



Journal
of the
Native Orchid Society
of
South Australia Inc



Caladenia latifolia

20th Anniversary Collector's Edition

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NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

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MARCH 2002 Vol. 26 No. 2**

2002 NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA 25 years

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NEXT MEETING 26 MARCH 2002

Tuesday, 26 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 is the AGM and the 25th Anniversary of the Society. Bring lots of orchids to adorn the display table. Also 'bring a plate of supper to celebrate our 25th after the meeting. A reminder: As 25 years is the silver anniversary, emphasis will be placed on white flowers (or silver ones!!). Members are asked to bring slides of *Eriochilus cucullatus*, *Leporella fimbriata*, *Genoplesium* sp., *Pterostylis uliginosa* (aff. *aphylla*) and *Spiranthes* for possible inclusion in the photographic library (see under NOSSA News).

DIARY DATES

26 March 2002: Annual General Meeting - N.O.S.S.A.s 25th Anniversary!!
 28 April Field trip; *Leporella* and *Eriochilus*
 5 May TPAG Weeding day at Belair meet: 9.30am at main entrance to Belair National Park
 3-28 September Kangaroo Island Field Trip. See the February journal for details.
 23 Sept - 5 October ANOS South-western Western Australia Field Trip. See February journal.
 18-21 Sept 2003 16TH Australian Orchid Council Conference Adelaide, hosted by O.C.S.A.

NEXT COMMITTEE MEETING

Wednesday 3 April at the home of Malcolm Guy. Meeting commences at 7:30 p.m.

FEBRUARY MEETING

Re-potting or mounting demonstrations were given by Don Wells, Reg Shooter and Brendan Killen for the epiphytes and David Pettifor and Les Nesbitt for the terrestrials. All these members grow excellent orchids and it was obvious that each had his own preferred potting mix or technique which showed there is no single recipe for growing orchids. It was a very entertaining evening with a relaxed atmosphere and one that certainly is worth repeating in the future.

Plants Benched

Terrestrial Species: *Caleana major* (2 pots, one resplendent in silver [paint - for our 25th]), *Pterostylis decurva* (Tasmania), *Eriochilus cucullatus* (Tas.), *Genoplesium rufum* (green), *Genoplesium rufum* (red), *Pterostylis coccina* (red), *Pterostylis abrupta*, *Calanthe triplicata*.

Epiphytic species and hybrids: *Sarcochilus ceciliae*, Saco Velvet [2 plants], *Sarco Riverdene*, *Sarco Sweetheart*, *Dockrillia cucumerina* [2 plants], *Dock Virginia Jupp*, *Dendrobium discolor*, *Den Golden Fleck*, *Den tetragonum*, *Den kingianum*, *Cymbidium Little Black Sambo x canaliculatum*.

Judging results

Epiphyte species

- 1st *Sarcochilus ceciliae* grown by Peter McCauley
- 2nd *Dendrobium tetragonum* grown by Sue & Graham Zerbe
- 3rd *Dendrobium discolor* grown by Alan Jennings

Epiphyte Hybrids

- 1st *Cymbidium Little Black Sambo x canaliculatum* grown by Kevin Western .
- 2nd *Sarcochilus Velvet* grown by Sue & Graham Zerbe
- 3rd *Sarcochilus Riverdene* grown by Noel Oliver

Terrestrial species

- 1st *Calanthe triplicata* grown by Brendan Killen
- 2nd *Pterostylis coccina* grown by Les Nesbitt
- 3rd *Genoplesium rufum* grown by Les Nesbitt
- There were no terrestrial hybrids

Best terrestrial *Calanthe triplicata* grown by Brendan Killen

Best Epiphyte and orchid of the night

Cymbidium Little Black Sambo x canaliculatum grown by Kevin Western

Popular Vote

- Best terrestrial species *Pterostylis coccina* grown by Les Nesbitt
- species epiphyte *Sarcochilus ceciliae* grown by Peter McCauley
- hybrid epiphyte *Sarcochilus Velvet* grown by Sue & Graham Zerbe

Commentary on terrestrials given by Les Burgess

Commentary on epiphytes given by Noel Oliver

FIELD TRIP FOR APRIL -Sunday 28 April *Leporella* and *Eriochilus* special. Meet: loam at the Kangarilla shops.

FOR YOUR INFORMATION - NOSSA NEWS

A FEW WORDS FROM YOUR NEW EDITOR:- DAVID HIRST

It is with some apprehension that I take over the role of Editor from Gerry Carne. I will strive to keep up the excellent standards that Gerry and his predecessors have set. Needless to say, much depends on contributions from you, the reader. Even small snippets of information can be of much interest as I found in the last journal while reading the Tuber-bank report by Malcolm Guy. Malcolm mentioned the names of some generous donators of tubers one being Peter Branwhite from Victoria. I first met Peter on a field-trip to the South-East in 1995 and was impressed with his enthusiasm and photographic techniques. Later I was to see examples of his excellent photography, not of orchids but of spiders, those wondrous eight-legged creatures that one sees on occasions when on excursions seeking orchids. I have not heard from Peter for some years now but such articles help keep us somewhat in touch, even if indirectly. For those people who have not access to computers or email facilities don't despair there is still Australia Post or I can pick it up or arrange for it be collected.

