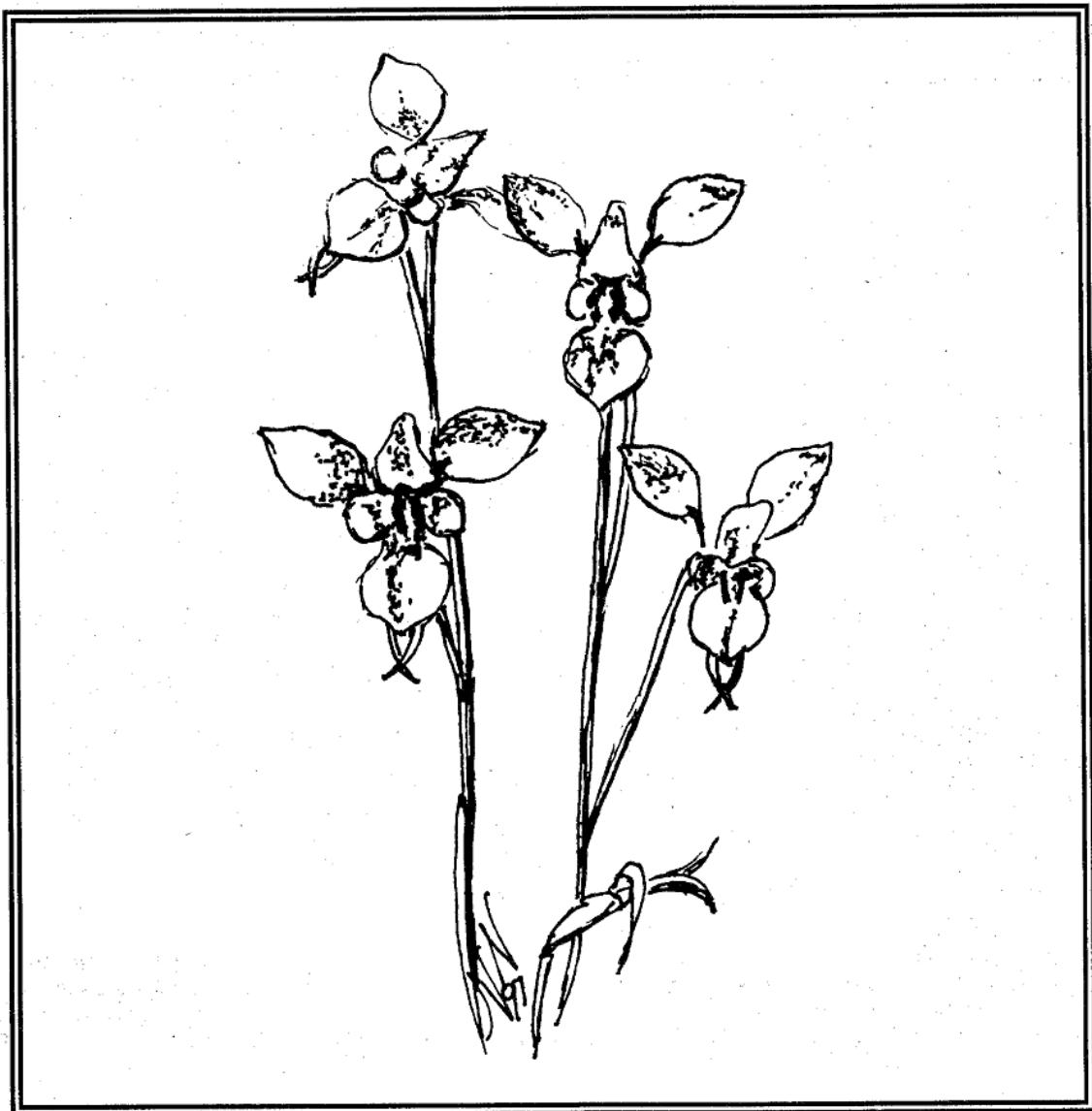




Journal
of the
Native Orchid Society
of
South Australia Inc



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

Post office box 565 Unley 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 George Nieuwenhoven
Telephone: 8264 5825

SECRETARY:

Cathy Houston
Telephone: 8356 7356

VICE-PRESIDENT:

Mr David Pettifor

TREASURER:

Mrs Iris Freeman

COMMITTEE:

Mr David Hirst
Mrs Thelma Bridle
Mr Roy Hargreaves
Mr Malcolm Guy

Tuber Bank: Mrs Thelma O'Neill
Tel. 8443 6535

EDITORS:

Bob & Kerry Bates
38 Portmarnock Street
Fairview Park 5126
Tel: 8251 2443
E-mail bobbates63@hotmail.com

LIFE MEMBERS:

Mr R. Hargreaves
Mr L. Nesbitt
Mr D. Wells
Mr R. Robjohn
Mr G. Carne
Mr R. Bates

REGISTRAR OF JUDGES:

Mr L. Nesbitt
Tel. 8332 7730

FIELD TRIP COORDINATOR

Mr G Carne 8332 7730

The Native Orchid Society of South Australia Inc. while taking all due care, take no responsibility for the loss, destruction or damage to any plants whether at shows, meetings or exhibits. Views or opinions expressed by authors of articles within this Journal do not necessarily reflect the views or opinions of the Management.

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

Journal cost \$1 per issue. Subscription \$14 family or single. DUE IN MARCH EACH YEAR.

NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC

SEPTEMBER 1998 Vol. 22 No. 8 JOURNAL

SEPTEMBER MEETING

Tuesday September 22nd at 8.00 pm: Saint Matthews Hall, Bridge Street, Kensington. Darren Willis will help you solve all those weed control problems at home and in the bush!

Doors open at 7.15 to allow trading table and library to proceed. Don't forget tea and biscuits afterwards!

PAGE	CONTENTS	AUTHOR
71	Diary Dates	
72	On the Bench	
73	South East Excursion	Thelma Bridle
74	Spring Show August Speakers	
75	Callington-Monarto Excursion Report	Thelma Bridle
76	From the Librarian	Geoff Edwards
77	Aussie Dendrobiums	Sandy Phillips
79	Albinism in South Aust Orchids	Bob Bates

Sept 19-20	Spring Show.	St Peters *
Sept 20	Hardy's Scrub Excursion	Blewitt Springs
Sept 22	Darren Willis on 'Weed Control'	Kensington
Sept 26	Conservation Meeting	Belair NP
Oct 3-4-5	Upper South East	Keith- Lucindale
Oct 10	<i>Prasophyllum</i> Special	Sandy Creek
Oct 11	<i>Monadenia</i> removal	Kuitpo
Oct 1.0-11.	SGAP Show	Wayville
Oct 18	<i>Thelymitra</i> Special	Belair
Nov 1-4	Combined ANOS Vic-NOSSA Excursion	Naracoorte
Nov 8	<i>P. arenicola</i> working bee	Grange
Nov 15	<i>Gustrodia</i>new sites	Scott Creek
Nov 29	Annual Picnic	Burnside
Jan '99	<i>Dipodium pardalinum</i> and Wirraminna visit	Ironbank
March '99	<i>Genoplesium</i> special to Simpson	Victoria
March 23	Bruce Mules Speaking	Kensington

Coming Field Trips:

Hardy 's Scrub 'Sept 20: Meet 10am at Blewitt Springs Hall. Bring a picnic lunch. Yes we will finish in time to be back at St Peters to pack up the Show.

Lyndoch *Prasophyllum* Special Oct 10: meet Cockatoo Valley Shop at 10am Lunch at Lyndoch before visiting Altona. Five leek orchids to see in addition to *Caladenia verrucosa*, *Thelymitra x macmillanii*, *Pyrorchis* and an undescribed 'rufa' group *Pterostylis*.

ON THE BENCH:

Epiphytes---*Bulbophyllum schillerianum*, *Cadetia chionantha*, *Dendrobium falcorostrum*, *D. aemulum*, *D. kingianum x moorei*, *D. bigibbum* x Rosy Tits, *D. Darlington Parish*, *D. Ellen* x Bardo Rose, *D. Arkaroola* x Zip, *D. Golden Fleck*, *D. Gracious Cascade*, *D. Jesmond Glitter*, *D. Kathryn Banks*, *D. Jane Leaney*, *D. Kenny Green*, *D. Telekon*.

