Native Orchid Society of South Australia Inc.

Journal

Registered Australia Post
Publication No SBH 1344

JULY 1992
Vol. 16, No. 6

N A T I V E O R C H I D S O C I E T Y
O F S O U T H A U S T R A L I A I N C .

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.

Price: 60 cents

NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC

JULY 1992 VOL. 16, NO. 6 JOURNAL

JULY MEETING
Tuesday 28th July, 1992, 8.00 P.M.; at St Matthews Hall, Bridge Street, Kensington. Mr. Bob Bates, our Past President, will present the 1991 N.O.S.S.A. Orchid Survey of Onkaparinga River Recreation Park. We can look forward to a most interesting presentation illustrated with some excellent slides.

NEW MEMBERS GROUP To be held at Johnston's Orchid and Indoor Nursery, Murphy Road, at Houghton at 2.00 P.M. on Saturday, 1st August. Enquiries Jan and Graham Burford - phone 45 3085. Everyone is welcome and indeed, invited to attend.

COMMITTEE MEETING To be held at the home of Judith and Gerry Carne, 118 Hewitt Avenue, Toorak Gardens, 332- 7730 on Friday, July 31 at 7.30 P.M.

DIARY DATES

July 28: Deadline for submission of photographs and 35 mm Slides in N.O.S.S.A. Photographic Contest

September 19th and 20th, 1992: Our Annual Spring Show. Less than two months away

August 1 (Saturday) : Excursion to HALE CONSERVATION PARK. meet at 10 A.M. at the Big Gum at Williamstown. A Conservation Group initiative.

Page	Contents	Author
52	June Meeting	
53	New Members Group Visit to home of Geoff Edwards	G. Burford
53	Trading Table	J. Peace
54	Conservation Group Report - Belair Weeding Day	K. Possingham
55	*Pterostylis arenicola* and other endangered plants	B. Sorensen & M. Jusaitis
57	Orchid of the Month - *Corybas hispidus*	G. Nieuwenhoven
59	End of Year Spit Report	K. Western
59	In the Orchid House - Care of Terrestrials; July & August	M. Phillips
60	Monthly Raffle Prizes	

JUNE MEETING

PLANTS DISPLAYED AT JUNE MEETING

TERRESTRIALS: *Pterostylis robusta, Pterostylis scabra, Pterostylis alata, Pterostylis cucullata, Pterostylis grandiflora, Corybas pruinosum.*

EPIPHYTES: *Dendrobium* Hilda Poxon

Plant Commentary on the Terrestrial Orchids was given by Bob Bates. Plant Commentary on the Epiphyte Orchids was given by Reg Shooter

POPULAR VOTE: Terrestrial: *Pterostylis cucullata* grown by John Peace was voted the best Terrestrial Orchid benched.

Epiphyte: *Dendrobium* Hilda Poxon grown by Colette Makin was voted the best Epiphyte Orchid benched

COMMENTATOR'S CHOICE: Terrestrial Species: *Pterostylis alata* grown at Black Hill and submitted by Roy Hargreaves.

Terrestrial Hybrid: No Terrestrial Hybrids were benched.

Epiphyte Species: No Epiphyte Species were benched.

Epiphyte Hybrid: *Dendrobium* Hilda Poxon grown by Colette Makin.

SPEAKER: Kevin Western, a well known and respected member of N.O.S.S.A., who has held several offices including that of President, presented a most interesting and well illustrated discussion on Hybridising with Australian Native Epiphytic Orchids. Kevin concentrated on the Genera *Dendrobium*, *Sarcochilus* and *Cymbidium.* He has prepared an article for our Journal (on Disk!) on the topic and this will be published in the next edition of the Journal. Thankyou Kevin for a most excellent and enjoyable presentation.

Our front table orchid display in June must have come close to setting a record for the fewest plants benched at a N.O.S.S.A. meeting. Unfortunately, several of our regular front table display contributors were unable to attend. Lets do much better for July. July isn't our peak flowering period but if we all contribute what we are able, we will have a very impressive display. Several who attend our meetings on a regular basis are not growers and are unable to get out into the bush to see orchids in their natural environment. They come to our meetings to see native orchids and to learn more about them. Your president and current Journal Editor is one such member. I think we all like to see a large display of both epiphytes and terrestrials each month.

