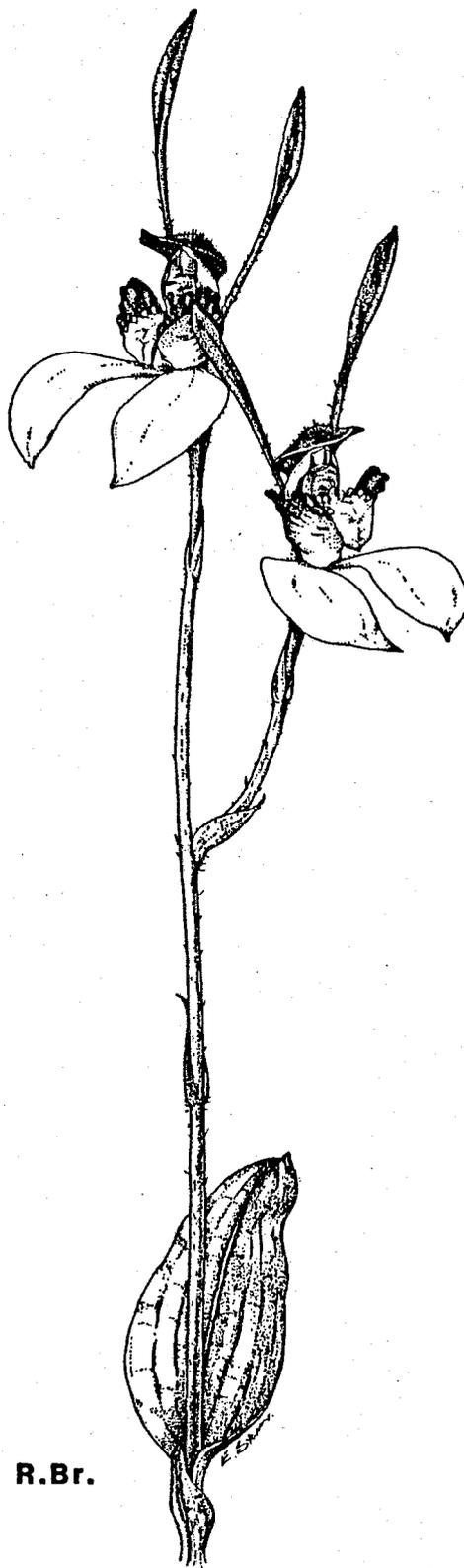


NATIVE ORCHID SOCIETY
of
SOUTH AUSTRALIA INC.

JOURNAL



Caladenia menziesii R.Br.

Registered by Australia Post
Publication No. SBH 1344

Volume 10, Number 2
March, 1986

NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.

JOURNAL

Postal Address:

NOSSA INC.,
P.O. BOX 565,
UNLEY, S.A. 5061

Price 60c

Patron: Mr T.R.N. Lothian

PRESIDENT

Mr R. Shooter
Telephone 356 2666

SECRETARY

Mr W.K. Harris
Telephone 278 2917

VICE PRESIDENT

Mr K. Western

TREASURER

Mr R.T. Robjohns

COMMITTEE

Mr R. Bates
Mr G. Brooks
Mr D. Harper
Mr J. Jacobs

LIFE MEMBERS

Mr R. Hargreaves
Mr H. Goldsack
Mr R.T. Robjohns
Mr J. Simmons

TRADING TABLE CONVENOR

Mr G. Brooks
Telepone 352 3025

TUBER BANK CONVENOR

Mr D. Wells
86 Pitman Road
WINDSOR GARDENS, S.A. 5087
Telephone 261 6030

EDITOR

Letizia Gentile
18 Tyrie Road
FINDON, S.A. 5023
Telephone 45 6453

Contents:

Page	12	Tuber Bank Report
	12	Report of February Meeting
	15	<u>Dendrobium Gloucester Sands</u>
	16	Conservation News
	17	Coming Name Changes
	18	<u>Caladenia Gladiolata</u> R. Rogers x <u>C. ovata</u> R. Rogers: A New Man-Made Hybrid
	18	<u>Acianthus (Cyrstostylis) Reniformis</u> : Really Two Species In South Australia
	19	Australian Native Orchids On postage Stamps
	20	Financial Statement

Next Meeting: The Annual General Meeting of the Society will be held on Tuesday 25 March at 8.00pm, in St. Matthews Hall, Bridge Street, Kensington. The March General Meeting will follow.

