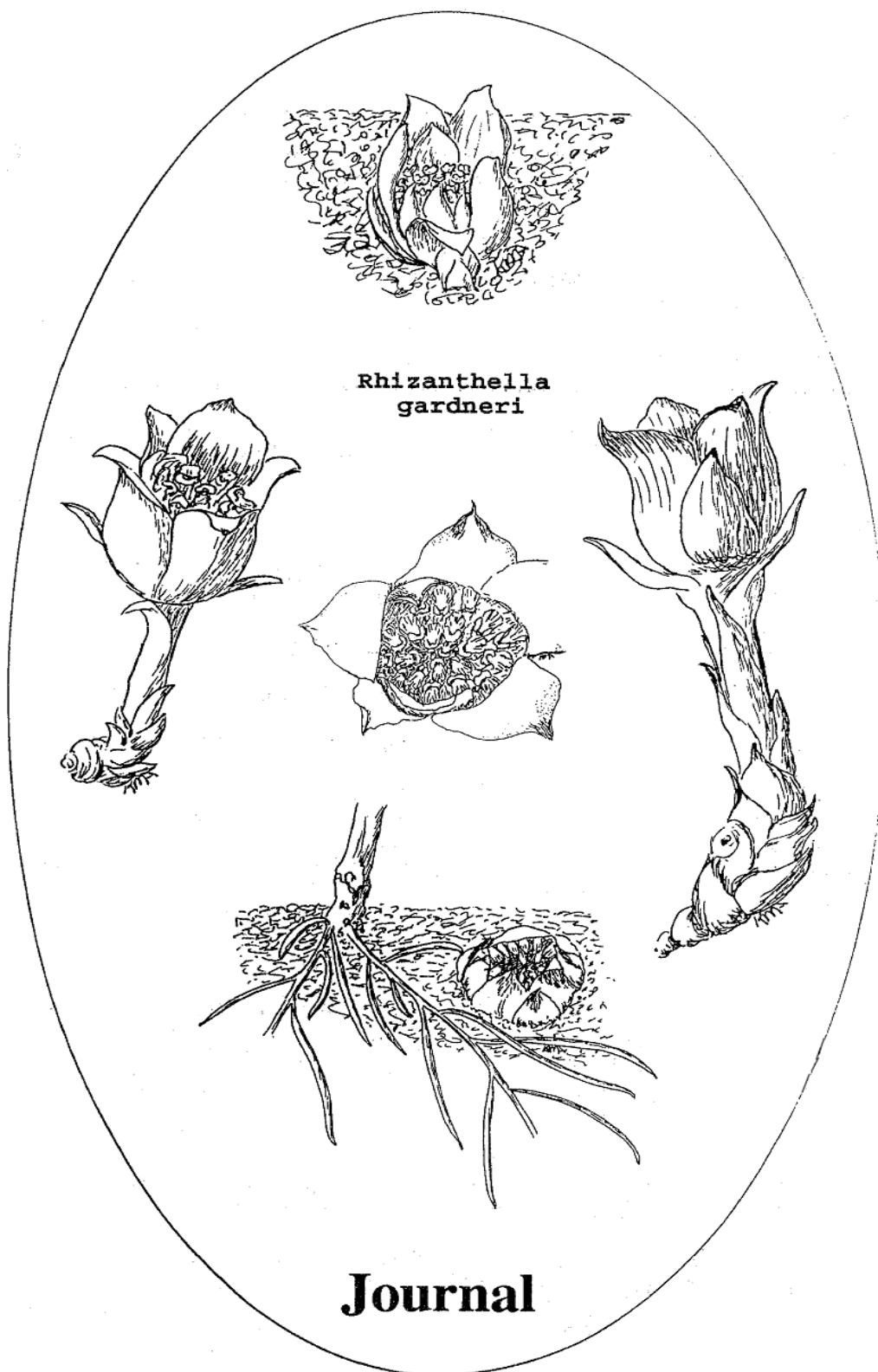


Native Orchid Society of South Australia Inc.



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.

