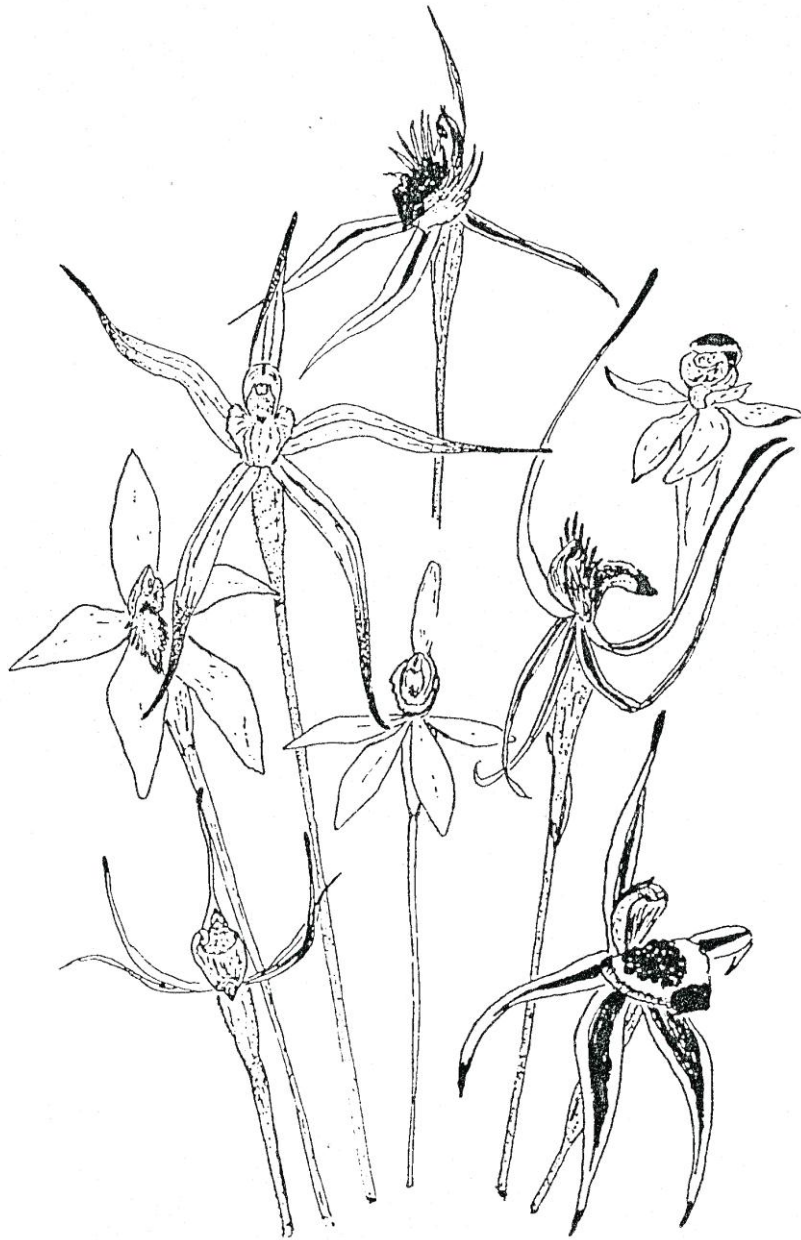




Journal
of the
Native Orchid Society
of
South Australia Inc



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.

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JOURNAL OF THE NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.



SEPTEMBER 2000

Vol. 24 No. 8

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SEPTEMBER MEETING

Tuesday, 26 September, 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. Guest speaker will be Committee Member and Arachnid expert David Hirst who will speak on Spiders and perhaps Spider Orchids too. Bring lots of orchids to the meeting!!

DIARY DATES

23/24 September Sherlock Field Trip
 29 September-4 October South East Field Excursion
 5-8 October 4th Australasian Native Orchid Conference and Show, Melbourne
 15 October Field Trip Cox's Scrub Conservation Park
 29 October Weeding *Pterostylis arenicola* at Grange Golf Course
 5-6 November Wetland Conservation Awareness - Mount Compass (details in later Journal)
 3 December Annual N.O.S.S.A. Barbeque
 24-28 September 2001 First International Orchid Conservation Congress, Perth, WA

NEXT COMMITTEE MEETING

Wednesday 30 August at the home of Cathy Houston. Meeting commences at 7:30 p.m.

