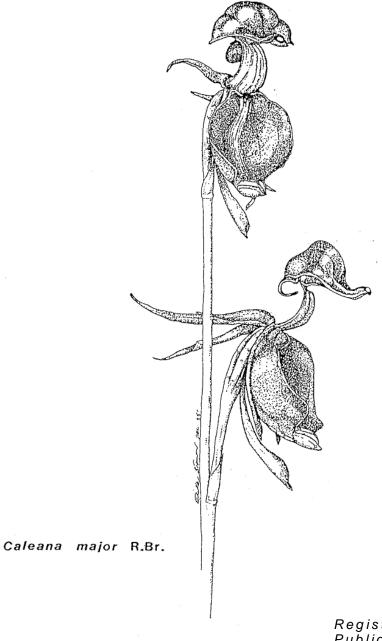
# NATIVE ORCHID SOCIETY of SOUTH AUSTRALIA INC.

**JOURNAL** 



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# NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.

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#### NEXT MEETING

Tuesday, 24 March, 1987, at 8.00 p.m. St. Matthews Hall, Bridge Street, Kensington.

Mr David Cartwright will speak on quarantine and Plant Diseases.

## ADVANCE NOTICE April Meeting

April meeting members are requested to please bring a plate of supper to our April meeting as this will be our special 10th anniversary meeting.

Also please bring any unusual or interesting slides, particularly pertaining to our early field trips, shows or meetings. It would help if you could bring them to our March meeting so they can be sorted and placed in a carousel.

# LAST MEETING

Les Nesbitt, who has been invited to speak at the next World Orchid Conference in Japan, gave us a preview of the talk he will be giving there. Les showed us a range of terrestrial orchids occurring mainly in the temperate areas of Australia. For the benefit of his Japanese hosts he also included some samples of our unique wildlife and the habitat of the orchids.

Judging by what we saw Les's talk should be very successful.

Thankyou Les and congratulations on being invited to speak in Tokyo - a well deserved feather in your cap.

Our second speaker for the evening was Phil Spence from Sydney. Phil runs a commercial flasking service. He specialises in cool-growing orchids - mainly Australian native. He showed us a range of hybrids the result of many years of breeding by him. He told us that the stage has been reached where cut flowers are in demand by florists for Den. hybrid blooms. Some of the impressive flowers shown were Sarcochilus. x Phalaenopsis crosses. The more desirable aspect of these is their habit of dividing like Sarcochilus hartmannii.

Our thanks to Phil for showing us a different facet of orchid culture.

#### PLANTS ON DISPLAY

Only seven plants were benched last meeting but numbers will rapidly swell from now on.

Epiphytes

Terrestrials

Sarcochilus ceciliae Cymbidium madidum Dendrobium antennatum Saccolabiopsis armittii Spiculaea ciliata Malaxis latifolia Calanthe triplicata

Popular Vote

Sarcochilus ceciliae - Peter Barnes.

Calanthe triplicata - (?).

Plant Commentary - Wayne Harris

Dendrobium antennatum, one of our antelope-type epiphytes, was the first plant tackled by Wayne. This plant needs a warm glasshouse with a minimum temperature of between 12-15° Celsius. It is easily grown under these conditions and will usually flower regularly, but not necessarily profusely, once a year. It grows in Australia and New Guinea and was once known as Dendrobium d'albertisii with some nurseries selling it still incorrectly named.

The following is quoted from Dockrill's "Australian Indigenous Orchids"

"In Australia this species appears confined to that part of Cape York Peninsula northward from the McIlwraith Range but it is a widespread and rather common plant in New Guinea and some of its outlying islands. It grows on rainforest trees where it gets plenty of light, at low or moderate altitudes. Flowering is somewhat erratic but usually confined to the period from March to November."

As you can see this will give you some clues as to how it is grown. Considering it mainly rains in the tropics during our summer the plant would probably enjoy a rest during the South Australian winter.