Speaker for the General Meeting will be Mr Les Nesbitt, who will talk on "Past NOSSA Awards".

Life Membership: Committee recommends to the membership that Mr L.T. Nesbitt be elected to Life Membership at the Annual General Meeting.

Nominations for 1986-87 Management Committee

The following nominations have been received:

President:	Mr R. Shooter
Vice President:	Mr K. Western
Secretary:	Mr W. Harris
Treasurer:	Mr R. Robjohns
Committee:	Mr G. Brooks

This year's cover illustration: Caladenia menziesii the floral emblem of our society by Erika Stonor of Lobethal.

Editors Note: Last month's edition of the Journal, was incorrectly numbered. The pages should have been numbered from 1 to 10. Please correct your copy.

New Members:

Mr J.S. Mc Grath, Hackham West
Mr & Mrs E.R. Badman, Willaston

FIELD TRIPS FOR 1986 - PRELIMINARY LIST

Saturday 19 April 1986 - Knott Hill Pine Forests Knitpo (1/2 day)

Sunday 10 August 1986 - Corybas special Williamstown area (whole day)

Saturday 13 September 1986 - Annual Belair afternoon

Sunday 5 October 1986 - Sandy Creek, Barossa (whole day)

Saturday 6 December 1986 - Peter Creek/Parowa double

A possible weekend trip to the southeast to be arranged for mid-November.

February 1987 - Spiranthes Special, southern swamps.

TUBER BANK REPORT

When the tuber bank commenced seven years ago, the supply of tubers was met by rescue work and donations from a very limited number of growers. At that time, most members were beginning to cultivate and not in a position to donate to the bank. This year has seen a complete reversal of those early years. Many members contributed to the bank, almost supplying the entire needs. The few blank spots being filled by the growing on programme.

Most customers were supplied with their choice, with the exception of the later orders, by then the more scarce tubers were distributed and substitutes had to be included.

Some tubers donated are in the growing on programme, thus in future years, tubers will become available after multiplication, eliminating a once off situation and broadening the list of species in the future.

The successful bank this year, is once again due to the many donors in other states, as well as our own. My job is made easy by such helpful members to whom I am deeply grateful.

Owing to ill health, I regretfully relinquish this position that I have enjoyed over this period. As this is my final report, I would urge members to give my successor the same co-operation and assistance afforded me.

Sincere thanks to all my helpers over the years and a special thank you to my wife, always my right-hand assistant.

D. Wells

REPORT OF THE FEBRUARY MEETING**Native Orchids Benched**

EPIPHYTES: Cadetia taylori, Cymbidium maddidum, C. suave, Dendrobium discolor var. broomfieldii, D. Ellen, (D. kingianum (white form) x D. tetragonum var. giganteum), D. Gloucester

Sands, (D. canaliculatum x D. discolor), D. Gwen Slade, D. Hilda Poxon, (D. speciosum x D. tetragonum), D. strebloceras x D. Goldflush x D. canaliculatum var. nigrescens, D. toressae, Luisa teretifolia, Sarcochilus ceciliae.

TERRESTRIALS: Pterostylis aestivalis, P. coccinea, P. decurva, P. fischii, P. longicurva, P. revoluta, Spiranthes sinensis.