MEMBERSHIP FEES ARE NOW DUE. Subscription remains the same.

New Members

The Native Orchid Society of South Australia warmly welcomes new members John Crawford of North Adelaide, Norm Betty of Western Australia and Dr Jenny Guerin of Norwood.

The March meeting is the AGM. Nominations for one more committee member required. Here is your chance to help and have your say in the running of your Society.

Tea or coffee after the meetings are appreciated by many but we need volunteers to organize this (on a sole, shared or rostered basis) in future as David Pettifor is unable to continue providing this service. If you are able to assist at the March meeting and/or beyond and please see David at the meeting.

Judging Classes

The classes will continue during 2002.

Dates for Judges Meetings

April Saturday 6th at 9:30am

May Saturday 4th at 9:30am

June Saturday 1st at 9:30am

July Saturday 6th at 9:30am

August Saturday 3rd at 9:30am

September no meeting due to number of shows

October Saturday 5th at 9:30am

November Saturday 2nd at 9:30am

December Saturday 7th at 9:30am

Orchid photos for email users

wto@peninsula.hotkey.net.au

Currently this site features photos of Melbourne's native orchids and its creator, Wayne Turville, is hopeful that in the future written articles will also be available.

The above information was supplied by Geoff Edwards.

NOSSA Photographic Library

In 2002 NOSSA would like to update its slide library and set up a photographic library of South Australian native orchids. The library is to be used by members giving presentations. Flower, plant and habitat shots are required for each species; the society will have slides copied and re-prints and electronic copies made for the library.

To facilitate the process specific genus photos will be requested monthly, preferably prior to flowering time so that an assessment can be made of what is available or what needs to be photographed.

Any members keen on orchid photography are requested to photograph both flower, plant and habitat for species during the year, so the library can be increased.

Please bring any suitable material you may have to the monthly general meetings. Apologies for the short notice for the March meeting.

26th March. *Eriochilus cucullatus*, *Leporella fimbriata*, *Genoplesium* sp., *Pterostylis uliginosa* (aff. *aphylla*) and *Spiranthes*.

23rd April. *Acianthus* sp., '*Caladenia*' *deformis*, *C. filamentosa*, *Corybas unguiculatus*, *Pterostylis alata*, *P. robusta*, *P. bryophila (obtusata)*, *P. nana*, *P. nutans*, *P. sanguinea* and *P. smaragdina (longifolia)*.

Please contact Cathy Houston or Thelma Bridle with your contributions, which will be returned asap. For any further details contact Cathy or Thelma.

HOW ITS DONE Reg Shooter

It was quite surprising to see the number of plants benched at the February meeting.

Considering the strange weather patterns over recent months all were in excellent condition. The judges were kept busy and had quite a job finding the best. In the terrestrial section there was a nice specimen of *Pterostylis coccinea* grown by Les Nesbitt but the final nod was given to Brendan Killen's tropical species *Calanthe triplicata*. It was not a large plant but was in excellent condition carrying one raceme of 20 or so flowers having nice clean leaves with many new pseudobulbs developing ready for next years flowering. This species prefers low humidity when in flower otherwise the pure white flowers are marked with botrytis spotting which quickly disfigures the blooms. Brendan's plant was without blemish

Brendan grows his plant in a shade house with 50% shade along with dendrobiums and other orchids all year round. He waters quite heavily in the warmer months when the plant is growing strongly but keeps it much dryer in the cooler months just relying on natural rainfall. Being a terrestrial of course it is grown in soil. Brendan uses a commercial premium potting soil mix, finding this much easier and quite as satisfactory as having to make up his own concoction. It has no special fertiliser treatment just receiving the same as all the other orchids in the area.

There are about 150 species of *Calanthe* worldwide but just the one in Australia. Its natural habitat is preferably cool shady forested areas in loose sandy humus rich soils often near watercourses from southeastern NSW to northeastern Queensland. It is not confined to Australia but reaches to China through New Guinea, Malaysia and India. Thanks Brendan for bringing such a lovely orchid for us to see.

In addition to the quite large number of terrestrials there were several epiphytes both species and hybrids. The orchid the judges adjudged the winner was a fairly small plant of *Cymbidium* Little Black Sambo x *canaliculatum*, grown by Kevin Western (Little Black Sambo was registered way back in 1966 before political correctness, I doubt whether today that name would be accepted for registration) The plant carried one stem of 22 dark red, almost black, typical *canaliculatum* type flowers which had a thin white margin to them making for a very attractive orchid. Kevin grows many of his orchids in sphagnum moss with great success including this cymbidium, It is grown in an open shade house under 70% shade cloth on top of the Adelaide hills where it experiences temperatures ranging from -4c to 47c. Kevin says it is not a fast grower this one he has had for 10-11 years and it is still quite small just a couple of pseudobulbs carrying typical *canaliculatum* type leaves, this is not surprising as the majority of species in the background is *canaliculatum* with just one infusion of *Cym madidum*, as for fertiliser in Kevin's words 'it gets it when I remember'.