The second plant (Saccolabiopsis armitti) under discussion was probably shown for the first time. A tiny flowered little gem, also a warm grower, came from Atherton in Queensland. Plants usually have stems approximately 50 mm long, leaves are 13 to 40 mm long and 6 mm to 13 mm wide. It hails from the Fitzroy River to as far north as Princess Charlotte Bay, and grows in dry scrub near the coast but in some districts up to 160 km inland. It flowers from September to December in its native habitat.

Sarcochilus ceciliae is a popular and often-benched plant. The delicate pink blooms of the plant belie its tough nature. If you can find the right spot for it (and this can be a cool glasshouse or out in the shadehouse amongst other orchids) it will thrive, quickly growing on various media usually containing a lot of pebbles, blue metal or sandstone and bark. During our summer you will be rewarded with successively-flowering racemes of 4-6 mm wide upward-facing blooms. In nature it grows on rocks in sheltered to exposed situations in rain forest or open forest. It likes plenty of water provided it is extremely well drained.

Plants on Display (contd.)

The last epiphyte was Cymbidium madidum one of the Australian trio of Cymbidiums.

It often grows into massive plants with numerous pendulous racemes of brownish and olive green flowers. Generally plants grow from hollows in trees in the wetter regions of north eastern New South Wales up to the tip of Cape York Peninsula. It is not difficult to grow, especially if the rotten core of gum trees is used as potting material as this is its natural media and provides optimum results. Deep pots are used for preference as it has an extensive root system in nature like its cousin *Cymbidium suave*.

Among the three terrestrials on display was *Spiculaea ciliata*. This is a monotypic genus occurring only in Western Australia, commonly called the Elbow Orchid after its elbow-like action of the labellum. This plant is related to both Drakea and Paracaleana. It grows under extreme conditions in shallow pockets of soil on granite outcrops. If you look up Noel Hoffman and Andrew Brown's "Orchids of South-West Australia" you will get some idea of its distribution. The stem shrivels from ground level upwards when flowers begin to open (a feature similar to that of some of our rufa group *Pterostylis* species). *Spiculaea ciliata* is not often seen in cultivation.

The second terrestrial Malaxis latifolia has little in common with Spiculaea except for the size of the flowers. These are very tiny but there are lots of them. A plant in full growth is quite attractive with bright green leaves up to 300 mm long. It is essentially a rainforest floor plant, occurring from the Burdekin River through to Cape York, New Guinea, Indonesia, Malaya and India. In Adelaide it too would need to be cultivated in a warm glasshouse. Growing from late spring through the summer, it will drop its leaves in autumn leaving a tapering fleshy pseudobulb. At this stage the plant must be kept almost completely dry until it starts to grow again next spring when watering may be commenced again (but only lightly) until the new growth becomes established. Plants watered prematurely will usually rot.

The last plant on display was Calanthe triplicata. Occasionally benched, its lovely pure white flowers always draw comment. A well grown plant will flower every year. In habit it looks similar to Phaius tancarvilliae although the flowers look nothing like it. A widespread species it grows on the floor of rainforests from the Illawarra district of south-eastern New South Wales through to the top of Cape York Peninsula; also in New Guinea, Indonesia, Malaysia, India, Sri Lanka and China.

It prefers to grow in leaf mould in nature but cultivates well in a cymbidium-type mix. It has a bad habit of developing a black disease starting from the leaf tips and working its way down. No cure seems to have been found for this so far. Plants grown out in the open in Adelaide seem much more susceptible to it than glass-house grown ones. It does not require heat during our winter but should be kept somewhat dryer during the colder part of the year.

#### References:

A.W. Dockrill, "Australian Indigenous Orchids". Noel Hoffmann and Andrew Brown, "Orchids of South Western Australia".

# NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.

Statement of Receipts and Payments for year ended. 31.12.1986.