Plant Commentary

TERRESTRIAL ORCHIDS

Commentary on the terrestrials was given by Bob Bates. He began his commentary with a magnificent specimen of Spiranthes sinensis grown by Wally Wallock. The plant which had at least 3 active growing heads, was described by Bob as the largest and healthiest he had ever seen. With respect to Pterostylis coccinea, Bob considered that this species, from the Great Dividing Range in the regions of Northern Victoria to North East New South Wales, was flowered early due to early watering. Commenting similarly on Pterostylis revoluta, P. aestivalis, P. longicurva (which Bob had not seen before), P. aestivalis and P. fischii. Bob noted that he kept his plants of these species quite dry in order to insure that they did not commence growth until April or May. Bob commented that early emergence of these species presents problems due to heat, drying and thrip attack. Interestingly though, the pots on display, had been kept dry, apart from an unexpected rainfall in early summer - both growers were from cooler, high altitude regions of the Mt. Lofty Ranges where summer has been significantly cooler than usual (nights of 8°C quite frequent), I suspect that the lower temperatures have played a considerable role in early emergence, since even late season Pterostylis are active already.

EPIPHYTIC ORCHIDS

Commentary on the Epiphytes was given by Les Nesbitt. Discussion with the owner of Dendrobium Ellen (D. kingianum - a white form x D. tetragonum var. gigantem) revealed that this healthy, vigorous, compact plant had been in continuous flower during the past 6 weeks and that it had flowered, as would be expected, during last Spring also.

The tropical, Dendrobium hybrid "Gwen Slade" was noted to hold its downturned flowers well above the foliage. Communication with the grower, revealed that the flowers had been open for about 4-5 months already. Another Dendrobium hybrid D. Goucester Sands, was also noted to be warm growing. Les noted that as usual, no matter what the month, there was a plant of Dendrobium Hilda Poxon benched. Les noted that the plant was vigorous and neat, with numerous active canes and many new flowering shoots yet to develop.

Commenting on a specimen of Cymbidium suave, Les considered that it was somewhat late in flowering. Discussion with the owner disclosed that it was normally a late flowering and long-lasting clone. With respect to Cymbidium maddidum, Les noted that the plant benched was in good condition and that C. maddidum generally grew well under shadehouse conditions in Adelaide, provided that plants were protected from winter frosts. Commenting on Dendrobium toressae, Les noted that the plant had been recently remounted from a disintegrating cork slab and that it was about to provide a good display of diminutive flowers.

RAFFLE:

1st	Mr A. Phillips	<u>Phaius tankervilliae</u>
2nd	Mr W. Fuller	Rain guage
3rd	Mrs Moore	<u>Pterostylis fischii</u>

Popular Vote

A. TERRESTRIALS: Spiranthes sinensis, W. Wallocheck
 B. EPIPHYTES: Dendrobium Gloucester Sands, R&J Shooter

SPEAKER

The speaker for the evening was Mr A. Clements, who showed the awarded and commended slides from the 1985 Photographic Competition. Alwyn commented on strengths and weaknesses of each slide, from a judges point of view, with a consideration that the slides have suitability for publication. The competition had 3 categories, namely:

1. Orchids in the natural environment,
2. Orchids in pots or mounted,
3. Close-up of flower(s).

Additional meritorious entries

With respect to Category 1, features which Mr Clements particularly stressed were the advantage of complimentary or contrasting backgrounds; the need to review the background through the camera view finder before taking shots, the need to remove any weeds or dead wood or leaf tissue which is highly ultra-violet light reflecting, and suggested that it is frequently advantageous to enhance the subject material by propping any "diagonal", sloping, conflicting back or foreground material, out of the way for the duration of the photographing process.

With respect to photographing "orchids in pots or mounted", it was suggested that one should look out for and remove or hide labels and/or stakes, and that a complimentary or contrasting background be used. Photographers were further advised not to place the background used, too close to the subject.

In discussing some "close-up" slides of orchid flowers, particularly a slide of a dissected flower of Pterostylis nutans, Alwyn commented how the photographer had so clearly captured the details of the internal structures of the flower, particularly the reproductive components that the slide, as well as being clear, told a story without any need for words.

K. Western

DENDROBIUM GLOUCESTER SANDS

The winner of the popular vote in the Epiphyte section at the February meeting, was my plant of Dendrobium Gloucester Sands and in light of the fact that it was I who suggested the popular vote winner should write an article on culture methods used, here goes.