Thank you to all these members who brought in orchids for us to enjoy.

CALEANA MAJOR

David Pettifor

The book states that it is not possible to grow these orchids for any length of time as they run out of mycorrhiza fungi.

These plants [two pots displayed at the February meeting] have been growing in this pot for five years.

The most 'ducks' seen on a stem is four so I am told. This plant [one of the two displayed] has flowered five and has another still to flower.

The height of the plant is normally 8 to 12 inches. This plant to the top of the 5th bloom is 35 3/4 inches or 905mm. Where will it stop?

This plant was first at the November meeting, and took the popular vote. It is now in flower for the February meeting and if all is well, will be in the March meeting with its last flower (unless it aborts in the heat).

You will note that there are new leaves in the pot already. [Look for it at the March meeting - Ed.]

Comments on the Reclassification of *Caladenia* and Related Genera Doug Bickerton

Many readers would be aware that David Jones, Mark Clements and others published a paper in the September 2001 edition of "The Orchadian", in which they proposed a reclassification of the genus *Caladenia* and allied genera. Thelma Bridle placed an article in the December edition of our NOSSA journal, summarizing the changes as they relate to South Australian species.

I am writing to inform people that the Adelaide Herbarium (now the Adelaide Plant Biodiversity Centre) has decided at this point in time not to recognize the changes. Their reasoning is that the paper is yet to be accepted in full by the scientific community at large. For example, Steve Hopper and Andrew Brown in WA are about to publish a reply. Without wishing to pre-empt their paper, it is my understanding that many of the changes proposed by Jones et al will not be disputed, but there are some differences in opinion. The Herbarium has wisely decided to take a conservative view and wait until the dust settles, so to speak.

NEW PUBLICATIONS

Agricultural and Resource Management Council of Australia and New Zealand Environment Conservation Council and Forestry Ministry, (2001) Weeds of National Significance, Bridal Creeper (*Asparagus asparagoides*) Strategic Plan. National Weeds Strategy Executive Committee, Launceston.

Part of a series of handbooks including blackberries this synopsis of bridal creeper gives the background of this plant in Australia, distribution maps of its spread and control measures [Ed.].

Available from:
Animal and Plant Commission
GPO Box 1671
Adelaide SA 5001
More information can be obtained from www.weeds.org.au

FURTHER CHANGES TO ORCHID NAMES

(Just when you thought you'd learnt them all)

from Jones D.L. et al., *Orchadian* 13(10),437-68, 2002

This paper covers name changes to orchids in the tribe Diuridaea. The sub-tribe Prasophyllinae is still under revision, so there will be further name changes for both *Prasoplyllum* and *Genoplesium* species plants.

The following list covers the published names changes for South Australian species. Further information, covering all species in the Diuridaea tribe can be obtained by borrowing the current issue of *Orchadian* from the NOSSA library.

Former name	New name
<i>Acianthus exsertus</i>	No change
<i>A. caudatus</i>	<i>Nemacianthus caudatus</i>
<i>Corybas fordhamii</i>	<i>Anzybas fordhamii</i>
<i>C. unguiculatus</i>	<i>A. unguiculatus</i>
<i>C. dentatus</i>	<i>Corysanthes dentata</i>
<i>C. despectans</i>	<i>C. despectans</i>
<i>C. expansus</i>	<i>C. expansa</i>
<i>C. x miscellus</i>	<i>C. miscella</i>
<i>Caleana major</i>	No change
<i>Paracaleana minor</i>	<i>Paracaleana Blaxell</i>
<i>P. nigrita</i>	No change
<i>Genoplesium archeri</i>	<i>Cornastylis archeri</i>
<i>G. nigricans</i>	<i>C. nigricans</i>
<i>G. rufum</i>	<i>C. rufa</i>
<i>Microtis atrata</i>	<i>Microtidium atrata</i>
<i>M. orbicularis</i>	<i>Hydrorchis orbicularis</i>
<i>M. rara</i>	No change

To be continued

FIELD TRIP TO NGARKAT CONSERVATION PARK

Cathy Houston

For the weekend of 22nd & 23rd September a 4WD field trip to Ngarkat Conservation Park in the mallee was planned. In the 24 year history of the Society it appears that no planned trip had ever been taken to survey the orchid populations of this huge conservation park. Too frequently appearing as a feature in the Press during Summer time, this park has been subject to many bush fires, the most recent being in Summer 1999/2000. Our planned route would not take us near this most recently burnt area. However, we would be visiting an area that had been subjected to a hot fire in the Summer of 1997/98.

Two couples decided to make the trip a long weekend and set out on the Friday, visiting the now familiar area near Sherlock, on the way. The weather at this stage was very promising, but the forecast for the weekend promised to deliver showers after sunshine. At Sherlock the ground was extremely dry. Exactly twelve months before, N.O.S.S.A. members had made some interesting "discoveries" at this site, so we were keen to see what was flowering this

year. *Thelymitra nuda* and *T. antennifera* were flowering freely but it was disappointing to find that *T. azurea* was well back in bud; last year it was flowering. We searched in vain for any trace of the *Arachnorchis* (*Caladenia*) which had been identified as *A. lowanensis* in 2000. In fact many of the *Arachnorchis* had dried off without flowering. The one species that did not appear to be affected by the dry conditions was *Diuris brevissima*, which was flowering, in considerable numbers in some very attractive groups.