Terrestrials --- *Acianthus pusillus*, *A. caudatus*, *Caladenia rigida*, *C. deforms*, *C. reptans* x *C. latifolia* 'Hotlips', *C. Fairy Floss*, *C. Fairy Floss white*, *Chiloglottis formicifera*, *C. platyptera*, *C. trapeziformis*, *C. truncata*, *C. x pescottiana*, *Cyrtostylis reniformis*, *C. robusta*, *Diuris conspicillata*, *D. corymbosa*, *D. magnifica*, *D. palustris*, *D. pardina* (Tas), *D. pardina* (SA), *D. Pioneer*, *D. brevifolia* (not in flower), X *Glossadenia* "NOSSA", *Glossodia major*, *G. minor*, *Pterostylis baptistii*, *P. concinna*, *P. curta*, *P. cynocephala*, *P. erythroconcha*, *P. longifolia*, *P. nana*, *P. x ingens*, *Thelymitra antennifera* x *T. epipactoides*.
Several hybrids were shown in flower for the first time.

PLANT COMMENTARIES Les Nesbitt and Noel Oliver

JUDGING

Terrestrial species

- 1st *Acianthus caudatus* grown by David Pettifor
- 2nd *Pterostylis baptistii* grown by George Nieuwenhoven
- 3rd *Caladenia rigida* grown by Nesbitt's Orchids

Terrestrial hybrids

- 1st *Caladenia latifolia* x *reptans* grown by Les Nesbitt
- 2nd *Chiloglottis x pescottiana* grown by G. Nieuwenhoven

Epiphytic species

- 1st *Dendrobium speciosum* grown by L.Nesbitt
- 2nd *D. falcorostrum* grown by N. Oliver
- 3rd *Cadetia chionantha* grown by R. Job & Edda

Epiphytic hybrids

- 1st *D. Ellen* x Bardo Rose grown by N. Oliver
- 2nd *D. Aussie Green* x *ruppianum* grown by G. Nieuwenhoven
- 3rd *D. kingianum x moorei* grown by R. & G. Shooter

Plant of the Night *Acianthus caudatus*

POPULAR VOTE

Best Terrestrial: *Acianthus caudatus* grown by David Pettifor

Best Epiphyte: *D. Ellen* x Bardo Rose grown by N. Oliver

Wanted to Buy: a copy of Orchids of South Australia by Bates & Weber. See Malcolm Guy (Ph. 8276 7350).
 *Yes the 'Pink book' is out of print and there are no plans for a reprint. Once our orchid names have stabilised, NOSSA may produce a bigger and better South Australian Orchid book!

Next Committee Meeting will be held at 7:30 Wednesday Sept 30 at Les Nesbitt's 18 Cambridge Ave Vale Park.

OCTOBER LONG WEEK END SOUTH EAST TRIP 3rd-5th OCT

PROPOSED ITINERARY

Sat 3rd	Mount Monster CP Aberdour CP Christmas Rock Padthaway CP	Meet at the Mt Monster entrance (2km down turn off from Keith -Naracoorte Rd) at 10:30 Oct 3 rd Maps of the parks will be provided. See Thelma Bridle for further information. This looks like being one of our most exciting trips ever as conditions have been excellent in the South-east this year!
Sun 4th	Stewarts Range Lucindale and Mc Hughs Fairview CP Jip Jip CP Desert Camp CP	
Mon 5th	Langkoop Apsley Common Bangham CP Pine Hill Soak	

(Some members plan to visit the Robe-Beachport areas on Tuesday)

SPECIAL RAFFLE:

A copy of the much prized 1911 edition of South Australian Orchids by R.S. Rogers is to be raffled over the next 4 weeks.

Tickets will be on sale at meetings and the Show.

Congratulations ANOS Victoria

30 year Anniversary in October!

Our combined NOSSA- ANOS Victoria excursion at the end of October looks like being a great social event. More details next Journal.

AUGUST SPEAKERS

World traveller Russell Job and partner Edda Viskic recently spent 70 days travelling in Central and South America. They managed to see 1000 species of orchids!

1 400 species occur in Costa Rica and Panama alone. This is an area the size of Victoria. As two thirds of the world's orchid species occur above 2000m altitude the intrepid couple head for the mountains wherever they go. It was fascinating to see how much wildlife could be found on a single tree upwards of 100 species of animal and plant can occur on a single ancient rainforest tree... as many as 20 orchid species, 10 ferns and assorted epiphytes such as Bromeliads have been counted on a single host tree! Russell who describes himself as a retired Earth Physicist showed an eclectic knowledge of the Natural World.

