

NATIVE ORCHID
SOCIETY
of
SOUTH AUSTRALIA

Caladenia menziesii



Pet

*Caladenia
menziesii*



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA
JOURNAL

Volume 2, No. 6

July, 1978

Registered for posting as a publication Category B. Price, 40c.

PATRON: Mr T.R.N. Lothian

PRESIDENT:	Mr L.T. Nesbitt 18 Cambridge Street VALE PARK SA 5081 Telephone 261 1550	SECRETARY:	Mr E.R. Hargreaves 1 Halmon Avenue EVERARD PARK SA 5035 Telephone 293 2471 -- 297 3724
VICE-PRESIDENT:	Mr P.E. Hornsby	COMMITTEE:	Mrs A.M. Howe Mr J.T. Simmons Mr R. Shooter
TREASURER:	Mr R.T. Robjohns		

Mr G. Nieuwenhoven

NEXT MEETING

When; Tuesday 25 July, 1978, at 8.00 p.m.
Where; Goodwood Ways High School, Hardy Street, Goodwood.-
Why; One of our members, Mrs Thorald Tormet, will talk and show slides on her recent visit to Darwin. Orchid growing at the "top end is rather different to what we are used to so this promises to be an interesting evening.

We expect to, have, Mr Joe Betts from Sydney as a guest at the meeting. Joe is President of the ANOS Council and Editor of the "Orchadian"

Also the usual features, plant display and commentary, popular vote, library, trading table, raffle.

LAST MEETING

Les Nesbitt spoke on, *Pterostylis* or, Greenhoods. The Society's slides of this genus were shown together with some of the President's. There was a magnificent display of greenhoods at the meeting. Eleven different species were seen in flower plus a couple more in early bud. Was it just a coincidence that the popular vote in the terrestrial section went to a Greenhood *Pt. baptistii* grown by Les?

George Nieuwenhoven gave an interesting commentary on the terrestrials, try far the larger group, and Mary Earle commented on the epiphytes.

We were lucky enough to be sent some plants of the cucumber orchid, *Dendrobium cucumerinum*, and these were all snapped up from the trading table after the meeting.

A NOTE FROM WESTERN AUSTRALIA

We are at last getting the taste of a normal winter and our creek has been roaring past the house for a week or two now. It's good music. We hope the inland gets enough to bring the water table up to normal again, to keep the springs flowing through the summer. The creek dried up for the first time in forty-odd years and we had a bad time for a couple of months. To add to our worries the field mice discovered the shadehouses and dug in the pots for the terrestrial tubers. They got all my *P. baptistii* before I woke up to them. They were most keen on the *Pterostylis*. Rats also became a nuisance and were eating the buds on the cattleyas - these blighters took a bit of fixing - changing baits and traps, but I eventually got them.

The rain, has brought everything on well - cym's are spiking up nicely and the natives are showing up - *Pt. vittata* is in full flower. I lost a few *P. curta* but those left are coming strong.

With regards to all our S.A. friends,

Yours sincerely,
Herb Foots.

SHOWS

We will need large quantities of pine needles (or better still sheoak needles) for our displays this year. Can you collect a bag or two? Dry them before storing away in bags or boxes until showtime. After the shows they can be cut up for use on terrestrial pots or in orchid composts.

POPULAR VOTE

Epiphytes There was a split decision last month and unfortunately the growers' names were not recorded.

One plant was a seedling of *Dendrobium* Hilda Poxon with tiny growths gradually increasing in size to the most recent which was 12 inches tall. The plant carried 28 cream flowers in four spikes, the largest bearing 14 flowers. This hybrid was growing in a 5" squat plastic pot filled with a mixture of bark, charcoal and Sheoak needles.

The second plant was also a seedling and was grown in scoria and charcoal in a 6" squat clay pot. The plant, which had three purple flowers, was named *Dendrobium* Johannis x *Den. bigibbum* var *bigibbum*.

Terrestrials Les Nesbitt's 12" clay seed pan of *Pterostylis baptistii* contained 32 plants. About 10 were in flower and the remainder in bud. The plants were 33 cm tall.