Friday evening found us camped at one of those attractive open flats adjacent to the protection of mallee scrub. This flat was covered with prostrate *Kunzea pomifera* and some native grasses. The whole area was "littered" with flowering orchids, mainly *Diuris brevissima* and *Arachnorchis verrucosa*, a sight not often seen in South Australia.

Saturday morning we were at the meeting point, namely Tintinara, by 10a.m. Being uncertain of whom to expect, we waited a reasonable time, but when no-one else showed, the lure of a warm sunny morning drew us into the scrub. The *Thelymitras* were already opening well and the area was a delight for photographers with *T. nuda* in all shades and hues. The area also sported a range of *T. macmillanii* of various colours. A group of *Pyrorchis* flowers were located under the shrubbery.

After lunch we set off for the Conservation Park proper. We entered in the south-western sector and travelled easterly, north-easterly and then northwards. Our destination by evening was to be Box Flat, in the north-western sector. Five stops were made in four hours. The habitat varied from mallee/ broombush to open flats of *Kunzea pomifera*, to low, open heathland, to mallee with very little understorey. An emu with chicks was followed for some distance along the track and kangaroos were encountered spasmodically. We were keen to locate an area at which we had found a dense colony of very small *Caladenias* in bud a couple of years before. We believe we found the place but this year there was no sign of any *Caladenias*. The mystery remains. A stop was made at "Orchid Hill", the area known to grow *Arachnorchis cardiochila*; the flowers were restricted to a few. Wherever we stopped *Diuris brevissima* seemed to be present; the species was having a good year. It was pleasing to find *Pterostylis plumosa* in southern parts because our records show them to be relatively uncommon in the park. *A. aff. arenaria* was also found only in the southern areas, whereas *Arachnorchis* in the *dilatata* complex were found throughout the park. The showers promised followed us intermittently and lightly throughout the afternoon, but didn't really affect our surveying.

We camped at Box Flat and spent the next morning surveying the area. It is a blue gum (*Eucalyptus leucoxydon*) ringed by sandhills with stringybark (*E. baxteri*). Once again we were fortunate to have a warm morning which opened the *Thelymitras*, viz. *T. antennifera*, *T. nuda* and *T. macmillanii*. *Arachnorchis stricta*, *A. verrucosa* and *A. tensa* were all flowering and the size ranges, particularly for *A. verrucosa*, had us wondering. Two rufa group *Pterostylis* were found there but only *P. pusilla* was flowering, the other being still in bud. This has been our experience each time we visit; more mysteries for the park.

Our final stop in the park was made at an area which had been burnt nearly four years before. The most exciting find in this area was two small plants of *Calochilus campestris* in bud. Three years previously this was where we had photographed *Prasophyllum elatum* in flower. This year we couldn't even find a leaf!

We made one more stop outside the park where once again we found hundreds of *Diuris brevissima* and *Arachnorchis verrucosa*. The numbers of *Thelymitra nuda* were much lower

than previous years, but the most interesting find was *T. pauciflora* in bud. It was evident that they were a uniform race of white flowered plants with glaucous leaves.

A wonderful weekend of orchids and other natural delights was experienced by the four intrepid enthusiasts.

	NGARKAT CONSERVATION PARK										
	Sherlock	A	B	1	2	3	4	5	6	7	C
									Box Flat		
<i>Acianthus pusillus</i>			f.o. Y						LY		
<i>Arachnorchis aff.arenaria</i>			fY	fX			fY				
<i>Arachnorchis cardiochila</i>	fW		fW					fX			
<i>Arachnorchis stricta</i>	fW						fX		fW		
<i>Arachnorchis tensa</i>			fY	fW				fX	fX		
<i>Arachnorchis verrucosa</i>	fW	fX							fW	fZ	fW
<i>Calochilus campestris</i>										bY	
<i>Calonema capillatum</i>	f.o. W			fX					fY		
<i>Cyrtostylis robusta</i>	LX		LX				pY				
<i>Diuris brevissima</i>	fW	fW		fW	fX	fX	fX	fX	fX	fX	fW
<i>Eriochilus cucullatus</i>		pX		LY			LY				
<i>Genoplesium nigricans</i>	pW			pX							
<i>Glossodia major</i>		fZ	fZ				*fY				
<i>Microtis arenaria</i>			fY								
<i>Microtis sp.</i>		LX									LW
<i>Petalochilus carneus</i>		fX	fZ	*fX			fW		fX		
<i>Pheladenia deformis</i>			pX	L.e. Y			f.o. Y				
<i>Prasophyllum elatum</i>	LZ										
<i>Prasophyllum occidentale</i>				bZ							
<i>Prasophyllum odoratum</i>			fY								
<i>Prasophyllum sp.</i>	LX				LY	LY				LY	
<i>Pterostylis aff.biseta</i>									bY		
<i>Pterostylis dolichocheila</i>							f.o. Y		LY		
<i>Pterostylis longifolia</i>	pX						pX				
<i>Pterostylis mutica</i>	pX								fY		
<i>Pterostylis nana</i>	pY	f.o. Y		pY		pY		LY			
<i>Pterostylis plumosa</i>	fY			fY		LY					
<i>Pterostylis pusilla</i>	fW								fX		
<i>Pterostylis robusta</i>									pY		
<i>Pterostylis sanguinea</i>	pY	pY									
<i>Pyrorchis nigricans</i>		LX	fY	LX		LX			LW	LX	
<i>Thelymitra antennifera</i>	fY	fX	fW			fX	fX		fX		
<i>Thelymitra azurea</i>	bY			bY		bY					
<i>Thelymitra luteocillium</i>			fZ								
<i>Thelymitra macmillanii</i>		fY	fX						fY		
<i>Thelymitra nuda</i>	fW	fX	fW	fW			fW	fX	fX	fY	fW
<i>Thelymitra pauciflora</i>											bY

