



Journal
of the
Native Orchid Society
of
South Australia Inc



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NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA
POST OFFICE BOX 565 UNLEY SOUTH AUSTRALIA 5061

www.nossa.org.au.

The Native Orchid Society of South Australia promotes the conservation of orchids through the preservation of natural habitat and through cultivation. Except with the documented official representation of the management committee, no person may represent the Society on any matter. All native orchids are protected in the wild; their collection without written Government permit is illegal.

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**JOURNAL OF THE
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MARCH 2008 VOL. 32 NO 2

CONTENTS THIS JOURNAL

Title	Author	Page
Diary Dates		10
February Meeting		11
For Your Information – NOSSA News		12
<i>Genoplesium rufum</i>	Les Nesbitt	13
How it is Done	Reg Shooter	14
Native Orchids: The Epiphytes	Steve Howard	14
Orchids of South Australian Pine Plantations	R. Bates	16
South Australia's monotypic orchid genera	R. Bates	17
Auditors Report		18

**The Native Orchid Society of South Australia meets every
4th Tuesday of the months February -November**

NEXT MEETING 25 MARCH 2008

Tuesday, 25 March, St Matthew's Hall, Bridge Street, Kensington. Meeting starts at 8:00 p.m. Doors to the hall will be open from 7:15 p.m. to allow Members access to the Library and trading table.

The meeting begins with the AGM. Following the general meeting there will be a question & answer session to solve all your orchid growing problems.

DIARY DATES

25th March	AGM
Friday 2nd May	Annual Dinner at the Buckingham Arms
3-4 May	Australian Plant Sale, Wayville
20-21 September	SPRING SHOW
30 November	Xmas BBQ

NEXT COMMITTEE MEETING

Wed, 26th March at the home of Bodo Jensen. Meeting commences at 7:30 p.m.

FEBRUARY MEETING

PLANTS BENCHED

Epiphytes: *Dockrillia cucumerina* x *bowmanii* (2 plants); *Liparis coelogynoides*

Terrestrials: *Calanthe triplicate*; *Genoplesium rufum*

Judging Results

Epiphyte species

1st *Liparis coelogynoides*

No 2nd or 3rd

Grower

Steve Howard

Epiphyte hybrid

1st *Dockrillia cucumerina* x *bowmanii*

2nd *Dockrillia cucumerina* x *bowmanii*

No 3rd

Malcolm Guy

Malcolm Guy

Terrestrial species

1st *Genoplesium rufum*

2nd *Calanthe triplicate*

No 3rd

Les Nesbitt

Les Nesbitt

There were no terrestrial hybrids benched.

Popular vote results

Epiphyte species

Liparis coelogynoides

Steve Howard

Epiphyte hybrid

Dockrillia cucumerina x *bowmanii*

Malcolm Guy

Terrestrial species

Genoplesium rufum

Les Nesbitt

Orchid of the night

Liparis coelogynoides

Steve Howard

Plant commentary on terrestrials given by Les Nesbitt & on epiphytes by Noel Oliver.

FEBRUARY SPEAKER

Cathy Houston

Our member Margaret Petridis was the February speaker talking about late Spring orchids of SW Western Australia. Margaret outlined how her love affair with orchids had started whilst still at school, as they were readily seen near it. Several field trips were made when she was in W.A. during October & November last year. From these Margaret showed some of the orchids she had found together with habitats and other points of interest. She used Power Point to advantage to highlight unique and elaborate orchids from the West, e.g. she displayed side-by-side two very similar *Caladenia/Arachnorchis* spiders in profile to show differences. The viewer was privileged to share some of the rare orchids she found as well as other well known species. Beautiful photos illustrated the talk.

FOR YOUR INFORMATION - NOSSA NEWS

The MARCH meeting is to be preceded with a New Members meeting with a session hosted by Reg Shooter. This will be at 7.15 – 7.45, prior to the meeting. Coordinator: John Bartram.

Australian Native Plant Sale
Wayville Pavilion, Adelaide Showgrounds
Saturday 3rd May 10am -5pm and Sunday 4th May 10am -4pm

Although NOSSA is unlikely to have any plants for sale a stand is being set up for which we require the assistance of volunteers.

ANNUAL DINNER AT THE BUCKINGHAM ARMS FRIDAY MAY 2nd

6:30pm for 7pm start

To help with reservations please contact Bill Dear or Cathy Houston prior to or at the April Meeting. Cost per head is \$24.50, Seniors \$22.50.