SPRING SHOW: many thanks to all those people who promised to help out at THE SHOW. We will need all the plants orchids, ferns, moss, pictures, displays etc you can provide as St Peters is a big hall. A new perpetual trophy has been donated by the AOC and this will be awarded to the Champion Epiphyte Hybrid at the Show.

CULTURAL AWARD & HCC

Congratulations to Barry Bailey who was recently commended for his huge *Dockrillia teretifolia* bearing many hundreds of flowers. This specimen plant could barely be carried.

CHANGES TO GENERAL MEETINGS:

To help avoid late endings at meetings the following changes have been made; to commence in September!

1----Tea and coffee will be served from the servery before meetings.

2----Popular Vote will begin at 7:50.

3----Members will be seated at 8 and speakers will follow the general business and voting results will be given at the end of the evening ie at 9:30.

SPRING SHOW St Peters
BE THERE OR BE SQUARE!

WE NEED EVERY PLANT. WE CAN GET!.

FIELD TRIP REPORT
CALLINGTON AND MONARTO

By Thelma Bridle

A trip to Monarto in late winter is always popular and Sunday 23/8 proved no exception with 15 members arriving at Callington. The season was much improved over 1997, with many *Caladenia stellata* in flower and many more in bud.

This is a very variable species with flowers ranging from creamy yellow with no red, to flowers with not only red labellum and clubs but red markings on the petals and sepals also. Size of flowers is also variable and - even leaves range from narrow to wide.

Cyanicula deformis or *Caladenia deformis* was widespread in the paddock, which although it still has rabbits, and a hare, numbers are fewer than in previous years. Most *C. deformis* were blue, but 3 pale specimens were located; almost pink in colour. *Pterostylis cynocephala* were scattered about, all very short specimens here, none

more than 2.5cm tall. *Diuris palustris* only grow in the one small area but there were a number of clumps and individual plants in flower. Close by were 2 plants of *D. pardina*, which we have not noted here previously, and these plants were 15cm tall. *Clematis microphylla* was in full flower and there were many billy buttons (*Craspedia varia*) flowering, using the clumps of sedge for protection as were the *C. stellata*.

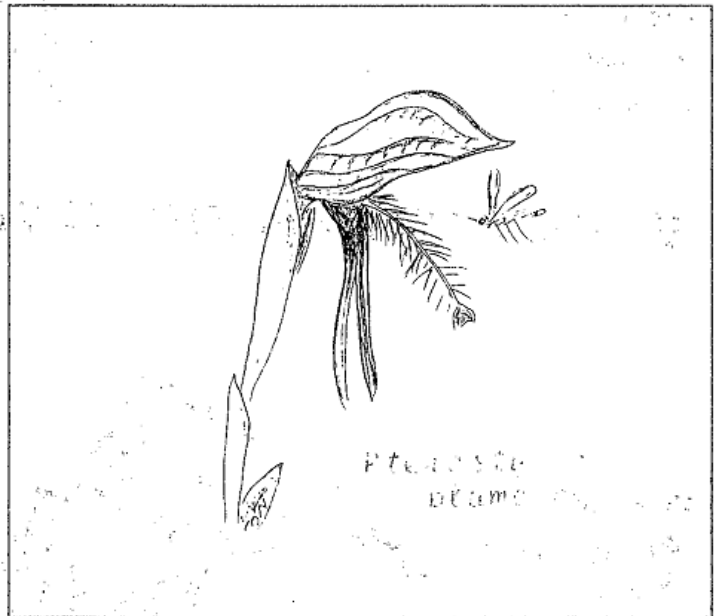
We usually visit the eastern side of

Monarto Conservation Park, but were unable to this year due to the disturbance passing vehicles would have had on lambing. We lunched in the main entrance car-park listening to the bird calls and chatting about orchids, then after splitting into small groups we wandered throughout the park to make our own discoveries and compare 'finds' later.