On Tuesday, July 7, Kay Nesbitt, a Founder of the Native Orchid Society of South Australia and a dedicated and much loved Member, passed away peacefully at home. The Committee and members of N.O.S.S.A. extend our deepest sympathy to Les and family. Kay will be sadly missed by all who knew her.

NEW MEMBERS GROUP VISIT TO HOME OF GEOFF EDWARDS by Graham Burford

We had a few plants brought in for analysis, following the suggestion from the previous meeting, and this discussion opened our meeting. Jan Burford had a specimen pot of *Pterostylis baptistii* and questioned why there was such a wide variation in growth with some plants yet to flower, some in flower, and others where the flowers were spent. The tubers had been selected and graded at the time of repotting and only large tubers had been planted. The answer - just one of these things. Jan also expressed her disappointment with two other terrestrials, *Pterostylis rogersii* and *Diuris brevifolia*. Having increased both of these species to having a specimen pot of large tubers, all tubers rotted, but a few pots of smaller tubers had come up. The lesson from this was to always have at least two pots of each species in case of a disaster in one pot.

Then it was over to Geoff. Geoff's attitude to his orchid growing is dictated to by the amount of time that a demanding job permits, and because there may be weeks go by when time does not permit him to even look at his plants, he admits that they have to be "survivors" in a real sense. Geoff is also casual when it comes to fertilising - no regimented program for him - just a side dressing of blood and bone (if he remembers), and he grows them fairly hard. Geoff sees his orchid growing as a means of winding down, and to just potter around is to relax. After all of this, his plants generally looked remarkably healthy.

On analysing Geoff's shade house it was agreed that he was blessed with conditions that were very close to ideal. The property is steeply sloped, facing south with conditions cooler than we plains dwellers have. Gum trees on both his and the adjoining property form a sparse canopy that place the shade house in dappled shade for most of the time and we reasoned that for all but the few very hottest months of summer, Geoff could probably remove his shade cloth covering altogether. The higher rainfall of the foothills is offset by regular gully winds.

We moved as a group "up the slope" of the backyard to look at the terrestrial orchids *Pterostylis pedunculata* and *Pterostylis nana* growing in profusion where Geoff has left some ground as it has always been. He had just cut the long grass with the brush cutter for us to see the orchid clumps more clearly. A nice natural touch to have in his backyard. Looking at his own terrestrials he admitted that he had not repotted this year and because of this many pots displayed plants growing around the outer edge of the pot where the newly made up tubers had grown.

Back down to the shade house revealed a very varied collection of plants. Someone jokingly said that it was nice to see where half of the raffle ticket prizes had gone. Again Geoff stressed that his hobby was big on pleasure, not so big on knowing hybrid names, etc.

His wife Pauline served afternoon tea in a lovely patio setting with the spa and hanging baskets in an area partly closed-in with fibre glass sheeting. The meeting finished at approximately 4 pm, and our thanks go to the Edwards' for a relaxing afternoon.

TRADING TABLE by John Peace

There has recently been a complaint about some plants purchased at the trading table. Would members wishing to sell plants at the trading table and the Spring Show please note the Society's by-laws governing the sale of plants. Only Australasian Orchids should be offered for sale; all other plants and exotic orchids are not to be sold (this ruling does not apply to our Christmas auction). Items such as pots and accessories for growing orchids are allowed for sale.

The trading table will close sales at 8.00 PM. Plants will not be sold after the meeting.

The following is from the Society's Constitution and By-Laws:

10 Sale of Plants through the Society

(1) General
The Society encourages the sale of member's pots at its meetings, but is concerned that the sales are well conducted and on a moderate scale.

Because many buyers of plants are not experienced growers, and because the Society's good name is to some extent affected by the quality and condition of plants offered for sale, it is important that all concerned observe these by-laws which have been compiled with the objective of safeguarding the best interests of the Society, the buyers and the vendors.

(2) Plant Health and Condition
All plants offered for sale must be clean, healthy and free from disease and insect infestation. If sold in pots or mounted they should be well established and rooted. although this is the preferred condition, plants may be offered for sale newly potted or mounted provided they are clearly labelled to this effect - or they may be sold bare rooted.