State of plant

f - flowering Co.- flower over p - pod b - bud L- leaf
L.e.- leaf with flower stalk eaten *f - flowers seen nearby but not at stop

Distribution

W - widespread X - less widespread Y - colony of few plants Z - single plant

ORCHIDS OF MOUNT KINABALU

Prologue to Borneo.

First Published in Orchids Australia Oct. 1999

Part 2 of 2 Written by Edda Viskic and Russell Job.

Some frogs were heard and seen as we wove through green trails of hundreds of tree species. Specimens seen along the way include *Anoetochilus*, *Apostasia*, *Corymborkis*, *Cryptostylis*, *Malaxis*, *Nervilia*, *Spathoglottis*, *Spiranthes*, *Corybas*, *Habenaria*, *Eulophia*, *Goodyera*, *Calanthe* and *Phaius* all terrestrial genera shared with Australia as are *Oeceoclades*, *Gastrodia*, *Thelymitra* and *Dipodium*. This was utterly beyond amazing, and a revelatory experience impossible to describe in print.

The bright pink flowers of the bushy Balsam, *Impatiens platyphylla* fill the ground space between rocks occurring from 2000m to 2500m. Rhododendrons reach extreme diversity from tiny stunted heath bushes near the summit, to massive trees near the Park H.Q. As we began our ascent of this mighty mountain we caught glimpses of *Phalaeonopsis amabilis* hanging from high branches with *Aerides odorata*, *Vanda hastifera* var. *gibbsiae* and *Appendicula foliosa*. Our packs were taken ahead by women and teenage porters with bulging calf muscles so that we could enjoy the view and ease the terrific climbing struggle! *Nepenthes* is an intriguing genus of tropical pitcher plants that lure and trap for insects with tasty secretions in colourful, ridged vases, to supplement their nutrition with prey digested in the juices. Their roots are often in wet moss at the base of a tree, while the stems and leaves climb several metres up the trunk. *N. tentaculata* grows in sphagnum moss banks at 900m and is one of nine species on this mountain coexisting with *N. tenophylla*, *N. burbridgeae*, *N. fusca* and *N. lowii*. The largest *N. rajah* and the elegant *N. edwardsiana* are rare and *N. villosa* only grows at 2400m to 3200m altitude so is a cool, temperate plant as temperatures can fall to 3 degrees C. in the early morning.

The summit trail starts at the Power Station Gate at 1829m with a profusion of greenery including *Rhododendron orbiculatum* which grows epiphytically on large trees or on rocks and *Bulbophyllum catenarium* on tree trunks just below the first hut. *B. flavescens* and *B. puglianthurn* are found at the lower level. At 2100m *Coelogyne plicatissima* shows its strongly, corrugated leaves and large flowers. *Thrixspermum triangulare* is one of the monopodials that grows here and ascends to 3400m. We were constantly stopping to photograph and video these unique plants in situ. The tangle of ferns including Bat's wing, Fishbone, filmy, and maidenhair, with lianas, liverworts and lichens indicated high humidity. The giant *Angiopteris* fern and shade loving *Tectarias* loved the stream banks. *Begonias* grew into small trees with white flowers overhead. *Cyathea* treeferns with flat scales of leaves covering the trunk included *C. contaminensis* and *C. tripinnata* which is related to a Queensland species. *Dicksonia* treeferns have red hairs covering the trunk with bristles and occurred at about 2000m. amongst Bamboos and rattan palms. At Carson's Falls, the first hut offers panoramic views of the Ranau road linking the park to the coast. Along this terrible road thousands of Allied troops died in atrocious barbarity near the end of WW2. The dainty, pink, bellflower of *Agalmyla tuberculata* spreads among the *Selaginella* ground cover. *Coelogyne cuprea* var. *planiscapa* flowers cream in August, a wet month and at this altitude cogeners *C. hirtella*, *C. moultonii* and *C. monilirachis* are also found. The beautiful, large, white flowers of *Dendrobium spectatissimum* and *D. parthenium* sometimes occur on *Leptospermum recurvum* shrubs. The former can stay open for six weeks and is moth pollinated. At 100mm across the petals, this nigro-hirsute section marvel should be in worldwide cultivation. On *Agathis* and *Podocarpus* trees at the second hut, the monopodial orchid *Cleisocentron merrillianum* grows to 1m and displays leaf polymorphy having both terete and strap leaves and blue flowers. Reddish forms are also known. *Flickeringia pseudoconvexa* dainty flowers last less than a day. *Eria angustifolia* *E. robusta* and *E. grandis* are encountered in the ridge forest trees. *Nepenthes lowii* likes to grow at this level but has been removed by collectors. Also found draping over treeferns at 2600m is *Bamboo gibbsae*, named after Miss Gibbs, the first woman to ascend the mountain while working for the British Museum in 1910. *Usnea tillandsioides* lichen covers the gnarled and twisted branches of the *Leptospermum javanicum* at the cloud forest station level at 2700m.

