

# NATIVE ORCHID SOCIETY

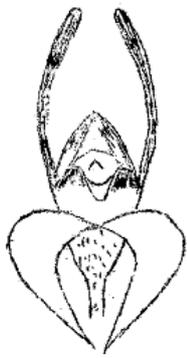
*of*

## SOUTH AUSTRALIA

### JOURNAL



*Pterostylis unnamed*



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

JOURNAL

Volume 8, No. 11, December, 1984

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NEXT MEETING

When: Tuesday, February 26, 1985.

Where: St Matthews Hall, Bridge Street,  
Kensington.

Please note there will not be a meeting  
in January.

LAST MEETING

Our November meeting saw a good turnout of  
members  
for our social meeting of the year. A number of  
members took part in identifying orchids from  
slides supplied by Ron Heberle after which all  
retired to the ante room for supper and a good  
nag. Our special thanks to the ladies who  
prepared the table and mad coffee and tea - it  
was much appreciated: I am told next year it is  
the men's turn.

Two special guests were George Michener from  
England (it was good to see him again) and  
Manfred Stetske from Germany.

## JOURNAL

My apologies for putting out the Journal so late. It makes it a bit difficult for Don Wells who runs the tuber bank so please get your order in straight away. Editor.

Letizia Gentile has offered to take on the duties of Editor, starting February 1985. Please see her at our club meeting or send any articles to:  
 Letizia Gentile  
 18 Tyrie Avenue  
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ON THE BENCH - November 1984

Plants on Display (\*first time seen)

## Epiphytes:

Dendrobium ruppianum	Phreatia crassiuscula
D. canaliculatum	Bulbophyllum crassulifolium
D. wassellii	Sarcochilus Melba
D. cucumerinum	Cymbidium canaliculatum (3)
O. fleckerii	C. canaliculatum var
D. Gloucester Sands (D. discolor x D. canaliculatum)	sparkesii
	C. suave (2)

Commentary - John Leader

Popular Vote - *Cymbidium canaliculatum* Ron Robjohns

## Terrestrials:

Diuris brevifolia (3)	Caladenia corynephora
D. punctata var parvipetala (2)	Pterostylis biseta (2)
D. venosa* (2 )	P. biseta sub-despectans
D. aetacea	(dwarf green type )
D. emarginata (2) (very tall)	Spiculaea ciliata
Cryptostylis subulata (2)	Prasophyllum gibbosum (short
Microtis parviflora	species)

Commentary - Bob Bates

Popular Vote - *Diuris venosa* - George Nieuwenhoven

## IN MEMORIAM

It is with sadness we announce the death of Beryl Carthew. Beryl and her husband Harold were early members of our Society and regularly helped to collate our Journal. We extend our sympathy to her husband and family.

UPPER STURT PRIMARY SCHOOL

24 October, 1984

New Words to Learn for This Week

terrestrial  
epiphytes  
pterostylis  
orchid

The visit to the school by Mr and Mrs Don Wells and Mr Hargreaves on the 9th October, 1984, inflicted a terrible shock to the spelling lists of some of our classes. Not surprisingly the new word lists that appeared on the blackboards had teachers scrabbling for their dictionaries. The children on the other hand took these words into their vocabularies and used them with the confidence that only the young seem to possess. "Pterostylis oh! that's like Pterodactyl (forerunner of the birds) that we learnt about when we studied dinosaurs."

We have, for a number of years: been proud of our greenhoods, donkeys, leopards, suns, beardies and so on that appear each spring and there has often been a race to be the discoverer of each species as it appears. Now (unfortunately for me) some of the children can rattle off the "proper" names leaving me to struggle through "Orchids of the Adelaide Hills" trying to find out what they are talking about.

The children's awareness of the "treasures" that we have in our patch of scrub at this school has increased dramatically since the visit by the "experts". This awareness can only help to ensure that future generations of orchids will be able to find a place to grow and thrive within the school. I believe that this will also spread to the children's homes and their  $\frac{3}{4}$  acre blocks of land may also become a little less alienated and a little more friendly toward the tiny yet exquisitely beautiful terrestrials.

The stories and pictures enclosed may bring a shudder to your experts but, believe me, they are written and drawn from the hearts of a grateful group of school children.

Bob Chapman  
Principal, Upper Sturt Primary School.

What a wonderful letter to receive.