(3) Plant Age and Size
The sale of very young and small plants to other than experienced growers is not encouraged. Although no clear-cut rules can be made in this regard the intention should be clear enough:- avoid making a sale where it seems likely that the plant will not survive.

CONSERVATION GROUP REPORT - BELAIR WEEDING DAY

by Karen and Hugh Possingham

Members of the NOSSA Conservation Group met with Ray Nash from Friends of Belair on Sunday 14th June for a delightful day in the bush. With his extensive knowledge of the orchids of the park, Ray led us to an area rich in orchids. We saw large colonies of *Acianthus exsertus* in flower. There was a profusion of different leaves and we had much fun identifying the species.

Boneseed eradication was our main purpose and it is a surprisingly easy plant to remove. In spite of this it is the major weed in the park and creates a seed bank so that it can take several years of weeding before it is completely eradicated from an area. After an hour or so of work we felt that we had made a great impact on our area and were surprised to find how rewarding weeding an area of otherwise intact bush can be.

Acianthus exsertus

The area was particularly rich in *Thelymitra* species with the leaves of *T. pauciflora, T. nuda, T. luteocilium, T. flexuosa* and *T. antennifera* being identified. We saw many *Pterostylis* species with the leaves of *P. nutans, P. nana, P. plumosa, P. pedunculata* being identified. On our walk after lunch we saw *P. longifolia* in bud, and *P. robusta* and *P. sanguinea* in flower. Also flowering was *Corybas despectans* and *Genoplesium rufum* had just finished flowering. We found the leaves of *Caladenia menziesii* and *C. dilatata, Diuris* spp and *Glossodia major*.

Due to the abundance of orchids in the area, it was decided that NOSSA should adopt the area just past the Pines picnic ground and return on Sunday October 11th to survey the area when in flower and continue to weed the area. We feel that we could make a tangible contribution to the long-term survival of orchid populations in this locality. Anyone is welcome to come and help. We will meet at the information centre at the entrance to the park at 10 AM.

PTEROSTYLIS ARENICOLA AND SOME OTHER ENDANGERED PLANTS OF SOUTH AUSTRALIA

by Birgitte Sorenson & Manfred Jusaitis
Black Hill Flora Centre
Maryvale Road, Athelstone SA 5076

Of the many rare and endangered plant species of South Australia, five are the focus of a World Wide Fund for Nature funded research project at the Black Hill Flora Centre, Botanic Gardens of Adelaide. Populations of these five species are generally restricted to remnant roadside vegetation and privately owned patches of scrub in the agricultural regions of South Australia.

Permanent photopoints have been established in native habitats of these species to monitor long-term growth rates and population changes. Plant dimensions and shoot lengths are recorded regularly to monitor seasonal growth rates. Seeds and cuttings collected on field trips are used in propagation studies and to build up stock plants for further experimentation.

Pterostylis arenicola (sandhill greenhood) is a terrestrial orchid found predominantly on sandhills under *Callitris preissi* a few kilometres south of Tailem Bend. A smaller population occurs near Grange in the metropolitan area of Adelaide, and recently a single plant, purportedly *P. arenicola* was photographed near Murrayville in Victoria by J. Jeanes. Populations are threatened by their small size, soil disturbance due to rabbit digging, trampling and collection of plants and seed, and by weed invasion. Plants collected from photopoint sites were used to isolate mycorrhizal fungus from *P. arenicola*, to collect seed pods and to determine the extent of tuber multiplication.

Mycorrhizal fungus was isolated from the thickened region of the underground stem immediately below the rosette of leaves. Stem segments were sterilised and sections were placed onto fungal isolating medium and incubated at 20°C in the dark. Fungal growth developed from the sections within 4 days and the fungus was subcultured on oatmeal medium to obtain a pure culture (Isolate P221).

P. arenicola seed were sterilised in 1% sodium hypochlorite (NaOCl) for 5 minutes and spread evenly over sterile filter paper which was in turn placed on oatmeal media pre-inoculated with fungal isolate P221 or 0167 (*Ceratobasidium cornigerum* isolate donated by J. Warcup). The seeds were incubated at 10/18°C in the dark, under a thermoperiod of 12 hours.