The Buckingham Arms is at 1 Walkerville Tce Gilberton

NEXT JUDGES MEETING

9:30am, Saturday 5th April, at Les Nesbitt's
18 Cambridge St Vale Park

This is it

IF A RED DOT APPEARS ON YOUR JOURNAL IT INDICATES THAT YOU HAVE NEGLECTED TO RENEW YOUR SUBSCRIPTION AND THE APRIL JOURNAL WILL BE YOUR LAST.

NOSSA activities

Sat 12 April Belair N. Park 9:30a.m. Meet at the information centre. If later than 9:30 proceed to Tennis Court 37 & make your way up the hill (For entry through the gate please mention you are attending T.P.A.G. weeding). Weeding activities for improvement of habitat for threatened orchid *Pterostylis cucullata*. Many people make it a half day activity.

Some photos of Gippsland orchids can be found at the following webpage link
<http://www.natureofgippsland.org/coppermine/>

ARTICLES/ITEMS FOR THE NEXT JOURNAL

Closing date is Friday 4th April

Les Nesbitt Award - 2007 Results

The Les Nesbitt Award for the best Native Orchid Species shown in South Australia in 2007 went to Steve Howard for his beautiful flowering of *Dendrobium biggibum*. Steve will get to hold the perpetual trophy for a year. He also gets to keep an A4 illustrated certificate showing the whole plant and a closeup of a flower.

Participation certificates were awarded to:

Neil Bull for *Dendrobium speciosum*

M&L Guy for *Pterostylis baptistii* 'Gosford'

M&L Guy for *Taurantha ophioglossa*

M&L Guy for *Ptst. concinna*

G & M Hazeldine for *Den. lithacola*

Steve Howard for *Den speciosum* 'Kroombit Yellow'

Noel Oliver for *Den. kingianum* ('KJM' x 'Dragonette')

Geoff & Lucy Spear for *Dockrillia linguiformis*

Field Trip Planning for 2008:

Meeting and Barbecue at Rob and Deidre's 6/21 Myponga Tc. Broadview. Sunday April 6th 12:30. **BYO**, R. Bates planning co-ordinator. Ph 83429247

NOTES FROM THE EDITOR- AGAIN

Last month I was blaming Vista for problems with unreadable files but it seems it is solely Microsoft 2007 that is responsible. So if you are using that version please save your files as a word 2003 format or older version to send to me otherwise your file will not be readable by my computer.

New Email address. **The Editor now has broadband at home**
david.hirst2@bigpond.com **The previous address can still be used.**

Genoplesium rufum

Les Nesbitt

Last winter I came across a single plant of *genoplesium rufum* while checking the key plants of *Diuris pardina* and *Caladenia carnea* on my block. It had seed pods making the tiny plant easier to see. I inserted a stake and label 100mm to the west of the plant so that I could find it again this season. By the first week of March, in the middle of a heat wave, it was in flower and a second smaller plant was alongside it. Upon further searching on hands and knees, 12 plants in flower or bud were located within a 3m stretch of an old overgrown track that has virtually no topsoil. The ground was bone dry and rock hard yet these little orchids were flowering happily. No nonflowering plants were observed. Does this mean that the leaves of nonflowering plants come up later when it rains? I will have to wait and see. There must be a pollinator present for so many seedlings to be nearby. I checked the grid and other adjacent likely sites but could not find any more plants.

How it is Done

Reg Shooter

There were only a total of 5 orchids benched at the February meeting. This is not unusual for February particularly this year with the long, dry spells and water restrictions being experienced.

We are quite used to seeing *Liparis reflexa* (the stinky one) on the bench but not *Liparis ceologynoides*. The genus *Liparis* contains about 250 species distributed world wide, 10 of which occur in Australia. The flowers of the genus are small, dull coloured and most have a strong unpleasant smell, some stronger than others.

This perfume attracts small flies and mosquitoes that feed on the nectar and in doing so pollinate the flowers.

As a genus they are quite easy to grow in cultivation requiring a pot of coarse, open compost growing in a humid atmosphere with plenty of air movement and kept moist throughout the year. In South Australia most of the species can be grown in a shade house all year round; a couple from the tropics may require the protection of a glass house during the winter months

The plant of *Liparis ceologynoides* benched at the meeting was in a small pot. Very well grown with many semi pendulous racemes about 10cms long carrying up to 20 small 8mm sized greenish yellow, slightly perfumed flowers. This is the smallest species of *Liparis* in Australia. On close examination the flowers resemble blossoms of the genus *coelogyne* hence the specific epithet.

