by Les Burgess  
TERRESTRIAL HYBRID: No terrestrial hybrids were benched  
EPIPHYTE SPECIES: *Sarcochilus hartmannii* grown by Don Wells  
EPIPHYTE HYBRID: *Dendrobium* Ella Victoria Leaney (red) grown by Peter Barnes.



## OPEN DAY VISIT BOTANICAL GARDENS CONSERVATORY VISIT by Graham Burford

About half of the members met at the Conservatory while the others met in the car park off North Terrace. The latter group walked through the back of the Gardens Administration area, workshops, glass houses, past the R. S. Roger's House and through the eastern end of the Botanical Gardens to the Conservatory. We made a total group of approximately thirty-five members and because of the close confines of some of the areas we were to be shown, Philip Matthews, our guide, split each tour into groups of ten. Those not on tour could look at leisure at the Conservatory.

It was pleasing to see some Epiphyte Orchids mounted on the trees. For the benefit of our newer Members, prior to the opening of the Conservatory our Society made a sum of money available for the acquisition of orchids, (or for other uses), but their introduction was dependent on establishing the over storey canopy first.

The "behind the scenes" technology was interesting - for instance a structure of 100 m x 47 m x 27 m high provides a huge water collection area and the run off of rain to the concrete drains is collected, pumped into a holding tank, and after six cleaning stages, is used through the misting nozzles for watering and humidity control.

Power supply in the case of the Conservatory is the reverse of the normal where a continuous supply of power is critical. A gas turbine generates the required power and E.T.S.A. supply is only a back up in case of power failure of the turbine.

Maintenance to any point within the structure is achieved through a power driven cage which can travel suspended from any of the transverse trusses and can also be lowered for pruning of trees, maintenance to misting nozzles, etc. As this was being explained to us I was reminded of a comment made by a guest speaker at one of our monthly meetings. He presented a talk on Great Conservatories of the World and mentioned that in some cases no provision had been made for maintenance to replace broken glass panels and for the cleaning of the glass, and many fine buildings around the world were in disrepair.

We were shown the computer room, the centre which controls all of the functions of the Conservatory micro climate. The building is divided into four sections, each containing three sensors and information is continually being fed back to the computer, to open or close the top louvre window bank, or bring on the misting nozzles to maintain the critical levels of heating, misting, humidity and ventilation.

A steep climb from the computer room took us to a vantage point some two thirds of the way to the top of the Conservatory where the view was like looking down onto the top of a rainforest, which really it is. This once only offer to see such areas was appreciated by those who attended and we thank Philip our Botanical Gardens Guide, and Roy Hargreaves for the visit arrangements. On the return to the car park, Roy opened the R. S. Roger's shade house for our inspection of the terrestrials, and this concluded another most enjoyable Open Day afternoon. - Neil Nicholson showed some excellent slides of the Conservatory Visit at the October General Meeting, . ed.

## CONSERVATION NEWS

by the Conservation Group

In recent years the number of land clearance applications accepted has dropped rapidly and as from 1992 no further applications will be considered. This does not (unfortunately) mean an end to destruction of native vegetation, as houses are still being built on bush blocks, sheep and cattle still graze native vegetation even in conservation parks and feral grazers are a major threat in most parks and reserves. Management procedures in N.P.W's reserves has not improved. Access tracks and fire breaks are not monitored, so that in event of fire whole parks are burnt out.

Control burns are not being done. It has got to the stage that in many areas the local C.F.S. crews will not fight park fires (the Flinders Chase bushfire last year is one example).

Feral animal control is not organised and in some parks not even allowed! Many of our parks are overgrazed not only by goats and rabbits, but are dug up by wild pigs and in some reserves where kangaroos are not culled, they have built up to plague proportions.

On the positive side, most farmers now consider conservation and revegetation as one of their prime objectives. The downturn in the wool industry showed them that there are other ways to make money than covering the land with sheep and letting them eat every last stick and blade of grass. Successful farmers who survive the recession are those who have respect for the land and who diversify, those who have enough pride to make their farms showpieces!

Well done the new breed of farmer!