NEW MEMBERS

Mr A.J. Kuchel, Murray Bridge
Mr T.E. Dennis; , Streaky Bay
Mr D.R. Voight, Salmon Gums, W.A.,.
Mr H. Wright, Longwood
Mr and Mrs C.O. Fuller, Linden Park

OUR RAREST ORCHIDS No. 11

Caladenia clavigera Cunn is one of those typically hairy spider orchids of the *patersonii* - *huegelii* complex. It is a "border hopping" species common in Victoria right up to the South Australian border but seldom has it been collected in our state. I know of only one area where it still occurs in S.A. and that is the Bangham Forest Reserve in the South East. An isolated small colony near Finnis on the Victor Harbor railway line appears to have died out.

C. clavigera has attractive red and yellow, usually single, flowers which open in October. It appears equally at home in heavy clays or sandy soil in dense bush or open forest. Its closest ally appears to be *C. reticulata*, from which it differs in the undivided margins to the labellum. *Caladenia ovata* - from Kangaroo Island closely resembles it but lacks the several rows of definite calli *C. clavigera* has on its labellum.

C. clavigera will grow in cultivation but increase is by seed only. It is a common orchid in Northern Tasmania and has been reported from New South Wales.

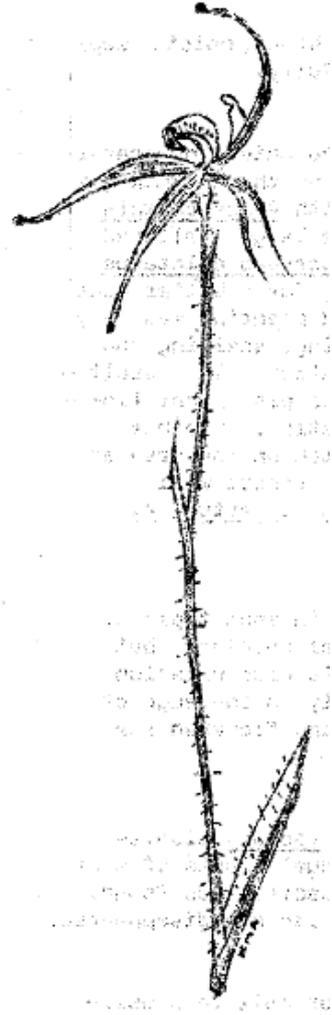
FIELD TRIP

Sunday, 30 July, to Cherry Gardens
Meet at 1.00 p.m. outside the telephone kiosk at Cherry Gardens. The words "Cherry Gardens" are trimmed into the hedge behind the 'phone box. Ray Nash will be leading the party. There is a good road all the way and very little walking is involved so even the not-so-active can enjoy themselves.

TERRESTRIAL CULTIVATION WORKSHOPS Les Nesbitt

The first two workshops were very successful and everyone present potted up *Pterostylis nana* and *Pt. pedunculata* for further experiment at home. We want to keep records of these plants to find out how well they grow and flower under different conditions. Seed was sown in some pots so we hope to see some seedlings this spring.

The next workshop will be on Saturday, 22 July, froth 2.00 to 4.00 p.m. at 18 Cambridge Street, Vale Park. Bring two 5" pots and labels, your record book and a pen. Both groups A and B will be combined from now on. Any other interested member is also welcome to attend. After looking in the shadehouses (weather permitting) we will pot up plants of *Pterostylis nutans* and have a preliminary look at seed raising.



ORCHIDS OF THE MT. BURR RANGE (continued) J. Clayson.

Chiloglottis cornuta

I know of two small areas where they can be found on the steep, moist, deeply shaded southern slopes of Mt. Burr and close by at Fern Gully.

Corybas dilatatus

Scattered throughout the whole range in small and large colonies: no preference to soil type. The real home of this species is known as the 'Syndicate', an area comprising 200 hectares. It was first planted with *Pinus radiata* in 1930, owing to a poor initial take many small and some large sheltered areas formed, these areas provided ideal conditions for *Corybas dilatatus* to thrive. 1974/75 saw this area clear-felled. Striving for a better take than the initial planting the preparation for the 1916 2R planting was very thorough. This involved heaping of the pine slash, burning, scalping and applying a residual weedicide to control competing vegetation. The result - from the point of view to the establishment of an improved pine plantation - excellent, as to the orchid population - complete eradication. whether temporary, only time will tell. I am keeping a close watch on the area and should any orchids that were there previously reappear a report will appear in a later Journal. Species involved are *Acianthus exsertus*, *A. reniformis*, *Caladenia latifolia* and *Corybas dilatatus*.