Native Orchids: The Epiphytes; March

Steve Howard

March finally sees the intensity of the sun wane and the distinct coolness of the nights setting in but it will be much later in the month before the potential for very hot weather has finally left us for this season. Our epiphytes have suffered a nasty summer, but it could have been much worse. Fortunately January after a radical start the heat never really continued and settled into a pattern of very warm days and mild nights and as I write this in early February I think the pattern will be similar with maybe more humidity but alas little rain unless you jag a storm overhead. There will still be the odd extreme day, especially later in the month as weather patterns change and we get more northerlies. Many epiphytes will be showing the scars of summer, burnt tips, pitting of the leaves and many new growths burnt.

There will be a higher percentage of new growths coming on late. Natives adapt to harsh conditions well. A destroyed new growth from early on will be replaced this year, possibly even now but I doubt that it will mature in time for flowering over spring. For those that do the growths should be fully matured by now and in the process of hardening up. Those that are still growing will need protection from fungal problems that will increase later this month with the cooler weather and higher humidity. Autumn also signals a flush of caterpillars, each one intent on eating every new growth it can see. (do they have eye's?)

Keep the watering well up and don't let them dry out. In their native habitats March is often one of the wettest months of the year. Obviously with the watering we maintain our low nitrogen high potash based feeding pattern but this will not apply to all our epiphytes. For example the native *Cymbidium* have finished flowering and are in the process of developing new growths so they should have a higher nitrogen intake to develop these growths. The

high potash applies to the dendrobes and the *Sarcochilus* clans. Flowering wise March will not turn up too many flowers. If anything there may be the odd hot/cold variety *Dendrobium* out now and somewhere there will be a Hilda Poxon out. In my shade house the *Dend. bigibbum* species will be in spike as well as *Liparis* sp. and *Dockrillia bowmanii*.

I usually start hanging my hot cold dendrobiums now after they have endured the hottest part of the year lower down on the benches. I find these are one epiphyte that perform better in a hanging situation. For the novice a hot/cold *Dendrobium* is a cool growing variety eg *Den. speciosum* crossed with a tropical variety eg *Den. bigibbum*. The results are tropical looking flowers that don't need heat, are usually larger and more colourful and longer lasting. The flowering season is also much longer with flowers appearing anytime from about April and the last around October. Apart from the hanging bit they do require drier conditions over winter, in fact many perish if they get wet feet. Apart from that they get the same treatment as the rest. One word of caution is they are much slower to flower from seedlings and many get to a large size before flowering but the wait is usually worthwhile.

Autumn will see *Sarcochilus* emerge from semi dormancy. This summer has been harsh, especially for those of us on the plains with many plants stressed, burnt and looking very ordinary. I would say many seedlings were transferred to the shade house in the sky as well. Most of my very stressed plants have been re potted and shifted to a shady area and are growing over water accompanied by my collection of native frogs and tadpoles and have improved markedly. March is a better month to do this but I had no choice, do them in January or lose them completely. Those plants that looked stronger will get their turn this month but the January plants were on their last legs. Yes, I lost a few as well.

Keep up a regular misting for the mounted plants as well. With the cooler nights and maturing growths many of these plants will grow a new root system as well so ensure they are well watered and fed. You will also find that a percentage of earlier roots would have died over summer so best to snip them off.

My species of the month is *Dock. bowmanii*. This terete leaved species originates from the lowlands in coastal NSW and is not put off by harsh conditions. Apart from a burnt tip on the new growths they handled summer well. They are best mounted on callistemon, natural cork or weathered hardwood. Mine grows in the 70% area, facing east above the *Cymbidium* seedlings and is on a red-gum slab. They grow between one and two new leaves a year. Starting off from the rhizome the first couple of leaves grow straight up then as the growth extends with more leaves it arches over with the weight. The leaves will grow smaller each year but that will not affect flowering. Flowers are usually 1 to 3 at the base of the most recent leaves and unlike most species this one flowers in autumn. The yellow flowers have a lemon scent and usually your plant will surprise you with a second flush of flowers a couple of weeks after the first. They like many epiphytes have an uncanny knack of flowering at the same time. I have a few pieces from different areas and they are all open within a few days of each other. Maybe its nature's way of making sure effective cross pollination occurs? Like many of the terete group they are at their best as a specimen plant and providing your host is robust enough will last for years and years. Whilst not as stunning as a well grown *Dock. teretifolia* I feel they are a worthwhile species to have in your collection.