Identical procedures were used to study asymbiotic germination, except oatmeal medium was replaced with Pa5 (modified Burgeff N_3f) medium and fungal innoculum was excluded. Early results indicate that symbiotic germination occurred more rapidly than asymbiotic, and that mycorrhizal isolate P221 was more effective than 0167 in stimulating germination of *P. arenicola* seed.

In order to determine the extent of tuber multiplication in this species, 10 plants were grown individually in pots and tubers were counted at the end of the season after upending pots and sieving the soil. Of the pots examined, 70% had one tuber, 20% had 2 and 10% had 3 tubers. Where 2 or more tubers occurred, at least one was markedly smaller than the other(s). It appears that tuber multiplication contributes only in

a minor way to population increase in this species, supporting field observations that this species is not a colony-former.

(Ms Sorensen and Mr Jusaitis also discussed four non orchid species in this paper: *Acacia cretacea, Acacia pinguifolia, Pultenaea trichophylla* and *Dodonaea subglandulifera*. Due to the constraints of space, the entire paper could not be published in this volume -ed.)

Generally, local farmers and property owners have been very interested and concerned for the welfare of these endangered plants growing in their neighbourhood. They have been willing to assist us where possible and are pleased to be informed of the presence of rare plants in their locality. Some farmers stopping to query our actions along the roadsides, when informed of the rarity of a particular species, characteristically remark "but they're as common as weeds - they're all over the place", little realizing the restricted nature of populations to this immediate environment. The Department of Road Transport on Eyre Peninsula kindly donated and erected a fence around a group of *A. pinguifolia* plants growing along the roadside. This was to ensure their workers did not damage any of the plants during the reconstruction of the Tod Highway.

All 5 species discussed above are endemic to South Australia and are not known to occur in any conservation parks. One of the aims of this project is to reintroduce the species into conservation parks, sanctuaries or protected lands located as close to native habitats as possible, to ensure ongoing survival of these plants in the wild for future generations to enjoy.

Recovery Plan for *Pterostylis arenicola* (Sandhill Greenhood Orchid)

SUMMARY

Current species status: Endangered (Briggs and Leigh, 1988). Species is endemic to South Australia and restricted to 3 small populations at 2 disjunct sites (Tailem Bend and Grange) totalling approximately 336 plants. Primary threats are loss of habitat, introduced weeds and herbivores.

Habitat Requirements and Limiting Factors: The orchid is closely associated with *Callitris preissii* trees in grassland on red sand dunes. Suitable areas of this habitat type still exist enabling introductions to be performed.

Research Objectives: To obtain sufficient information about *P. arenicola* to plan recovery actions and to prepare a conservation research statement.

Research Criteria: To achieve the objectives, information on distribution, present population numbers, mortality and recruitment rates, propagation techniques and threatening factors will be obtained.

Recovery Plan Objectives: To downlist *P. arenicola* to vulnerable within 10 years.

Recovery Criteria: Recovery will have been achieved when the three main populations have been maintained or increased over five years, and when two re-established populations of at least 200 plants each have been self-sustaining with minimal interference for 5 consecutive years.

Actions Needed:

1. Field research
   - 1.1 Study ecology, population biology and reproductive biology
   - 1.2 Study of threatening factors

2. Laboratory research
   - 2.1 Develop propagation techniques
   - 2.2 Study environmental and physiological factors involved in flower initiation