Diuris longifolia

This species is widespread over most of the range, grows in most types of soil; will stand initial clearing and ploughing of natural bushland, but gradually disappears when the pines close canopy, there is wide variation as to colour of the flower. Many known plants, especially on the edge of firebreaks which have a northerly aspect, have appeared and flowered for over twenty successive years.

Diuris pedunculata ?

Just east of Mt. Lookout (Bald Hill) lies the 1559 *Pinus radiata* plantation. Prior to the clearing of this area several individual plants of what I believe was *Diuris pedunculata*, or a variety of this species, was found. Unfortunately with the clearing of this area another species has disappeared.

Eriochilus cucullatus

Scattered plants in small areas, prefers the sandy type of soil in a well-drained area. The regular appearance each year of this autumn-flowering species is interesting, whether there is no rain during January/February or heavy rain during these months, it starts to flower regularly during the last week of March. Two small areas have been under observation for many years, although setting seed well, numbers remain very stable.

to be continued in future journals.

OCCASIONAL NOTES Peter Hornsby

My assistant and I have only managed two trips to the Flinders Ranges so far this year. The main object was not to look at orchids, but nevertheless we kept our eyes open. For our first visit in mid April, we had an extensive search at Arkaroola. Everything looked exceptionally dry, and enquiries revealed a vague recollection of a moderate fall of rain the previous November, but nothing to speak of since. In fact, the north Flinders, was experiencing its third year of drought. Not surprisingly, we did not find any orchids.

Occasional Notes (contd.)

Our second visit was at the end of May, and this time we were more successful. Brian Powell took us on a trip into the backblocks west of Quorn to see the effects of burning off the Porcupine Grass ("spinifex"), *Triodia irritans*. In some rather inaccessible country high up in the Ranges, we found a sheltered gully with *Pterostylis scabra* var *robusta* growing on the south-facing slopes and in flower, together with quantities of *P. mutica* nearby. The latter was also found high up on the flat top of one of the ridges. This location would be subject to full sunlight throughout the summer, and the only shelter the orchids managed, was by growing on the southwest side of clumps of *triodia* or small rocks.

Burning off of the *triodia* is a dubious exercise at the best of times, and must have a devastating effect on these orchids and probably many of the other forms of plant life in the area. The acreage so treated is being extended each year, and it is high time efforts were made to control it before, too much of the flora is lost for ever.

In spite of visiting several other locations on the way, we found no more orchids until we got to Arkaroola again. Two days after our previous visit they had received 35 points (about 9 mm) of good steady rain. This was sufficient to start *Pterostylis* growing there too. This time, they were probably *rufa* types, but it remains to be seen exactly what they are. Admittedly, on this occasion we searched rather more diligently in a smaller proportion of Arkaroola, and the two lots we found were in areas where we had not looked on the previous occasion, though the small size of the plants we found on the southern slopes of Greenwood Hill make it extremely unlikely that we would have found any during the earlier visit.

We searched again further north but once more we were unrewarded, in spite of diligent efforts, by my assistant, who by this time had got the message and knew now what to look for - which is not bad for a 4-year-old.

Once more, it rained two days after our return, but this time they were good soaking rains, and they have been followed by more at the end of last month - sufficient to transform the countryside; so for anyone wondering what to do for a break in the springtime, this is going to be a marvellous year for wildflowers, in the Flinders. See you there in August? Don't forget to look for the orchids as well - they are there, right through the Ranges. If you can't make it until September, you can take in the Quorn centenary celebrations at the same time.

For the record, the Adelaide Plains are climatically similar to the northern Ranges, so orchids from the area do quite well, especially if they are not treated too gently during the summer.

At the time of writing Ray Nash and Mark Clements are preparing for a trip to Western Australia) with Ray hoping to home in on *Pterostylis scabra*. They should be back in time for our July meeting, meanwhile we wish them every success, and look forward to the "visuals" later.