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NATIVE ORCHID SOCIETY OF

SOUTH AUSTRALIA INC

JUNE 1994 VOL. 18. NO. 5 JOURNAL

JUNE MEETING

Tuesday, 28 June, 1994, 8.00 pm: at St Matthews Hall, Bridge Street, Kensington. Doors to the hall will be open at 7.15 pm for those wishing to borrow from the library or purchase/sell through the trading table. Ian Kilpatrick will speak on Orchid House Gadgetry.

NOSSA OPEN DAY

To be held on Saturday (not Sunday) July 2nd at Les Nesbitt's home, 18 Cambridge Street, Vale Park.

PAGE	CONTENTS	AUTHOR
42	Diary Dates	
42	Next Field Trip	
42	New Members	
43	On The Bench	
43	Photo Competition	
44	Speakers at the May Meeting	
45	Basis of Terrestrial Growing Part 1 - Housing	Les Nesbitt
45	Book Review - K.I. Wild Flowers	Bob Bates
46	Favourite Orchid Locations	Mark Philips
48	Botanists of the Orchids 24	Sandy Philips
48	Australian Dendrobiums No. 2	Sandy Philips
49	Australian Orchid Conference	Gerry Carne

BUS TRIP ***** September 24th *****

• Bruce Mules' Orchid Nursery (Port Pirie).
 Seats are still available. Ring Bill Dear or see him at the next meeting.

DIARY DATES

June 19 Conservation Group meeting at Belair.
 July 2 Open Day at Vale Park.
 July 16 Excursion to Morialta Falls.
 July 30 Weeding at Scott Creek. Conservation Park.
 July 31 Open Day at Roger Herriman's.
 Aug 21 Excursion to Aldinga Conservation Park.
 Aug 21 Open Day at Kevin Western's.
 Sept 17-18 NOSSA Spring Show.
 Sept 18 Hand Pollinating *Caladenia rigida*, *C. behrii*, *C. gladiolata* at Scott Creek.
 Sept 24 Bus Trip to Bruce Mules'.
 Oct 8 - 9 SGAP Show.
 Oct 23 Echunga Open Day Picnic.

COMMITTEE MEETING

To be held at the home of Les Nesbitt at 7.30 pm Friday 1st. July.

NEXT FIELD TRIP

Morialta Falls, Saturday 16th July. Meet at the kiosk at 2 pm.

NEW MEMBERS:

Welcome to: Gillian Long of Belair.
 Alex Nalco of Marion.
 Ray Haese of Dernancourt.
 Verity Adams of Campbelltown.
 Peter Harris of Uraidla
 Janet and Bob Napier of Caringbah NSW

PLANT POTS (Black plastic): Bill Dear will be taking orders at the next two meetings or phone 296 2111.

300 mm	\$2.50	150 mm	\$0.40	80 mm	\$0.15
200 mm	\$1.50	125 mm	\$0.20	50 mm	\$0.08
200 mm tall	\$1.00	100 mm	\$0.20		

ON THE BENCH

Terrestrials: *Acianthus pusillus* (3) including green flowered form; *Corybas hispidus*; *Eriochilus cucullatus*;
Pterostylis alata; *P. alveata*; *P. abrupta*; *P. dolichochila*; *P. fischii*; *P. coccinea*; *P. longipetala*; *P.*

ophioglossa; *P. obtusa*; *P. truncata*; *P. X toveyana*; *P. X , furcillata*; *P. X Rogoff*; *P. X Sentinel*.

Epiphytes: *Bulbophyllum macphersonii*; *Cymbidium canaliculatum*; *Dendrobium antennatum*; *D. Golden Fleck*; *D. Hilda Poxon* (7); *D. Essie Banks* (2); *D. Johannis X agrostophyllum*; *D. Kim Heinz*; *D. Kuringai*; *D. Aussie Child*; *D. Star of Gold* (2); *D. Sunglow*; *D. Zeppelin*; *D. Zip X Aussie Quest*.

Bob Bates gave the commentary on the Terrestrials.