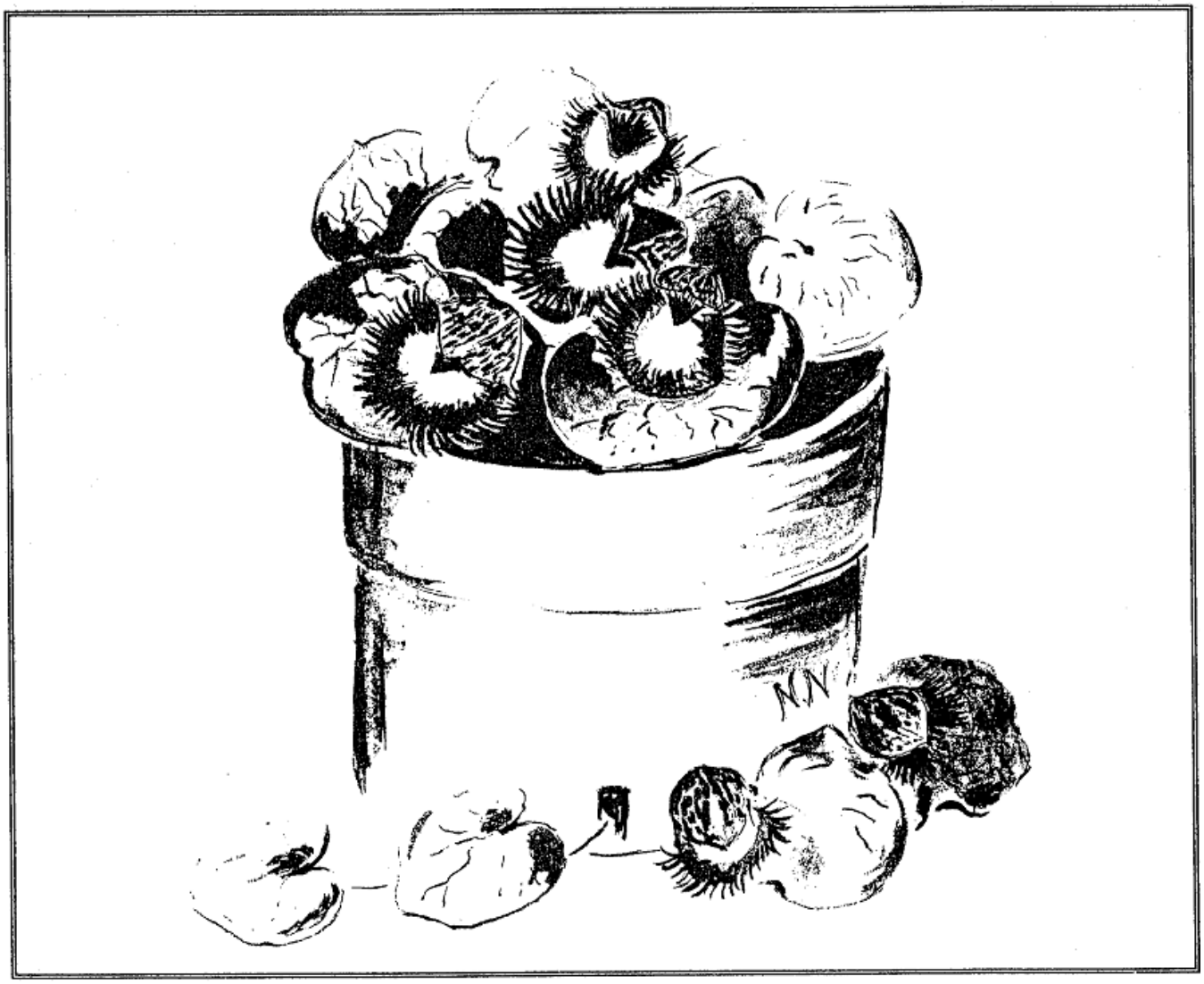
3. Recovery tasks
   - 3.1 Propagate plants and build up ex situ collection of plants and seed
   - 3.2 Fence and control weeds in existing populations
   - 3.3 Re-establish two new populations
   - 3.4 Monitor old and new populations over 5 years

ORCHID OF THE MONTH (JUNE) by G.J. NIEUWENHOVEN

Corybas hispidus D. Jones Bristly Helmet Orchid

This lovely Orchid occurs in south east Queensland, New South Wales, A.C.T. and the north east part of Victoria.

According to David Jones in his book "Native Orchids of Australia" it grows in open forest, often on sheltered slopes and gullies in hilly country. This sounds just the sort of place one might look for *Corybas* in South Australia.



Corybas are small plants with ground hugging leaves, rounded or heart shaped, and grow in sheltered places under shrubs where the air is always humid during the growing and flowering season.

Humidity is an essential requirement for the flowers to develop and last; prolonged periods of dryness in the air will quickly abort the flowers. Unlike most of our South Australian species, *Corybas hispidus* comes up fairly early March - April. This co-incides with the earlier Autumn rains and cooler conditions in the hilly areas where it grows.