New Members

It is with considerable pleasure that the Native Orchid Society of South Australia welcomes Graeme and Denise Krake and Adele Post as New Members.

AUGUST MEETING

In full flower, standing up straight as a soldier, with its spike of pale purple flowers that are shaped like helmeted men, with the four lobes on the lip representing arms and legs. *Orchis militaris* the soldier orchid, growing in woods on chalk, and very rare.

NOSSA Vice President David Pettifor addressed a well attended meeting, speaking about the orchids he saw during a recent trip to the south of England the area in which he grew up as a boy. During the three months that David spent in England, he was able to see 27 of the 31 species that grow in Hampshire (only 51 species in the entire country). The Common Spotted Orchid, Birds Nest Orchid, Frog Orchid, Musk Orchid and Lizard Orchid were all seen and captured on film. Prior to his departure, David undertook considerable research and planning, writing numerous letters to line up other orchid enthusiasts willing to talk about English orchids and show him orchid locations. A most interesting talk by a knowledgeable presenter, and illustrated with many excellent slides.

Plants Benched

Terrestrial Species: *Acianthus caudatus*, *Cyrtostylis robusta* (Lucindale), *Cyrtostylis reniformis*, *Cyrtostylis reniformis* (Lucindale), *Chiloglottis trapeziformis*, *Chiloglottis trapeziformis* (Comaum South Australia) *Chiloglottis truncata*, *Chiloglottis truncata* (Goombungee Queensland), *Corybas incurvus* (Adelaide Hills), *Diuris conspicillata* (Esperance Western Australia), *Diuris pardina*, *Glossodia major*, *Pterostylis baptistii* 'Janney' (x2), *Pterostylis concinna*, (Fern Bay NSW), *Pterostylis concinna* - yellow (Eltham Victoria), *Pterostylis curta* (Mt Gambier), *Pterostylis curta* (Adelaide Hills), *Pterostylis curta* -variegated (Hastings Western Australia), *Pterostylis cynocephala*, *Pterostylis elegans* (Walcha NSW), *Pterostylis nutans* (Wensley Dale Victoria), *Pterostylis nutans* (white form), *Pterostylis pallustris*, *Pterostylis procera*, *Pterostylis rusellii*, *Pterostylis stricta*, *Pterostylis tunstallii* (La Trobe).

Terrestrial Hybrids: *Caladenia* Fairy Children, *Caladenia* Spiderman (*Cal. latifolia* - white form- x *C. dilatata*), *Chiloglottis* Pescottiana x), *Pterostylis* Ruckman (*Pt. procera* x *Pt. ingens*)

Epiphyte Species: *Dendrobium tetragonum* (x2), *Dendrobium dichaeodes* (PNG), *Dendrobium speciosum*, *Dockrillia teretifolium* (x2),

Epiphyte Hybrids: *Dendrobium* Colin, *Dendrobium* Hilda Poxon x *Dend. Zip*, *Dendrobium* King Bouquet x *Dend. Zip* x *Dend. Tinonee*, *Dendrobium* Zip x *Dendrobium falcorostrum*, *Dendrobium* Pinterry x *D. Sunglow*, *Dendrobium* Elegant Heart x *Dend. Zip*, *Dendrobium* Aussie Angel x *Dendrobium speciosum*, *Dendrobium* Elegant Heart x *Dend. Gillian Leanney*, *Dendrobium* Elegant Heart x *Dend. Zip*, *Dendrobium* Elegant Heart, *Dendrobium* Jesmond Gliter x *Dend. Zip*, (*Dendrobium* Pinterry x *Dend. Ellen*) x *Dend. Aussie Victory*, (*Dendrobium* Elegant Heart x *Dend. Zip*) x *Dend. Aussie Quest*, *Dendrobium* Jayden, *Dendrobium* Gillieston Glow, *Dendrobium* Pinterry x *Dend. Tegans Delight*, *Dendrobium* Pinterry x *Dend. Vi Sheen*, *Dendrobium* Rutherford Starburst x *Dend. Vi. Sheen*, *Dendrobium* Gracious Star x *Dend. Graham Evert*, *Dendrobium* Victorian Splendour, *Dendrobium* Aussie Child x *Dendrobium speciosum*, *Dendrobium* Jesmond Dazzler, *Dendrobium* Jesmond Treasure x *Dend. Sunglow*, *Dendrobium* Regal Affair x *Dend. Aussie Victory*, *Dendrobium* Yondi, *Dendrobium* Ku-Ring-gai, *Dendrobium* Avril Gold, *Dendrobium* Jesmond Treasure, *Dendrobium* Golden Glory x *Dendrobium* Aussie Iva, *Dendrobium* Zepplin, *Dendrobium* Graham Hewitt, *Dendrobium* Zip x *Dendrobium* Gracillimum, *Dendrobium* Aussie Bonanza.

