



Journal
of the
Native Orchid Society
of
South Australia Inc



Urochilus (Pterostylis) sanguineus

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

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.

PRESIDENT

Bodo Jensen:
telephone 8243 0251 work 8347 2005

SECRETARY

Cathy Houston
telephone 8356 7356

VICE PRESIDENT

Bob Bates

COMMITTEE

Peter McCauley
Malcolm Guy

Brendan Killen
David Pettifor

EDITOR

David Hirst
14 Beaverdale Avenue
Windsor Gardens SA 5087
Telephone 8261 7998
Email hirst.david@saugov.sa.gov.au

TREASURER

Iris Freeman
ASSISTANT TREASURER
Bill Dear
telephone 8296 2111
mobile 0414 633941

LIFE MEMBERS

Mr R. Hargreaves†
Mr H. Goldsack†
Mr R. Robjohns†
Mr J. Simmons†
Mr. L. Nesbitt

Mr D. Wells
Mr G. Carne
Mr R Bates
Mr R Shooter

Registrar of Judges: Reg Shooter

Trading Table: Judy Penney

Field Trips and Conservation:

Tuber bank Coordinator:

New Members Coordinator:

Thelma Bridle telephone 8384 4174

Malcolm Guy telephone 8276 7350

David Pettifor telephone 0416 095095

PATRON Mr T. R. N. Lothian

The Native Orchid Society of South Australia, while taking all due care, take no responsibility for loss or damage to any plants whether at shows, meetings or exhibits.

Views or opinions expressed by authors of articles within this Journal do not necessarily reflect the views or opinions of the management committee. We condone the reprint of any articles if acknowledgment is given

Journal Cost \$2. per issue. Family or Single Membership with subscription \$16.00

Front cover from an original drawing by Jane Hutchinson. Used with her kind permission.



JOURNAL OF THE
NATIVE ORCHID SOCIETY
OF
SOUTH AUSTRALIA INC.

SEPTEMBER 2004 VOL. 28 NO 8

CONTENTS THIS JOURNAL

Title	Author	Page
Diary Dates		77
July meeting		78
For Your Information -NOSSA News		79
Field trip/conservation trip dates for 2004		80
How its done	Reg Shooter	81
Australian Native Cymbidiums	Graham Zerbe	81
A.O.F. Awareness Campaign. Ant-scale insect-mealy bug-aphid connection		83
Flower Resurrection of SA Native Orchids in wet weather	Bob Bates	84
Orchid Grid-August 04	Les Nesbitt	84
The Genus <i>Phaius</i>	Malcolm Guy	85
Winter birds of Para Wirra	Edda Viskic	86
Monarto area field trip - 7/8/04	Thelma Bridle	87
<i>Liparis coelogyroides</i> (F.Muell) Benth 1873	Len Field	88

NEXT MEETING 28 SEPTEMBER 2004

Tuesday, 28 September, 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 speaker for the meeting is Bob Markwick with the topic 'Kosciusko in Flower'.

DIARY DATES

See pages 79-80 for comprehensive list
22/23 Sept (Wed/Thurs) Conservation in the South-East
25/26 Sept (Sat/Sun) Conservation weekend at Clare.
2-4 Oct (long weekend) Conservation in the South East
2 Oct. (Sat.) Anstey Hill
5 December Annual BBQ Picnic
13-19 Sept. 2005 WA Orchid Spectacular

NEXT COMMITTEE MEETING

Wed, 6th October at the home of Bodo Jensen. Meeting commences at 7:30 p.m.

AUGUST MEETING - Plants Benched

Epiphyte species

Dendrobium speciosum

Epiphyte hybrids

Dendrobium Golden Glory x *falcorostum*; *Dendrobium* Ellen x Jayhurst; *Dendrobium* Lustrous.