RECEIPTS		PAYMENTS	
Subscriptions 1986 Prepaid Donations Badges Publications Raffles Tuber Bank Show Admission Bank Interest Sundries Trading	1450.49 226.00 179.75 59.00 605.05 410.31 321.05 201.50 509.14 8.85 1173.55	Typing Journals-Honorarium Printing Journals Insurance Raffle Permit Orchid Club of S.A.	25.00 22.99 710.66 137.64 284.65 200.00 220.00 1197.00 270.00 5.00 10.00 25.00 50.00 14.00 50.00 186.81 57.50 39.33 37.27
		B.A.D. and F.I.D. Tax	9.83
		Excess Receipts over Payments	1567.01
	\$ 5144.69 ======		\$ 5144.69 ======
Cash Statement			
Cash at Bank 1.1.86 Cash on Hand 1.1.86	6457.09 <u>162.33</u>	\$ 6619.42	
Add Excess Receipts		1567.01	
		\$ 8186.43	
Cash at Bank 31.12.86 Cash on Hand 31.12.86	8066.41 <u>120.02</u>	\$ 8186.43	

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

26 February, 1987.

Honorary Auditor

#### FIELD TRIP

"Spiranthes Special" - 7 February, 1987.

by P.G. Reece

February is the best month to see *Spiranthes* in flower and two swamps were visited, plus a dry hill-top Conservation Park, to see *Dipodium punctatum* which also flowers well at this time of year.

The day was a warm and humid 30°C, and 15 people assembled at the meeting point near Yundi. Our leader was R. Bates who first took us to Warners Swamp at Yundi, permission to enter having been gained prior. Some ripe blackberries diverted the group. For some it was their first walk in a swamp and they took a little time to find their "swamp" legs.

It had been a cool summer similar to the last one and more species than usual were expected to be in flower. *Microtis parviflora* was seen in seed at the edge of wetland and the first *Spiranthes sinensis* was in flower as pink and white individual flowers spiralling up the stem - small in size but delicate and very beautiful with the aid of a 10 x eye lens.

Plenty of six-spined spiders of genus *Gasteracantha* hung in their webs and deterred the more wary. It was a real swamp and the newcomers seemed to enjoy the experience, mud included.

A small colony of *Pterostylis aphylla* was found in flower on top of one of the many little grassy mounds that were about. This species is rare for the Adelaide hills but common in Tasmania. It resembles *Pt. parviflora* at first appearance, however, it lacks the basal leaf rosette and is self-pollinating, causing almost all ovaries to swell after flowering. It proved safer to walk in the water than up on dry tussocks as attested by some people who displayed muddy elbows and rear quarters.

Some Cryptostylis subulata were still in flower, most having set seed or collapsed. The high proportion of collapsed flowers to swollen pods suggested insect pollination applies to this species.

A central section of the swamp was fenced off as part of the State Heritage Agreement which conserves the more valuable plants including orchids from grazing cattle and protects the cattle from injury in the rough terrain. In seed Thelymitra venosa and Prasophyllum australe were seen.

A drive of 20 km took us to the next site - a swamp on the south side of the Myponga to Victor Harbor Road and 200 metres east of Hammond Road. The group had, by then, been reduced to seven people (the thought of more mud perhaps turning a few away). In this swamp were found more examples of *Spiranthes*, this time as a pure white colour form and it was noted that both clockwise and counter-clockwise spirals occurred in full flower. Some time was spent in photographing the exquisite blooms. *Cryptostylis subulata* was also seen in flower and the seed-pods of *Thelymitra holmesii* and *Th. venosa* were identified.

The final locality was Spring Mount Conservation Park in its south-east corner where *Thelymitra fusco-lutea* was found in seed and some excellent examples of Dipodium punctatum were in flower beneath tall eucalypts.

Who said February is a dull month for orchids?!

Field Trip - "Spiranthes Special" (contd.)

## Locations visited:

- (A) Warners Swamp, Yundi.
- (B) Hammond Road Swamp, near Spring Mount.
- (C) South-east corner, Spring Mount Conservation Park.