A fantastic congregation of orchids! I count 20 terrestrial species, not counting variations 4 epiphyte species, 4 terrestrial hybrids and 37 epiphyte hybrids total of 65 different native orchid species and hybrids) - ed.

Popular Voting

Best Terrestrial: *Caladenia* Fairy Children grown by Les Nesbitt and *Diuris pardina* grown by David Petti for (tied vote)

Best Epiphyte: *Dendrobium* Jesmond Glitter grown by Betty and Steve Meszaros

Judges' Choices

Best Epiphyte Species: 1st *Dockrillia teretifolium* grown by B Bailey
2nd *Dendrobium speciosum* grown by Betty and Steve Meszaros

3rd *Dockrillia teretifolium* grown by Graham and Jan Burford

Best Epiphyte Hybrid: 1st *Dendrobium* Avrils Gold grown by Brendan Killen
 2nd *Dendrobium* Yondi grown by Brendan Killen
 3rd *Dockrillia* Gillieston Glow grown by Graham and Jan Burford

Best Terrestrial Species: 1st *Corybas incurvus* grown by David Pettifor
 2nd *Pterostylis curta* grown by David Pettifor
 3rd *Chiloglottis trapeziformis* grown by Jan and Graham Burford

Best Terrestrial Hybrid: 1st *Caladenia* Fairy Children grown by Nesbitt's Orchids
 2nd *Chiloglottis* Pescottiana grown by David Pettifor
 3rd
Pterostylis Ruckman grown by Nesbitt's Orchids

Judges' Plant of the Night *Dendrobium* Avril's Gold grown by Brendan Killen

Noel Oliver provided the commentary for the epiphyte orchids, Bob Bates provided the commentary for the terrestrials.

Fourth Australasian Native Orchid Conference and Show
 Melbourne 5-8 October 2000
 "Native Orchids - Our Natural Heritage"

The Conference Committee has been working hard for nearly 3 years and is really looking forward to the Conference and Show. Registrations are looking healthy but more can be accommodated. Have you sent in your registration? The speaker program has a great line-up of excellent speakers on a wide range of interesting topics. The orchid tours prior to the Conference with guides who know both the orchids and the areas are proving to be popular. Of course the details of the itinerary for these will be finalised closer to the Conference when flowering is more predictable.

The Show should be of great interest to all visitors, The Central Display featuring a walk through a range of orchid habitats should be a feature which will be a talking point for a long time. The sales area, always popular at orchid shows will not disappoint, with many of the best nurseries selling plants.

COMING FIELD TRIPS Thelma Bridle

September 23-24: Mallee weekend in the Sherlock area. Meet: 10 am in Sherlock. Suggested overnight stay in Yumali.

September 29-October 4: Southeast Weekend and on to Victoria Native Orchid Conference. Please contact Thelma Bridle for further details

Sunday 15 October : Cox's Scrub Conservation Park. Meet at Northeast entrance to the park at 10am

Sunday 29 October: Weeding *Pterostylis arenicola* at Grange Golf Course. Meet in the car park at 10 am.

FOR YOUR ATTENTION - N.O.S.S.A. NEWS

Trading Table. Items are needed for the trading table. Items don't have to be orchids.

Journal Articles are sought (from you the reader). In particular, we need more articles about epiphytes. Make 2000 your year to contribute. Many thanks to those who have already contributed, but don't stop now.

Donations for our Annual Christmas Raffle are sought. This is an important fund raising initiative for NOSSA. Raffle to be drawn (and tickets sold) during November General Meeting.

Your orchids are needed for NOSSA's display at the Fourth Australasian Native Orchid Conference and Show to be held in Melbourne 5-8 October. Most Members will remember the outstanding display the Victorians brought to Adelaide in 1996 when it was our turn to host the Conference. We would like to reciprocate by taking an equal display to Melbourne. We are looking for as many South Australian Orchids as might be in flower and as these will not be many, any other orchids that might be in flower, both epiphytes and terrestrials, species and hybrids. See Bill Dear or Gerry Carne if you might be able to assist. The orchids will be well looked after.

