

NATIVE ORCHID
SOCIETY
of
SOUTH AUSTRALIA



*Thelymitra
antennifera*

MAY

1977

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 435



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NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

NEWSLETTER

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May 1977

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AIMS AND OBJECTS

- a. To promote the culture, propagation and scientific knowledge of the native orchids of Australasia.
- b. To assist in the preservation of the native orchids of Australasia in their native habitat and to discourage the wanton destruction of the same.
- c. To print and publish literature that the Society may consider desirable for the promotion and furtherance of any of its objects.
- d. To engage in any activity relevant to these objects.
- e. To extend the membership of the Society by creating a public interest in its activities.

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NEXT MEETING:

WHEN TUESDAY 24th MAY at 8.00 p.m.

WHERE: ASSEMBLY HALL, Goodwood Boys High School, Hardy St, Goodwood.

WHY Noted local orchidologist Mr. Ray Nash will show slides and speak on terrestrial orchids. He will comment also on the terrestrials on display. Mr. Nicky Zurcher has promised to bring his magnificent specimen plant of Dendrobium bigibbum var compactum which will be in full bloom. He will tell us how he grows it and also comment on the epiphytes at the meeting. These two men are both recognised internationally for their work on orchids so don't miss out on this chance to hear them. Bring along your orchids whether in flower or not.

The pots of Pterostylis curta which Roy Hargreaves is donating to the Society will be for sale at the meeting for \$1.50 per pot. Each pot contains about 7 plants. This greenhood is easy to grow and flowers in early spring.

POPULAR VOTE:

The majority of members at the last meeting favoured a popular vote competition so this will commence at the May meeting. Each pot on display will be given a number. A voting slip will be available before the meeting for each person present to record the number of the epiphyte and the terrestrial which they like best. To make voting easier terrestrials will be on one table and epiphytes on another.

LAST MEETING:

Attendance 45.

Peter Hornsby gave a well prepared talk with slides on the orchids of the Mount Lofty Ranges. One memorable snap showed a group of flowers of Caladenia menziesii at Cudlee Creek national park last year. This orchid is generally very shy flowering in cultivation. Peter also brought along several books describing the orchids of the Mt. Lofty Ranges.

A raffle was held and \$10.00 was raised. Prizes were a potful of Pterostylis nutans and a plant of Dendrobium Kingianum.

Roy Hargreaves murdered a couple of plants of Pterostylis curta before our very eyes by roughly tipping them out of their pots to see if they had roots. One plant was spared to see if it grows better without the extra treatment. Would you believe Roy intends to do the same thing again next month.

PLANTS ON DISPLAY:

The following plants were tabled at the meeting on 26.4.77.

Flowering: Eriochilus cucullatus; Pterostylis parviflora,
Pt. Revoluta. Pt. Baptistii. Pt. Aristata. Pt. Obtusa.
Prasophyllum Nigricans. Sarcochilus Ceciliae
Dendrobium Bigibbum Superbiens Compactum.
Thelymitra Aristata (Qld)

Not Flowering: Diuris Longifolia, D. Maculata. Caladenia Dilatata.
Thelymitra Grandiflora. Bulbophyllum. Liparis Reflexa
Pterostylis Vittata. Dendrobium, Mortii, D. Speciosum,
D. Discolor, D. Monophyllum, D. Bigibbum "Superbiens"
D. Bigibbum "Compactum" D. Striolatum, D. Fleckeri,
D. Agrostophyllum, D. Johannes.

NEW MEMBERS:

A very warm welcome is extended to these new members. NOSSA now has 59 members.

Miss G. AMOR, CUMBERLAND PARK
Mr. and Mrs. C. H. BARRATT, MARDEN
Mr. R. BATES, FAIRVIEW PARK
Mr. BUTLER, BELAIR
Mr. J. CLAYSON, TANTANOOLA
Mr. and Mrs. B. D. COSH, MOLBURY
Mr. J. E. LEEDER, MALVERN
Mr. N. LOTHIAN, ADELAIDE

Mr. G. McGRAITH, MELBOURNE. VIC.
Mr. W.A. PYBUS, SOMERTON PARK
Mr. K. SCHULTZ, FOREST RANGE
Mr. L. SHEPPARD, WESTERN AUSTRALIA
Mr. T. SMITH, VALLEY VIEW.

LIBRARY:

Mr. Jim Simmons has offered to be Librarian. We hope to have the library in operation shortly. Jim has provided a long list of books on Australian orchids to use as a reference when money is available for purchasing library books.

SEED BANK:

Members are keen to grow it but seed is scarce. Species available so far are Caladenia dilatata and Diuris maculata. Write to Mrs. Mary Earle if you would like seed. Those who asked for seed at the last meeting may collect it at the May meeting.