Tiny flower buds are already evident when the leaves start to develop in Autumn. To ensure the flowers do not abort during warm dry conditions, I place a clear plastic cover over the top of the pot to keep in humidity. The flowers continue to grow quickly until mature and can last up to 3-4 weeks under ideal conditions.

To make sure plants have a proper growing cycle I water the pots occasionally from January onwards. Leaves start to appear within 3 to 4 weeks afterwards. In nature *Corybas* are pollinated by small gnats; occasionally this occurs in cultivation. An interesting phenomenon is the elongation of the peduncle or flower stalk when the ovary is nearly mature. This raises the ovary anything up to 30 cm off the ground and helps to disperse the seed further than would otherwise be possible.

Most *Corybas* species are colony forming and have deep red to purplish flowers with fringed labellums. To observe them in nature one would have to get down on hands and knees to look them in the eye properly. Corybas are one of a small number of orchids that will colonise exotic pine forests; large carpets of these plants can sometimes be found amongst the pine needles.

Cultivation

Corybas hispidus in common with several other species including some of our South Australian ones is easy to grow.

Soil: generally a mixture of loam and sand, say 60/40 ratio. Sand must be coarse and washed, quite gritty is ideal. A small quantity of peatmoss or rotted leaf litter may be added to provide some food for the plants. A layer of leaf litter on top of the compost will simulate natural conditions, alternatively, a layer of chopped pine needles will do. The soil made up, should be freely draining and stay moist but not wet. Plant the small tubers about 25 mm below the surface, growing point up. This can often be difficult to find on dormant tubers. Tubers planted the wrong way up will usually grow successfully anyway.

A shadehouse covered with 50% shadecloth is ideal for growing *Corybas*. If you grow plants such as cymbidiums place your *Corybas* in between them.

Watering:
Corybas, in common with most native orchids, need a distinct damp growing season from Autumn to late spring and a dry period from late Spring to early Autumn. Keeping the tubers constantly moist during dormancy will rot them. Re-potting should be done each summer to rearrange the tubers, as new tubers produced on the end of long adventitious roots often end up in the bottom of the pots, causing the new plants to grow from the drainage holes. This may look interesting but makes it easier for slugs and snails to make a quick meal of them.

Where to get them:
From native orchid nurseries i.e Les and Kay Nesbitt at Kersbrook, or by joining the Native Orchid Society of South Australia. Their tuber bank sometimes has tubers available, or you could try growers directly. *Corybas* and all Native Australian Orchids are protected and must not be removed from the bush, nor must flowers be picked.

Some easier *Corybas* to try: *Corybas aconitiflorus, C. diemenicus* syn. *dilatatus, C. fimbriatus, C. hispidus, C. pruinosus*.

Reference: D. Jones. Native Orchids of Australia

THE DECEMBER N.O.S.S.A. END OF YEAR SPIT:- REPORT & RECOMMENDATIONS
by Kevin Western.

Firstly a long overdue "THANKYOU" to Wally and Shirley Walloscheck for their parts in making the event of 1-12-91 possible and for offering their home as the venue. I wrote the original version of this report and promptly lost it so my apologies for the delay.

I turned up about half an hour late (as usual) to help get the spits started. Wally was a 'spit novice' and it didn't take long to realise I had forgotten about as much as I had ever learned about barbecuing on spits.

Accordingly, soon after my arrival, the fat on the first animal became molten, began to run, ignited and caught the exterior of the beast alight. Moments of panic! "I've seen this before." I recalled. "Doesn't seem to do any harm. Let's get it out and keep cooking." All was soon well as we learned to reduce the amount of heat being generated.

Soon some more 'spit novices' arrived to help. They could not be convinced the charred and bedraggled exterior was just a cover for a perfect cooking job (as was proven later). By the time members began arriving the meal was near to ready and well worth waiting for. Comments such as "Looks like burnt offerings!" and so on soon had to be eaten. (Pardon the pun).

Those present were treated to a superb meal, a wander through Wally's orchid collection and a great opportunity to relax for quite a time in the company of fellow 'orchid nuts'. All those who attended rated the occasion as extremely successful and believed that it should be repeated each year.