Tips for Better Orchid Growing. In an earlier Journal, I asked Members to pass on their tips for better orchid growing. I haven't had get many responses. I hope, before the end of the year to publish a listing.

Tuber Bank: Donations of Tubers for the NOSSA Tuber Bank are sought. We again appeal to all terrestrial growers to check their pots and assess what excess tubers they may have. Please consider donating these to the NOSSA Tuber Bank as we would like a record number of species this year. Any number, small or large, will be welcome. Please advise Malcolm Guy at 15 Naomi Terrace, Pasadena or phone (08) 8276 7350 by 28th November. The final list with order form will be published in the December Journal. Thank you in anticipation. Locality data should be included where available.
Malcolm Guy

Peristeranthes hillii (F. Muell) Hunt 1954 By Len Field
Retyped from: Australian Native Orchids - Description and Culture Notes by Len Field for A.N.O.S. Newcastle Group

Previous names *Sacolabium hillii* F. Muell 1859
Onithochilus hillii (F. Muell) Benth 1881

Named from the Greek peristera (a dove) and anthos (a flower). This name was given by T. Hunt who thought for some reason that the flower looked like a dove. While the name hillii was named after Walter Hill who had many Australian orchids named after him.

The type plant was from Moreton Bay in South Queensland and was described in the year 1869 This is a monotypic genus confined to Eastern Australia. Schlector at one time considered creating the genus Fitzgeraldiella for this species in honour of R.D. Fitzgerald but died before doing so.

A fairly widespread species ranging from the Bloomfield River in South-Eastern Cape York Peninsular to the Hastings River in N.S.W. In this large area it grows as an epiphyte on small rainforest trees in rainforests and sheltered gullies. In its Southern ranges it is confined to the lowlands and low ranges and remains close to the coast, but as it travels Northward it becomes a highland grower and remains endemic to the high ranges. This is a common trait of many of our orchid species as this is their way of escaping the heat of the tropics by tending to grow on the higher, cooler ranges. There is no difference in growth and appearance between the Northern and Southern forms of this species although in the

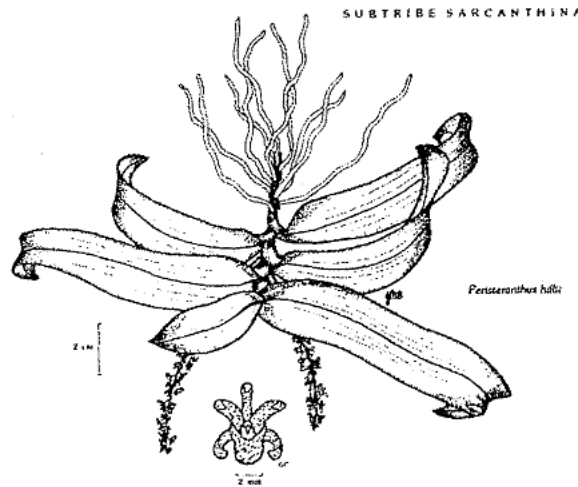
south it can become very abundant. In Northern N.S.W. and South-East Queensland I have seen small rainforest trees absolutely covered with this orchid with root systems from the numerous plants competing for the available room.

When not in flower it is a striking plant that has a large and vigorous growth and does not look unlike a large robust *Sarcochilus olivaceous*. The plant which can have stems up to 250mm long and 5mm in diameter has a pendulous habit with the leaves that can number between 20mm to 50mm wide. It has a vigorous root system, which is very large and will travel for some distances along the host tree. Although it is an eye catching plant in growth habits when not in flower it becomes very disappointing.

The flower racemes are pendant and can be as long or longer than the leaves. The flowers are numerous and very small being about 7mm in diameter, coloured pale green with brown markings and many crimson spots. These flowers are on very short pedicels and face downwards, but are very dull and disappointing in appearance and in comparison to the size of the plants. Flowering period is September and October.

Culture. This is a very easy plant to grow but does need some protection from extreme cold. In cold climates it would need at least a cool glasshouse but will grow better if given some warmth, humidity and plenty of air movement. It will grow quite easily in a temperate climate but keep clear of very low temperatures. It can be grown in pots but I would prefer a large slab of weathered hardwood, tree fern, cork etc. and allow plenty of room for the large and extensive root system of this plant. I grew this plant for many years on the original piece of the host tree until the host rotted away and then I had a little trouble relocating it to a piece of tree fern.