John Turner spoke on the Epiphytes.

Don Wells was the commentator for the Competition Plants.

COMMENTATORS CHOICE:

Terrestrial Species: *Pterostylis fischii* grown by Wally Walloscheck.

Terrestrial Hybrid *Pterostylis X Rogoff* grown by Les Nesbitt.

Epiphyte Species: *Bulbophyllum macphersonii* gown by George Nieuwenhoven.

Den. Hilda Poxon grown by Reg Shooter.

POPULAR VOTE:

Terrestrials: *Pterostylis abrupta* grown by Les Nesbitt

Epiphytes: *Dendrobium fleckeri X D. speciosum*

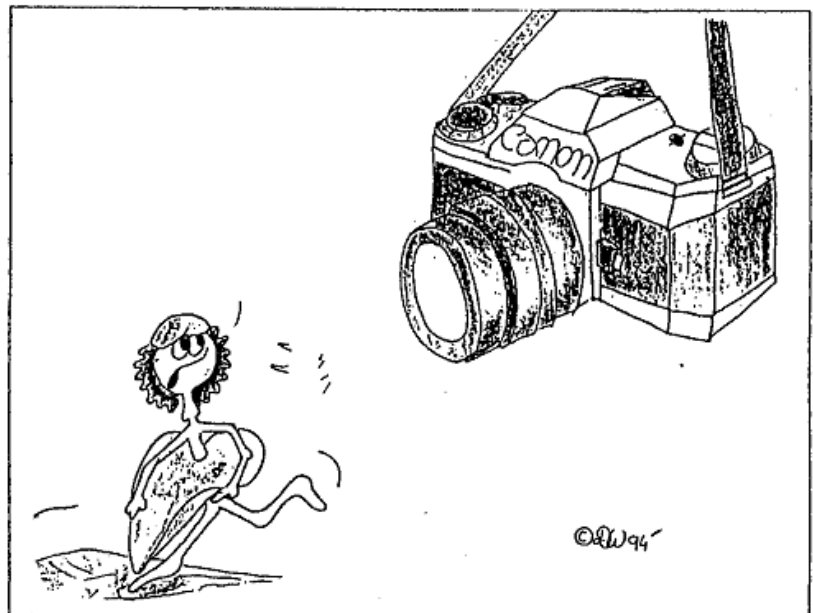
PHOTOGRAPHIC COMPETITION

If you wish to enter prints or slides in this years Orchid Photographic Competition please hand entries to Roger Biddell at the June or July meetings.

This years classes will be:

- I Corybas
- II Leporella
- III Thelymitra
- IV Rufa Group *Pterostylis*

Limit of five entries per class.



SPEAKERS AT THE MAY MEETING:

Barry Collins of ANOS council congratulated NOSSA on being the chosen hosts for the Australian Orchid Conference in 1996.

Bob Napier ANOS Treasurer presented a cheque for \$1,000 to be awarded as prize money for the Grand Champion at the 1996 show as well as a \$2,000 advance to help fund the Conference (from NOSTI).

John Turner (ANOS council) originally from Butler Tanks South Australia spoke on ANOS funding of Conservation Projects such as the Shell Harbour Reserve for *Pterostylis gibbosa*.