Since the End of Year N.O.S.S.A. SPIT stemmed from a statement that I made during a 'New Members' visit to my house at Coromandel Valley when I offered to make our house available for the event; I would like to recommend that the event should become a fixture on the NOSSA calendar and further recommend that the venue change to the homes of other willing members to broaden the coverage of collections seen and to spread the load about. To that extent I would again offer my home as this year's venue.

NOSSA SPRING SHOW SEPTEMBER 19TH AND 20TH

IN THE ORCHID HOUSE: CARE OF TERRESTRIALS JULY-AUGUST By Mark Phillips

By now you will have a fair idea of how well your orchids will flower this Spring and will be planning for optimum flower quality at the N.O.S.S.A. Spring Show. This can be achieved by:

1. Stop any fertiliser programs now! If you continue to 'foliar feed ' or use 'liquid manures', flower spikes will become leggy and easily blown over in the wind.

2. Give maximum light: remove overhanging branches; use a white partition on the south wall of the orchid house - this will reflect light and also cut down wind damage during the passage of the many cold fronts we can expect between now and the Show.

3. Do not shift or turn pots un-necessarily as this will produce kinky stems and flowers facing all different directions. Flowers turn to face the sun. It is an advantage at the Show to have all flowers facing the same way.

4. Strip off any leaves or leaf tips which have rust, mould or bacterial disease - such diseases spread quickly in cool, wet weather. Any pot seriously affected must be removed completely

to a dry, well light spot. A spray of dilute White King will help to control fast spreading rots. (actually as I write this the dry weather has ensured that there is no disease in my orchid house but that can all change very quickly [its pouring with rain as your editor types this article ed]). In a roofed orchid house, especially an insect proof one, diseases almost never appear but I think most Adelaide growers prefer the challenge of an un-roofed orchid house.

5. Keep snail baits handy; go around with a torch (flash light) on wet nights at about 11 pm to catch those nasty little slugs which sometimes ignore metaldehyde pellets. I like to check all pots twice a week for signs of caterpillars or aphids which are best removed by hand. Make sure you keep the orchid house door closed - I've had cats and possums get in and when I've disturbed them they panic and race around knocking everything over!

6. Retarding or bringing flowering forward: this is always a tricky one. If you think a pot will be in bud for the Show, you might consider A); lending it to a friend in a warmer suburb; B) giving it fluoro light; C) shifting it to a glass house if you have one. If you think your pot will be finished before the Show, do the opposite of the above, and if pollination by insects is a problem, shift the pot to an insect free location.

Soon you should see those little seedlings beginning to appear; presuming you sowed seed on the tops of pots that is! A sojourn in the glasshouse will bring seedlings through earlier. Some people do not sow seed until now - this is especially useful in colder areas such as the hills but it does mean a lot of watering in November - December so that pot surfaces do not dry out.

Now is the time to write those letters to interstate growers offering to swap tubers - let them know what you will have spares of and what you would like. Just because you have a particular species does not mean you should not try to get other clones of it. Another clone may 1) do better in your environment 2) be useful for cross breeding to produce more vigorous plants of the same species 3) in fact turn out to be a different species. 4) flower at a different time to the clone you already have eg Spring Show time!! Occasionally I have 'got rid of' a particular species I could not grow well by sending the tubers to someone in exchange, only to hear in a year or two later that they have turned my reject tubers into a magnificent potfull of perfect flowers!!

MONTHLY RAFFLE PRIZES

Les Burgess suggested that N.O.S.S.A. acquire some new hybrid crosses which are now being introduced, to use as raffle prizes at our monthly meetings. As of the July meeting, a major improvement will be seen in the quality of prizes offered. All members are encouraged to support N.O.S.S.A. by purchasing tickets for the raffle on a regular basis. Thanks Les for speaking up when so few do.

"The most successful and happy orchid growers seem to be those who have no reason for being successful and happy"

"All mericlones are alike but they have different growers so we can tell them apart"

from Orchid Wise by Roger Rankin

Art contributions for this month's Journal are courtesy of Mrs. Chris Butler (*Pterostylis arenicola*), Mrs. Nancy Nieuwenhoven (*Corybas hispidus*) and Mr. Les Peters (*Pterostylis cucullata*).