VISITS TO GROWERS:

Our first visit will be to the collection of Mr. and Mrs. L.T. Nesbitt of 18 Cambridge St, Vale Park on Saturday 4th June from 2.00 p.m. This collection contains over 100 Australian species, mostly terrestrial. Some of the epiphytes are established on an apricot tree. You will see 8 - 10 species in flower.

FIELD DAYS:

Sunday 3rd July - National Park.

Meet 11.00 a.m. at the entrance near the Belair Railway Station. Bring barbecue lunch. Train times will be published next month for those going by train.

Sunday 31st July - Venue to be announced.

Field days will be arranged at shorter intervals as more species come into flower later in the season.

CONSTITUTION:

Committee has begun the task of writing a Constitution. Written submissions or ideas for inclusion are welcome from any member. You will get a chance to review the draft constitution as soon as it is written and printed. A final constitution will be drawn up after this review.

NATIVE ORCHID GROUPS:

Our closest native orchid group both geographically and in outlook is the Australasian Native Orchid Society - Victorian Group which meets in the National Herbarium, Royal Botanic Gardens, Melbourne, on the first Friday of the month. If you are ever in Melbourne on that night make a point of attending, you won't be disappointed. The group publishes monthly a "Bulletin" crammed with items of interest and their tuber bank for the distribution of terrestrials is famous Australia wide. A terrestrial study group was formed recently.

They have always been vitally interested in ground orchids but this sub-group will undertake more detailed studies. Mailing membership is \$3.00. A new rate may apply after their AGM in July. Write to the Treasurer, Mr. Neil Bathie, 9 Dunfield Ave, Mitcham, Vic. 3132.

5TH AUSTRALIAN ORCHID CONFERENCE:

Sponsored by the Australian Orchid Council and hosted by the Orchid Society of W.A. Inc. the week long conference will be held at the Sheraton - Perth Hotel from the 12th - 17th September, 1977. All types of orchids will be on display but Australian natives will get their share of attention especially on the organised tours which will stop to examine selected roadside locations where a range of local species can be observed. One of the papers to be presented is "Observations in Western Australian Native Orchids" by Mr. Andrew Brown. Brochures will be available at the next meeting.

OUR RAREST ORCHIDS

No. 1 in a series. Bob Bates

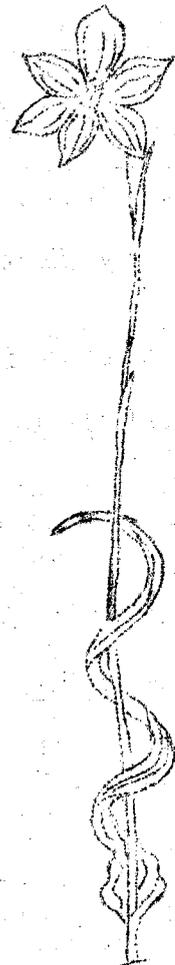
Thelymitra matthewsii

This orchid was found for the first time in S.A. in 1967 near Willalooka in the South-East; surprisingly it was then collected in 1970 on Kangaroo Island and again in the Messent National Park near the Coorong in 1972 and near Meningie in 1973. It has been collected once in W.A. and only a dozen times in Victoria and New Zealand. This wide distribution and great variety indicates that it must once have been quite common but even before settlement was heading for extinction.

Less than ten cm. tall and with a single short-lived, rarely-opening flower, it is quite difficult to find. Its most outstanding feature is its spiral leaf, not uncommon in West Australian Thelymitras. The flower is self-pollinating but quite attractive when it opens, being glossy purple and darkly veined with a bright yellow anther point.

It has only been found in limestone country in South Australia where it flowers late August and September.

Unfortunately it is not a good species for cultivation, but if pollinia taken from it are used to pollinate other Thelymitras it could produce some excellent hybrids and thus save an otherwise doomed species.



FIRE AT HORSNELL'S GULLY RESERVE

Peter Hornsby

There was a scrub fire at Horsnell's Gully during the night of Wednesday 4th May this year. Whilst in itself the event is regrettable; it does afford an opportunity to examine the effects of fire on the native flora in general and the native orchids in particular. Since this is an area where such orchids are quite plentiful, especially at the top end of the reserve where the fire was concentrated, it should be well worth a visit in four or five month's time, about the end of September or the beginning of October.

PRASOPHYLLUM NIGRICANS (Dark Leek Orchid) Les. Nesbitt

At the April meeting Peter Hornsby mentioned that native orchids can be found in flower in the Mt. Lofty Ranges throughout the year. The species under scrutiny here is the only one which blooms in the hottest driest period of the year and bridges the gap between the summer flowering Dipodium punctatum and the autumn species Eriochilus cucullatus.