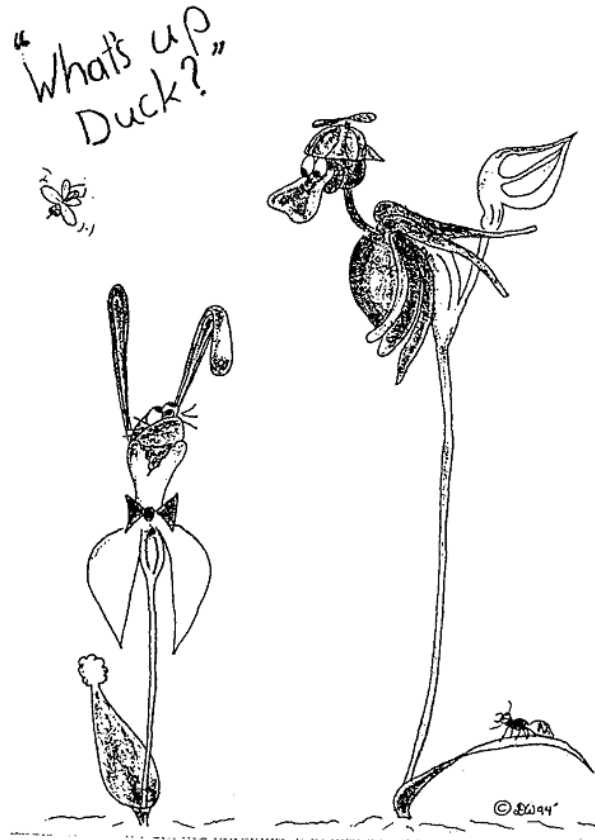
Our main speaker, Les Nesbitt, spoke on the cultivation of terrestrial orchids in Adelaide. Les noted that considerably fewer terrestrial species are being grown in Adelaide compared to ten years ago because in the 80's NOSSA participated in many rescue digs and members were growing all sorts of difficult species. These have since died out or been returned to the bush and now only easy to grow species are left.

Les discussed the numerous orchid killers:-

- Torrential summer rains followed by heatwaves which cooked tubers in the pots.
- Hail storms.
- Loss of soil mycorrhiza.
- Killer frosts.
- Introduced virus, fungi and bacteria.
- Slugs, snails, aphids, mealy bugs, millipedes, grubs.
- Wrong conditions - too dry, too wet, too shady etc.
- Excessive fluctuations of soil temperature, water content.
- Wrong pH of medium.
- Blackbirds, cats, dogs, rats, mice, children.
- Floods and fires.
- Growers themselves - over watering, over fertilising, mis-use of pesticides and herbicides, long holidays, laziness, illness, divorce, etc.

Many of these problems can be avoided by:-

- Cleanliness and hygiene, quarantine.
- Roofing shade houses.
- Proper shade house construction; pest-proof, various shade levels.



- Not watering too early or letting pots dry out too early.
- Regular repotting, regular checks for pests and hand removal of same.
- Use of well drained mixes.
- pH adjustments.
- Good use of leaf litter topping on pots - gum leaves, pine needles etc to stop splashing, and control temperature and water fluctuations

It is imperative that we get the problem sorted out so we can have a good display of terrestrial orchids at the Conference in 1996.

Les has provided a series of articles to expand on this talk, the first of which appears below.

THE BASICS OF TERRESTRIAL GROWING PART 1 HOUSING.

Les Nesbitt

South Australia and Victoria are well known as the native terrestrial orchid growing states throughout Australia. We will be expected to put on a spectacular show of terrestrials for the 3rd Australian Native Orchid Conference in 1996. We have two & a half growing seasons to get our terrestrials into peak condition. These notes are designed to help you and me with basic culture.

Anyone can grow orchids on the 360 normal weather days of the year. It is the 5 or 6 extreme days that must be guarded against. The best defence is a sturdy shadehouse to keep out wind, hail, frost and floods. At least part of the roof can be fibreglass, etc. to shed summer rain during thunderstorms. The shadehouse should, if possible, be sited so it is not shaded in winter by trees or buildings. The walls must not be solid material because good air movement is essential for good culture. Benching of galvanised pipe and weldmesh is a bit expensive but lasts a long time. It repels slugs and snails and keeps pots clean.

Shadecloth (50% - 70%) is a good material for roof and walls. There should be no gaps so that blackbirds, possums, dogs, cats and children can not get in. A lock on the door helps security. If a shadehouse is out of the question for a year or two, there is always somewhere suitable for terrestrials. Greenhoods and Helmet orchids do not need bright light and can be grown inside on a window sill.

