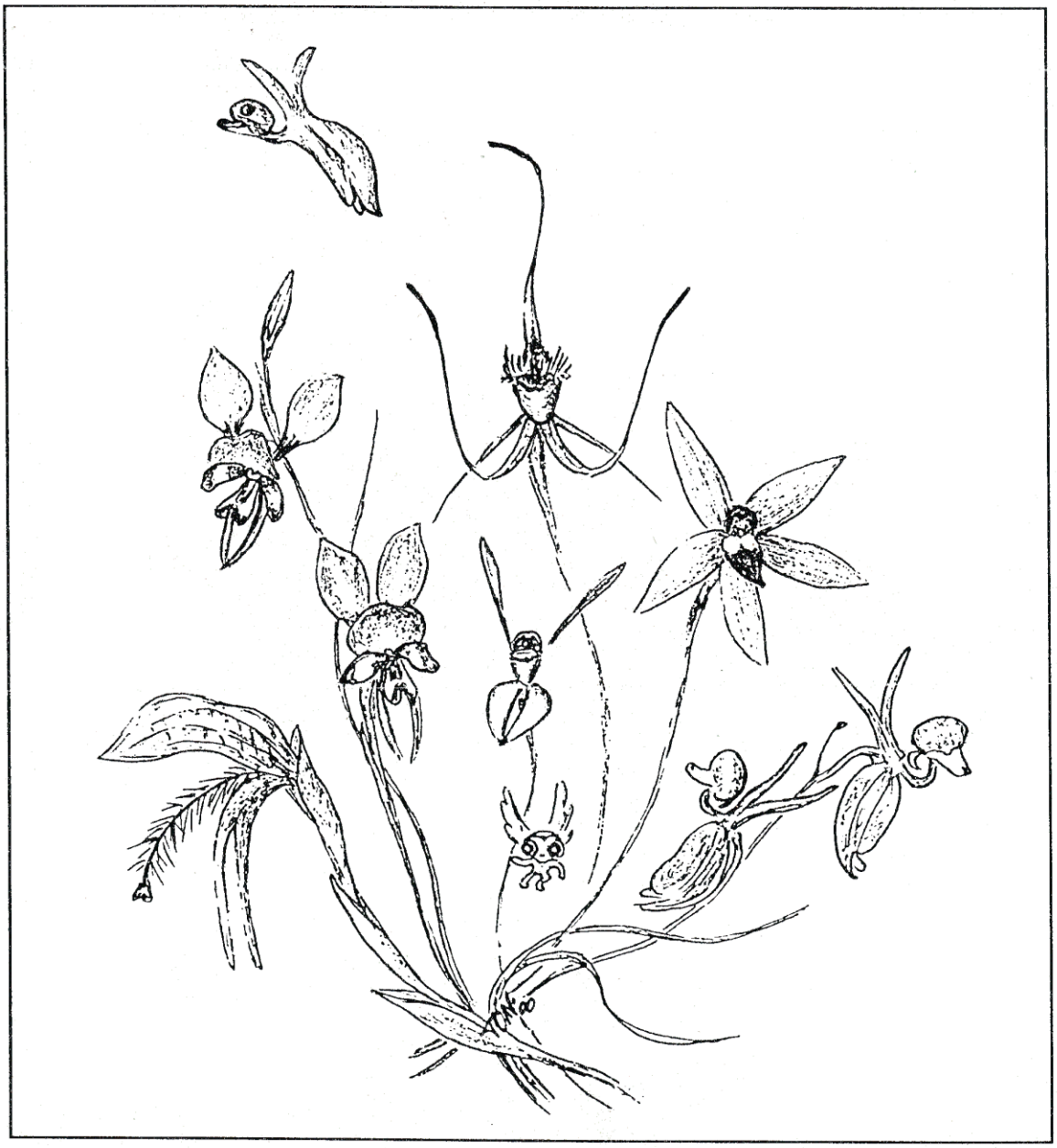
Journal
of the
Native Orchid Society
of
South Australia Inc



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NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

POST OFFICE BOX 565 UNLEY SOUTH AUSTRALIA 5061

The Native Orchid Society of South Australia promotes the conservation of orchids through the preservation of natural habitat and through cultivation. Except with the documented official representation from the Management Committee 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.

Journal cost $2 per issue. Family or Single Membership with subscription $15.

JOURNAL OF THE NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.

DECEMBER 2001 Vol. 25 No. 11

NEXT MEETING 26 FEBRUARY 2002
Tuesday, 26 February, St Matthew 's Hall, Bridge Street, Kensington. Meeting starts at 8:00 p.m. Doors to the hall will be open from 7:15 p.m. to allow Members access to the Library and Trading Table. This will be a cultural evening with demonstrations on potting terrestrial orchid tubers and mounting epiphytes. More details in the February Journal.

CONTENTS THIS JOURNAL

DIARY DATES
Tuesday 15 January 2002: Meeting to plan Field Trips for 2002
February 26, 2002: First NOSSA General Meeting for 2002
March 26, 2002: Annual General Meeting - N.O.S.S.A.s 25th Anniversary!!
18-21 Sept 2003 16' Australian Orchid Council Conference Adelaide, hosted by O.C.S.A.