ERIKA STONOR: BOTANICAL ARTIST

by R. Bates

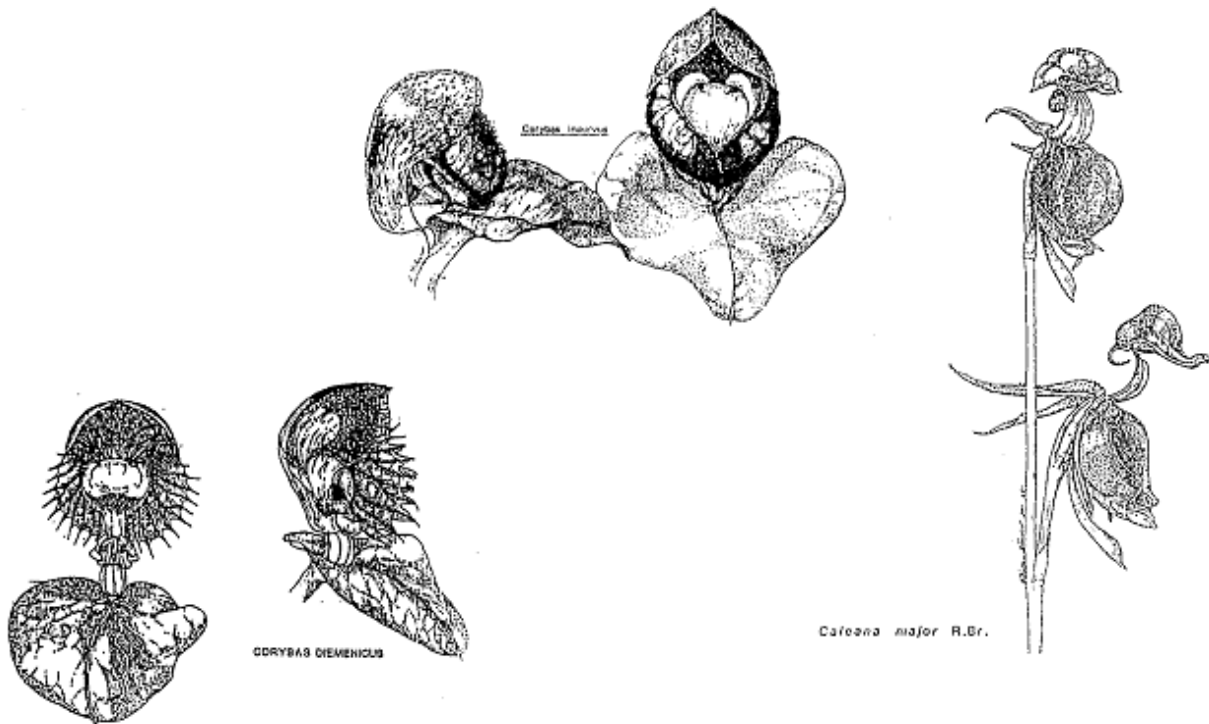
Once again the cover illustration for our Journal has been provided by local artist Erika Stonor.

Erika lived for some years near Margaret River in Western Australia. It was here that she and her husband developed an interest in native orchids.

Later while living at Lobethal in the Adelaide Hills they made a study of the orchids in a nearby reserve and it was from here that the orchids illustrated on the cover of the 1992 NOSSA Journal came.

Erika is an artist extraordinaire, working in fields as diverse as painting and glass blowing. She did most of the line drawings in *Orchids of South Australia*.

Erika lives near Crafers.



The above are reductions from some of the previous covers Erika has prepared for N.O.S.S.A. Our considerable thanks to Erika for her considerable contributions to our Journal over the past several years.

The following is the essentials of a talk Geoff gave to NOSSA at our September General Meeting.

In September last year I gave a similar address to the Orchid Club of South Australia. Like tonight, it was just after the major show of the year, and it was hoped that new members, new growers or prospective persons in those areas, were in the audience. Consequently you can blame my effort last year for being here tonight. I will present my point of view and if that creates healthy thoughts, discussion, debate - good. If you consider it to be, at times, provocative, or I act as a devils advocate I do so deliberately, because I believe that people do not learn, or gain knowledge through passiveness or addresses of platitudes.