No, the stories and pictures did not bring a shudder to us. On the contrary we thought they were beautiful and proudly displayed them at our last meeting. It is very pleasing to see a new lot of experts coming along at the Upper Sturt Primary School, for, after all, anyone that can rattle off names and recognise the orchids is an expert.

To all the children and staff at the Upper Sturt Primary School - welcome to the orchid world, and thank you for your drawings and stories.

Editor.

*PHAIUS TANCARVILLIAE*

Being a keen and longtime grower of *Phaius tancarvilliae* I read with great interest the article by Les Nesbitt on this beautiful orchid (NOSSA Journal October, 1984).

I found my first plant in the late 1960s growing near the banks of the Richmond River in northern New South Wales and I have since revisited this area and found the plants still growing in the same area. I have also found it growing in other locations in New South Wales and south east Queensland but, as Les points out, its habitats are fast disappearing. Illegal collecting has also played a large part in the demise of this plant.

While I realise that growing conditions in Newcastle, New South Wales, would be much kinder than in South Australia I find that I get best results growing them in a mixture of 70% fine chopped "oak" bark (*Casuarina* species) and 30% fine sieved charcoal. I have since experimented and had good results with pine bark passed through an 8mm sieve. I repot every two years into a larger pot because they are heavy feeders and also because of their extensive and fast growing root system. When the plants become too large to handle I break them up and start again. I have also found by regular repotting I avoid the build up of salts, etc., in the charcoal. A slight drying out during the dormant period appears to have no adverse effects but I do not recommend this and it should be avoided if possible.

Over the years I have tried several methods of propagation from the flower stalk using at different times trays of wet sand, spagnum moss and *Selaginella* species moss. Best results have been obtained by laying the full length spikes on the floor of the bush house in a patch of *Selaginella* species moss that I grow especially for this purpose. One other observance I have made is, that if you let the flowers become pollinated for seed the nodes are less inclined to shoot but if the flowers are removed early better results are obtained.

Len Field,  
Blackalls Park, N.S.W.

## FIELD NOTE

*Thelymitra macmillanii* has re-appeared in Belair Recreation Park, having been seen in flower on 6 October, 1984, in the Flora Area to the west of Government Farm Oval. Five or so plants were in a tight group - no others were seen in the locality despite a search. The day was a warm and sunny 26°C. The find was surrounded by hundreds of *T. antennifera* in flower along with dozens of *T. luteocilium* (pink) plus a few *T. rubra*; all in flower. The examples of *T. macmillanii* were a salmon pink in colour and their perianth segments were 20% longer than those of the *T. antennifera*.

It is heartening to see that such Flora Areas have maintained their condition over the years.

P. Reece

Several years ago, while my husband and I were at Mount Gambier, we wondered if it were possible to acquire some scrub of our own. We soon realised that there was none to be had in the South East. Then a lucky chance brought us to a property in the hills near Willunga. We decided to buy it - thirty hectares of hilly, virgin scrub, plus some pasture, and two spring-fed creeks. The scrub was fenced ff but my husband improved and extended the fence line.

As we were then living in Mt Gambier we were unable to explore, except during school holidays. But now, in the last two years we have been discovering the wealth of native flowers that we have, particularly the orchids.

In springtime the orchids are a delight. Recently three of your experienced members came down to help us identify them. They were amazed to see the profusion and size of *Glossodia major* and *Caladenia dilatata*. The colour of the *Glossodia* ranges from deep lavender to pure white. I understand that white ones are fairly scarce, but on our block they are not. The waxlips and spider orchids are everywhere: in one patch of 1m x 1m I counted over 50 *Glossodia* and in another 3m x 30cm I counted over 50 *Caladenia dilatata*.