NEXT COMMITTEE MEETING
Wednesday 30 January at the home of Bill Dear. Meeting commences at 7:30 p.m.

The Committee of the Native Orchid Society of South Australia wish you and your family a happy, healthy, inspirational and safe time over the Christmas festive season and throughout the coming new year.

NOVEMBER MEETING
The November meeting was our annual Auction and the drawing of the Christmas Raffle, followed by a Christmas Supper. A great evening, with many bargains found in the auction, and some really great socialising during the supper. Many thanks to those who helped out with the auction, in particular Reg and Les who were the auctioneers for the evening, and Iris who kept track of the monies from the auction. Many thanks to those who brought in items for the auction and to those who bid during the auction. Many thanks too, to Gill for looking after the Raffle, and to those who brought in items and those who purchased tickets for the Raffle. $xx was raised from the auction and $ was raised from the raffle. $527.50 $125

Plants Benched
Epiphyte Species: *Cymbidium canaliculatum, Cymbidium madidum* (three of), *Sarcochilus fitzgeraldii, Dendrobium monophyllum*.
Epiphyte Hybrids: *Sarcochilus hartmannii x Sarcochilus* Cherie, *Sarcochilus* Mavis x Plectorrhiza *tridentata, Sarcochilus* Lois x *Sarcochilus ceciliae, Sarcochilus* Cherie, *Sarcochilus* Cherie Snow, *Sarcochilus* Pinkhart x *Sarcochilus* Cherie.
Terrestrial Species: , *Pterostylis psammophyla, Pterostylis biseta, Caleana major, Microtis parviflorum, Diuris drummondii.*
Terrestrial Hybrids: *Pterostylis* Jumbuck x *Pterostylis* ovata, *Pterostylis* Jack Warcup.

Orchid of the Night: *Cymbidium canaliculatum* grown by John & Bev Gay.

Popular Vote
Epiphyte Species: *Cymbidium canaliculatum* grown by John & Bev Gay
Epiphyte Hybrid: *Sarcochilus* Cherie grown by Wally Walloscheck
Terrestrial Species: *Caleana major* grown by David Pettifor
Terrestrial Hybrid: *Pterostylis* Jack Warcup grown by Les Nesbitt

Commentary on the Epiphytes was given by John Gay, Commentary on the Terrestrials was given by Les Nesbitt

FOR YOUR INFORMATION - NOSSA NEWS

NEW EDITOR WANTED AND NEEDED!! Your Editor is unable to carry out the task of editing the monthly Journal in 2002, and a new Editor is required to take over. Any volunteers? The inventions of the computer and emails have considerably lightened the task of generating text each month (only ten pages per month).

At our annual BBQ, NOSSA Members sought Bob Bates (seated) for comment and advice on certain orchids seen and photographed during recent field excursions. Bob will be leaving to take up a teaching position in the UK during 2002. To the right of Bob are Thelma O'Neil, Thelma Bridle and Phil Bridle; standing is Malcolm Houston. The day was not particularly warm, but what a great day it was - good company can overcome even the weather! !

Many thanks to Wally and Shirley Walloscheck for providing the perfect venue for the BBQ.

Photo taken by Rodger Biddell

The March meeting in 2002 will be the AGM and the start of the year of the 25th Anniversary of the Society. Members are asked to start thinking about bringing items of memorabilia such as slides, photographs etc to that meeting. As 25 years is the silver anniversary, emphasis will be placed on white flowers (or silver ones!!). More information will be forthcoming in the new year. If any members have any ideas how to celebrate this important milestone please speak to one of the committee.

FIELD TRIPS

Meeting to discuss FIELD TRIP PLANNING for 2002:

Venue: 47 David Terrace, Morphett Vale

Date: Tuesday 15 January 2002, Time 6 pm for a BBQ tea

CONSERVING *PTEROSTYLIS HIANS* AND *DIURIS FRAGRANTISSIMA* BY ACCIDENT!
first published in the Journal for the Society for Growing Australian Plants

Kevin Western

In January 2000, I received a small package of seed from a NSW species of 'Greenhood Orchid', *Pterostylis hians*, along with seed of several other terrestrial orchid species. At that point in time I had never heard of *P. hians* but I figured the only good way to find out what they looked like was to sow and raise them. The genus *Pterostylis* is reasonably easy to grow in artificial cultivation if you have a little experience and a little luck. There was not much seed, but I estimate that better than 95% did germinate and grow.