While plants turn up at our meetings quite often it would only be grown for its novelty value and /or its striking growth habit, for as I have stated earlier its flowers are small, dull and disappointing.



Drawing from David Jones Native Orchids of Australia, 1988

The Spidery *Glossodia major*

by Heinrich Beyrle

The weekends in winter and spring were some of the most enjoyable times during my stay in Australia, when we went bush walking with the family, looking for native orchids. On a Saturday, early in October 1992, we visited a nature reserve close to Kersbrook, where *Glossodia major* flowered plentiful. *G. major* is a uniform species, very distinct with its large, fairly broad and slightly glossy perianth segments and the smooth white labellum. The flower is purple with some plants showing more red pigments than others. Like other orchids, the flowers are reported to be very rarely white, but I

have never found a pure white flowered plant. During the walk, studying the colour variations, I discovered a plant with long narrow flower segments, resembling the closely related spider orchids *Caladenia*. This feature was very conspicuous, as the long segments gave the flower a very different look. If I remember correctly, the lip was slightly elongated as well, but the column seemed to be quite normal. Therefore, I decided it would not be a hybrid, but an atavism. This term is used for an ancestral or primitive feature becoming only expressed by a genetic disorder or mutation. As *Glossodia* is most likely derived from *Caladenia* this explanation seems to be quite feasible. Accidentally, just a weekend before, we had found a very similar strange plant at Kuitpo forest. I collected some pollen and the next day we went back to Kuitpo forest to find this particular plant again. The flower was still fresh and seemed not yet pollinated by its pollinator. The pollen from the Kersbrook plant was attached to the stigma of the Kuitpo plant and the fertilized *G. major* was marked. Seeds were collected four weeks later.



The seed capsule gave plenty of well-developed seeds. A small sample was germinated symbiotically in autumn 1993 and gave normally growing seedlings. Unfortunately the plantlets vanished shortly after deflasking. In the meantime I returned to Germany and some seeds were sown again in the European autumn in 1994. This experiment gave the same discouraging results. Seeds were sown a third time in autumn 1995 and the plantlets potted in autumn 1996. About a dozen

seedlings survived but during the next year some more plants vanished. It was only in 1998 that my potting mix became suitable for growing *Glossodia major* to flowering size. The mix is 80% fine perlite mixed with 20% impregnated and fermented pine wood fibres. A layer of 1 cm to 2 cm extra wood fibres comes on top of the mix. This top layer is especially beneficial for *Glossodia* and *Caladenia* species. This spring, in early April 2000, from 5 plants still left, 3 plants flowered for the first time. All three plants developed normal *Glossodia major* flowers.

This experiment was initiated to investigate the genetic basis of the spidery appearance of *Glossodia major*. The results indicate, that the long narrow flower segments are not genetically fixed but are rather a result of some other unknown factors. Environmental stress may be a likely cause. It is unknown if these particular plants developed spidery flowers in the following years. None of the two plants were found again in spring 1993. Either they did not produce flowers or they developed normal flowers. Unfortunately, I was not able to visit the sites in the years, thereafter. Critically assessed, it cannot be necessarily excluded that its natural pollinator, shortly before the artificial pollination took place, already had pollinated the *G. major*. However, this seems unlikely because abnormal flowers are usually not very attractive to natural pollinators.

Biological Control Of Boneseed And Bridle Creeper: Two Of Our Worst Environmental Weeds By Bob Bates

The Advertiser recently announced the release of the rust fungus *Puccinia myrsiphylla* in SA to control Bridal Creeper. This is the third biological control agent to be released for this weed! Lets hope it will be more effective than the previous.

Two weeks later Belinda Huppatz of The Advertiser reported that "Waite Institute scientists have released leaf roller moths at Morialta so that their offspring can chew their way through invading Boneseed weed."

Dr Rich Roush director of weed management says "we have long waited for permission to release the boneseed leaf roller in Australia" ... "this caterpillar often eats all the leaves on the weed and kills it." What more could we ask!

Now we need controls for *Monadenia*, Gorse, *Genista* and blackberry. The rust meant to control blackberry may have worked in the eastern states but it has not slowed the spread of the horrible prickly pest in our state. Biological controls on weeds will do wonders for the management of our threatened orchid species and make life easier for the many bushcare workers in NOSSA.