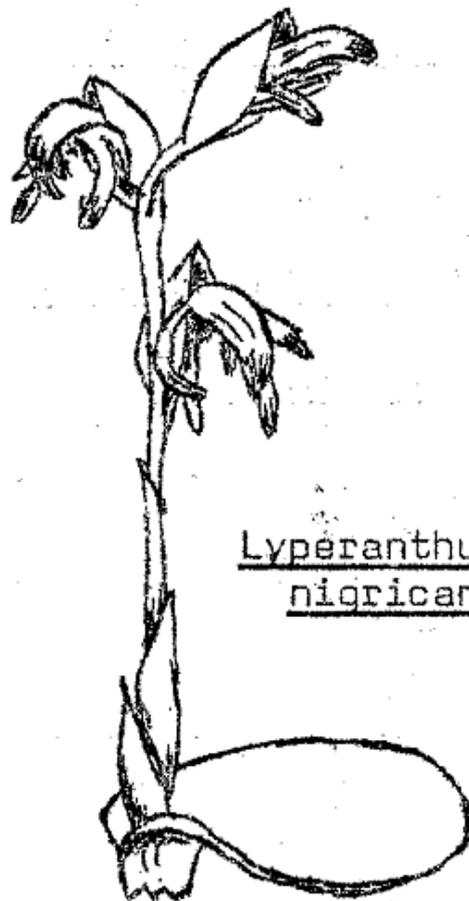
We had great fun climbing the hills and discovering *C. carnea*, *C. menziesii*, *Thelymitra antennifera*, *T. ixioides*, *T. pauciflora*, *T. rubra*, as well as those described above. Then there were *Diuris longifolia*, the *Acianthus* (many clumps of all species) and *Pterostylis*. Although more of a winter orchid, because of the late season, there were many *P. nutans*, *P. nana* and *P. pedunculata* still about, also *P. vittata* and *P. plumosa*. Every now and then *Calochilus robertsonii* showed its pretty beard as well.

One great excitement was to find *Lyperanthus nigricans* in flower. We have hundreds of their enormous leaves and only recently I learnt that they usually need a bush-fire to bring them into flower -- but we can do without that.

A week later I discovered one *Caladenia leptochila* and one pure white *C. dilatata*. Fortunately pollination seems to have taken place and I am anxiously waiting to see if they set seed. So far the kangaroos haven't eaten them.

Another pretty patch I found on the last weekend in October was *Microtis unifolia*. These are flowering in an area (outside the main scrub) which has been fenced off from the cattle only this year.

So altogether we are getting a great deal of pleasure from our new purchase. We are thrilled that we can preserve it and hope to enjoy its beauty for many years.



## HISTORY OF SOUTH WESTERN AUSTRALIA'S TERRESTRIAL ORCHIDACEAE R. Heberle

BARON FERDINAND VON MUELLER, 1825-1896

Government Botanist Victoria 1852-1896

After James Drummond and his contemporaries botanical exploration came under the dynamic influence of von Mueller. His prodigious enthusiasm and willingness to make extensive field excursions resulted in his becoming the foremost authority on Australian flora. He visited Western Australia in 1869 where he influenced the settlers to make collections where numerous people between the Murchison River and Israelite Bay consigned specimens to him.

Ferdinand von Mueller made a major contribution to Bentham's "Flora - Australensis" and should be regarded as its co-author. He named two Western Australian terrestrial orchids.

*Caladenia cairnsiana* Mueller 1859, Stirling Range, 1833.

*Lyperanthus forrestei* Mueller 1882, x J. Forrest, Stirling Range, 1833.

Dr W.H. HARVEY, 1811-1866.

Botanist, Keeper of Herbarium University of Dublin, Member Royal Dublin Society

Dr Harvey arrived in King Georges Sound in 1854 and spent eight months in the colony mostly collecting marine plants. He had one orchid named.

*Caladenia aphylla* Bentham 1873, Flora Australensis at King Georges Sound, April 1854.

GEORGE MAXWELL. 1805-1879

Botanist and Naturalist, King Georges Sound 1840

George Maxwell collected along the south coast on occasions with Drummond, sent specimens to Kew Gardens and the British Museum of Natural History and later to von Mueller. One of his orchid collections was named.

*Thelymitra cornicina* Reichenbach 1871, at King Georges Sound, 1840.

## Methods and Madness of an Orchidologist (contd.)

The major value to man concerns the beauty of the flowers and are therefore used as decorations, not a use to support the material needs but for the inner person a real must, especially among those of us unfortunately smitten by this fatal group of plants. Among many peoples there are myths and legends concerning these plants, so influential they have been upon man.

Man is supposed to be the most intelligent creature on the earth (among the animal life) and I think perhaps the orchids occupy a similar position in the plant world. Are they not very cunning when it comes to inducing insects into pollinating them? In the human world they would be considered to be extremely good at sales and masters at advertising. These plants are so good at selling that they have convinced man to spend a great deal of time and effort hunting and administering to them -- the rewards can be great for both.