In the natural setting, orchid seeds will only germinate if and when they are invaded by the right fungus. The fungi involved are referred to as mycorrhiza and include the genera *Tulasnella*, *Ceratobasidium* and *Sebacina*. Interestingly they can occasionally be involved in quite destructive disease states in some grain crops. Orchid seeds are extremely small and have almost zero nutrient material in them. There is not enough energy for the embryo to germinate and commence growth as there is with other plant seeds. When the right strain of the right species of mycorrhizal fungus attempts to invade and engulf the orchid seed, the seed uses the stored energy of a diminutive drop of oil to turn the tables and control the fungus so as to gain initial nutrients and energy to commence growth. Early researchers discovered that each species of orchid tended to rely on the presence of one to a few strains of fungus for their germination. As germination does not occur without those fungi in nature, most orchid seeds perish. In the mid 1920s a researcher speculated that the fungi were providing the orchid seeds with carbohydrates and essential nutrients and that if he were to sow surface-sterile orchid seeds onto sterile nutrient gel, and maintain sterile conditions, they would germinate and grow without the need for mycorrhizal fungi. Luckily for the orchid enthusiasts of the world, he was right. Today we still sow orchid seeds onto sterile media formulations that are not vastly different from the original formula that he used.

The *P. hians* seed was sown onto sterile nutrient agar containing about 5% coconut water. (Water from fresh, unspoiled, sweet coconuts contains very low concentrations of plant growth regulators that enhance germination of orchid seed but are not destroyed by sterilisation at 121°C for 20 minutes in a pressure cooker). After a few months, the seedlings were large enough to be spread out by sterile transfer technique into several new flasks of nutrient agar, this time containing about 6% of banana pulp. (Bananas have nutrients and/or plant growth regulators that enhance the growth of germinated orchid seedlings in tissue culture). At this stage a fellow 'orchid nut' noticed the *P. hians* seedlings growing in my home laboratory and informed me that he had read that *P. hians* had only ever been known from one small, confined location. Furthermore, a bushfire had destroyed all trace of the species in this location. Subsequently, at a conference, I met the people who had first discovered the species. I learned from them that lawful collections had been made to provide herbarium specimens and maintenance in lawful cultivation for the drawing and recording. Material was sent to the keepers of the Australian collection of terrestrial orchids. Tubers from multiplication of the live material were subsequently distributed to competent growers to insure on-going survival of the species in collections. It was seed from one of these sources that had been sent to me. They also confirmed that, despite extensive searches for *P. hians*, no specimens had been found since the bushfire and it had to be presumed that *P. hians* was extinct in the wild. They were delighted that seedlings were growing in tissue culture as this meant that they were free from contamination and in a fit state to be returned to the wild in selected, safe locations. This is scheduled to happen mid to late autumn 2002. Hopefully a

system of cross-pollination of plants from the original collection will also be organised so as to maximise the likelihood of maintaining genetic variability.

Despite the fact that *P. hians* was not wide-spread in nature and was able to be wiped out by one bushfire, it is a good grower in the flask. This was seen at the September regional meeting of the Australian Plants Society where I displayed a flask with two seedlings that had made it to flowering size. I am informed that *P. hians* also grows quite vigorously and reliably in pots of fresh sphagnum moss and continues to do well if the tubers are repotted into fresh sphagnum moss each summer. My impression is that this species has habits typical of the *Pterostylis* species that are found growing in mosses and fallen mulch in cracks and pockets on rocks in places such as the Grampians. I hope to be able to continue to receive seed and grow it on until safe breeding populations of this species can be successfully re-established in the wild.

On a similar note, I received seed of *Diuris fragrantissima* about 12 months before receiving the *P. hians* seed. As usual the seed was processed and sown and eventually germinated. There was a problem though in that despite routine surface sterilisation of the seed and its subsequent germination, a slow-growing mould had survived and was growing at one edge of the mother flask. I was about to toss it out when the 'orchid nut' colleague mentioned above, asked whether I knew what I had. As with *P. hians*, I had been sent seed of a species that was known from only two existing wild plants. This news changed my approach! Luckily it was possible to separate the uncontaminated seedlings and replate them in fresh flasks of sterile medium. They too grew well and something like 900 seedlings in flask have been given back to the authorities. They were then planted back in safe locations where it is reported success rates have been superb. Some of the flasks were distributed to successful growers to ensure on-going production of seed until this species is off the endangered list. Many more seedlings will be sent back to Victoria in 2002 so they can be associated with their mycorrhizal fungus and be effectively reintroduced into safe habitats. In these times of growing realisation of the impact of our habits and intrusions into the untouched habitat on the flora and fauna, it is nice to know that we can occasionally reverse the trend - even though, in these cases, at first, it was largely by accident.

ADELAIDE PLAINS RUFAS: FIELD TRIP TO BALAKLAVA OCTOBER 25TH Bob Bates

What a smorgasbord of rufa group *Pterostylis* was seen by the nine participants. Our leader for the day was Ken Bayley. Ken and Barb Bayley had lived at Balaclava for many years, but have now departed for southern areas.

Our first stop was on the roadside between Balaklava and Halbury. In the mallee over limestone were dozens of tall *P. excelsa* just beginning to bloom and a small colony of shorter *P.* aff. *biseta* in full flower. Mixed in were dried plants of *P. mutica* with empty seed capsules. Further along the railway line we made a second stop in pine and mallee over red loams; more *P. excelsa*, some to 60cm tall yet with only the lowest of many buds open. These were likely to reach 80cm by December making them easily the tallest species of 'Rufa'.