March will slip into April and we enjoy what I believe to be the best weather for the whole year. Also it becomes a busier time in my shade house as I begin the annual task of moving my plants in readiness for the cool season that lies ahead.

Bates (1992) discussed the orchids which were commonly found in pine plantations but since then much has changed. The previous article did not discuss whether the orchids were in forest planted on cleared land, or on forest planted directly on to native vegetation. In reality the orchids of native bush planted to Pines were little different from the original orchids on those blocks particularly if the pines failed to thrive. These failed plantations had orchids like the duck orchid *Caleana major*, giant sun orchids *Thelymitra grandiflora* and blue top sun-orchids *Thelymitra cyanapicata* which we can be sure were not there by choice. These failed plantations were some of our most valuable bush remnants and almost a hundred of South Australia's orchids could be found in them in the early 1990's. Sadly these failed blocks have mostly been clear-felled, poisoned and replanted to pines (Bates 2007).

This article does not deal with them rather it treats the orchids of mature pine plantations which had not failed, mostly planted on cleared land. The orchids in these plantations are far fewer, and for many, mature plantations are favoured habitat. These orchids include bird and ant orchids *Simpliglottis* and *Myrmechila* which are almost confined to plantations these days. *S. aff. valida* is a recent addition having been discovered just last year in the South-east. Better known is *S. cornuta* which is quite common in mature plantations near Mt Gambier and *M. trapeziformis* first located in SA in Pine Plantation near Comaum by Marian Beek in the 1970's and later at Kuitpo where it is thought to have been planted.

Helmet orchids are well suited to pine plantations and *Corysanthes dilatatus* and *C. incurvus* form large colonies in SE, KI, SL and NL region pine forests while *Anzybas unguiculatus* used to occur in SL pines until recent clear-felling. A few greenhood species will invade pines particularly *Pterostylis foliata* and *P. pedunculata* in SL but most of the previous records refer to greenhoods in pines planted in native veg.

Microtis and *Thelymitra* of the self pollinating *pauciflora* complex do well in pines in all southern regions but flower sparsely.

Mosquito orchids *Acianthus*, *Cyrtostylis* and *Nemacianthus* have all been observed invading mature pine forest.

Previous records of spider orchids (*Caladenia* alliance) referred mostly to species in failed pines but one group, the taller self pollinated *Petalochilus*: *P. prolata* and *P. vulgaris* do invade pine plantations in SL, KI and SE regions.

Only one beard orchid has been recorded in plantation and that is the 'Hills form' of *Calochilus robertsonii* in SL but pine forest populations are decreasing.

Although colonies of *Diuris brevifolia* and *D. orientis* were previously observed in pines (SL, KI, SE) these only flowered after fire or when the pines were clear-felled and do not seem to have persisted in second plantings. Likewise *Gastrodia* do not seem to persist in second plantings.

In total some twenty orchid species are commonly recorded in mature pine plantation in South Australia. The number is expected to decrease rather than increase as sources of invasion are destroyed for new plantations of pines and Tasmanian Blue-gum.

I would like to hear from readers, of any additional orchids seen invading pine plantations, but not those persisting in pines planted direct into bushland.

References: various J. Native Orchid Soc SA from 1990-2007.

South Australia's monotypic orchid genera

R. Bates

A monotypic orchid genus has only one species: from 'mono' meaning single. There are dozens of monotypic orchids in Australia and worldwide there are hundreds but South Australia has just eight. Sometimes a monotypic genus is a relict genus restricted to just one small area of unusual habitat even though in the past there may have been many sister species. South Australia has none of these relicts.

What we have are highly successful orchids which are widespread across southern Australia and this is more normal for a monotypic genus. These monotypic species are often very constant because they are genetically fixed. They are also often self pollinated or apomictic.

Worldwide there are many more monotypic genera than genera with two species.

The genera:

Caleana as *C. major* the larger duck orchid occurs in all eastern states and South Australia. As sometimes happens *Caleana* has a sister genus appropriately *Paracaleana* which has many species.

Hydrorchis as *H. orbicularis* is a semi aquatic, apomictic onion orchid occurring right across southern Australia. There is a supposed second species *H. cupularis* which is not a valid species but one of a range of forms I have observed in WA which are either environmentally induced or differ in a single gene.

Leporella as *L. fimbriata* the fringed hare orchid is common right across Southern Australia and is unique in having a sexually attracted male ant pollinator. It never self pollinates.

Leptoceras menziesii, NOSSA's emblem, is a common outcrossing species right across Southern Australia. Like all the previous species it forms large clonal colonies under ideal conditions.