In the technical sense these plants are clever too. Consider the various mechanical systems developed to ensure that the right type of insect is attracted and then ensnared (if you like the term) to pick up a load of pollen or deliver same to a flower and in the right place too. So you might say these plants are engineers. Or have the insects been the engineers? Who knows how much either has affected the mechanisms of these plants.

After all of that let me ask one question: which group of plants have been very intensely studied, cultivated, developed, very high prices paid for and many other really silly things done for them or about them? The answer is the Orchids. So are they not smart?

Now, many plants have been brought to Australia intentionally and a few unintentionally. Many introduced plants have survived extremely well in this new environment - too well - and have become weeds. Among the new arrivals have been many orchids, a few at times have escaped, or did they? Could they have just been dumped as surplus cuttings, etc? In South Australia I have heard of two such instances of cultivated introduced orchids going wild: one was in the Beaumont Hills and the other near Victor Harbor. To my knowledge none survive now.

Here in Australia one orchid migrated to this land of promise on its own and has become a most successful settler, doing as good a job as the Europeans. This plant migrant came from South Africa and even though I have read and been told several accounts of how this plant arrived, the probability is that it smuggled itself here in some bagging or rubbish on a ship from the above country to embark in Albany Western Australia, about 40-odd years ago. Had it heard somehow what a good country Australia was for South African plants and decided that's the place for me? (Note many of our worst weeds come from that land.)

At that time Albany would have had far more bushland about the port area than it does today, even so natural bush is not that far from the above area now.

It may have been just one small seed that fell or was blown into a quiet spot where it germinated. Imagine this small seed settling amongst some native bushes at the foot of the hill above the port area and south of the old Post Office building in Albany many years ago. As the leaves of the small plant could easily have been mistaken for a number of other weed-like plants, no one would have bothered it.

After a year or two this small plant would have become strong and large enough to have flowered. As it is self-pollinating, in my experience, then that one flowering plant could have produced a vary large number of virile

## Methods and Madness of an Orchidologist (contd.)

seeds, many of which could have been moved still further inland by the wind.

As the years moved by this new arrival slowly spread further and yet further away from Albany till today it is to be found well north of Perth and over much of the south-west of Western Australia, and has been described as a weed. I wonder if anyone in that state has made any attempt to meter the progress of this plant, away from its point of entry? If such work has been done what an interesting story it would make.

*Monadenia braoteata* is not one of the world's spectacular orchids. The flowers are small and in a tight spike growing from an untidy rosette of grass-like leaves. Perhaps its greatest asset is its eagerness to be on the move, get out, explore and colonise. If nothing else it has used man to its advantage.

Back in about 1971 I received four or so tubers of this plant from a friend. They were planted and in late autumn four plants appeared. All later flowered but in the mean time many small plants came up around the larger plants. On tipping the pot out in the ensuing summer only four tubers were found, At no time since has this type of behaviour occurred with this species in my collection. Has any other grower had this experience with this migrant?

About the second year of owning this adventurous plant I noticed small flat-leaved seedlings among the pots of my collection. In successive years these grew up to become plants of *Monadenia braoteata*. However the original plants did not survive for more than four years.

I still have a couple of descendants of these original four orchids. Sometimes they flower and often they do not. Always after a plant has flowered a few seedlings appear, sometimes the next year or even up to two years later. However, no matter how I try I cannot grow these plants into the large vigorous specimens found in Western Australia.

One of the favourite spots that this plant likes to show up in is amongst some potted *Epidendrum* orchids I have. Nearly every year at least one plant is to be found among the above orchids. Some years they die completely out but the following year a small seedling will be found.

Among the native terrestrial orchids they seem to have no preference as to which genus or species they prefer and will pop up in any pot. One has been growing for some years in with the Albany pitcher plant *Cephalotus follicularis* which is kept wet throughout the year. They now take about three to four years to flower from when first seen and after flowering they usually die.

I think this plant, or at least those I have experience with are self-pollinating as every flower results in a full seed-laden capsule and often I have just the one flower spike, resulting in the following years with more seedlings.

One would think that as this plant was so successful in Western Australia that it would have escaped into my garden. It has never appeared about my garden except as mentioned above. I dare say that if it were to try to grow in the wilder parts of my garden, another migrant from South Africa would have smothered it out of existence. This second plant is South Australia's unofficial, unnatural and unwanted flower the Sour Sob.

As now the district about my home is all developed I think it would be safe to say that this plant will not escape and spread from my collection like those first migrants did about Albany.