Conservation Field Trip To Mount Bryan (30 July 2000)

by Thelma Bridle

We had to scrape ice from the car windscreen in Burra on Sunday morning before proceeding to Hallett for a 9am meeting. The sun was shining, the hills green and the flocks of sheep supplemented with many lambs. After meeting with 6 other NOSSA members we travelled on to Tooralie Homestead and the site near the base of Mount Bryan, where the rare *Pterostylis despectans* grows. Under the direction of Doug Bickerton, we marked all the rosettes in the area surveyed last year. Some of last year's stakes were removed, where they no longer had an associated rosette, and new stakes were added for young rosettes. The resultant total was almost identical to that for 1999 - 135 rosettes, with 139 rosettes for 2000. Paddocks in this area have red-brown soil, lichen-covered rocks and are sheep-grazed, making it almost impossible to find short, brownly-coloured *Pterostylis* sp. flowers with shrivelled brown rosettes in late October unless the rosettes have been previously marked, when green and fresh. A number of other groups were found by extending the survey site and some were found along the creekbed.

After lunch and some birdwatching, we moved to the nearby Peppermint Gully, an area well-known for its birdlife. Here, along both sides of the road were many large groups of *Pterostylis* sp. rosettes, probably mainly *P. aff biseta* and *P. pusilla*. These were staked for subsequent identification of the flowers and to see if any *P. despectans* grow at this site. A few *Caladenia* sp. leaves with buds just forming were also located and marked. A small group of red-capped robins caused some interest. They were in full breeding plumage, even the female had some red marking around the beak and on the head. Two males, quite happy in each others company had stunning red heads and breasts.

Driving back towards Burra, Bob showed us the native grassland at Mount Cone, recently given conservation status. This area of tussock irongrass was full of low-growing native plants. Trees are not part of this landscape, so nothing is much above 20cm high, making careful searching necessary to find different plant species. *Prasophyllum* sp. leaves were found (apparently a short, green-flowered form of *P. occidentale* is common here). *Pterostylis aff. cycnocephala* was numerous and just beginning to flower. A colourful form of *Diuris* is found in the creekbeds, but we failed to find leaves, being of course, too early for flowers. Since removal of the sheep Bob has noticed an increase in the number of kangaroos and certainly there were plenty to be seen across the rolling plains.

Ferries McDonald Field Trip (6 August 2000) by Thelma Bridle

At Hartley the bridal creeper is moving well into the paddock, although this does not seem to be the reason for the decline of the *Caladenia stellata* population. It probably is impacting on the *Diuris palustris* population (only 3 plants found). The paddock was well-watered with autumn/winter rain, so we would have hoped to locate more, not fewer orchids. The 2.5cm *Pterostylis cycnocephala* which grow in the open were quite sparse, but beginning to flower and this area had more *C. stellata* than previously. *C. deformis* was widespread and in full flower, with 3 albino flowers located. *Cyrtostylis robusta* was flowering.

Ferries McDonald Conservation Park was surface dry, but moist below. *C. filamentosa v. tentaculata* was flowering profusely, with many more buds. Other flowering orchids were the mallee form of *P. nana*, *P. mutica* and a colony of *P. erythroconcha* (a new siting for this park). *P. dolicochila* were

almost finished and *C. cardiochila* were well in bud. Flowering *C. deformis* were scattered through the bush. It took some time to locate the *P. nana* population of similar appearance to those examined the previous day at Hale Conservation Park. Samples of these were collected by Doug Bickerton to establish their DNA differences/similarities. Cathy eventually found the *P. nana*, in the same location as last year. Numbers had increased, with 15 flowering plants (only 4 flowers found in 1999) and 50 non-flowering rosettes counted. The plants were still extending right into the walking track.

As a final visit for the day we went to Westbrook Cemetery, as mentioned the previous week in Andrew Allanson's talk at the general meeting. Bob had told us orchids had been located there in the past, although he didn't expect us to find any now. Unfortunately, amongst the thick grass, freesias and one-o'clocks (*Oxalis purpurea*) we were unable to locate any orchids.