Prasophyllum Nigricans grows about 120 mm high from a spherical tuber. The base of the stem below ground level is surrounded by thick fibrous sheaths. The flowers are numerous but very tiny and as is characteristic of the genus they are upside down. The largest of my plants had 33 flowers and the smallest had 8. The sepals were green with darker markings whilst the petals and labellum were very dark purple coloured. A magnifying glass is necessary to fully appreciate this miniature species. The leaf appears to be almost non-existent, just a short bract below the flowers. In fact the flower spike grows up through the centre of the leaf and emerges through a fistula or slit near the top. My plants get the same treatment and conditions as the Caladenia and Thelymitra species.

THE ORCHIDS OF WILPENA POUND

Bob Bates.

'The Pound', that magnificent natural amphitheatre situated in the Flinders Ranges, 560 km. north of Adelaide, is visited by 200,000 tourists annually. Its rim is a circle of mountains over 1,000 metres in height and, although there is desert on each side, Wilpena itself averages 300 mm. of rain a year. Consequently, vegetation is more varied and denser than outside 'the Pound' and some twenty species of orchids occur. Tourists seldom see them because they do not expect to see them, and their eyes are usually directed toward the awesome beauty of the mountains and the vast distances.

On a visit to 'the Pound' in 1974, I was hiking behind a group from Victoria when they stopped and began pointing excitedly at a double-flowered Caladenia dilatata var. concinna. "How could it possibly grow here, a hundred miles from any other orchid?" asked one. I was pleased that they recognised it as an orchid and took them a few metres down to the creek bank where numerous Caladenia filamentosa and Caladenia dilatata grew interspersed with the sweet-scented Prasophyllum odoratum, under the native pines. The years 1975 and 1976 were extremely dry and few orchids flowered, but nevertheless the tubers remain waiting again for a good season.

One of the most unexpected orchids and a very spectacular one is the azure blue, metre tall *Thelymitra aristata* (syn *grandiflora*) which in 'the Pound' has reddish leaf and stem. More common is the perfumed *Thelymitra nuda*, its blue, white or purple blooms open easily on sunny days and are abundant throughout.

A recent discovery is *Caladenia radialis*, previously known only from the wheat districts of Western Australia. This spider orchid grows on red sand dunes within 'the Pound' and in the desert to the west, but is very rare.

The most common genus is *Pterostylis*. In the Flinders Ranges the multiflowered species replace the single-flowered green-hoods of the Mt. Lofty Ranges. The so-called 'rufa' group is most abundant with *Pt. rufa*, *Pt. biseta*, *Pt. hamata* and *Pt. boormanii* all growing in the driest, hottest areas as well as more favorable locations. All four species extend much further north in the Ranges. Who would expect to find the hairy *Pt. boormanii* in a crack on a north-facing rock which was so hot in November when it flowered that the rock burnt our hands? Yet there it was, demonstrating to us that not all the orchids are lovers of shade and damp.

Pterostylis mutica with its 5 to 20 tiny green flowers, occurs even at the summit of St. Mary's Peak, giving it the distinction of being the State's 'highest' orchid. Strangely enough, this species is also our lowest growing along the beaches of the West Coast.

Pterostylis vittata and *longifolia* complete the list of multiflowered green-hoods. The two single-flowered *Pt. nana* and *Pt. robusta* are both uncommon here.

Throughout the floor of the Pound the two *Prasophyllums odoratum* and *occidentale* grow side by side. High on the rocky slopes and flowering only after bushfires is the 2-metre tall *Prasophyllum elatum*, its black flowers actually in the branches of the stunted mallees. It may be 100 years before the next bushfire, followed by a good season, shows these blooms again. There may be undiscovered species waiting to be found, especially on the rugged western peaks, so if you ever spot something not listed below, please let me know.

List of species:-

Pterostylis
 nana
 robusta
 rufa
 biseta
 boormanii
 hamata
 mutica
 vittata
 longifolia

Caladenia

dilatata
dilatata var. concinna
filamentosa
radialis

Prasophyllum odoratum
occidentale
elatum

Thelymitra aristata
nuda

Microtis unifolia

POLLINATION OF ORCHIDS A serial in 20 parts. Bob Bates.