My approach is to be different and although my topic is Australian Native Orchids, what I have to say applies to all genera and all growers. I have assumed that I am addressing the converted, however, some may need re-stimulating. I will not provide a lot of platitudes, so in being different and therefore a little controversial, I will set out to stir up the mind, make people think and maybe re-assess their position. If you hope that my talk will follow the norm of mixture, water, free flowing air movement, culture, etc, wrong again! In general terms I will be talking about my philosophy of growing and at the end I trust that you will see how it relates to the theme. Native Orchids need to be tough to survive in the wild and so they need to be tough to survive in my approach to growing. My approach is a little laid back, its a way of providing relaxation from the pressures of my daily work and I get the satisfaction of seeing others get satisfaction from what I can produce.

In my early days I sat at the back of the meeting hall wondering, a little confused, and not understanding all that was transpiring. People rattling off names, fertilizer mixes, temperatures, etc, etc, all too quick for many, especially me, to comprehend. They all appeared to be acting, oh so naturally!! For a variety of reasons I decided, "hang on, this is not for me - I will do my own thing and see what happens". I am satisfied with what I produce, so my Back to Basics is a little different and is directed more towards attitudes.

To be successful one must have 3 attributes - knowledge, skill and attitude. If one does not have the requisite knowledge, one will rarely get the skill. However one needs the proper attitude to get both and therefore set the level you as an individual, wish to achieve.

This obviously can be directed towards any orchid growing. I believe that at times, the more proficient need to pinch themselves and be reminded that others have set different levels and are happy at that level, especially if that level is below what you perceive yours to be.

When dealing with knowledge it can fall into two categories:-

- you know the basics and where to get the remaining information from, or
- you know the subject yourself intimately and in great depth.

Attitude and after a long while, experience, will determine which category one will fall into or how far into each.

Australian Natives fall into 2 types. EPIPHYTES and TERRESTRIALS. Dealing firstly with EPIPHYTES - one category of knowledge will identify that they grow on trees, plants or rocks, in the open air and will be dependent on moisture in the air. This is enough to set basic culture: attach to a medium or establish in an open free drain mixture; provide water if not naturally available; probably no need for a lot of fertilizer; plenty of air movement. In the wild they only get these natural basics anyway.

Intimate knowledge will identify DENDROBIUMS as one of the many EPIPHYTES which are then divided into very many others. DENDROBIUM derives from the Greek words, Dendron - tree and Bios - life. This leads to the life in a tree, the need to be tough to survive natural conditions and hence pointing in the direction of culture. Dendrobiums will lead you to this plant of mine - arguably a good representation of this type. Your level may tell you it is a Dendrobium. Others will look at the label like I do to tell the

difference between all my Dendrobiums even when not in flower, to see that it is a D. Rutherford Supreme. To some there will be instant recognition of D. kingianum X D. fleckeri to give D. Hastings: D. Hastings X D. Speciosum to give D. Wonga: and D. Hastings X D. Wonga to give D. Rutherford Supreme. To others, you will do what I did, look it up in a book. My attitude says that I don't want instant recognition with precise, intimate knowledge; I know where to find it, even though the end result is a lovely plant, well flowered which gives satisfaction. As I said, my level and reasons for growing is for relaxation from daily work stresses and the pleasures from achieving something when the plants are grown tough.

In saying that I also accept that, maybe, the end result could be a little better, but as they say - each to his own. When these flowers are fully open I don't think this plant of mine could be a lot better. When dealing with TERRESTRIALS the same philosophy applies. The Latin word "Terra" means earth, from which the phrases, "grown in the ground", "dormant in the earth", "deciduous ", "arises annually from a tuber", all devolve. That determines culture and the immediate identification of the difference to an EPIPHYTE.

I said earlier that if one wishes to only know the basics one will need to know where to get the remaining information. The list is endless; books, meetings, workshops, newsletters, talks, informal chats over supper, visiting other growers, etc, will enable you to achieve the level you wish to set yourself. This will lead you to the basic environmental components of culture: what grows in the air or dirt, light requirements, air movement, temperature and fertiliser - with all of their vagaries - will all emerge. The skill will be to get the correct balance of each to achieve what you want.

My environment at Bellevue Heights has its own vagaries. I am low down below the top ridge on the southern side of the Mount Lofty Ranges. It is colder and wetter than the plains, light intensity and hours of light availability is different. Winds blow at gale force from the south west in the winter while hot winds of the summer go right over the top of the ranges. My shadehouse is protected under a nice canopy of gums. So through trial and error, knowledge attained, talking to different people who grow orchids under similar conditions, and my own experience, I have adapted (and adopted) to cope with my variations (not others) and place them into my expectations. Take rainfall for instance. I had 237 mm in August and 205 up until today (22/9/92). I heard that Adelaide had 16 mm in the last 24 hours, I had 45. That in itself requires adaptation and is where the skill factor is built in.