## Orchids Seen:

## In flower:

Pterostylis aphylla (A)
Cryptostylis subulata (A) (B)
Spiranthes sinensis,
 pink and white form (A)
 all white form (B)
Dipodium punctatum (C)
Microtis parviflora (8)

## In seed:

Prasophyllum australe (A)
Microtis parviflora (A)
Thelymitra venosa (A) (B)
Th. holmesii (B)
Th. fuscolutea (C)

Total: 10 species and forms, 6 in full flower.

Note: A large old tree stump beside the road on top of Spring Mount contained dozens of dried plants of a *Thelymitra* (perhaps *nuda*?). They should flower again next October/November and would make an unusual photograph.

Pterostylis plumosa (see opposite)



Mrs N. George
Mrs S.K. Gillis
Mrs B. Sjoerdsma
Mr L.L. Young
Dr K.H. Northcote



## NOTES ON PTEROSTYLIS PLUMOSA

Dan Hatch Laingholm

(From New Zealand Native Orchid Group, Newsletter No. 20, December 1986.)

Pterostylis plumosa Cady belongs to an isolated section of the genus with several species and forms in Western Australia, only one of which extends to eastern Australia and thence to New Zealand.

The plants reproduce only by seed and not by multiple tubers; are very dependent on mycorrhiza and cannot be cultivated with any success. Round Auckland they are generally found on gum-clay, but sometimes on red sandstone (Kare Kare) and on volcanic scoria (Rangitoto). These dissimilar substrates however are all sterile and appear to abound in mycorrhizal fungi.

One of the characteristics of this species is that the seed often germinates in clusters of up to 14 plants in an area seldom exceeding 200 mm diameter. Solitary germination does of course occur, but the single plants tend not to be noticed until the rosette is well developed, or the plant is even in flower.

The seeds appear to germinate all at the same time but the young plants grow at varying rates, which seems odd in such a small area - although I have noticed a similar variation in the mycorrhizome clusters of *Pt. brumalis*.

Germination takes place after the autumn rains, and by mid-June the groups of seedlings are noticeable on the gum-clay beneath *Leptospermum scoparium*, or the horrible Hakeas - *sericea* and *gibbosa*. During the first season some of the young plants will develop as many as 6 alternate, petiolate leaves on an erect stem up to 15 mm high, while others will not get beyond a single leaf. This erect early growth stage is reminiscent of the juveniles of some of the cauline-leaved Pterostylis and may perhaps give us a clue to the evolution of the New Zealand grass-leaved species from an ancestral rosetted form.

The second season sees the development of the characteristic petiolate-leaved flat rosette. This rosette form, providing as it does a maximum area of chlorophyll for photosynthesis, produces a rapid increase in tuber size (1982).

# To take a specific case:-

A tuber 5 mm diameter produced by 29 June, a juvenile-form rosette of 11 leaves with an overall spread of 37 mm. The largest leaf was 20 mm long (including 5 mm of petiole) and 7 mm broad. On 13 October (3½ months later) when the rosette dried off, the new tuber was 11 mm diameter and more than 10½ times the bulk of the original!

11 mm diameter incidentally is the rubicon for this species, the size at which the plant changes into the adult form and produces a flower.

The uneven growth of the rosettes means that one plant in a group will sometimes "go for flower" and begin to develop a flower stem direct from a flat rosette, without passing through the sessile folded-leaf stage which normally presages a flower. The plants are dependent on regular rainfall, and if as often happens, a dry windy spell of several weeks occurs in September, they will abort and dry off, even if they have got as far as forming a flower bud.

Notes on Pterostylis plumosa (contd.)

The seed has a penchant for germinating on banks and berms, and on the hummocks of dug-over gum-clay. The plants are subject to some natural hazards, drought and crumbling banks, and are often chewed (rabbits? opossums?); once by a weta which I caught in the act: Being both beautiful and conspicuous when in flower, they are also at the mercy of people and are dug up and trampled down. One seedling cluster I was carefully monitoring was buried under silt by a roadman intent on clearing a ditch.