Orchids in flower.: C - Callington, M - Monarto

Caladenia deformis C,M
C. stellata C
C. filamentosa v. *tentaculata* M

Orchids in bud :
Caladenia stricta M
Thelymitra antennifera M



we seemed to be a couple of weeks too early for the *Caladenia* sp. There were huge numbers of both *C. stricta* and *C. cardiochila* (a few in flower), and with the

variety of leaves accompanying buds, possibly other species too. Although in many locations *C. filamentosa* was not prolifically in flower and no pink-flowered plants were seen. Everywhere *Pterostylis nana* was flowering it seemed to be accompanied by the very short-stemmed but brightly coloured mallee form of *P. sanguinea*. *P. cynocephala* grows taller in the open sand, up to 8cm. and 5 flowers. *P. plumosa* were in bud with only a couple found in flower and

P. dolichochila was almost finished flowering. Many *Genoplesium* sp. seedpods were found, *Eriochilus cucullatus* leaves and some large colonies of *Cyrtostylis robusta*, some flowering profusely, many only leaves. Most of the sand-loving mallee shrubs were in flower, which helps to make this such an attractive park in late winter/early spring. The babblers, parrots and honeyeaters add a lot of chattering and calling to a very peaceful area.

C. cardiochila M
Cyrtostylis robusta C,M
Pterostylis cyanocephala C,M
P. nana M
P. sanguinea M
P. plumosa M
P. dolichochila M

T. nuda C
 Other orchids :
Microtis sp. C,M
Genoplesium sp. M
Eriochilus cucullatus M
Pyrorchis nigricans C

FROM YOUR LIBRARY

by Geoff

Our special raffle prize advertised in this journal

An Introduction to the Study of South Australian Orchids Second edition by R.S. Rogers

is worth the ticket prize for historical value alone. It was printed in 1911 and sold at the price of one shilling. The 63 page, pocket sized book touches on a wide cross section of our terrestrial orchids. It is written in simple style which renders it suitable for the 'schoolchild or person not possessed of any botanical knowledge'.

The preface states that ... 'it is most earnestly hoped that the attempt on the part of the author to popularise the study of our native orchids will not lead to the destruction of these interesting plants but rather to their protection and preservation Unless wanton destruction is checked, ultimate extermination of our most beautiful species must result'.

NOSSA'S copy has glued onto a rear page a preserved flower of *Caladenia filamentosa*.

The information in the book was first published in serial form in those wonderful little Children's Hour booklets which were essential reading for three generations of young South Australians. They were put together as a book in 1909 and this publication proved so popular the second edition soon followed.

Complementary to the above is another historical work titled

"Notes on certain species of *Pterostylis*" (Read 11th March 1915)

and issued the same year. It appears to be part of a series from the Proclamations of the Royal Society of Victoria. Seven pages of notes are followed by three hand drawn plates covering *P. cucullata*, *P. furcata*, *P. falcata* and *P. alpina*. The preface indicates that it was a gift to Mr & Mrs Jacobs, with compliments and signed by RS Rogers. (The Jacob's lived at Cherry Gardens which at that time was the best orchid district in South Australia.)

As Pauline & I are off to Brisbane and Townsville for the APOC conference my next report will be on something interesting from there ...perhaps a book read under a palm tree in glorious sunshine beside a tropical beach!