Microtidium atratum, Australia's smallest flowered orchid also occurs right across southern Australia and is very constant and apomictic.

Nemacianthus caudatus the mayfly orchid is common in the eastern states and South Australia; it is clonal and outcrossing but very constant. It has a unique wet dog odour indicating a fungus gnat pollinator.

Orthoceras strictum, the horned orchid, is even more widespread occurring in all the eastern states and New Zealand too. There is supposedly a second species *O. novaezelandiae* with smaller bracts but I have seen a continuous range of forms even in South Australia and the latter species should be dropped. *Orthoceras* is self pollinated.

Pheladenia deformis, the blue fairy orchid, occurs right across southern Australia and is very constant except in colour. It is an outcrossing species.

There are several other orchid genera which are represented in South Australia by a single species but all of these have other species in other states.

There were once two other monotypic orchids in SA's southeast ie *Burnettia* and *Thynniorchis* but these disappeared with white settlement.

Next month genera with twin species.

N.O.S.S.A FINANCIAL REPORT 2007

RECEIPTS		EXPENSES	
Membership Subs	2205.53	Magazine Publishing	1439.90
Plant Sales	0	Magazine Postage	436.24
Trading Table	79.65	Hall Hire	881.00
Tuber Bank	333.85	Foreign Notes fee	7.00
NOSSA Show Plant sales	5335.00	Insurance	739.35
NOSSA Show Plant Raffle	322.10	Office of Business and Consumer Affairs – Registration	49.25
NOSSA SAP Plant Sales	558.95	Badges	115.00
Raffles – Club Meetings	231.00	Post Box Rental	65.00
Donations	10.00	Subscription refund	20.00
Badges	5.00	Secretary's Expenses	278.05
Club Dinner	462.00	Presentation Glasses	331.06
David Jones Book	130.00	Club Urn	76.99
Orchids of S.A. CD	35.00	A.N.O.S. Books	57.00
Refund ANOS Conference	500.0	NOSSA Show Advertising	53.55
Term Deposit Interest – Adelaide Bank	1118.21	NOSSA Trophy Engraving	96.00
Bank Interest – Bank S.A.	23.37	A.O.F. Donation	50.00
	0	Speaker	300.00
	0	Raffle Expenses	83.86
	0	Auditor Fee	50.
	0	00Editor's Expenses	375.00
	0	Ira Butler Award	40.00
	0	Conservation	10.00
	0	Lamination	100.45
	0	Memberships (NOSSA)	55.00

FINAL POSITION 2007

Opening Bank Balance 26 Dec. 06 (no unrepresented cheques)	4190.08
Plus Revenue 2007(actual banking) \$11349.66 plus adjustment \$2.00	11351.66
	15541.74
Less Expenditure	10207.40
	\$5334.34

Bank Balance 26 December 2007	\$5749.94
Less Unrepresented cheques	415.60
	<u>\$5334.34</u>

FINANCIAL POSITION AS AT 26 DECEMBER 2007

Cash at Bank (Bank SA Account No. 073181741) (net of unrepresented cheques)	5334.34
Term Deposit (Adelaide Bank Account No. 0037250651) (including interest for 2007 \$307.83)	5966.82
Term Deposit (Bank SA Number 192 4035413460)	20000.00
	\$31301.16

	0	Plant Sales – sellers	3949.00
	0	Club Dinner	513.90
	0	Advertiser – death notice	34.80
	11349.66		10207.4
Opening Bank Balance 26 December 2006	\$4190.08	Closing Bank Balance 25 December 2007	\$5334.34

I HAVE AUDITED THE INCOME & EXPENDITURE OF THE CLUB FROM RECEIPT BOOKS, BANK CHEQUE & DEPOSIT BOOKS & BANK STATEMENTS PRODUCED & CONSIDERED THE ABOVE TO BE A TRUE & CORRECT STANDING OF THE CLUB'S FINANCIAL POSITION AS AT 26/12/2007.

Murray Page
MURRAY PAGE
HON. AUDITOR 24/1/08



Above: A mosquito homes in on a *Linguella* (photo by Robin Goodfellow) and is unlikely to be significant as a pollinator.

Below: Pollinator wasps carrying pollina (photo by Andy Young) .





SOME ORCHIDS AT THE 2007 NOSSA SPRING SHOW

8 Photographs by Luke Thornton

More wonderful photos like these can be found on Luke's website at
<http://www.flickr.com/photos/chug/collections/72157600002649052/>