Terrestrial species

Caladenia tentaculata; *Corybas incurvis*; *Corybas diemenicus*; *Chiloglottis trapeziformis*; *Cyrtostylis huegelli*; *Diuris brunatis*; *Diuris corybosa*; *Diuris pardina*; *Diuris palustris*; *Glossodia major*; *Pterostylis curta*; *Pterostylis curta* (variegated); *Pterostylis foliata*; *Pterostylis mutica*; *Pterostylis stricta*; *Thelymitra antennifera*.

Terrestrial hybrids

Caladenia Fairy Floss; *Caladenia* 'Spiderman'; "*Calossodia*"; *Pterostylis* Cutie 'Harolds Pride'; *Pterostylis x ingens*; *Thelymitra* 'Goldfinger'.

Judging results

Epiphyte species

1st *Dendrobium speciosum* grown by Les Nesbitt

No second or third place

Epiphyte hybrids

1st *Dendrobium* Ellen x Jayhurst grown by Malcolm Guy

2nd *Dendrobium* Golden Glory x *falcorostum* grown by Russell Job & Edda Viskic

3rd *Dendrobium* Lustrous grown by Russell Job & Edda Viskic

Terrestrial Species

1st *Corybas diemenicus* grown by Les Nesbitt

2nd *Diuris corybosa* grown by Malcolm Guy

3rd *Pterostylis curta* grown by Les Burgess

Terrestrial hybrids

1st *Caladenia* Fairy Floss grown by Les Nesbitt

2nd *Caladenia* 'Spiderman' grown by Les Nesbitt

3rd *Pterostylis x ingens* grown by Malcolm Guy

Plant of the Night

Corybas diemenicus grown by Les Nesbitt

Popular Vote Results.

Terrestrial Species

Corybas diemenicus grown by Les Nesbitt

Terrestrial Hybrid

Caladenia 'Spiderman' grown by Les Nesbiu

Epiphyte species

Dendrobium speciosum grown by Les Nesbitt

Epiphytic Hybrid

Dendrobium Ellen x Jayhurst grown by Malcolm Guy

Plant commentary on Epiphytes was by Noel Oliver and on terrestrials by Les Nesbitt.

AUGUST SPEAKER

Colin Jennings, our speaker for August, gave a talk and slide show on some spectacular award winning orchids. I was particularly impressed with the beauty of some of the slides of *Sarcochilus*.

FOR YOUR INFORMATION - NOSSA NEWS

NEW MEMBERS

The Society has had a number of new members joining over the last few months. They are Mr A. Wurst, K. Krassay, Mr W. Olsen, Mr M. Plaister (Tas.), Ms A. Coventry & family, Ms N. Shipley, Mr & Mrs P. French, Mr & Mrs B. Gunn, Mr & Mrs D. Higgs and J. Mill. The Society and committee would like to wish a warm welcome to all.

TUBER BANK - 2004-2005

This is a reminder to Terrestrial growers to check your pots to see what tubers you can donate to the tuber bank.

Please remember to include locality data with the tubers. The tuber bank depends on growers supplying tubers for the younger or new growers and to ensure a good stock of plants is widely available.

Please advise Malcolm Guy - by 2nd November

15 Naomi Tce, Pasadena, SA

Phone: 8276 7350

The list of tubers available is published in the December Journal

ARTICLES

The deadline for articles to be published in the journal is now 17 days prior to the months meeting. This is a slight increase from the previous deadline as there recently has been a change of printers and a subsequent change in time the printer requires the copy.

I am occasionally offered articles that never arrive and then I am required to fill in with an equivalent sized article at the last minute. Please endeavour to pass on your article to me at your earliest convenience.

Ed.

XMAS RAFFLE

As with other years a Christmas Raffle will drawn at the November meeting.

Donations of items to put towards the basket can be brought in to the September and October meetings. Please see Jill or Reg Shooter.

Tickets will also be on sale Sept. and Oct. meetings

FIELD TRIP/CONSERVATION TRIP DATES FOR 2004

22/23 Sept (Wed/Thurs) Conservation in the South East.
Please contact Cathy Houston for details.