There is a tendency (not invariable) for the plant to flower and die. I managed (years ago) to keep an Australian specimen in cultivation for 10 years, during the first 5 of which the plant flowered; the rosettes became smaller and the stems shorter, while the flower itself remained much the same (cf 1949). Eventually only a rosette was formed, and this in its turn became smaller until the plant finally failed to appear. I have had less luck with New Zealand plants in cultivation. They will build up nicely to flowering size, followed by one or two seasons with small mature-form rosettes, then die.

In the wild, progressive deterioration after flowering also takes place, the rosettes of the following season being only half the size of those which produced the flower. None of my marked plants flowered 2 seasons running.

The pollination mechanism is insect-attractive but on some sites, notably the western and southern coastal aspects of the Waitakere Ranges, the plants are subjected to severe wind-buffeting which is more than enough to shake the pollinia loose and deposit some grains on the stigma. Be this as it may, all the flowering plants I observed set seed.

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References: Hatch E.D., 1949, Trans.R.S.N.Z. 77: p.238.
1982, N.Z.N.O.G. Newsletter 2: p.4.
1984, N.Z.N.O.G. Newsletter 10: p.4.
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EVENTS LEADING UP TO THE FORMATION OF THE NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

Roy Hargreaves

Probably one of the earliest memories of those born in the country is that of picking native terrestrial orchids (in most circumstances illegal today). Such was the experience of the two who were primarily responsible for the promotion and foundation of the Native Orchid Society of South Australia.

About six months after the Western Australian Native Orchid Study Group was formed a paragraph was published in the Australian Orchid Review (Vol 39, No 4, page 173, 1974) advising readers of same. It was then that Les Nesbitt and I joined that group.

In July 1976, while visiting Perth (A.O.R. Vol 41, No 3, page 153, 1976) and being at the home of Nell and Herb Foote (President of the Western Australian Group), the 'phone rang and a member advised him that an area was to be subdivided for housing and should he do something about rescuing the native orchids? The thought struck me: Who would be contacted if the same happened in South Australia?

Events Leading up to the Formation of N.O.S.S.A. (contd.)

In August 1976 Les Nesbitt presented a slide programme and displayed pots of fine flowering native terrestrial orchids at the Society for Growing Australian Plants (S.G.A.P.) meeting following which the President, John Scarvelis, approached him about forming a Native Orchid Study Group within S.G.A.P.. However, Les and I did not consider that the time allotted at each meeting (probably 10-15 minutes) would be sufficient. This then posed the question: Why can't we do something about a Native Orchid Society in South Australia? After discussing this with Les, as I did throughout the promotion, I rang Colin Jennings (President of the Orchid Club of South Australia) concerning the possibility of starting a Native Orchid Society. He later rang back requesting that the proposal be put in writing with the recommendation that it be a study group of 15 or so members within O.C.S.A. I then wrote to the Australian Native Orchid Society (A.N.O.S.) Committee in Sydney advising them of the intention of forming a Group or Society in South Australia. It then transpired that they had recently written to both Jim Simmons and Tony Lower to see if either would be able to form an A.N.O.S. Group in South Australia. They did, however, send a list of A.N.O.S. members in South Australia.

About this time, not being too sure to what extent the O.C.S.A. would be behind the proposal, and hearing the expressed opinion that as a native orchid society had not so long ago ceased to function it was most unlikely for another to succeed, I approached John Scarvelis of the Horticultural Branch of the Woods and Forests Department who was President of S.G.A.P. and had native terrestrial orchids flowering, for his advice and support in forming a Society and he was most helpful. My personal feeling was that if people wanted this to happen they would join.

Harry Lambert (Editor of the O.C.S.A. Bulletin) wrote the following in the December 1976 issue:

# "Australian Native Study Group

A group of club members is trying to organise a study group on Australian Native Orchids. Any member interested in becoming a member of such group is invited to give particulars of his/her name in a book which will be tabled next to the visitors book at the next meeting. Any member who cannot attend the meeting may write to the Secretary O.C.S.A. advising of his/her interest."

Being Librarian at O.C.S.A., a request to display an invitation for interested members to join was granted.