BOOK REVIEW

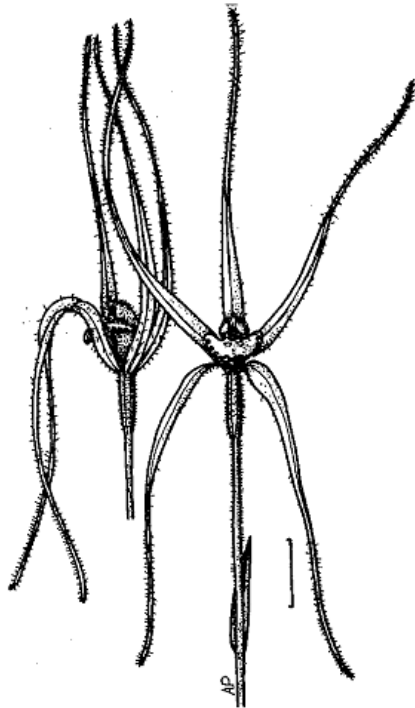
Bob Bates

Kangaroo Island's Native Plants by Ivan Holliday, Bev & Dean Overton. (Swift Printing; Adelaide) 1994.

Kangaroo Island is special to most South Australians, particularly those interested in nature. The island has forty endemic plant species at present named (but my estimate is that the true figure would be closer to sixty).

Kangaroo Island's Native Plants is an attractively presented, glossy production with 246 species of plants illustrated in colour, 28 of them Kangaroo Island endemics. (As 200 of the species illustrated also occur in the Mt Lofty Ranges the book is valuable not only for the tourist but for the local wild flower enthusiast also.)

The orchids in the book are perhaps not as well treated as they ought to be, only nineteen species being illustrated and two of those are mis-identified, the plate labelled *Corybas incurvus* is in fact *Corybas dilatatus* and the one labelled *Thelymitra aristata* is actually a species in the *Thelymitra nuda* complex. It is pleasing however to see pictures of the unnamed Kangaroo Island Daddy long-legs (*Caladenia* aff. *filamentosa*) and the Green Comb Orchid *Caladenia tensa*, both of which are missing from Orchids of South Australia.



Daddy-long-legs

The text is simple, really only notes accompanying the photographs which show the wonderful variety of Kangaroo island wild flowers. Other than the orchids mentioned there are a few errors including mis-identified photographs (the plant illustrated as *Frankenia pauciflora* is in fact the un-related *Samolus repens*) and inverted photos (ie of Spiny Mintbush: *Prostanthera spinosa*).

I would like to see a more comprehensive book on the Flora of Kangaroo Island, which treats all species including the many unnamed taxa, discussing plant associations, biology, ecology and especially giving a fair treatment to the orchids!

Nevertheless I would recommend the book Kangaroo Island Native Plants to anyone interested in South Australian plants.

The book is available for between. \$11 and \$14 at various bookshops including the Conservation Centre Bookshop.

FAVOURITE ORCHID LOCATIONS

Mark Philips

Murchison River, Western Australia

The river, said to be the oldest river in the world having followed approximately the same course for 10 million years has its origin in the dry stony ranges of Central Western Australia about 1,000 Km from Perth,

There are very few orchids along the upper reaches of the river as it flows through arid, infertile soils but as it approaches the coast rainfall increases, especially winter rainfall. The middle section of the river has hardly been explored botanically and it is likely that many undescribed species occur there.

From Murchison Bridge where Highway One crosses the river, to Kalbarri on the coast the river cuts through ancient sandstones that have been uplifted in the last million years

so that the river has had to cut a deep gorge. It is in this area which receives 300 mm plus rainfall per year that some wonderful orchid sites can be found.

The Z bend is the best known of these, sandheath grows to within 100 metres of the gorge. After a bush fire there is a profusion of orchids on the sandheath - millions of *Burnettia nigricans* carpet the ground with their red and white flowers while the black stems of *Prasophyllum giganteum* reach up to 2 metres and represent one of the tallest plants on the plain. However when not burnt orchid flowers are very scarce until one reaches the Z Bend itself. Here the soils are more fertile, rocks channel rainfall runoff, and there are numerous cooler, damper microhabitats. Most of the orchids here have only been recently named in fact for many species the Z Bend is the Type location!