Practically underneath these giants were the tiny *P. pusilla*, just ten cm tall and with the last flowers finishing. Amazingly we also found *P. 'Halbury'* an undescribed winter flowered species with dried seed pods having already released their seed, yet on the same stem flowers fully open, in one case an open flower was only two nodes above a dried and empty capsule! Once again we found *P.* aff *biseta* 'tall' but this time there were also perfect examples of hybrids between these and the *P. excelsa*.

Across the Hellfire Creek were more *P. excelsa* and *P. 'Halbury'* as well as what looked like a cross between the two -a cross never before reported. Seed capsules were seen of several other orchids, including *P. nana,. Caladenia tensa,* and *P. robusta*.

We moved on to Zachers scrub SW of Blyth for lunch, but everyone was so keen to look at more 'rufas' we did not bother to sit down for lunch. At Zachers there were thousands of *P. excelsa*, some typical *P. biseta* and occasional crosses, as well as almost finished *P. pusilla*, but the find of the day was a colony of *P. boormanii*, a species almost unknown from the Adelaide Plains these days. It is amazing that we could visit these tiny l hectare remnants in a sea of thousand of square km of wheat crops and yet find such a diversity of orchids, especially rufas so late in the season. With dozens of habitats such as red sandhills, black clay flats and cream sand plains all without remnant native vegetation, we realized that

we may have lost as many as half a dozen 'rufa' group *Pterostylis* to extinction on the Adelaide Plains alone, these species becoming extinct without ever being collected. The ones that have survived must have been the very commonest, once existing in millions. Also at Zachers were dozens of *Microtis frutetorum* as well as seed pods of *Thelymitra nuda.*

Many thanks to Ken for acting as guide and to Barb and friends for a delightful tea.

FIELD TRIP REPORT - CLARE AREA 7/10101 Thelma Bridle

Only 4 members met at Sevenhill on a cold, wet Sunday morning, knowing there was no chance of *Thelymitra* species with flowers open in such conditions. We decided to start by visiting a couple of wineries - only for orchids, of course!

At Waninga, the large-flowered *Caladenia* species *C. argocalla* were a magnificent sight, flowering in large groups on the hillside. The variety in this species was surprising, with variations within groups as well as between groups. We found flowers with dark red/brown osmophores and red calli, others with yellow/brown osmophores and white calli. Some flowers had particularly wide labellums whilst other flowers had red labellum tips. Many of the plants had 2 flowers. Bob Bates informed us that the flowers of this species increase in size after opening and may last up to 6 weeks if not pollinated. There were increased numbers at all sites visited during the day, where this species was present, so pollination must be occurring as no hand-pollination is being carried out whilst Doug Bickerton is surveying, counting and monitoring this threatened species. There were also some large *Thelymitra* nuda flower spikes here, ranging in colour from white to pink, various shades of blue to almost purple. A single flowering spike of Prasophyllum odoratum was hard to spot amongst the many flowers of *Stackhousia monogyna*.

At the second winery, *Thelymitra* species were in profusion, in particular all shades of *T. nuda*, but also *T. luteocilium, T. rubra, T. pauciflora* (blue), a *T. pauciflora x T. rubra* hybrid and a couple of large *T. nuda x T. grandiflora. T. pauciflora* with a white flower may be a different species to the blue-flowered form with its channelled leaf quite different to the strap leaf of the blue-flowered type.

On the roadside near Skilligollee winery, *Prasophyllum pallidum* was flowering and a large colony of colourful *Diuris orientis*, the first recording of both these species at this site and the first recording of *D. orientis* in the Clare area. With *D. behrii, D. pardina* and *D. palustris* all known from the locality, *D. x palachila* and *D. x fastidiosa* probably occur here also.

Four other NOSSA members joined us at Spring Gully Conservation Park. *C. argocalla* was again found, at 2 sites in the park, in one place growing alongside *C. tensa*. There were hybrids between the 2 species, varying from large, greeny-coloured flowers to smaller ones with red labellum tips and all with labellum fringing as per *C. tensa*. On this ridge we walked through the clouds and found *T. luteocilium* was still only in bud. A large group of *C. leptochila* in the park were flowering, some with red flowers. Spring-flowering lilies were numerous, with the blue *Chamaescilla corymbosa* (blue squill) and *Caesia calliantha* (blue grass-lily) interspersed with *Dichopogon strictus* (vanilla lily). There were also some introduced lilies flowering.

Several different *Microtis* species, including some as yet undescribed species were recorded. We soon became very confused with the variety of Thelymitras. *T. nuda* in 2 forms - those flowering and the later, glaucous form still in tight bud, *T.* x *chasmogama, T. huteocilium, T. rubra, T.* aff. *holmesii* and *T. pauciflora* were recognised. There appeared to be a hybrid between *T. rubra* and white-flowered *T. pauciflora*, but surprisingly with a strap leaf. Another large, blue-flowered *Thelymitra* sp. had a *nuda* type column, was insect-pollinated, had long narrow buds and a narrow channelled leaf. Then there were the more subtle variations and I was completely lost. Other orchids included many *Prasophyllum pallidum, Glossodia major* and *Pterostylis biseta*.