Sir Reginald Ansett once said "Persistence - which entails the right attitude - especially when needed to overcome frustrations, is the most necessary ingredient of success".

Orchid growing can be frustrating and persistence is required - even to just get them to flower. It is like the question frequently asked, "Are orchids hard to grow?" "No", is the reply, "they are just hard to flower". Take these two identically treated D. kingianums. They have received exactly the same treatment for about the last 6 years. One will be a picture of lovely pink flowers when all are fully open, the other - absolutely nothing. One is left to ponder.

Those traits of persistence and your attitude are all important ingredients of success, but the end degree of your enjoyment will probably override all. Your attitude and its level, both in growing and success terms, is what you set for yourself. Knowing what you want will determine your own satisfaction - if that doesn't please the judges or others - so be it.

When I talk to Neighbourhood Watch Groups I tell them to determine each of their own needs, and then determine how to achieve them. If they are different to others, do so without apology. The same applies to you all, whether you are new growers, or more experienced growers who need to regularly re-assess objectives. The end result, however is all in the eye and mind of the beholder.

I return to this lovely DENDROBIUM - the kingianum. Last year, prior to a meeting , a lady said "What a lovely pink, the flowers are so petite, that would be my favourite". I personally like the darker colours of the other plant, D. Rutherford Supreme. That difference of likes is healthy and always that should be respected and accepted. That is what attitude to the basics is about.



I conclude with no apology for being a little different. If I have made some of you think, if some of you agree, if some disagree, good, I have achieved what I have set out to do.

## POT SIZES

by Malcolm Moore

The following article was first published in Journal of the ANOS Far North Coast Group Inc (NSW).

During the past couple of years when repotting or potting seedlings on, I have noticed some common phenomena which have had me a bit mystified. Recently, however, after reading Gordon Young's CSIRO booklet on "Potting Mixes" I'm closer to understanding my observations.

### 1) Seedling Pots

Seedling Pots purchased from nurseries were of four types: tall tube; short tube; small square; shallow square squat. As I removed seedlings from these pots, there were several things I noticed. Seedlings grown in taller pots with more open mix had better developed root systems. The worst were seedlings in shallow square squat pots with a close fine mix. While these conclusions were clear, they were offset by some exceptions due to natural inclinations of the plants themselves. Some seedlings in the shallow square squat pots clearly loved the close mix or chopped Elk fibre. Some seedlings in tall tubes had root systems which had damped off 3 to 4 cm down in the mix (this was mostly in pots with finer mix).

### 2) Plastic drink bottle bottoms

For years I have used the black plastic bases of PET bottles as pots. I have melted extra holes in the centre, bottom and sides and have used them with a variety of mixes, which included gravel. I found them to be stable pots for tall plants and they were cheap although the ribbing I received from certain members cost embarrassment! In the past year I had noticed that pots with an open coarse mix were doing better and the root system was filling the whole pot; whereas pots with a finer mixture were not doing so well and the roots were avoiding the whole pot, going around and around the top section of the mix.

With these two sets of observations rolling around in my head, I came across the section "The Depth Of The Pot" in the CSIRO booklet on "Potting Mixes".

### Depth of the Pot

Potting mix in a pot behaves in much the same way as a wet towel hung on a clothes line. Just after drainage has stopped the bottom part of the towel or mix is still saturated with water. Above the saturated part is a very wet zone, with water content then grading to the lowest level at the top of the towel or mix.

The depth that is saturated and very wet is the same no matter what the total height of towel or mix. This means that the average water content decreases as height increases. See for yourself with a towel or use a bath sponge held successively with it's shortest, medium and longest sides vertical.

One effect of this is that the proportion of air in a just-drained mix will be less when it is in a shallow pot than when it is in a tall pot. A potting mix in which the balance between air and water is good in a seedling punnet may contain so little water in a tall pot that frequent watering of plants will be necessary. On the other hand a mix that has excellent properties in a tall pot will probably contain too little air when placed in a squat pot.