Pleasant reading and good luck in the raffle. Geoff Edwards

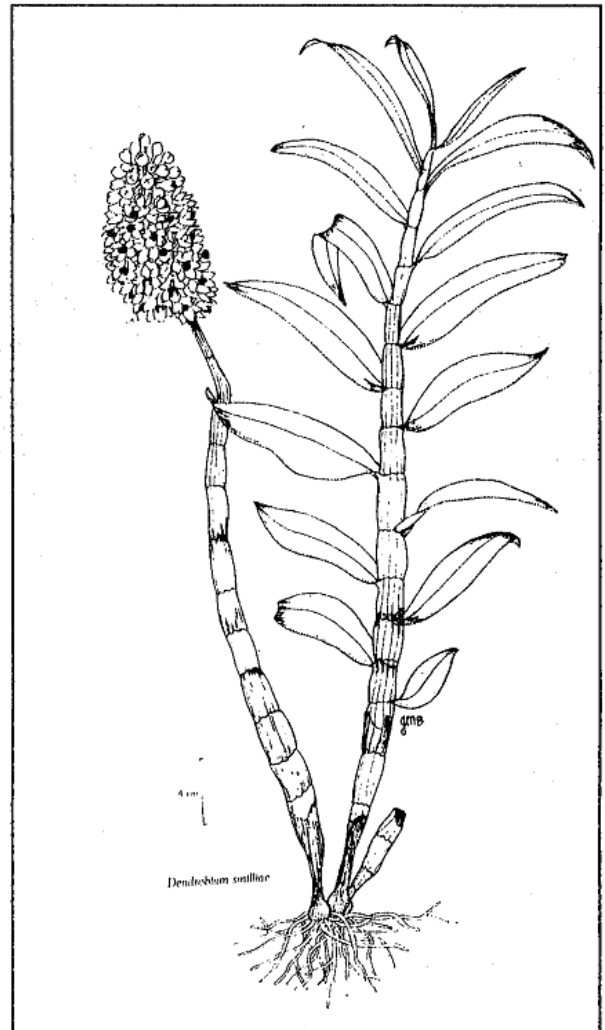
Dendrobium smilliae

This species was named by Ferdinand Mueller in 1867. It honours Mrs E. Smillie a friend of Mueller's. The species is common in northern Queensland (from Townsville north) often in upper branches of trees in rainforest or woodland but sometimes on trunks, logs or rocks. Sometimes found in clumps of mixed epiphytic ferns or other orchids.

D. smilliae is pollinated by nectar seeking birds such as the Bush Canary honeyeaters which hover humming-bird-like in front of the dense racemes. Hence the atypical flowers. One of the most recognisable species of *Dendrobium* due to its dense bottlebrush like spikes of waxy red and green blooms.

Not easy to grow in Adelaide as it requires heat, winter light and damp summer conditions but certainly worth the extra care.

There are some dozen synonyms including *Pedilonum smilliae*, *Dendrobium smilliae* var. *ophioglossum* and *D. holtrungii*.



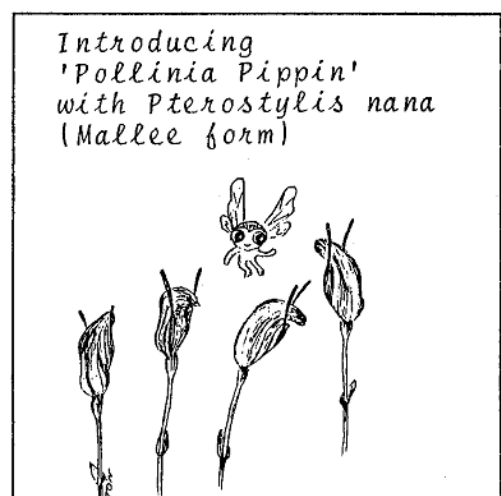
ARTISTS FOR YOUR JOURNAL

Many thanks to our artistic members who provide 'piccies' for the journal. The more pictures we receive the more attractive the journal becomes remember 'a picture tells a thousand words'.

We would like all artistic members to become regulars. Special thanks to the Thelma B., Thelma O., Barb and others who have contributed.

I'm especially keen to publish highly original orchid art such as that opposite, from Thelma O'Neill.

We would also like photographs, especially of people and events.



BUSH BIZARRE.... adapted from Jon Lamb.
(In The Advertiser Aug 21)

... "Little greenhoods with their fat, nodding heads on top of slender stems and delicate leaves look like some kind of botanical joke. Although they are ground-dwelling and lack the flamboyance of gaudier orchids they belong to the same family.

Native orchids are rapidly getting rarer and so are protected. They cannot be collected from the wild but can be bought from native plant specialists and societies. Other ground-dwelling species include spider orchids, sun orchids and donkey orchids... hard to grow.

Our native terrestrial orchids die back in summer and re-emerge after autumn rains to flower in winter and spring. The first ones I saw grown domestically were at the Native Orchid Society Show... (This could have led into an ideal plug for our Spring Show. Ed.s.!)



I bought a pot of blunt greenhoods *Pterostylis curta* which by the following spring had multiplied. I'm now a convert to native orchids.... forget fussy *Cymbidiums* - greenhoods just soldier on. Terracotta squat pots seem to complement the plant's shape and stature, although they are not fussy and grow equally as well in plastic pots

AUSSIE ORCHIDS in NEW ZEALAND

Australian orchids keep popping up in New Zealand. The latest (reported in the J. N.Z. Nat. Orch. Group Sept 1998) is a species given as *Pterostylis* aff. *obtusa*. Since most Australians would be hard put to identify the numerous recently named species in this group its not surprising the aff. *obtusa* epithet is used.