By the car park one can find the red striped spider orchid *Caladenia wanosca*, named after the Western Australian Native Orchid Study Group! Further along the cliff top *Caladenia pachychila* grows and actually hybridises with *C. wanosca*. *C. pachychila* is the northern form of the Zebra orchid and has only been named recently. Particularly common among rocks here are the northern subspecies of the Cowslip orchid *C. flava* ssp. *maculata* and *C. reptans* spp. *irnpensa* with its pale pink flowers. These two hybridise right by the car park to form a beautiful apricot-coloured hybrid. I have seen a marvellous pot full of this hybrid in cultivation in Perth. In Adelaide it would need to be grown under glass. East along the cliff top are some beautiful blue *Cyanicula* both *amplexans* and *deformis* with leaves of the inland *Eriochilus*, *E. dilatatus* ssp. *undulatus*.

The very strange Dragon orchid *Drakonorchis barbarella* occurs on rock ledges along the gorge both here and at The Loop. It has the most restricted range of the Dragon orchids. Two other bizarre orchids here are *Drakea concolor* which actually grows behind the information sign and *Spiculea ciliata*. I must admit I was most surprised to find these three orchids here in 1986 as *Orchids of South-western Australia* showed that no *Drakonorchis*, *Drakea* or *Spiculea* occurred so far north.

At The Loop we found the ethereal *Paracaleana terminalis*, one of the most delicate looking Duck-orchids, yet it grew on dry sand which reaches 45°C on most days from November to March.

The Sun orchids at the Z Bend are disappointing. We saw only a few *Thelymitra antennifera* on a rock ledge where water seepage occurred.

Few Leek orchids were seen except on burnt sandplains nearby where *Prasophyllum sargentii* grew with *P. giganteum*, the former with its sparkling white labellum being one of my favourite Leeks.

Greenhoods too were sparse, we recognised the remains of *Pterostylis sanguinea*, an early flowered member of the *P. nana* complex and excitingly the rare *P. macrocalymna* which according to Hoffman and Brown (1992) occurs only at one site yet we saw it at three places including under sheoaks north of the Z Bend.

Although there were no *Diuris* in flower we did see leaves on a rock ledge

I would recommend that anyone visiting the West in early spring make a stop at Kalbarri and visit the Z Bend, The Loop and Natures Eye. Anyone wanting to make a name for themselves and with a few weeks to spare, could visit the Murchison River and with the help of a 4WD vehicle visit as many sites as possible. I guarantee that you will find orchids new to science!

BOTANISTS OF THE ORCHIDS 24

Sandy Philips

M.C. (Mark) Clements was born in Adelaide in the early 1950's. His father Alwyn was president of various Conservation Societies in South Australia and was one of the instigators in the formation of the Moorundie Reserve for Hairy Nose Wombats near Swan Reach. Hence Mark developed an early interest in nature, in particular orchids, encouraged by Harold Goldsack and Ray Nash, both well-known names in South Australian orchidology. His training as a wool classer saw Mark travelling extensively through rural South Australia in the 1970's and gathering extensive knowledge about native orchids.

Mark then changed career paths to become a botanical research scientist (after study at Canberra National University) working at the National Botanic Gardens in Canberra and specialising in the symbiotic flasking of orchid seed in which he has become a world expert.

Mark is also keen on orchid taxonomy, photography and cultivation and has named and described dozens of new orchid species. The culmination of years of study of orchid Types in Australia and particularly in Europe (while he was Australian Botanical Liaison Officer at Kew Gardens and the British Museum) appeared in his publishing of the "Catalogue of Australian Orchidaceae" in Aust. Orch. Res. Vol 1, 1989.

Much of his taxonomic work has been handed over to David Jones but Mark has retained a strong interest in "rufa group" *Pterostylis*, many of our South Australian species have been named by Mark; ie *Pterostylis dolichochila* and *P. erythroconcha* (1986) and *P. arenicola* (1989).