From the mossy, submontane forest to about 2400m, *Rhododendron stenophyllum* has a delicate, orange, tubular, flower cluster and belongs to the *Vireya* group as do all 25 species growing on Kinabalu. It only grows to 3m but the red/pink *R. rugosum* grows to 8m and is pollinated by birds. As we climbed higher and oxygen becomes more rarified the stops became more frequent to give our hearts and lungs time to catch up. Dawsonia moss is a relic of the pre-Dinosaur era and ranges in size from 1cm to 1m, forming deep beds that has made coal seams since the Carboniferous times. *Huperzia* sp. tasselferns are found growing like thin shoelaces on rocks and in treeforks. The large *Dipteris* fern like fossil forms from Jurassic times survives here and *Dendrobium piranha* and *Dendrochilum grandiflorum* find niches on rocks or tree limbs. The weather being constantly wet, there are often mists in the air encouraging lush growth of cloud forest plants. Some like Celery-top Pine, *Phyllocladus hypophyllum* and another primitive conifer *Dacrydium beccari*, Needle-leafed Southern pine are emergent trees at this level. From 1500m to 3000m the *Nepenthes* pitcher plants have been growing making squat, fat pitchers on the mossy pads near the ground and funnel shaped pitchers hanging down from the tree branches. *Polypodium* and *Davallia* species ferns make massive clumps in trees with their rhizomes stretching continuously up. The ultrabasic rocks outcropping produce yellow nickel and chromium soils and vegetation changes abruptly. The summit trail path consists of *Leptospermum recurvum* root-steps and trunk-handrails. The largest flowered *Vireya* species with umbels of yellow mid-sized flowers, *Rhododendron lowii*, grows in moist, forested gullies and it becomes a spindly, dwarf tree as it approaches its altitudinal range limit. *Platanthera kinabaluensis* is a terrestrial with the widest altitude range growing up to 3400m as does *Epigenium kinabaluense*. The amount of exposure and depth of shade determine their vegetative habit. Emerging above the cloud forest, the *Leptospermum* trees underline the obvious dominance of the Australian derived plants, dwarfed and gnarled into fantastic forms by the gales that so often lash these tough plants. *Bulbophyllum coriaceum*, with thick, fleshy leaves, *Eria grandis*, with sword shaped leaves and *Coelogyne papillosa*, a stunning white necklace orchid, colonise the granitic crevices, bases of scrubby bushes or trees of the sub alpine area. Holly, *Ilex havillandii* occurs on high ridges with *Rhododendron buxifolia*, with its blood red, honey scented flowers that grow up to 3900m. The fragrant *Magnolia* family is represented and the local people use the Kerosene nut juice to ignite fires.

Near the sixth station at 3109m is a helipad for important occasions. The Laban Rata Guesthouse is a welcome stopover on the summit climb. After climbing for about 6 hours the relief was tremendous, and the view across the Crocker Range seemed to go on forever. With the magnificent "Donkey's Ears" cliff face as a backdrop, alpine meadow grasses and sedges start appearing and some weary visitors overnight in the spartan comforts. Arising at 3am, after lurid dreams to begin the summit walk in the dark in order to see the sunrise over Borneo from Low's Peak this is an unforgettable hike that many people make. Not for the faint hearted smoker though, one carries a torch and keeps close to the person in front and above. The 10,000 year old massive rock pile that marks the place where the last of the glaciers dropped its rocks is tortuously traversed. This marks the end of subalpine diversity, and the toughest orchids on the mountain *Dendrochilum alpinum* and *pterogyne* are found, gloriously flowering in the moraine rocks in September. It still calls us

Up to 3800m the elfin forest comprises stunted Teatrees, *Leptospermum* and *Dacrydium* covered with lichens. Blackberries, *Rubus lowii*, silver leafed *Potentilla*, *Ranunculus* buttercups and *Bulbophyllum montense* form the ground cover on open exposed sites. *B. anguliferum* makes sturdy, compact growth on mossy cushions or elongated and larger leafed on bark. The Necklace orchids, *Coelogyne papillosa*'s beautiful, snow-white, pendulous display attracts pollinators for several weeks in this harsh environment.