CHANGES IN ORCHID NOMENCLATURE - Part 3

Many so-called "changes" of plant names are not changes at all. There are several reasons for changes and apparent changes. The major ones are

1. Duplication of names. The same plant is given different names in different States or countries. This occurred sometimes when two botanists working at the same time were not in contact and were unaware of the others work. In such cases it is often difficult to work out which name

Changes In Orchid Nomenclature - Part 3 (contd.)

was published first and therefore has priority, especially if both were published in the same journal. More often it simply goes back to poor descriptions, short descriptions, lack of illustration, no types being kept (or sent to London) or publication in obscure journals. Later authors were not aware of the prior naming of a species and so a species could be given several names over the years. Taxonomists working today seek out the earliest name, which becomes the accepted one. Names are not changed, they just become synonyms. *Thelymitra azurea* Rogers is a synonym of *Th. canaliculata* Lindl. The names have not been "changed".

2. Invalidity of a previous name. When Dr. Rogers used the name *Prasophyllum gracile* for a new species in South Australia he did so illegally as that name had already been used by Lindley. The plant named by Dr. Rogers remained an undescribed species or possibly it fitted easily enough into the concept of a previously named species. Invalidity of names is really quite common, i.e. *Leptoceras*.

3. Combinations and separations. Quite often an author in the past described two species and gave two names to what is really the same species. Sometimes the material he used for both species even came off the same individual plant. Maybe one set of leaves were the juvenile leaves and second set were the mature leaves. Not realizing this the botanist actually gave two names for one species. Later botanists discovering the mistake combine the two species, usually choosing the first name to appear in print. This occurred with Fitzgerald's *Thelymitras rubra* and *urnalis*. *Th. urnalis* is considered to have been described from juvenile flowers of *Th. rubra*. Some of the original *Th. urnalis* had staminodal spurs, at the front of the column, a feature mentioned by Fitzgerald as a point of separation. However, staminodal spurs are a common feature of the many *Th. rubra* near Mt. Lofty where the type specimens of both were collected. Therefore the two species are combined and the name *Th. rubra* becomes the correct one. The opposite occurs when plants under one name are divided into two or more species.

4. Change of status. When two plants named as species are separated by trifling or inconstant differences, problems with identification will occur so to simplify identification and show the close relationship of the two plants one will be reduced status to a variety of the other. The earliest name remains the species name, the other name is not changed but merely reduced. For example *Caladenia carnea* variety *alba*, a reduction made by Bentham a century ago but not generally accepted since. This illustrates the fact that a change in status is only a matter of opinion of the author's of such a change - it need not be accepted. The revision of Black's Flora, Part 1 will contain quite a few "reductions" of species to varieties, although this will involve mainly South Australian endemics. A change of status can also be upwards, i.e. variety to species.

Other reasons for name changes include transference of species from one genus to another, or the formation of an entirely new genus (as with the recent *Paracaleana* Blaxell when a species did not fit neatly within their present genus.

New species are being discovered constantly - some of these from regions not previously explored botanically, some have been overlooked due to small size or unusual habitat, and others have been confused with similar species.

Many named species are being recognised as hybrids though this does not: necessitate a name change as it is very difficult to "prove" a plant is a hybrid. Thus *Diuris palachila* Rogers, though an obvious hybrid between *D. maculata* Sm. and *D. pedunculata*, still retains its name, though some botanists prefer to refer to it as *D. X palachila*.

Changes In Orchid Nomenclature - Part 3 (contd.)

Part 4 of this series will deal with some of the actual changes appearing in the reprint of Black's Flora which should be available shortly though some of us will not be able to afford it at the new inflationary price.

Editor's Note: The Third Edition of "The Flora of South Australia, Part 1" by J.M. Black is now available at \$16.90 per copy from;

Government Publications Sales,
State Information Centre, 25 Grenfell Street, Adelaide 5000.
Telephone 227 3388.

Mail orders to: Publications Office,
282 West Beach Road, Netley, 5037.

OUR FIVE COMMON GREENHOODS L.T. Nesbitt

There are over 60 species of *Pterostylis* (common name - Greenhoods) in Australia. About 22 species have been found in South Australia and five of these are abundant and widespread. These five, which are easily grown in cultivation and multiply readily, are;

<i>Pterostylis curta</i>	-blunt greenhood
<i>Pterostylis nana</i>	-dwarf greenhood
<i>Pterostylis nutans</i>	-nodding greenhood
<i>Pterostylis pedunculata</i>	-maroonhood
<i>Pterostylis scabra</i> var <i>robusta</i>	-sharpleaf greenhood

Every orchid lover should be able to recognise these five local species because they are exhibited regularly at meetings and shows in their flowering season. *Pt. scabra* flowers in May-July and has almost finished for this year. (The name of this species was changed from *Pt. robusta* several years ago and has again been changed to *Pt. alata* var *robusta* in the new third edition of the "Flora of South Australia".)