In O.C.S.A. Bulletin, February, 1977, the following appeared:

"40 persons (actually it was 14) have already indicated an interest in this group accordingly, if anybody else is interested would they please contact Roy Hargreaves . . or Les Nesbitt . . both will be present at the next meeting."

Altogether 35 signed as interested.

Colin Jennings (President, O.C.S.A.) accepted an invitation to chair a meeting at the home of Les and Kay Nesbitt on February 22, 1977, to discuss the formation of a Society. Present were: Bruce Anderson (S.G.A.P.), Roy Hargreaves (O.C.S.A. and S.C.O.C.), Peter Hornsby (S.G.A.P. and N.E.D.O.S.), Colin Jennings (O.C.S.A.), Les Nesbitt (O.C.S.A. and N.E.D.O.S.) and Warwick Pybus (S.G.A.P.).

Events Leading up to the Formation of N.O.S.S.A. (contd.)

The S.G.A.P. members urged that we become part of S.G.A.P. but as the response of O.C.S.A. members to the invitation had been good (35) the recommendation of Les and I to form a separate Society was accepted - the inaugural meeting to be held at the Goodwood Boys High School on March 22, 1977. Colin Jennings was to be Chairman and all local orchid societies and S.G.A.P. to be advised in writing.

The Editor, Harry Lambert, wrote in O.C.S.A. Bulletin, March 1977:

"Native Orchid Society of S.A.

This newly formed Society will hold its meeting in the Assembly Hall, Goodwood Boys High School, Hardy Street, Goodwood, on the fourth Tuesday each month, starting at 8 p.m. Plant displays and commentaries will be conducted at each meeting; field days will be arranged from time to time. Interested persons are invited to contact Les Nesbitt or Roy Hargreaves . . for further information. There will be a trading table at these meetings."

Inaugural Meeting 22 March, 1977

Colin Jennings (President O.C.S.A.) was the Chairman. 48 persons were present of whom 44 became foundation members. John Leader moved that the name be Native Orchid Society of South Australia which was carried.

Officers elected:

President: Les Nesbitt
Vice President: Peter Hornsby
Secretary: Roy Hargreaves
Treasurer: Ron Robjohns
Committee: Audrey Howe, Mary Earle, Kevin Western

Auditor: Keith Yates (who had strongly supported the forming of N.O.S.S.A.)

Newsletters to be sent to all local orchid societies. Colin Jennings reported to O.C.S.A. Committee who requested that representatives of N.O.S.S.A. meet them in three months time re N.O.S.S.A. progress but when Colin was reminded about same his reply was that this was not necessary as N.O.S.S.A. was going very well. General practical assistance was received in the form of donations from S.C.O.C. and N.E.D.O.S. to help put the new Club on a sound footing. Invitations to N.E.D.O.S., S.C.O.C. and S.G.A.P. to exhibit at their shows were accepted. A request to O.C.S.A. to exhibit at their Spring Show was rejected until we were affiliated which was not possible until we had a Constitution (March 1979). We have never made a request since but a late invitation in 1985 was accepted.

#### List of Foundation Members:

Mr and Mrs N. Auliciems Mrs Betty Barclay Mrs Barbara Bennett Mr and Mrs G.P. Burniston Mrs A.M. Howe Mr and Mrs R. Chisholm Mr and Mrs R. Hutchinson Mrs M.L. Earle Mr and Miss M. Furness Mr and Mrs K. Furness Mr and Mrs C.C. Lindsay
Miss C. Furze Mrs Shirley Little Mrs Jean Gardner Mrs F.S. Gready

Mr E. Roy Hargreaves Mr and Mrs C.R. Hocking Mr and Mrs P.E. Hornsby Mrs A.J. Jansen Mr Brian Lehmann Miss A.M. Marks Mr and Mrs L.T. Nesbitt

Mr G.J. Nieuwenhoven Mr and Mrs R.G.Nunn Mr Brian Osborne Mr Ron T. Robjohns Mr and Mrs R. Shooter Mr J.T. Simmons Miss Helen Walker Mr and Mrs D.H. Wells Mr Kevin W. Western