Out last visit was to Emu Flat Reserve. All the *Corybas* and *Pterostylis* species were finished flowering, to be replaced with *C. argocalla, Thelymitra* species, *Microtis arenaria* in flower and *Prasophyllum fitzgeraldii* still in tight bud. Driving home the rain stopped and the sun came out - all too late, but we had an excellent day despite the weather with many orchids found.

ORCHIDS RECORDED 7/10/01

	1	2	3	4	5	
Acianthus pusillus	1		1	1	1	
Caladenia argocalla	f			f	f	
C. argocalla x tensa				f		
C. leptochila				f		1 - Waninga winery
C. tensa				f		
Calochilus robertsonii				b		2 - Mitchell winery
Diuris behrii				fo		
D. orientis			f			3 - Skilligollee roadside
D. x palachila				fo		
D. palustris			fo	fo		4 - Spring Gully Cons. Park
D. pardina		fo	fo			
Glossodia major		f	f	f		5. - Emu Flat Reserve
Microtis aff. *parviflora*			f			
M. arenaria					f	
M. frutetorum	f		f	f		
M. sp.					f	
Prasophyllum fitzgeraldii					b	
P. odoratum	f					
P. pallidum			f	f		
Pterostylis biseta				f		
P. sanguinea				s		
Thelymitra x chasmogama		f		f		
T. grandiflora x nuda		f				
T. aff. *holmesii*			f	f		
T. luteocilium		f		b/fo	f	
T. nuda	f	f		f	f	
T. nuda (late flowered)	b		b			
T. pauciflora (white)	f	f	f	f	f	
T. pauciflora (blue)		f	f	f		
T. rubra		f	f		f	
T. rubra x pauciflora		f		f		
T. sp.				f		

CYMBIDIUM SUAVE R.BROWN 1810 Len Field

Named from the word suave meaning sweet smelling. Pertaining to the flowers: Previous known by the synonym *Cymbidium gomphocarpum*. Common names snake or grass orchid from the shape of the long strap like leaves.

This is the smallest of the three Australian Cymbidiums with a wide range of habitat which ranges from near the Victorian border, right through N.S.W. up to North Queensland around the Cooktown area. Right through this range it is confined to the eastern slopes of the great divide. The Southern end of its area is much further South than either of the other two Cymbidiums and although the smaller of the three it can still form quite large clumps on its host timber. It can be found from sea level on the coastal plains and up to an altitude of 1100 metres, this high altitude is more so in its northern range where it is seeking the cooler temperatures.

Found mainly in hardwood forests but can be at home in the dry sclerophyll forests or on paper barks in swamps and watercourses and can also be found in dense rainforest. It is a common sight in our local forests and is one of the few epiphytes that grow on Eucalyptus while another of its favourite hosts is the bush oak (*Casuarina torrulosa*). It is easily recognised by its long and very slender, grass like flexible leaves which can be up to one metre long and up to 15 in number from each long woody untidy stem that the plant produces. These long stems take the place of Pseudo bulbs. Not having these bulbs to store food and energy the plant depends on a huge extensive root system which will burrow for long distances through the dead pulp in the centre of its host timber and even into the ground seeking nourishment. These roots can travel up to ten metres or more in their search for food. This root system is unique for although being an epiphyte these roots do not spread over the surface of its host but prefer

the dead wood of the centre or under the paperback of the Melaleucas where they are insulated from the temperature extremes. This vast root system is followed by rhizomes which when encountering a hole in the tree or surface from under the bark(more so in paper barks) go on to form new plant.

Flowering is from August to October but this can be extended to January in Southern New South Wales. Pendulous flower racemes appear from the bottom of the leaves with close packed apple green to brownish green which are sometimes marked with reddish patches, these fragrant flowers can number from fifty to one hundred or more to a spike. The stems as they continue to grow from the base of the plant carry flowers for many years. A large plant when in full flower is a lovely sight.

Culture: While in nature this plant appears to be able to grow in many places on a great range of hosts this is a vastly different proposition at home for if any plant resents any disturbance to its root system it would be this one. While I have successfully grown this plant for many years with no great difficulty I have found that what appeared to be quite healthy plants could die literally overnight. One reason I think could be the cause is root crowding as these plants have a huge root system and with no pseudo bulbs to rely on they depend on this root growth more than other orchids.

When transplanting I would suggest obtaining smallish plants in preference to a large plant as it is almost impossible to not over disturb the root system whereas a small plant can be handled with all its growing root tips intact and when potting choose where you are going to grow it with care and allow plenty of room for root growth as once they are established they are very difficult to repot and resent disturbance. (A large pipe or hollow log would be ideal) Compost. A coarse *Cymbidium* mix with some of the rotted centre of a Eucalyptus tree with a small amount of charcoal added also some sawdust. It likes considerable air movement and a lot of sunshine. Water well in the summer and autumn. *Dendrobium* beetle can play havoc with the flowers; also ants can cause heavy scale infestation. I have seen considerable success for people growing it in Staghorn (*Platycerium superbum*) That is the way I would personally prefer.