It is therefore best to use a slightly more open mix in shallow pots than in taller pots. Also mixes for large tubs which are normally deep can be quite fine. Changing the width of a pot or the general shape of its sides has no effect on the proportions of air and water in the potting mix.

Although this is written without orchids specifically in mind, the principal is the same. The conclusion is clear. The nature of the orchid root is such that it requires high humidity from the air from nearby bark chunks or particles. For the roots to dry out between waterings, clearly a tall pot is desirable. If a squat pot or saucer is used then extra drainage and a coarser mixture is needed.

In the future when buying seedlings I will be looking for the taller seedling pot or I will be prepared to repot into my own mix in a tall pot. Another lesson to be learned from the article is that even when the top of the mix is dry the deep mix in the pot may still be damp and providing humidity for roots higher in the pot.

*PTEROSTYLIS PLUMOSA* CADY IN SOUTH AUSTRALIA

by R. Bates



The yellow plumed greenhood or *Pterostylis plumosa* is one of our most distinctive and widespread orchid species, occurring from Streaky Bay on the west coast as far north as the Flinders Ranges, across into the eastern states and onto Kangaroo Island. It can be locally common (such as in Monarto Conservation Park).

For many years it was thought to be just a form of the Western Australian *Pterostylis barbata* and was first recognised as distinct by Leo Cady of Kiama, NSW, co-author of Cady and Rotherhams "Australian Native Orchids".

*Pterostylis plumosa* and *Pterostylis barbata* are really just part of a complex of as many as a dozen species, mostly in Western Australia (see Hoffmann and Brown for illustrations of some of the western species).

Compared to Western Australia there is little variation in the appearance of South Australian plants from district to district, but there are three distinct forms, perhaps subspecies, which can be recognised. The common form occurs in dry, usually fertile soils in woodland and mallee. This is the form which grows in the Adelaide Hills. Plants are robust with colourful yellow plumes, strongly outcrossing flowers and with little or no brown around the orifice of the hood.

On Kangaroo Island plants are less robust with smaller flowers, less brilliant plumes and with a brown orifice to the hood. This form is confined to the island.

In the South East two forms occur, the common form being found in dry fertile soils. The second is a dull, short segmented, self pollinated taxon which occurs in poor acid sands in damp sites. This latter plant extends through southern Victoria and into Tasmania in similar habitats.

David Jones at Canberra Botanic Gardens is working on this complex. Fortunately our common form is the one which Cady described as *Pterostylis plumosa*, so we do not have to worry about a name change here.

In cultivation *Pterostylis plumosa* prefers a small pot of well drained mix, but will not flower every year and plants often die suddenly - probably due to loss of the appropriate soil fungi. As they do not increase vegetatively about the only chance of getting plants is from flask grown material.

*Pterostylis* in this complex are probably pollinated by short bodied flies, but little is known of the attraction process or pollinator, specificity from species to species. This is a wonderful field open to study!

A group of hardy weeders including Bob Edge, John and Joan Peace, Thelma O'Neil, Roger and Rhonda Biddell, Karen and Hugh Possingham and Bill Dear met with Ray Nash on Sunday October 25th at 10 am, to return to the site adopted by The Conservation Group near Pines Oval at Belair National Park.

As it was a lovely, warm day we had a spectacular day with at least 7 species of *Thelymitra* being open and in flower. After a small walk investigating the orchids in our area, we began work, this time on the other side of the track which was quite heavily infested with boneseed. After an hour or so of hard work we had transformed the area. Now both sides of the track have been returned to virtually native scrub. In spite of the boneseed there were still a few orchids and we decided to set up a number of census sites measuring 10 m<sup>2</sup> to monitor whether the orchid populations multiply as a result of our efforts.

Feeling tired but virtuous we went for a walk after lunch and saw *Thelymitra rubra*, *Thelymitra pauciflora*, *Thelymitra ixioides*, *Thelymitra nuda*, *Thelymitra antennifera*, *Thelymitra grandiflora*, *Thelymitra x macmillanii*, *Microtis unifolia*, *Caladenia leptochila*, *Caladenia menziesii*, *Caladenia tentaculata*, *Diuris corymbosa*, *Glossodia major*, *Prasophyllum pallidum*, *Prasophyllum fitzgeraldii*, *Pterostylis plumosa* and *Calochilus robertsonii*

I would like to thank the hard-working volunteers who braved the hazards of bull ants and scratches by branches, to make a significant contribution to the restoration of native scrub. We will be returning to Belair next year in May and October. Details will be given in next year's Journal.