From the photographs it would appear to be the same as a species common in montane eastern Victoria and New south Wales but one I'm not sure of the name for, if indeed it has a name. The galea is too blunt for it to be our South Australian *P. bryophila* and indeed it would be more likely to be a species blown across from mountains at Australia's closest point to New Zealand.

An article by Molloy and Dawson in the J. Royal Soc. N.Z. explains how many of our NZ and Aust. Sun orchids are almost certainly stabilised hybrids. *T. carnea* for example is *T. flexuosa* x *T. pauciflora* (the argument for that one has been around for as long as I remember). *T. decora* is as expected *T. ixioides* x *T. longifolia*. (Compare that with our own *T. x truncata* which is a semi-stable cross ... *T. ixioides* x *T. pauciflora*).

And of course *T. pulchella* has been proved a cross between *T. cyanea* and *T. longifolia* in New Zealand which hardly makes it different from our Australian variants which result from *T. cyanea* crossed with *T. pauciflora*, *T. malvina* and sometimes *T. nuda*. All this hypothesis is backed up nicely by cytological evidence (hooray for chromosome counts and DNA analysis: and no DNA does not stand for the National Dyslexics Association!)

The dry mallee across the River Murray from Bow Hill has mostly been cleared for wheat. Isolated pockets of bush remain but these are degraded by rabbits, sheep, weeds and mouse plagues. I've known people to say "there are no orchids in that country". Some 300mm of rain falls some years but other years it may be only 200mm and soils are poor or shallow over limestone wheat may do well in deeply dug and fertilised soils after trace elements are added-and there is no competition from mallee roots but life is hard for orchids.

We met in the north-west corner of Lowan CP which is NOSSA's survey park for 1998. Its only a small park and mostly covered with mallee, often with little understorey and poor powdery soils but there are a few fertile pockets. We drove in on the only track in the park (its a pretty drive to a dry billabong with coolibahs) and stopped 200m from the main road. The wildflowers were in full bloom and we found orchids instantly .. leathery leaves of *Thelymitra megcalyptra* in bud and leaves of various *Caladenia*. Recognisable buds of *Caladenia verrucosa* with pale yellow osmophores and *C. stricta* without clubs as well as a late flowering *C. aff. tensa*. Cathy found some *Genoplesium* in seed. The commonest orchid was, as expected *Pterostylis mutica*, many already in flower.

Further down the track where the *Cannabis* growers had left their netting a small colony of the mallee form of *Pterostylis robusta* was in flower. While we were looking at these Thelma B. called out...."What rufo group *Pterostylis* grows here as I saw a plant over there?" It took a lot of searching to relocate a single plant of *Pterostylis pusilla*, another new record for Lowan.

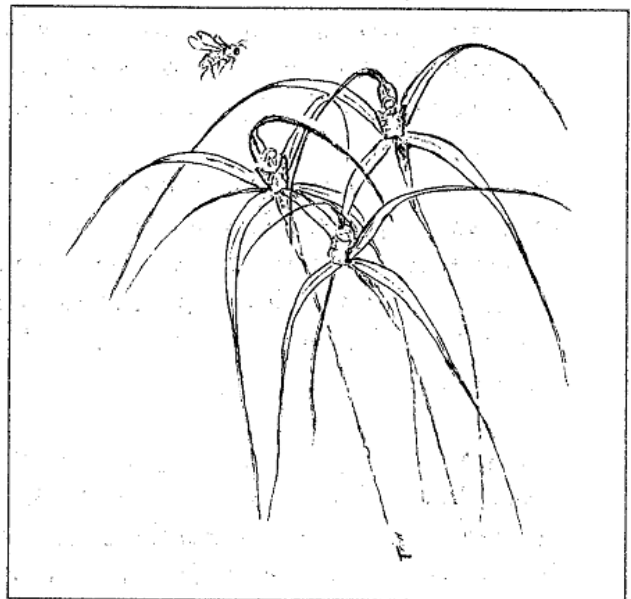
Soon we were on the highest 'hill' in the Park, unfortunately partly cleared and ploughed years before. As well as the ubiquitous *P. mutica* there were numerous leaves of *Caladenia* and it was a challenge to work out the species from buds alone. The only *Caladenia* seen in flower in the Park was *C. deforms* and that a single plant only. Another species seen as a single plant was a *Prasophyllum*, presumably *occidentale*, leaf only.