List Of Orchids Seen:

<i>Acianthus pusillus</i> 1 f (FM)	<i>Eriochilus cucullatus</i> 1 (FM)
<i>Caladenia cardiochila</i> b (FM)	<i>Genoplesium</i> sp. s (FM)
<i>C. deformis</i> f (H,FM)	<i>Microtis</i> sp. 1 (H)
<i>C. filamentosa</i> v. <i>tentaculata</i> f (FM)	<i>Pterostylis cycnocephala</i> f (H)
<i>C. stellata</i> f (H)	<i>P. dolichochila</i> f (FM)
<i>C. stricta</i> b (FM)	<i>P. erythroconcha</i> f (FM)
<i>C. sp.</i> 1 (FM)	<i>P. mutica</i> f (FM)
<i>Cyrtostylis robusta</i> f (H)	<i>P. nana</i> (mallee) f (FM)
<i>Diuris palustris</i> f (H)	<i>P. nana</i> (Hale-like) f (FM)
<i>Pyrrochis nigricans</i> 1 (FM)	

L = leaf, b = bud, f = flower

New Orchids And Names In South Australia

Bob and Kerry Bates

1: the *Caladenia* alliance.

Way back in 1992 Hopper and Brown coined the name *Cyanicula* for the blue flowered *Caladenia*. Their book *Orchids of South-West Australia* contained the comment 'Full descriptions of orchids illustrated here are published in *Australian Orchid Research* vol 3'.

With that we in South Australia began using the name *Cyanicula deformis* for what had been *Caladenia deformis*.

However a valid description of *Cyanicula* was not forthcoming and by 1997 the name *Caladenia deformis* was back in use. Now at last Hopper and Brown have formally published *Cyanicula* in *Lindleyana* 15: 120-126, (2000). The authors comment that DNA studies support *Cyanicula*. Therefore it is likely that *Cyanicula* will gradually be accepted Australia wide. There are now about ten different *Cyanicula* which all occur in WA with two extending to the East ie *C. deformis* and *C. caerulea*.

Hopper and Brown's intention of naming a genus *Drakonorchis* has been dropped as it is not supported by DNA sequencing, but *Drakonorchis* is a valid subgenus. Likewise a new subgenus *Elevata* has been erected to cover species related to *C. latifolia* and *C. flava*.

We are reminded that true *Caladenia* are those short segmented bee pollinated species like *Caladenia carnea*. The spider orchids themselves belong to the subgenus *Calonema*. ie *Caladenia argocalla*.

2: *Prasophyllum murfetii* D L Jones *Orchadian* June 2000 ... This recently named species is endemic to the Southern Lofty region. We previously knew it as *Prasophyllum frenchii* 'Fleurieu Peninsula form'.

It is of course a well known species and is illustrated in *Orchids of South Australia* plate 133 as *P. frenchii*.

Plants of *P. frenchii* from the South-east will continue to be known by that name so we do add another species to the SA tally. True *P. frenchii* tends to have shorter sepals which give the flowers a more globular appearance. Jones also suggests that the labellum callus of true *P. frenchii* (see Orchids of Victoria pg 240) has a 'horse-shoe shaped, verrucose labellum callus' but judging from the photo of *P. murfetii* in Orchids SA that species can also have a horseshoe shaped, verrucose callus.

The name *murfetii* honours well known local field botanist Denzel Murfet who (with Rosemary Taplin) collected plants for David Jones to be used as a Type Collection... so all you keen field orchidologists in NOSSA, if you want an orchid named after you I suggest you send your most exciting finds to David.

Jones gives the species a conservation rating of 2V but as anyone who has tried to find the species recently will know it is now one of our most threatened orchids the swamps where it once grew have been all but destroyed. Clearly it will be almost impossible to save this species and the true rating should be 2eci, meaning that it is likely to become extinct in the next few years and that the few plants in conservation parks do not represent a viable population.

3: It should be pointed out that in the two papers above that some 14 new taxa are named, only one of them South Australian, so we really do have a long way to go at this rate to get our State's orchid taxonomy properly resolved.

Acknowledgement: Thank you to David Jones and Marion Garrett who kindly sent me copies of the papers referred to above.

National Threatened Species Day 2000-09-09
After Vicki-Jo Russell, Threatened Species Network (SA)

National Threatened Species Day is held 7th September each year and marks the day the last Tasmanian Tiger died in the Hobart Zoo. The day is used to highlight the plight of Australia's threatened species and to encourage the community to become involved in local recovery actions. National Threatened Species Day activities are typically a mix of media and on-ground events.