25/26 Sept (Sat/Sun) Conservation weekend at Clare.
Please contact Cathy Houston for details.

2-4 Oct (long weekend) Conservation in the South East.
Please contact Cathy Houston for details.

9 Oct (Sat) Field trip around Kersbrook
Including a private property visit and Roachdale.
Meet: 10 am at public toilets, Kersbrook. Bring lunch.

10 Oct (Sun) Field trip to Scott Creek Conservation Park
Bob Bates will show members some of the
Thelymitra species recently described by Jeff Jeanes.
Meet: 10 am Alamanda Mine carpark, Dorset Vale Road.
Bring lunch.

16 Oct (Sat) Conservation trip to Belair NP
Pterostylis cucullata weeding trip with DEH, TPAG.
Meet: 9.30 am at main entrance. Bring gardening gloves, pruners, Lunch,

7 Nov (Sun) Field trip to Lobethal
Bob Bates will show members further recently
described *Thelymitra* species.
Meet: 10 am Lobethal Bushland Park carpark. From Lobethal follow
sign to Gumeracha. Park is on left.
Bring lunch.

4/5 Nov (Sat/Sun) Conservation in the South East
Please contact Cathy Houston for details.

13 Nov (Sat) Field trip to Halbury/Clare
Meet: 10am Halbury roadside (RHS just before Halbury out of
Balaklava). Bring lunch.

14 Nov (Sun) Conservation/Field trip
NOSSA/DEH monitoring and recording of flowering *Pterostylis*
despectans at Mount Bryan and Koolunga.

27/28 Nov (Sat/Sun) Conservation in the South East
Please contact Cathy Houston for details.

8/9 Jan 2005 SE Conservation weekend. 25-28 Mar 2005 Easter in the South-East.
Further details for 2005 trips will occur in a later Journal.

Alternative trip
2 Oct. (Sat.) Anstey Hill. Meet 10 am opp. Oval cnr Perseverance Road &
Memorial Drive, Tea Tree Gully. Car parking available by oval.
Wear good walking shoes. Estimated time 3 hours.
Contact: David or Rosemary 8261 7998.

There was a nice display of different terrestrial orchids benched at the August meeting but only four epiphytes, perhaps the growers were saving them for the upcoming shows. One of the epiphytes that caught my eye was *Dendrobium speciosum* var. *capricornicum* grown and flowered by Les Nesbitt.

The variatal name *capricornicum* refers to the region of distribution on the Tropic of Capricorn in northern Queensland. *Dendrobium speciosum* is a very variable species consisting of six varieties stretching from northern Victoria along the eastern coast to the tip of Cape York Peninsula. All the varieties prefer rocks as a host in their natural habitat, the common name being Rock Lily however some, particularly the variety *hillii*, will often prefer trees as a host. In cultivation they will grow quite satisfactorily in a pot with a compost of large pieces of bark with the addition of some pieces of sandstone mixed in. These plants can become quite large and weigh many kilos when mature so a large container should be used to pot them in. A warm sunny position suits them best and with their thick rigid leaves can take quite strong sunlight. Like most Australian Native orchid epiphytes they prefer to be kept on the dry side during the cooler winter months but appreciate copious watering when growing strongly. The very occasional dose of a weak, low nitrogen fertiliser can be beneficial, but too much can result in lots of green growth at the expense of flowering.

The plant that Les exhibited is one of the smaller varieties having short, squat pseudobulbs 10 to 25cms tall producing racemes (sometimes more than one) from the apex of the bulb some 35cms long of white to cream flowers crowded on the raceme the flowers not fully opening. In later years as the orchid ages, racemes are produced from dormant buds down the pseudobulb, this can occur over a number of years even on leafless bulbs therefore these bulbs should not be removed before they are really dead indicated by excess shrivelling.

Den. speciosum is a very desirable if somewhat frustrating orchid to grow. They take a long while to mature to flowering size from a seedling varying from 5 to 10 years; can become very large, and they tend to have years where they do not flower. However when they do flower it makes all the effort worthwhile.