## HISTORY OF SOUTH WESTERN AUSTRALIA'S TERRESTRIAL ORCHIDACEAE (contd.)

AUGUSTUS FREDERICK OLDFIELD. 1820-1887

English Botanist and Zoologist

Collected in Western Australia between 1850 and 1860, sending specimens to Melbourne Botanical Gardens and Kew. Also did extensive work in Tasmania. One orchid named.

*Prasophyllum cyphochilum* Bentham 1873, Flora Suustralensis at Upper Kalgan River October 1867.

NEW DISCOVERIES M.B. Stonor, Lobethal.

While examining a colony of *Pterostylis cucullata* recently my family and I noticed a flower among the rest which was obviously quite different. It appeared similar to *P. nutans* in flower shape. Not being quite like *P. cucullata* or *P. nutans* and yet having features of both we can only assume that it is a hybrid between the two.

The plant is about 130mm high with a basal rosette of ovate leaves on short petioles with one small leaf bract about one third of the way up the stem. The flower, slightly bent forward, is 24mm long, coloured white, brown and green.

Although bent forward as is *P. nutans* the flower is straighter, coloured white at its base with the tip of the dorsal sepal quite a deep brown with the last couple of millimetres reflexed. The petals are green at their base, shading to deep brown at their tips with some evidence of veining near the base. They have a puffed appearance as in *P. cucullata*.

The lateral sepals are wide with the tips finishing just above the galea. The sinus is about half way up the sepals and is acute, the colour is brown with the furry appearance of *P. cucullata*. The labellum is rather straight for half its length then curves through the sinus to finish in a rounded point. It has a slight central ridge but no hairs and is dark brown in colour.

There was only one flowering plant of this type evident in the colony and an extensive search has failed to reveal any more. *P. nutans* is flowering about twenty metres away and it would seem that the plant is a natural hybrid between this and the *P. cucullata*.

A number of photographs have been taken and if any of them are suitable one will be put in the slide collection of the Society.

## WOODS AND FOREST DEPARTMENT APATHY TOWARD CONSERVATION OF ENDANGERED ORCHIDS AT KUITPO

As reported in the April 1984 issue of this Journal the Native Orchid Society of South Australia sent a submission to the Woods and Forest Department regarding conservation of native orchids in the Kuitpo Forest. This submission was sent in November 1983. One of the most significant sections of the submission dealt with the rare South Australian endemic *Diuris brevifolia*, giving details of the largest known population of this species. The submission showed the exact location of the colony and suggested management procedures. I was particularly concerned to find on visiting the location in early November (1984) that it had been fenced off and was being grazed by large numbers of sheep. Several signs along the fence announced that there was to be no public access as it was a stock grazing area. Needless to say instead of flowers I found only chewed-off plants.

The recently published (1984) "Extinct and Endangered Plants of Australia" by J. Leigh, R. Baden and J. Briggs, with a forward by H.R.H. The Duke of Edinburgh, lists only three South Australian orchids on the endangered list - and one of these is *Diuris brevifolia*. Curiously enough (page 39) they include *D. brevifolia* in a list of twenty plants threatened by forestry! Quite correct I would say. However, *D. brevifolia* is also included in their list of ten plants threatened by horticultural collecting. This is far from true. In 1976 I collected five tubers from an area later ploughed and planted to pines. Four years later I had over fifty plants, some were given to Les Nesbitt who now has them for sale. Tubers from the original collection have been available on "tuber banks" both in Victoria and South Australia and it is now estimated that from the original five tubers there are now at least 500 plants in cultivation and tubers are freely available to anyone who wishes to grow *D. brevifolia*, so there is no threat to the wild plants from collection.

I feel that our Society has done its share toward conservation of *Diuris brevifolia* - it is now up to those who own the land where it grows to ensure its survival.

Concerned Conservationist

## METHODS AND MADNESS OF AN ORCHIDOLOGIST

Migrants        R.C. Nash

If I were to say that the family of plants known by us humans as orchids were smart plants, would you consider this to be true or false? Well let us just consider these plants for a little. They, amongst all the vegetable group of life on this planet earth have, it is said, the largest number of genera and species. They occur in almost all land areas except those places too harsh and dry or cold to support the higher plants of a soft texture. Amongst all the known species few are or have been used by man as food, as medicine or for structural purposes. The most famous use in the food line is now made artificially which, however \* cannot beat the real thing, and here I talk about vanilla essence.