The theme for National Threatened Species Day 2000 in South Australia was the declining of birds and their habitat in the Mt Lofty Ranges. The Mt Lofty Ranges has one of the greatest concentrations of threatened bird taxa on the mainland of Australia. In all, the Action Plan for Australian Birds 2nd Ed has identified 18 taxa of national conservation significance in the region and many other species, once known to be common, are also thought to be on the decline.

The Mt Lofty Ranges have already lost six species of local breeding birds: King Quail, Kangaroo Island Glossy Black-Cockatoo, Ground Parrot, Azure Kingfisher, Regent Honey Eater and the Rufous Heath Wren. The Mount Lofty Ranges Spotted Quail-thrush - 'Australia's most threatened bird' has not been seen since 1982.

Bird life in the region face many threats including: historic and ongoing disturbances of habitat, particularly the disappearance of remnant understorey species, fragmentation of habitat, introduced predators such as cats and foxes, altered catchments and changes to fire regimes.

The Threatened Species Network (SA) is a community-based program of the World Wide Fund for Nature and Endangered Species Program of the Natural Heritage Trust. The Network aims to involve community in the recovery of national threatened species and their habitats. Members of the community are welcomed to get involved. Contact Vicki-Jo Russell TSN (SA) at the Conservation Centre on (08) 8223 5155 or email tsnsa@ozemail.com.au.

Revision of Australian *Thelymitra*

Jeff Jeanes of the National Herbarium, Victoria has received a research grant to undertake a taxonomic revision of Australian *Thelymitra*. The revision will take three years to complete. Results will be published in Volume 47 of the Flora of Australia.

A Bit About Watering Those Orchids
From Bulletin Number 139, ANOS Geelong Group Inc.

by Gary Walsh

Some geniuses have gone to the expense of installing automatic watering systems complete with solenoid switches, chrome plated timers and cubic zirconium fog nozzles. I don't like these because I can't afford them. My bush house is too big and I'm too poor as well, I doubt they work without having their own peculiar problems. You must have good mains pressure for a start. Even then the nozzles may block up and cause you a real headache. I did have one of those cheap black plastic systems in my old bush house, but I found it didn't cover all the orchids no matter how hard I tried to arrange the nozzles. In the end I inserted so many that the main water pressure fell away dramatically. I issued a decree to all the neighbours that they weren't to shower or flush their toilets without my permission but this created ill-feeling - particularly with the people over the back fence.

Watering is an art that can only be developed by the individual. Heavy watering, light watering, only you can decide. One of the biggest mistakes that novice growers repeatedly wreak on poorly performing orchids is to 'give it more water'. I used to do it all the time. I still get fooled from time to time. You know the tale, a plant sits in the pot, loosing leaves and new growths rotting. More water is rarely the answer unless you've reduced your watering to ridiculous levels. Repotting is nearly always the cure - fresh potting mix often works miracles. So if a grower says he waters it heavy, or frequently, or whatever, you must remember that his idea of watering is undoubtedly different to yours

Think for yourself.

Arthrochilus - the Spinifex Orchid

Kings Park Plant Science Director Kingsley Dixon told the West Australian that the spinifex orchid *Arthrochilus* and eight other plants new to science were found during a trip to collect botanical specimens near the Prince Regent River in the Kimberley. The small green orchid with up to 12 flowers each about a cm across, grows up to 30 cm in height. "We were sitting in a rock shelter looking at another orchid and noticed these leaves we couldn't identify, so we kept hunting and lo and behold, when we parted a Spinifex clump that had grown around the rock ledges, we found it" Kingsley said. "Its unique in being the first orchid known that grows in Spinifex, which is why people probably never looked for it."

The orchid is found near the 740 m high mesa-like Mt Hann in the Prince Regent River catchment area. The orchid is known from only two other related specimens in the Northern Territory.

The labellum of the Spinifex orchid mimics in shape, colour and scent a female wasp. The male wasp, lured to the orchid by pseudo-pheromones, endeavours to carry the female (the hinged but fully attached labellum) away and in doing so, and unwilling to let go, is thrown into contact with the pollinia, a process utilised by many (*Caladenia*)

Wet and humid conditions restrict the flowering of orchids in the Kimberley, with terrestrial orchids flowering generally from January to the first week in February. 'Working conditions were trying; it was like living inside a plastic bag.' Epiphytic orchids in the region flower during the middle of the year.

The Kimberley Trip was sponsored by Western Power and a private donation., and also included PhD student Matt Barrett.