Pt. nana and *Pt. nutans* are winter flowering and are at their best in July. *Pt. curta* and *Pt. pedunculata* flower, in spring and will be seen in full bloom in early September.

All five species will grow under the same conditions. They prefer a sandy free draining soil mix, I use 40% soil, 40% sand and 20% Peat moss. Cymbidium type orchid composts are usually unsuitable, especially when new. Seven inch squat plastic pots give excellent results but smaller or larger pots can be used. Greenhoods are shade lovers. They grow happily under 50% shade cloth and are easier to manage in a shadehouse than a glasshouse. Slugs and snails love them so pots should be placed on benches clear of the ground to discourage these pests.

Greenhoods grow and flower in the cool, wet months of the year. The plants die in late spring leaving several small spherical white tubers underground. These tubers shoot again in the autumn to produce new plants. Greenhoods may be repotted in summer while dormant without coming to any harm.

OUR COVER

Caladenia menziesii (the Hare Orchid) is one of our two *caladenia* which multiply readily and are usually found in colonies. The other is *C. latifolia*. *C. menziesii* has a single pointed leaf which is hairless and if you look closely the leaf cells form a uniform pattern resembling snake skin.

Our Cover (contd.)

It is easy to grow in cultivation preferring rich well-drained soil in a shady position. It is not easy to flower however - and just why this is so I can't explain. Recent reports from Jack Clayson (NOSSA Journal, Vol. 2, No. 5) in the South East and from W.A. tell of plants flowering in ploughed firebreaks but not in undisturbed soil on either side. *C. menziesii* bears one to three small attractive flowers on thin stems in September - November. Our NOSSA emblem is based on this species which is widespread in the southern half of the state. It also extends to W.A., Victoria and Tasmania. South Australia is therefore in the centre of its range.

Perhaps in our more thoughtful moments we should ponder that NOSSA may be like its emblem: grows easily but very difficult to bring into flower.

ORCHIDS IN THE SUB-ANTARTIC

The following article is re-published from a news release by the "Australian Government "Information Service":

Biologist Nigel Brothers and botanist Michael Brown, officers of the Tasmanian National Parks and Wildlife Service, have discovered orchids growing on the west coast of Macquarie Island. The island, situated about mid-way between Australia and Antarctica, is 34km, (21 miles) long and 4km (2½ miles) wide. The orchids are a species called *Corybas macranthus*, or Helmet Orchid, which grows in New Zealand and on same islands south of New Zealand. Australian botanists are excited about the find as they believed orchids could not live as far south as Macquarie Island, which is 1770km (1100 miles) south of the Australian continent.

Macquarie Island, which is part of the Australian State of Tasmania, is a national park and wildlife reserve, with an average temperature of +4.5°C (40°F). The island is often lashed by rain and strong winds, and the seas around it are so rough in winter that members of the Australian National Antarctic Research Expedition, who spend 12 Months there, are cut off from the outside world for nine months.

Mr Brothers, 22, spent 16 months on various wildlife projects on Macquarie Island from November 1975 to March 1977 and during that time found leaves on the west coast he was unable to identify.

During a walk on the island in November 1977 he returned to the place where he found the leaves. "There to our amazement were several patches, each about 10 square feet (about 1m²), of flowers which were instantly recognisable as orchids", he said. "The plants, which grew up through moss with their stems mostly buried in the moss had round green leaves which lay on the moss surface. The simple flowers, which were dark purple with a green base, were almost flat on the moss. We found them on the featherbed, a soft, spongy layer of very wet mosses and grasses on the island's coastal terrace about 50 feet (15m) above sea level. We only found the four patches but there could well be others in the vicinity."

"Flora of New Zealand, Vol II", by L.B. Moore and E. Edgar, describes *Corybas macranthus* (Hook.f.) Reichb. as being found on both the North and South Islands of New Zealand in wet woods, bogs, etc. It was believed to be endemic to New Zealand.