I obtained the plant as a small division given to me by Peter Barnes some 3 or 4 years ago, after I had admired his plant seen at his home. It is a fairly quick growing orchid and soon reached flowering size, flowering for the first time last year.

D. Gloucester Sands is the result of crossing the species D. canaliculatum with D. discolor, the resultant hybrid was registered by K.A. MacPherson in 1963.

D. discolor is a large vigorous species, whereas D. canaliculatum is a small compact grower. The progeny is a compromise between the two, growing to about 2' 6" in height. Both the parents are from sub-tropical to tropical areas of Australia and require some protection in the form of winter heat to flower successfully in southern Australia. This habit has been retained by its progeny. I grow mine in a heated glasshouse with a minimum winter temperature of 15°C. Plastic pots are used and I favour as small a pot as will comfortably take the roots, which at the same time give enough room for a further twelve months growth.

A compost consisting of medium fir bark, 1/2" to 3/4" pieces charcoal and small pebbles 1/8" to 1/4" size is used. I buy pebbles from a concrete statue and paving contractor by the sackful and find that they serve several purposes, one, they improve drainage which at the same time keeping the compost cool and moist, a condition roots seem to revel in. Pebbles are cheaper than fir bark and the greater weight tends to alleviate the problem of top heavy pots falling over.

I do not use much fertiliser on this or any of my Epiphytic native orchids, maybe giving them 2 or 3 feeds a year. After the flowers have fallen in late summer, I like to give a light feed of a fertiliser made up of aquasol, magnesium sulphate and chelates of iron to give a bit of a fill-up to the newly developing growths. I water regularly

during the spring and summer, making sure the compost does not dry out, but at the same time not water logging the compost. Hard and fast rules cannot be given in this regard, just observe the compost and water when necessary. During the winter the plant is kept on the dryer side, just maintaining the compost in a damp condition to prevent shrivelling of the pseudo bulbs.

The leaves of this hybrid are very thick and fleshy and seem to be resistant to insect attack, the only point I have to watch for is that water does not lodge in the young growths, should it do so the growth will quickly rot.

To put this all in a nut shell, if some winter protection can be given in southern Australia to D. Gloucester Sands the rest is easy.

As a matter of interest, the Ira Butler committee decided it was the most outstanding Australian native orchid hybrid for 1981 and the award was given to a magnificent specimen of D. Gloucester Sands grown by Mr Laurie Jarvis of the Central Coast Group of A.N.O.S.

Reg Shooter

CONSERVATION NEWS

Filsell Hill Scrub near Carey Gully in the Adelaide Hills, has been purchased by the government together with Wottons Scrub.

The 131 ha of stringy bark forest (cost \$450,000) will be declared a conservation park and it is expected that other smaller areas will be added to increase its size to 180 ha. No orchid list exists for this area and it would be a valuable exercise for our society to formulate such a list during 1986.

Several new conservation parks have been declared or proposed recently in S.A. The Lake Eyre Conservation Park of 12,280 km² and Mt. Dare/Dalhousie Springs Conservation Park of 1000 km² will be important additions to our Conservation Park system.

Although the huge area sounds impressive, it is important to note that: like most of our conservation parks, these areas had been previously degraded by stock and being true desert areas there are no orchids.

More important for native orchid lovers, is the acquisition of Wilpena Station for addition to the Flinders Ranges National Park. This area has large populations of Caladenia toxochila and Pterostylis boormanii and once sheep are removed many other species are likely to return.

The Monarto Conservation Park has been declared. About 150 hectares, this area (formely Braendlers Scrub), has about 20 orchid species, including the recently named Caladenia dilatata var stricta. The bad news is that most of the interesting and rare orchids of the Monarto area, are outside reserves and recent overgrazing by sheep has seen the loss of Diuris pedunculata, D. x palachila, D. palustris x D. longifolia, C. patersonii and C. aff. fitzgeraldii from the area. The largest colony of Caladenia aff. fitzgeraldii south of the Flinders was ploughed under this winter.