'Brighteye', *Euphrasia borneensis*, is another Australian and New Zealand plant relative (an endangered *Euphrasia collina* still survives at Mylor in the S. Aust. hills). Also related is *Podocarpus imbricatus* which grows as a mossy, 1m dwarf tree at its upper limit and to 30m at lower altitudes. The large, white *Camellia* like flowers of *Schima brevifolia* stud the hillside with its purple tinged leaves of new growth. Due to extra high radiation levels at this altitude, many plants are tinged red with anthocyanin to protect new leaves and buds. *Rhododendron fallacinum* of slightly lower altitude has coppery leaves and is predominantly epiphytic but can occur on the ground on open ridges and

landslips. Still walking slowly upward by torch headlight, trying to keep the person ahead in view at 4.30am., we gasped and stumbled doggedly up. As the wooden handrails get replaced by rope the walk becomes steeper and the white, grey and black speckled rocks and boulders are clothed in moss. Gentians find boggy cracks to carpet the granite. Cascading waterfalls and glacial moraine provide support for heath plants and Sayat Sayat, the hut named after the tiny leafed, white flowered, dwarf Teatree that grows at 3810m. This is the highest place to stay overnight on the mountain and the altitude ensures strange lurid dreams. The sheer power of this place is overwhelming. As the sun rose over the Sth. China Sea we were sitting waiting and watching the magic light show spread all around. The freezing dark rock warmed fast in the morning sun, and the distant twinkling lights of civilisation were still visible. The rocky summit plateau extends up past the *Vaccinium* bushes with reddish flushes of new growth, stunted *Rhododendron ericoides* plants, tough sedges and lichens to the bare ridges of the peaks. This miniature red tubular champion of the mountain demonstrates the adaptability of a *Rhododendron* in its successful guile of hijacking the pollinator of *Ericas*. Water falling off the granite spires traces a filigree of mist over the forest creeping up to the highest hut where the plants flower and fruit when only a few centimetres tall. A Kinabalu Rat survives only in the rocky, alpine zone near the peaks. This is probably due to the rapid rise in daily temperature of the dark, shattered rocks where it lives. A nocturnal ferret badger is another montane mammal that is more difficult to spot.

The terrifying view down Low's Gully from Low's Peak is dramatically precipitous (2500m vertical). The water falls here are higher than any Venezuelan tepui, and many new discoveries are yet to be revealed from its secret, botanical depths. Botanists have died here. The largest monolith is also the most dangerous. It took us longer to walk down to Panar Laban guest house than climb because of the amazing botany revealed in the daylight. Getting back to park HQ. was anticipated with intentions of enjoying the downhill view. However, the afternoon rains deluged the trail which became a slippery torrent of tumbling water. With the increase of air pressure on descent, all our equipment was drenched and failing as we entered the main building to recoup with a glorious coldy! Scarlet sunbirds and Mountain Blackeye are the large pollinators and a great variety of insects including beetles, bees, butterflies, huge Atlas Moths and bats pollinate the enormous variety of orchids and other flowers that populate these slopes. Tree frogs, gliding lizards, gliding snakes and a gliding primate are also endemic to this magnificent mountain but are rarely seen while the Grey drongo is a common bird. Both Sunbirds and Drongos are found in Australia's north. There are so many links between the biodiversity of Mount Kinabalu from the Himalayan through to the Australasian which are still being revealed today that make it such a sacred regenerative site for so many different cultures, and the richest orchid mountain on earth.

Orchid names appear in italics.

Written by Edda Viskic and Russell Job.

P.O. Box 10 Forest Range. S.A. 5139.

e-mail : mrj@unforgettable.com <http://welcome.to/montemazula>

references : 'The Plants of Mt. Kinabalu 2 Orchids' by Wood, Beaman & Beaman Royal Botanic Gdns. Kew, web adress at <http://nabalu.flas.ufl.edu/kinahome.html>

'Mt.Kinabalu Borneo's Magic Mountain' by Wong and Chan Publ. by Natural History Publications at Kota Kinabalu. Thanks to Dr. Ben Wallace for corrections and suggestions.

ADVANCE NOTICE: Coates are running a 12 day terrestrial Orchid tour north of Perth in Western Australia beginning 24th August 2002. More details in a future journal.

Previous names *Sarcochilus longmanii* Bailey 1912

Parasarcochilus weinthalii (Bailey) Dockr. 1967

Common name .The Blotched Sarcochilus

Named after Fred Weinthal the original collector who first found the plant at Main Range Toowoomba Queensland in 1903.

The growing area takes in a range from the Richmond River . in Northern N.S.W. to the Bunya Mountains in S.E. Queensland where it prefers to live away from the Coast on the slopes of the ranges up to an altitude of about 650 metres or slightly higher. Here it grows in patches of isolated scrub where it can become locally common and although not easy at times to locate it can be found growing with *Sarcochilus olivaceous*, *Sarcochilus falcatus* and *Sarcochilus dilatatus* but can be recognised by its leaves which are a light green, thinner and more leathery than the other mentioned species, also the flower spike turns brown when dead whereas *Sarcochilus falcatus* turns black.