South Australian Women Orchidologists and Orchid Painters
Number 7: Kath Alcock Bob Bates

Kath Alcock of Naracoorte is the best known of our contemporary South Australian female orchid artists. She was born Kath Ridgeway at Bordertown S.A. in 1925 and attended the tiny Pine Hill school until grade seven. Kath remembers her parent's interest in the bush and its native orchids. Kath writes of these early days.... " In between jobs on the farm I explored the district north of Wolsely on horseback from which position I had the advantage of taking in a fair area at a single glance."

Kath painted her first orchid, a green comb spider orchid while still at school. Some of the orchids she collected at the time are now housed at the State Herbarium, still in the school exercise book they were pressed in.

After more schooling in Adelaide she returned to the farm. About 1940 she corresponded with South Australian orchidologist and NOSSA life member Harold Goldsack, sending him various orchids of the Wolsely area. Kath spent some time in the Womens Land Army during WW2. She married soon after the war and raised three children on a farm near the tiny pine forest settlement of Comaum only a few km from the Victorian border and thousands of hectares of bush so much wilder than Wolsely. This rekindled her interest in wildflowers and she began to paint more seriously by 1958, experimenting with water-colours using very fine paint brushes, some trimmed to just a few hairs. Kath also took a particular interest in the way orchids moved into mature pine plantations.

It was not until her children were old enough to look after themselves that Kath was able to paint more seriously and began to correspond again with botanists in Adelaide and Melbourne, sending many specimens which were to prove new records for South Australia or entirely new species. She also developed friendships with local native plant enthusiasts such as Marion Beek, who wrote for the SGAP journals of the time and encouraged young naturalists such as Kevin Johnson of Nangwarry to look far and wide for orchids. Between them they made some twenty new records of orchids in South Australia including the first *Chiloglottis*, both *C. trapeziformis* and *C. cornuta* as well as *Pterostylis concinna*. It was Kath who first recognized *Dipodium campanulatum* and *Dipodium pardalinum* as new species. Today there are several of Kath's discoveries yet to be named.

I first met Kath in the early 1970's and she was my guide in finding some wonderful orchid locations as well as offering hospitality when my family and I needed somewhere to stay on trips to the South-east.

Some of Kath's new species have been named in her honour, including *Triglochin alcockii*. I remember her asking me to go out into the water of a muddy lagoon and dig up plants of this species so she could show me how its tubers were very different from the common *T. procera*. My interest in plants owes much to this true field naturalist with a wonderful general knowledge. Kath is still infecting local naturalists with her enthusiasm and her more recent students such as Peter Penny and Les McHugh are still turning up new orchids almost every year.

Many of Kath's friends look forward to her Christmas cards, wondering what wildflower Kath will have painted for them.

Kath has now painted over a hundred South-eastern orchid species and it would be wonderful to see these published.

Sources: 1:K. Alcock personal communication Oct 2001.
2: State Herbarium Adelaide

NOSSA AWARDS OF CULTURAL COMMENDATION (ACC) Reg Shooter

An ACC may be granted to the grower of a plant that exhibits excellence of culture such that it is superior in floriferousness, size, robustness and cleanliness of growth to that which could reasonably be expected from a mature plant of its type.

For the award to be granted, the plant must have been grown by the applicant(s) for a minimum of two years immediately prior to the judging. Reasonable evidence to this effect may be required by the Panel.

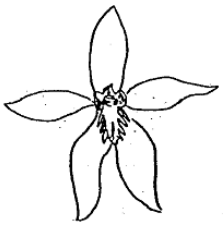
In the judging of a plant for an ACC, a points total from a maximum of a 100 shall be allocated in respect of such attributes as floriferousness, overall plant size and vigour, presentation and perceived excellence of culture. A plant must receive an average minimum of 75 points for the award to be granted.

If at any meeting or show any member feels they have a plant that meets these criteria please speak to one of the judges. To date some 36 ACC awards have been given, they are:

1. Dendrobium speciosum to Ray Haese in 1978
2. Caladenia patersonii to Bob Bates in 1979
3. Caladenia rigida to Les Nesbitt in 1979
4. Diuris Pioneer 'Big Ears' to Les Nesbitt in 1979
5. Pterostylis longifolia to Bob Bates in 1981
6. Pterostylis Cutie to Harold Goldsack in 1981
7. Dendrobium Bardo Rose to L & R Moore in 1981
8. Caladenia catenata to G Nieuwenhoven in 1981
9. Pterostylis cucullata to Harold Goldsack in 1983
10. Pterostylis curta to W Walloscheck in 1984
11. Dendrobium Rosemary Jupp to Barry Baily in 1984
12. Caladenia patersonii to D & B Wells in 1984
13. Caladenia dilatata to D & B Wells in 1985
14. Dendrobium falcorostrum toWayne Harris in 1986
15. Diuris pedunculata to Les Nesbitt in 1986
16. Dendrobium Bardo Rose to Barry Baily in 1986
17. Cymbidium suave to D & B Wells in 1986
18. Diuris punctata 'Old Vic' to Les Nesbitt in 1989
19. Chiloglottis gunniito Kate Hosking in 1990
20. Chiloglottis formicifera to Kate Hosking in 1992
21. Leptoceras menziesii to Jan Burford in 1993
22. Dendrobium other details not recorded in 1993
23. Glossodia major to L & W McHugh in 1995
24. Diuris pardina to W Walloscheck in 1995
25. Dendrobium discolor to I R McDonald in 1997
26. Dendrobium aemulum to D & B Wells in 1997
27. Chiloglottis trapeziformis to David Hirst in 1997
28. Dendrobium gracilicaule to Noel Oliver in 1997
29. Dendrobium striolatum to Noel Oliver in 1997
30. Diuris corymbosa to M Tiggerman in 1997
31. Leporella fimbriata to Les Nesbitt in 1998
32. Dockrillia teretifolia to Barry Baily in 1998
33. Pterostylis ophioglossa to Les Nesbitt in 1999
34. Corybas diemenicus to D Pettifor in 2001
35. Dendrobium Star of Riverdene to B Killen in 2001
36. Dockrillia teretifolia to W Walloscheck in 2001

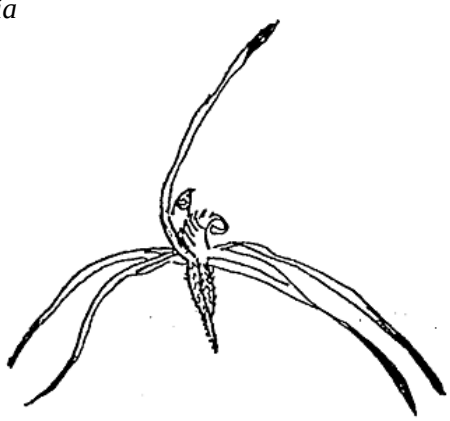
A New Classification of *Caladenia*
Adapted from The Orchadian 13(9), 389-417,2001 by DL Jones et at

Extracted to cover new classifications of *Caladenia* found in South Australia.



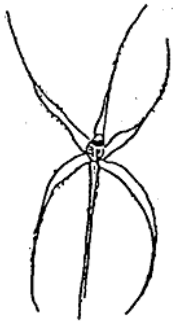
Caladenia - beautiful gland, referring to the prominent, often colourful labellum calli. Grows in clonal colonies. Long, narrow calli clustered in a. semi-circle at the labellum base. Tips of column wings with a small lobe.
Caladenia latifolia

Arachnorchis - spider orchid. Hairy leaf and scape. Large flowers with segment tips extended into long, thin tails or thickened into club-like units, both structures with osmophores. Column with a pair of prominent, usually yellow, basal glands.



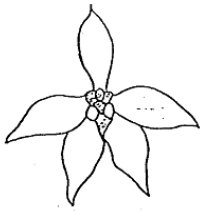
Arachnorchis arenaria
A. argocalla
A. behrii
A. brumalis
A. calcicola
A. cardiochila
A. clavigera
A. colorata
A. concolor
A. conferta
A. dilatata
A. formosa
A. gladiolata
A. macroclavia
A. ovata
A. parva
A. patersonii
A. reticulata
A. richardsiorum
A. rigida
A. stellata
A. stricta
A. tensa
A. tentaculata
A. toxochila
A. valida
A. venusta
A. verrucosa
(all previously *Caladenia*)

Calonema - beautiful thread, referring to thread-like segments on sepals. Leaf and scape hairy. Large flowers, with long, filamentous segments, covered with cylindrical osmophores (different shape to *Arachnorchis*). Shiny, smooth labellum calli and absence of basal column glands.

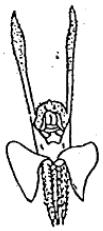


Calonema bicalliatum
C. capillatum
C. filamentosum
C. sanguineum
(all previously *Caladenia* with species name ending in -a)

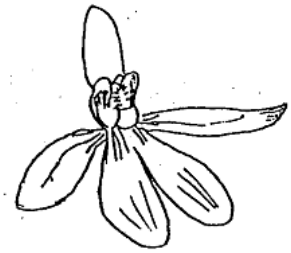
Glossodia - tongue-like, referring to the calli on labellum base. Tapering hairs on leaf and stem. Exterior surface of flower segments uniformly coloured, interior surface dull to shiny, but never glossy. Large labellum. 2, erect, hard basal calli fused , at least at the base.
Glossodia major



Leptoceras - slender horn referring to narrow, erect horn-like petals. Clonal colonies by vegetative reproduction. Smooth leaf, sterile leaf with basal tongue-like growth. Erect, narrow, long horn-like petals densely covered with red glands.
Leptoceras menziesii