Australian Native Cymbidiums

Graham J. Zerbe

There are three Cymbidiums native to Australia. All are completely different in their make up and appearance. Their habitats vary although there is some over lapping in the districts. The good thing about all of them is that they all grow extremely well in our conditions.

Taking them individually, *Cym. canaliculatum* is probably the most popular of the three. This species is unique in its own right, the short, thick, channelled leaves and smallish pseudobulbs are features which serve the plant well in its habitat, which extends from northern parts of Western Australia (Kimberleys), Northern Territory, from North Eastern Queensland to Central New South Wales, (Cape York to Hunter River).

With an area of this magnitude there are a number of growing conditions prevailing. Ranging from the sclerophyll forests and woodland of northern Australia and inland regions, the western slopes of the dividing range. The orchid is rarely seen near the coast in its southern extremes of the range, but in the tropics it often grows on trees by the sea. The most noticeable common denominator though is the fact that *Cym. canaliculatum* depends on the monsoonal conditions, which prevail in this area.

The flowers are small varying in colour from the darkest red/black to the Alba form of apple green with a white labellum, and many combinations of these colours in between, spike habit can be anything between upright to pendulous. Flower numbers can be from 30 to 60 plus arranged attractively around the raceme.

Cym. madidum, this plant is vastly different in its growth habit, large bulbs, large strappy type leaves, and it is found in to be happier in the moister habitats, like rainforests, swamps and high rainfall areas. They are found growing on trees, rocks, boulders and cliff faces. They can develop clumps up to two metres across, and preserving their species by allowing seedlings to germinate in the fibrous root systems of other epiphytes. Some plants have been found growing in sandy soil under light, coastal scrub. The habitat is from near the top of Cape York in Queensland to the Hastings River in New South Wales.

The flowers range in colour from golden yellow, green to greeny brown. The spike habit is arching to pendulous, flower numbers are from 10 to 70 and fragrant, 20 to 30 mm across. There is one variety that has been named, *Cym. madidum* var. *Leroyi*, this one is endemic to an area from Cooktown to Cairns and usually grows on species of *Melaleuca*, which has papery bark.

Cym. suave, again quite different in its growth habit, hardly any actual bulb and quite grass like leaves. The area of which it is endemic is from north eastern Queensland to south eastern New South Wales (Cooktown to Eden).

This orchid is a familiar sight in the moister forests and woodlands of the eastern side of the dividing range, from coastal to 1200m elevations, in the ranges and tablelands.

The flowers again are quite small 20/30 mm across highly fragrant. Colours range from light to dark green or a brownish green, and sometimes blotched, *Cym. suave* has a trademark labellum, brown and yellow. Spike habit is arching to pendulous approximately 30cm long and flowers are crowded. It is noted that there has been estimated to be 10,000 flowers on large plants, and the sweet fragrance of the flowers has been noticed from considerable distance.

It is also noted that *Cym. suave* is an orchid that doesn't like to be disturbed once it is established.

These plants have been used a number of times in hybridizing, with other Cymbidiums with considerable success. The ones that I am going to dwell on are the Australian ones.

Cym. suave x *Cym. madidum*: *Cym. Kuranda*

Cym. canaliculatum x *Cym. madidum*: *Cym. Little Black Sambo*

Cym. suave x *Cym. canaliculatum*: *Cym. James Weebeck*

Cym. Kuranda x *Cym. canaliculatum*: *Cym. Aussie Trio*.

The one that I am more familiar is *Cym. Kuranda*. It was purchased from Gordon Brooks approximately six and a half years ago, my wife and I have grown this plant under 70% black and 70% beige shade cloth during this time, the plant has been a very rewarding plant to us apart from the flowering in early December and that we cannot share it with you we have shown it at other clubs and December 2003 we were pleased to receive the first Quality Award for this crossing in Australia. The plant had some 34 spikes and 1,300 flowers on it. The plant is so easy to grow there are no special requirements it just grows and shows itself off each year, I have divided a brother/sister to this plant and it didn't appear to mind, flowering the next year. There are three similar plants, one is a clean green, one is a muddy green colour, and these two have the characteristic labellum of *Cym. suave*. The other one of which I am familiar is very similar to *Cym. madidum*, this particular clone has been used in a successful Intergeneric crossing.