Some hope must be taken from the new "Native Vegetation Management Bill", which requires 12.5% of the area of farm properties to be left uncleared. This of course, does not protect the orchids, as sheep may still graze!

Another heartening sign comes from a government authorised study of "wetlands", with a view towards their conservation and management. Although once again it is too late for most of the orchids!

COMING NAME CHANGES FOR ORCHIDS

Corybas: It has previously been mentioned that the species previously known as C. dilatatus, is the true C. diemenicus and that what we have been calling "C. diemenicus" is to be described as a "new species".

Caladenia menziesii: Most Australian orchidologists, do not really believe this species belongs under Caladenia, so we should soon see it removed to its own monotypic genus; the logical choice being Leptoceras, the name Robert Brown gave to the section of Caladenia in which he placed this species. The situation is similar with the curious Western species C. aphylla (recently flowered here in Adelaide), which should be given a new generic name.

Prasophyllum: It has long been recognised that the little autumn flowered midge orchids (section Micranthum) which are fly pollinated, are quite distinct from the large, wasp and bee pollinated, spring flowered leek orchids (En. prasophyllums or true prasophyllums). It is likely they will become a separate genus. It will not be "Micranthum" as that name is too close to the S.A. (non-orchid) genus Micranthemum (Micranthemum demissum is an attractive red fruited sub-shrub of the southern Mt. Lofty Ranges). Some recent workers believe the whole autumn flowered group, including Genoplesium baneri represent one genus. In that case, the name Genoplesium may be used for the midge orchids. Can you imagine getting used to "Genoplesium rufum". I hope this will not be the case!

R. Bates

**CALADENIA GLADIOLATA R. ROGERS X C. OVATA R. ROGERS:
A NEW MAN-MADE HYBRID**

Caladenia gladiolata is an endangered South Australian endemic spider orchid, which once occurred from Cherry Gardens in the Adelaide Hills to near Quarm in the Flinders Ranges. It now survives only in the Mt. Remarkable area of the southern Flinders. Caladenia ovata is also an endangered endemic, until the 1970's known only from Kangaroo Island. The distribution of these two rare orchids does not overlap. The author crossed these two species (cultivated plants) in September 1982. The seed was sown around thriving plants of C. gladiolata in a 10cm pot in April 1983. Some fifty seedlings appeared that Spring and these were separated out and potted in bush loam in January 1984. Only about 20 survived through 1984 and these were left in the same pot. Unfortunately, the pot tipped over in the Summer of 1984-85. Six tubers seemed to be okay, and were repotted. One plant stronger than the others produced a flower in August 1985.

Like all hybrids of C. gladiolata the flower had thick glandular tips to sepals and petals and like all C. gladiolata hybrids, it does not have the perfume of its fragrant parent. Curiously enough, the labellum of the hybrid was almost a copy of the C. ovata parent, being broad and unfringed.

Other Caladenia hybrids have been made and flowered, but all were copies of existing natural hybrids. The C. gladiolata x C. ovata was, I believe, the first "man-made only" hybrid of the genus to be flowered. The hybrid was exhibited at the August meeting. It was made purely for interest and I believe it has no value as a cultivated plant.

R. Bates

**ACIANTHUS (CYRTOSTYLIS) RENIFORMIS:
REALLY TWO SPECIES IN SOUTH AUSTRALIA**

It has long been recognised that there are two forms of Acianthus reniformis in South Australia, but because there are more similarities than differences between them, there has never been any serious consideration of treating them as distinct species.

I would however, suggest that they do in fact behave as distinct species and should be recognised as such. Each has a different geographical distribution. They have quite different habitat preferences, they flower at different times and there are constant morphological differences.

This can be distinguished even when not in flower. But most importantly, of all it has been demonstrated that at the few locations where they do grow together, they do not intergrade in any way. What we probably have is two sibling species which are biologically distinct. Preliminary experiments indicate that there are internal barriers to hybridisation.

The winter flowering form is the more robust of the two, its leaves sometimes up to 10cm long and yellow-green in colour the stem and flowers a rusty red colour (rarely yellowish), the labellum large rather broad, but with a sharp point.