The Park is named after the Mallee Fowl (Lowan) which used to occur there and we found an old nest.

Happy with what we had seen we drove on to Perponda, which 20 years ago was a thriving railway town. But now the dusty main street was empty, the shop closed, the school bulldozed and the railway ripped up. The few remaining inhabitants were wide eyed at the arrival of a convoy of cars!

We lunched by a sandhill in the town common (cemetery reserve) in glorious 'sunshine before an orchid search which showed a whole different range of species to what grew in Lowan! Here the spider orchids were in full flower, many specimens of *Caladenia filamentosa* var *tentaculata* and a delightful deep red var *filamentosa* begging to be photographed.

There were two different *Pterostylis* aff. *nana*, neither of which was the usual 'mallee nana'. One with rosettes flat on the ground and with no stem leaves had a blunt galea, the other taller species had long sepals and a pointed galea this latter species was new to all of us and was duly collected and sent to David Jones who is



researching the genus. *Caladenia cardiochila* was seen in bud and *Pterostylis dolichochila* in seed...(of interest is the fact that this is the Type location for this species).

At this point we went in different directions. The intrepid leader headed north to the magical Goondooloo pine forest, of *Callitris murrayanum* on hard red soils over sheet limestone. Again the orchids were quite different. There were thousands of rosettes of some species in the *P. biseta* complex, a few *P. cynocephala*, a couple of *Caladenia toxochila* in flower and leaves of *Prasophyllum odoratum* complex. Several of the species seen were extensions of known distribution of up to 50km!

All together some 20 different orchids had been seen in three different habitats so we extrapolated that, as there were before settlement, several other habitats in the area, there may once have been as many as 30 different species present which is surprising for such a fringe area!

ALBINISM IN SOUTH AUSSIE NATIVE ORCHIDS

R. Bates

A recent article in THE ORCHADIAN by retiring editor David Canon discussed albino native orchids.

The term albino refers to plants lacking the normal pigment for that species. Hence an albino *Thelymitra nuda* will have white instead of blue flowers but an albino *Acianthus caudatus* will have green flowers instead of maroon! Blue colour in sun orchids is caused by antho-cyanins, yellow and orange by carotenes and red by a combination of these. A common form of *Thelymitra luteocilium* lacks only the antho-cyanins and so its flowers are yellow.

Since colour in *Pterostylis* is caused by the presence of chlorophyll any flowers without chlorophyll will be white. Albinism is a disadvantage in most species ... ie lack of chlorophyll in the flowers can only make *Pterostylis* weaker, no red in a *Caladenia* labellum will mean that flower is less attractive to pollinators and so on. Although colour is less significant to bee pollinated species a white flowered Sun orchid may just be more obvious to the enemy ie beetles, 'roos and the like and if it also lacks nectar guide-lines even the bees may not be attracted.

Some species actually have white flowers yet still exhibit albinism. *Caladenia behrii* has white flowers with a red tipped labellum but sometimes one sees albinos with no red at all. *C. rigida* has white flowers too and the labellum in that species does not have a red tip, however the calli are red and there is a red stripe below the sepals. Albino *C. rigida* do occur and these are cream colored without any red at all. *Thelymitra pauciflora* is a self pollinated species so colour is of less significance, hence about half of the *T. pauciflora* in the Adelaide Hills have white flowers instead of blue.

Over the years I have seen albino flowers in a majority of species hence it would be easier to list those without an albino form! *Thelymitra antennifera* is a common yellow flowered species with red column appendages. I have never seen a white flower in this species but I have seen flowers with yellow appendages. Species for which I have not yet found albinos include most of the rufa group *Pterostylis*, a handful of *Prasophyllum*s, most *Microtis* and *Genoplesium*.

The opposite of albinism is melanism or the presence of excessive pigmentation. In some species like *Prasophyllum elatum* it is difficult to decide if the dark flowered forms are melanic or normal or whether the green flowered forms are albino! But do remember if you find an odd colored orchid don't think 'new species' think 'pigmentation'. (More on this topic in a future issue!)