Cym. Little Black Sambo is seen occasionally on the show bench and of course has its differences with colours, ranging from greens, yellows, reddish, a number of margined and blotched segments depending on the parents used.

Cym. James Weebeck, unfortunately I have not seen in the flesh although it was registered a number of years ago.

Thanks to one of our members who has an interest in this type of Orchid the cross has been remade and god willing I will get to see the results.

Cym. Aussie Trio is another that is only recently been registered. I have deflasked the flask and am patiently waiting for the progeny to reward us.

Australian Orchid Foundation
Awareness Campaign.

The little black ant - scale insect -mealy bug - aphid connection

These four groups of insects can work hand-in-glove to make a living at the expense of photosynthetic production of your orchids. The latter three literally suck the sap from the plant for their own needs and also produce sugary exudates, which the ants feed on. In turn the ants carry the sapsuckers to the choicest localities, such as young emerging leaves, expanding buds, or active root tips where nutrient concentration is at its greatest. Loss of such nutrient from the plant can have a seriously deleterious effect on its growth and ability to flower properly. Worse still, the insects may, in the meantime, also inject pathogenic virus into the plant, which spells its doom.

To deal with such a conspiracy effectively requires a multi-pronged response from the grower. Firstly you need to be patient and watch where the ants are running to and from, so that you can discover the location of the nest. If it is in a pot its easily destroyed - tip the plant and mix onto the soil outside of the greenhouse or growing area, remove the plant, spread the mix and spray it with a mixture of Pest Oil and pyrethrum; also spray the plant. If the nest is on a concrete slab, or brick wall, you'll have to use a bit more guile and lay an ant poison bait. An effective recently introduced one is Mortein Ant Sand; there are various other types available.

Having dealt with the ringleaders, next get the subordinates. A close examination of all plants is important to locate infestations of scale, aphids and mealy bugs, remembering that they can hide in obscure places such as down in leaf sheath bases and on buried roots and other out-of-sight spots. Remove all infected plants individually and spray them with the above-mentioned mix or use a soft toothbrush with the same or detergent. It is important to use some sort of surface tension breaker like soluble oil or detergent or methylated spirit to penetrate the waxy coat of the insects and kill them. Don't use more of such chemicals on the plants than needed as they may damage soft tissues.

Remember that dealing with all culprits is important - not just the obvious sapsuckers doing the immediate damage.

Many of you will have heard of resurrection ferns (genus *Cheilanthes*, *Pleurosorus* etc) which are our most common SA ferns. These desiccate in dry weather and may wait six months looking totally dead, yet just hours after rain will unfurl their fronds to look fresh and new. Some of our native orchids are also capable of such resurrection, if on a less spectacular scale. I was reminded of this on a recent hot, dry, winter day when temperatures through much of South Australia reached 30 degrees Celsius. Blooms of winter flowered genera such as *Corysanthes* (helmet orchids) and *Diplodium* (shell orchids/ completely collapsed in the dry northerly winds and looked particularly shapeless. This seemed a bit of a problem as *Corysanthes incurvus* had only just opened its flowers a few days earlier. But as so often happens that hot day was followed by a rainy night and by the next day the orchid flowers had regained their shape and most looked as good as new. The pollinia were still fertile and stigmas receptive, tiny fungus gnats whirled around the now resurrected flowers. Not all flowers recovered their shape completely but all seemed capable of doing their job ie of attracting pollinators and being fertilised. Some spring flowered species such as the sun orchids *Thelymitra antennifera* and *T. rubra* are often seen at the end of a very hot day hanging listlessly, with dried edges to the tepals, yet they too may recover quite well after a cool damp night, even opening widely the next day, the tepals glistening with droplets of water. I guess many other species have flowers which recover by taking in the overnight dews, certainly in our dry state orchids must have evolved all sorts of techniques for beating heat and drought and resurrection after rain is one of those strategies!