With the current interest in Underground Orchids, *Rhizanthella*, in South Australia it is interesting to note that Mark was responsible for the rediscovery of *R. slateri* Eastern Underground Orchid near Alum Mountain (NSW) in 1987. Mark has travelled extensively through all Australian States studying orchids in the wild and is still naming new species.

AUSTRALIAN DENDROBIUMS NO. 2

Sandy Philips

D. aemulum

Dendrobium aemulum is one of the best known Australian dendrobiums, one of the most widespread, commonly cultivated, frequently used in creating hybrids and one of the easiest to grow. There are numerous forms, some of which have been recently described as new species ie *D. callitrophyllum* with green flowers confined to *Callitris*

trees on the Atherton Tablelands. Many are cool growing. I have seen it growing in the Adelaide area in glasshouses, bush houses and even attached to backyard fruit trees.

D. aemulum is a favourite of many growers because when well grown it can be smothered with medium size crystalline white flowers (to 3 cm across). The flowers open widely but segments are often rather narrow. Line breeding in NSW is now achieving fuller flowers with a colour range being developed to include pinks and yellows.

D. aemulum is easily recognised even when not in flower because of its dark often purplish pseudo bulbs and when in flower by the wavy yellow ridge on the middle of the labellum.

It grows naturally in its various forms from Southern Cape Yorke to Southern NSW from sea level to mountain tops usually in forest, in trees, particularly eucalypts, overhanging creeks but occasionally on water splashed rocks.

Common name: White-feather orchid or Iron-bark orchid. The name *aemulum* means "similar" probably indicating that Robert Brown who named the species in 1810 found it difficult to separate from a number of other similar dendrobates.

THIRD AUSTRALASIAN NATIVE ORCHID CONFERENCE AND SHOW 1996

It was with great pleasure and pride that we welcomed to Adelaide, Mr Barry Collins, President of the Australasian Native Orchid Society (ANOS) and Chairman of the ANOS Conferences Committee, Mrs. Janet Napier, ANOS Councillor and Secretary of the ANOS Conferences Committee, Mr. Bob Napier, ANOS Treasurer, and Mr John Turner, ANOS Councillor and Member of ANOS Conference Committee.

Some 15 NOSSA Members who will be very involved with the staging of the Conference and Show met with the ANOS representatives for a morning tea at the home of Jill and Reg Shooter on the morning of Sunday, 24 April. This was the first opportunity for most of us to meet with the Sydney (and area) based dignitaries and for the ANOS people to meet some of the NOSSA Members who are assuming lead roles in the 1996 Conference. Following tours of the Shooter's glasshouses and shadehouse, a considerable bit of friendly conversation, and a most delicious and ambitious morning tea, the group moved on to the home of Bub and Don Wells where several more NOSSA Members and a gourmet barbecue lunch were awaiting us. Rain threatened but with the exception of a few drops, did not fall. Welcome to South Australia's drought! After a hearty meal, Don led an informal tour of his native orchid collection and showed some of the very beautiful wooden chalices that he is creating as presentation pieces and as possible raffle prizes for the Conference. The two venues of the day provided an excellent opportunity for the ANOS Conference Committee to meet informally with NOSSA Members and to see what South Australian native orchid enthusiasts are growing. They certainly found that NOSSA Members are generous hosts (and hostesses) and a very friendly mob indeed. The afternoon concluded with a visit to Nesbitts Orchids in Kersbrook. Nesbitts is the largest and most important native terrestrial orchid nursery in Australia. The ANOS delegates already knew Les Nesbitt through his long involvement with ANOS and through his unsurpassed reputation as a grower and hybridiser of native terrestrial orchids.