A small epiphytic plant not unlike a small *Sarcochilus falcatus* in appearance that can form small pendulous clumps with leaves 40mm to 90mm long moderately broad and 3 to 7 in number but usually about 5 and falcate in shape with racemes longer than the leaves. While the roots are also different being very white and fleshy.

Again this is another plant that has suffered badly to loss of habitat and severe collecting for which it was sort after for its very attractive flowers which are on racemes up to 80mm long pendulous with 3 to 5 flowers about 13mm in diameter, very fragrant and variable in colour which is usually yellow spotted with purple yellow or reddish purple and plants from the more Southern areas can be more white and can also have larger flowers than the more Northern areas such as Toowoomba. The flowers are usually recognised by their distinctive blotches also there is also a pure yellow form although these are very rare. Flowering period is from August to October.

Cultivation. For a plant with such an attractive flower it is a shame that it is so hard to grow in cultivation but this is not unusual for many of our epiphytic *Sarcochilus*. A small slab is best and it prefers a temperate climate with a cool moist atmosphere with good air movement and it should not be allowed to dry out so keep the atmosphere moist at all times if possible especially on very hot days. Growing the plants in small clumps can at times have better success. If you can cultivate it the results are well worthwhile, as this is one of our more spectacular orchids.

MAGNIFICENT DIPODIUMS Les Nesbitt

The summer of 01/02 just passed was the coolest on record with no heat waves and only a few single hot days quickly followed by a cool change. On my property, 'Bittwood' near Bridgewater in the Adelaide Hills, the dipodiums, have been magnificent. They normally flower in January but this year they were a month late coming up and started flowering in February. At the end of the first week of March those in shady areas were still in peak condition. The number of flower spikes is double the previous best year over the past 9 years that I have been observing this area. Clumps of 3 or 4 together were common and 10 spikes within 2m occurred in a number of places. Most spikes are on the slashed fire tracks but this year there were more single spikes in the overgrown bush on the hillsides. They do not seem to occur in the winter-wet areas at the bottom of the gullies. All of the plants have striped lips. I have looked in vain for spotted lips. Colours range from almost white flowers on green stems to dark pink flowers on red stems and all variations in between. There must have been at least 200 flower stems on 'Bittwood' this summer.

NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.
FINANCIAL STATEMENT 1ST JANUARY 2001 TO 31ST DECEMBER 2001

<u>RECEIPTS</u>				<u>PAYMENTS</u>	
<u>Subscriptions:</u>	1,924.55			<u>Journal:</u>	
Prepaid for 2002	213.19	2,137.74		Postage	826.14
<u>Donations</u>		54.00		Printing	1,488.76
<u>Administration:</u>				Donations	350.00
Cheque Account Interest		62.96		<u>Administration:</u>	
Investment Account Interest		1,236.60		Insurance	388.00
				Hall Hire	410.00
				Audit	250.00
				Stationery	81.05
				Postage & Phone	76.65
				GST	234.26
				FID & Debits Tax	42.68
<u>Sundries:</u>				<u>Sundries:</u>	
Publications		60.00		OCSA Affiliation	25.00
Posters		10.00		Publications	105.00
Orchid Prints		140.00		Posters	63.72
Trisodium Phosphate		28.00		Orchid Prints	175.00
Pots		145.40		Trisodium Phosphate	54.00
Tuber Bank		251.15		Orchid Bark	90.00
				Projector	300.00
				Screen	195.00
				Cards	4.95
				Weedkiller	20.00
				Bookbinding	58.00
				Roy Hargreaves Trophy	50.00
				Friends of Parks Subs.	10.00
Annual BBQ		46.80		Annual BBQ	56.75
Annual Auction		527.50			
Raffles:				Raffles	13.15
- Meetings	518.20				
- Laelia Painting	159.00	677.20			
Trading Tables:					
- Meetings	125.25				
- Belair & A.P. Society	122.50				
- Aust. Plant Society Show	75.80	323.55			
Annual Show:					
Raffle		225.50		Annual Show Expenses	357.36
Trading Table		2,864.80		Show Consignments	1,758.97
				St. Bernadettes Bond 2002	100.00
				Total Payments	7,584.4
Total Receipts		8,791.20			
Add					
Opening Balances 01-01-01				Closing Balances 31-12-01	
Bank SA Cheque Account	\$ 5,902.16			Bank SA Cheque Account	\$ 6,108.9
Investment Account	20,000.00			Investment Account	20,000.0
				OCSA Conference Investment	1,000.0
Cash In Hand	25.00	25,927.16		Cash In Hand	25.0
					\$ 34,718.3
		\$ 34,718.36			

Hon. Treasurer: Iris Freeman 31-01-02

AUDITOR'S REPORT

I have examined the transactions of the Native Orchid Society of South Australia Inc for the year ended 31st December 2001 and declare that the Receipts & Payments statement above is a true and correct extract therefrom. I have sighted the Investment Certificates & confirm that they amount to \$21,000 as at 31-12-2001.