Have you noticed that many orchids are insect like? The reason for this is that orchids need insects to effect pollination. Nine out of ten orchid species will not be pollinated and therefore will not produce seed unless visited by an insect - and this insect must be

- a. just the right size.
- b. carrying the pollen masses or pollinia of another orchid., preferably the same genus or even the same species.
- c. and these pollinia must be attached in just the right place head, back, or tail as the case may be.
- d. the insect must then crawl into the flower at just the right angle and stay there long enough for the pollinia to adhere to the orchid's sticky stigma.

Anyone who has gone around sniffing orchid flowers will have noticed that perfume is the exception rather than the rule. A visit to the bush soon shows us that terrestrial orchids are seldom massed together in bloom and are most common where other wild flowers are blooming in profusion - the gum trees offering loads of nectar, the wattles a tonne of pollen, the banksias heavy with perfume and the orchids - well just what do the orchids offer?

(Find out in the next edition of your Nossas bulletin)

S.A. GROUND ORCHIDS

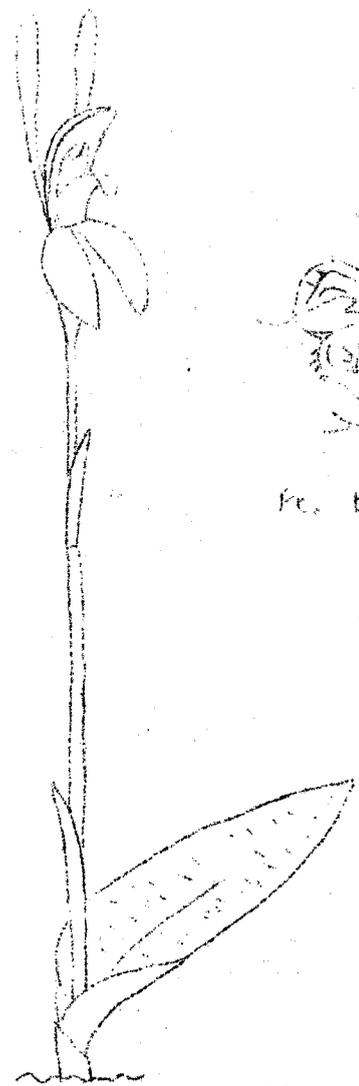
Les Nesbitt

CULTURE FOR MAY -JUNE

All healthy tubers should produce plants in the next few weeks if they have not already done so. At the time of writing (early May) no heavy rain had fallen for nearly a month. This will retard growth in the bush but plants in pots in a shadehouse which have been watered are growing normally. Twice weekly light waterings were necessary in late April this year because the days were warm and sunny. Continue regular hand watering until the winter rains set in. You will find that weeds will be less of a problem from now on although a few will continue to germinate.

Be sure they are weeds and not seedlings or the leaves from small orchid tubers before you pull them up. Continue to folia feed with half strength liquid fertilizer. Sufficient spray to wet the leaves is all that is necessary. A preventative spray with an insecticide to control thrip and aphid is a good idea if these pests were troublesome last year. Read the directions on the label first and don't use a strong solution or the orchid leaves may be burnt. Watch for signs of leaf or stem rot on ground orchids. At the first sign of trouble move the pot to a drier and better ventilated area. Try to cut away the infected leaf area or burn it out with a hot wire. Sun orchids are prone to rot trouble but all species can be affected.

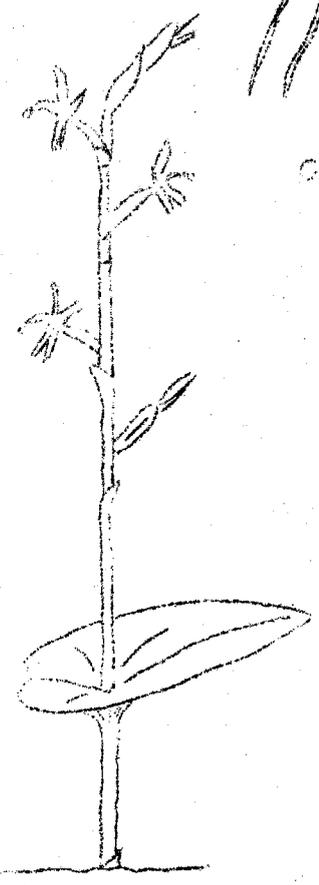
Species coming into flower now include Acianthus exsertus, Pterostylis vittata, Pt. scabra var robusta, and Pt. nana.



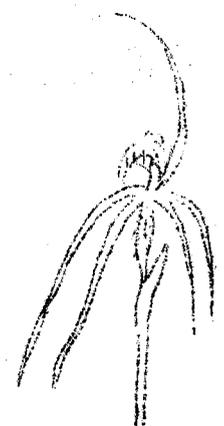
Caladenia menziesii



Pt. boormanii



Acianthus exsertus



C. radialis