This form prefers limestone areas, especially near the sea on Eyre Peninsula, Yorke Peninsula, Kangaroo Island, the Murray Mallee and the south-east, but also occurs in rocky places in the foothills of the Mt. Lofty Ranges.

The Spring flowering form is rather more delicate, very slender, the leaf blue-green with strongly marked veins, the stem and flowers a maroon-brown colour, only about half the size of the winter form, the labellum narrow, but with a blunt tip. This form prefers cool southern slopes of the ranges and is found in the southern Flinders, is common through the Adelaide Hills and also occurs in the lower south-east. It prefers acid soils. There are other differences, but those cited are the most noticeable. Both forms are commonly cultivated and it is the spring flowered form which does best for most growers. Near Adelaide in rocky places, like Ansteys Hill and overlooking Morialta Gorge there are colonies of both forms growing adjacent to each other, their flowering overlapping in early September. They might look similar, but that is no guarantee that they are all that closely related, after all, hedgehogs and echidnas may look similar, but they are hardly related. As both the forms of mosquito orchid are very constant over a wide range one would suspect that they may in fact have differentiated millions of years ago. Studies of their pollination and mycorrhizal relationships as well as chromosome counts may well clarify the situation further.

It is of interest to note, that it is now generally accepted that Cyrtostylis should be re-instated as a separate genus in a different sub-tribe from Acianthus! They might all be commonly known as mosquito orchids, but studies done recently show that Acianthus caudatus and Cyrtostylis reniformis for example, are totally different chemically, physiologically and in their mycorrhizal associations!

R. Bates

Australian Native Orchids on Postage Stamps

The Australian Orchid Foundation has advised us that in regard to Australian Native Orchids being featured on Australian Postage Stamps, Australia Post has chosen that:

Caleana major
Dendrobium nindii
Elythranthera emarginata
Thelymitra variegata

will be the species to be featured on Australian Postage Stamps, that will be released during the course of Orchids Australia '86 in Adelaide next September. Also, other species may be used on the cover of the Commemorative Pack that will be available at that time.

NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.

Statement of Receipts & Payments for year ended 31/12/85

RECEIPTS

Subscriptions 1985	1209.50
" Prepaid	250.50
Donations	33.00
Roy Hargreaves Trophy	50.00
Badges	8.00
Publications	568.70
Trading	1468.26
Raffles	475.40
Sundries	30.69
Tuber Bank	420.15
Bank Interest	349.22
Show Admission	481.00

PAYMENTS

Library Books	63.00
" Slides	25.00
Club Seal	13.76
Postage	766.72
Printing & Stationery	415.27
Publications	420.77
Rent of Hall	200.00
Typing Journal - Honorarium	220.00
Insurance	181.77
Conservation Education	63.45
Orchid Club S.A.	10.00
Society for growing Aust. Pts.	25.00
Aust. Orchid Found.	25.00
Ira Butler Trophy Committee	25.00
Roy Hargreaves Trophy	50.00
A.N.O.S. Medallions	45.00
Incorporation Expenses	67.40
Raffle permit	5.00
Entertain AOS Visitors	76.38
Xmas Social	6.83
Shadehouse maintenance	11.00
Plant pots	61.14
Show expenses	55.00
Sundry expenses	37.51
B.A.D. & F.I.D. tax	10.59
Excess receipts over payments	1963.83

\$5344.42\$5344.42Cash Statement

Cash at Band 1/1/85	4614.59	
Cash on hand 1/1/85	41.00	
ADD Excess Receipts	1963.83	\$6619.42
Cash at Bank 31/12/85	<u>6457.09</u>	
Cash on hand 31/12/85	162.33	
		<u>\$6619.42</u>

Signed: R.T. Robjohns
Honorary Treasurer

I have examined the books and records of THE NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC. and certify that the above Statement of Receipts and Payments is in accordance with the books and vouchers produced.

Signed: N. Christoph
Honorary Auditor

24th February 1986