Monday was devoted to a tour of the Conference Facilities already organised by NOSSA. Bill Dear, Reg Shooter, Barry, Janet, Bob, John and I met at the Flinders University at 9.30 am and were shown the Refectory in which the Orchid Show will be presented, the Matthew Flinders Lecture Theatre, the 'Club' in which the Cocktails/Icebreaker Evening will be held and the on-campus accommodation at the 'Hall'. Pictures were taken by Bob Napier, of the rest of us standing in front of the native orchid mural which is on permanent display at the University. Perhaps we will see ourselves in the Orchadian! We then proceeded to the Stonyfell winery where we had a look at the Pickwick Room in which the Presentations Dinner will be held. As it was past normal lunch time, we purchased some food and drink at a nearby Deli and proceeded to the Black Hill Flora Research Centre where we were joined by Roy Hargreaves and Research Scientist, Birgitte Sorensen. Lunch was followed by a tour of the Centre and included the research laboratories and a discussion of some of the work Birgitte is carrying out including her very important research on *Pterostylis arenicola*, glass houses filled with all colours of the Sturt Desert Pea and of course the R. S. Rogers Shadehouse which hosts a large collection of native terrestrial orchid species.

A more formal meeting of some of the Conference Committee and other NOSSA Members was held at the home of Judith and Gerry Carne on Monday evening. This provided ANOS a chance to pass onto us, some of their considerable wisdom gained from involvements in numerous other conferences, and allowed for discussion of certain aspects of the organising and running of the 1996 Conference and Show.

Our distinguished guests attended our monthly general meeting the following evening. It was pleasing to see a good display of orchids on the front bench. President Barry Collins indicated that ANOS was very impressed with what they had seen over the three days of their stay. All NOSSA Members were encouraged to participate, to make the 96 Conference the best one yet and one which will be long remembered, and to start inviting friends to attend. Bob Napier, on behalf of the Council of A.N.O.S. Inc, presented two cheques to President Bill Dear, one in the amount of \$1000 for ANOS' Sponsorship of the Champion Orchid of the Show, and one in the amount of \$2000 in the form of a loan which is to be used to start us off.

Barry, John, Janet and Bob are terrific people and perfect Ambassadors for ANOS Council. We were very honoured to have them in Adelaide and to have had a chance to get to know them in person and not just by name. NOSSA Members involved had a thoroughly enjoyable time. Special 'thank-yous' are in order to Jill and Reg Shooter, Bub and Don Wells, Roy Hargreaves and Birgittte Sorensen.

G. E. Carne, Chairman

ANOS MEMBERSHIP

Secretary Gerry Carne has membership forms available for anyone wishing to join The Australasian Native Orchid Society (ANOS). Membership is just \$26.00 per year and this includes four volumes of the very highly regarded and full of colour Journal, The Orchadian .

CERTIFICATES OF APPRECIATION OKAYAMA ORCHID SHOW '94 - JAPAN 1994

Mr. Don Gallagher, President of the Orchid Club of South Australia Inc, was given the responsibility of putting together the AOC (Australian) display at the Orchid Show Okayama, recently held in Japan. Certain NOSSA Members contributed native orchid specimens, posters and photos for the display, which we hear was very much admired, particularly by the Japanese delegates. The terrestrials (stems and flowers only) were placed in test tubes which were then placed in soil, giving them a most natural appearance, especially since most of the terrestrials taken to Japan by Don and his wife were of the cauline group of *Pterostylis*. The Japanese are very interested in our native terrestrial orchids.

At OCSA's June 3 meeting, Certificates of Appreciation were presented to several people including NOSSA Members Les Burgess, Les Nesbitt and Roger Herraman for assisting with the Australian Orchid Council display by providing native orchid plants, and to Gerry Carne and to NOSSA itself for providing posters and photos of native terrestrial species. Roy Hargreaves was presented the Certificate of Appreciation on behalf of NOSSA. In addition to a certificate, Les Burgess was presented with the trophy he was awarded at the Show for *Pterostylis* Sentinel. All of the NOSSA Members who participated are also members of OCSA.

NOSSA was honoured to have been able to assist the AOC in their very important and influential display and the certificates of appreciation were an unexpected surprise. In all, some 10 OCSA members were presented with certificates of appreciation and some of these were awarded trophies at the show. Congratulations to all involved. Don Gallagher in particular is to be congratulated for his initiative and drive and for the considerable time he committed in putting together such an excellent display.