#### FIELD TRIP REPORT;

by Garry Guide

Conservation Group outing to Hale Conservation Park. August 1st. 1992

Twenty people met at Williamstown in the northern Adelaide Hills on a fine cold mid-winter day and proceeded in convoy to the ridge-top Hale Conservation Park. This is an unusual area because despite its high altitude and good rainfall it has a large component of mallee plants or those unusally at home on the plains. This is probably due to the skeletal soils and exposed situation so that soils dry out quickly.

The park was a blaze of colour. *Acacia pycnantha* the Golden Wattle perfumed the air, flame heath had large areas 'on fire' and purple *Buekea* and *Hardenbergia* were massed on exposed sites.

We took the Heysen trail to the top of the ridge. Greenhoods (*Pterostylis*) were abundant, tiny *Pterostylis* of the 'nana' complex, both 'Hills nana', 'Mallee nana' and a third species which occurs nowhere else but in this park; chunky *Pterostylis robusta*, tall green *Pterostylis longifolia* and the blood red *Pterostylis sanguinea*. Colonies of the tiny cherry red helmet orchid *Corybas dilatatus* (it now appears that *Corybas diemenicus* in the strict sense does not extend to the Adelaide Hills so *Corybas dilatatus* can be used!) littered the ground under the native pines, *Collitris rhomboidiformis* and everywhere leaves of Mosquito orchids, the *Acianthus pusillus* in seed and the *Cyrtostylis* in bud.

We stopped for morning tea at the lookout which gives a good view over the Para Reservoir, pine forest and farmland. There were lots of *Diuris pardina* in bud here and the seeding remains of *Genoplesium rufum*.

After morning tea we divided up, most returning to the cars, but 5 continued on 'over the edge' of the lookout and on the longer ring-route back to the carpark.

Under the cliff we walked on down to the creek where not only were there thousands of *Corybas dilatatus* but almost as many of the squat helmet orchid *Corybas incurvus* and for the first time in this park a colony of their hybrid *Corybas x miscellus*!

Altogether a pleasant walk, well marked out!



#### ANNUAL LAMB ON A SPIT BARBECUE

At the home of Helen and Kevin Western, 6 Goldsack Avenue, Coromandel Valley, from 11 am on. Bring a salad and desert to share, BYOG and bring a chair. A \$1.00 donation would be much appreciated to help offset cost of the lamb. This is a social event that everyone is looking forward to. All N.O.S.S.A. Members and their families are welcome and indeed, encouraged to attend. Refer to Kevin's article on page 59 of the July Journal if you missed last years Barbie.

ATTENTION ALL MEMBERS In order that our Librarian may complete an end of year stocktake, all members with borrowed Library Books are requested to return the same during the November meeting. Your assistance in returning books would be most appreciated by Wally.

#### ART CONTRIBUTIONS

The drawings of *Caleana major* and *Pterostylis plumosa* are provided by Les Peters. The drawing of *Sarcochilus* was taken from a poster advertising our Spring Show.

TUBER BANK Please refer to page 90 in the October Journal. All Members with spare tubers are strongly urged to participate. Locality data should be provided with donated tubers if at all possible. Phillip Matthews has been doing an excellent job as Tuber (tuberoid) Co-ordinator so lets give him our full support.

NO.S.S.A was privileged to have Dr. Larry Peterson, Professor of the Department of Botany, University of Guelph, Ontario, Canada attend our October General Meeting. Dr. Peterson is a Distinguished Visiting Fellow in the Department of Soil Sciences, University of Adelaide and is researching mycorrhiza.

#### BENCHING OF PLANTS AT NOVEMBER BREAKUP MEETING

Members are encouraged to contribute to our monthly front table display of orchids as normal. As we have a very full evening planned, we will not have a plant commentary or popular vote. We will, however, provide a list of plants benched for the December Journal. Plants placed on display will not be auctioned!!

From Orchid Wise by Roger Rankin

"Half the failures in flowering orchids arise from putting the plant in a better place".