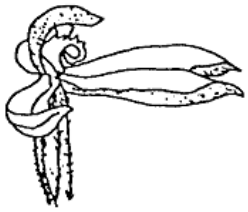


Petalochilus - petal-like labellum. Four short, forward projecting perianth segments. Labellum calli enlarged, usually in 2 rows and a different colour to the labellum. Labellum and column usually ornamented with prominent red transverse bars.
Petalochilus carneus
P. coactilis
P. fuscatus
P. mentiens
P. ornatus
P. prolatus
P. pusillus
P. vulgaris
P. xantholeuca
(all previously *Caladenia*, species name changes *carnea, fuscata* and *ornata*)



Pheladenia - false gland, distinctive calli. Tubers fully enclosed in a multi-layer tunic. Leaf and scape with flattened hairs and columnar calli on the labellum.
Pheladenia deformis

Stegostyla - cover, column referring to the cap-like dorsal sepal over column Cap-like dorsal sepal strongly arched over the column. Labellum calli usually in 4 rows. External surfaces of sepals and petals usually heavily adorned with glands.
Stegostyla congesta
S. cucullata
S. gracilis
(all previously *Caladenia*)



N.O.S.S.A. TUBER BANK FOR 2000-2001
M. GUY

Available to Financial Members only! See Over for listing. Closing date for orders is the last mail on the 11th January, 2002; Tubers will be posted on the 21St January.

I thank all growers who have generously promised tubers which need to reach me by the 11th January. NOTE: 56 lots in all see reverse side of page.

Circle each lot number that you wish to order and mark 'Sub' by any that you would like if your first choice is not available. Lots will have from 1 - 10 tubers, depending on supply and demand. Tubers in short supply will be issued on a first come - first served basis. Please record the provenance of tubers you receive if known.

Price per lot is $1.00. Please note that a postage and handling cost of $2.00 now applies.

POST ORDER TO M. Guy
15 Naomi Terrace
PASADENA SOUTH AUSTRALIA. 5042

Price per lot $1

lots = $ Name

Plus $2.00 packing and postage Address

.....
Total for order is
Post Code

Cheque/Money Order to be made payable to N.O.S.S.A.

LOT	GENERA SPECIES	LOCALITY DATA
1	Caladenia latifolia	Anglesea Victoria
2	Chiloglottis formicifera True Type	Nowra NSW
3	Chiloglottis palachila	Mt Kaputar NSW
4	Chiloglottis platyptera	Barrington Tops NSW
5	Chiloglottis seminuda	Nattai NSW
6	Chiloglottis truncata	Anduramba, Sth Qld
7	Cyrtostylis reniformis	Tasmania
8	Diuris sulphurea	Airds NSW
9	Diuris sulphurea	
10	Diuris sulphurea	Amplissima WA.
11	Leptoceras menziesii	
12	Microtis arenaria	Adelaide Hills
13	Thelymitra rubra	Lyndoch, SA
14	Corybas incurvus	
15	Corybas dilatatus	Sandy Creek
16	Pterostylis aff. nana	west of Kalgoorlie WA
17	Pterostylis anatona	Eungella Qld
18	Pterostylis baptistii	NSW
19	Pterostylis baptistii	
20	Pterostylis concinna	Carrum Downs Vic
21	Pterostylis concinna	
22	Pterostylis collina	
23	Pterostylis collina	Copeland NSW

24	Pterostylis collina	Green Tallai Range
25	Pterostylis curta	Dandenong Ra Vic
26	Pterostylis curta	Adelaide Plains
27	Pterostylis curta	Mt Gambier SA
28	Pterostylis decurva	Bullock Hill Tasmania
29	Pterostylis erecta	
30	Pterostylis hispidula	Dungog NSW
31	Pterostylis longipetala	Douglas Park NSW
32	Pterostylis longipetala	Kersley NSW
33	Pterostylis nutans	
34	Pterostylis obtusa	* NSW
35	Pterostylis ophioglossa	Kurri Kurri NSW
36	Pterostylis ophioglossa	Red Banks Plains
37	Pterostylis laxa	Bungonia NSW
38	Pterostylis procera	Davies Creek Qld
39	Pterostylis pedunculata	Wynyard Tasmania
40	Pterostylis pedunculata	
41	Pterostylis reflexa	Fern Bay NSW
42	Pterostylis russellii	
43	Pterostylis robusta	
44	Pterostylis revoluta	Biragambil NSW
45	Pterostylis taurus	Engella Qld
46	Pterostylis truncata	Gulf Stream NSW
47	Pterostylis truncata	Bowril NSW
48	Pterostylis truncata	You Yangs
49	Pterostylis Bantum	
50	Pterostylis Dunkle	
51	Pterostylis Dusky Duke	
52	Pterostylis x furcillata	Western NSW
53	Pterostylis Hood Wink	
54	Pterostylis Nodding Grace	
55	Pter. Joseph Arthur	
56	Pterostylis Walpamur	