ORCHID GRID - August 04

Les Nesbitt

Orchids flowering in the grid during August were *Corybas diemenicus*, *Cyrtostylis robusta* and *Pterostylis nana*. *Corybas incurvis* did not flower even though there are some 20 healthy leaves in a tight clump, twice as many as last year. The thin soil in the grid is not very fertile. It is thirsty grey soil overlying an orange clay layer with soft sandstones imbedded. Orchids grow in it quite well once established. They would grow much better in deep fertile soil but then so would the weeds. I do not have much trouble with weeds yet. In the first week of the month 5.5" of rain fell and the runoff filled the local creeks and dams. The entrance track was too boggy to drive on so I had to walk in to the property. I was worried that the orchids may rot away but in the end only one pot of *Caladenia* and two greenhood pots developed leaf rot. The cold temperatures and strong winds probably helped although the leaves and soil remained wet for the following two weeks. In the third week of August the clouds rolled away and the sun came out drying everything off. During the month a plant in bud of the hybrid *Diuris* Pioneer 'Big Ears' was planted out from a pot into the grid.. Seedlings of *Thelymitra benthamiana* were deflasked directly to the grid. Seedlings of *Glossodia major* and *Thelymitra luteocilium* deflasked in June are still surviving but the seedlings of *Caladenia tentaculata* and *Thelymitra rubra* seem to have rotted away. Two seedling plants of *Caladenia tentaculata* were transferred from a pot to the grid and they were still surviving. Hopefully the fungus has been transferred with them. After 12 years I saw my first kangaroo on the block this month. There has always been plenty of evidence that kangaroos visited but they remained invisible at the times I am there. This one was a half grown grey and it was in the bush just at the edge of the firetrack near the grid. So far no orchids have been eaten in the grid.

The genus *Phaius* has about fifty species distributed throughout Africa, India, South East Asia, Polynesia & New Guinea. Four species are found in Australia.

Species of *Phaius* are bulky, evergreen terrestrial orchids with pseudobulbs or stems in clumps carrying large, thin textured pleated leaves. The inflorescence arises in the axil if a sheathing bract.

The flowers of *Phaius* are usually large and have free perianth parts of similar shape and size. The labellum is joined at the base of the column and is three lobed with a spurred or pouched base.

The species of *Phaius* like moist to wet soils and grow in swamps, grasslands and forests. Plants are evergreen putting on most growth in spring and summer, flowering in spring on growths that have recently matured.

Phaius species have forms that self pollinate, however some insect pollinating may take place. *Phaius* are shade loving orchids that require warm, humid, airy conditions, a rich humus based soil which drains freely and regular watering throughout the year. Extra warmth is needed in temperate climates.

These plants can be propagated from the flower stems, cut into lengths and laid on damp sphagnum moss.

Phaius australis

Pseudobulbs are roundish 7cm x 7cms becoming crowded with age, four to seven large thin textured dark green leaves up to 1.25mtrs long 10cms wide the 4 to 16 flowers are produced on 2mtr tall stems. The flowers are reddish brown with yellow veining on the inner parts and white outside and the three lobed labellum protrudes forward. This species is found in from northern NSW to south eastern Queensland. It's preferred habitat is swamps and low-lying areas usually in coastal areas. Given the right conditions this species is easy to grow, and flower.

Phaius bernaysii

This was originally named *Phaius australis* var. *bernaysii* to which it closely resembles in all parts the difference can be seen in the flowers which are sulphur yellow inside and white outside. Like others of this genus it prefers swampy moist areas, the flowers are most attractive which has led to over collecting and is now quite rare in the wild.

Phaius pictus syn. *amboinensis*

This species has stems that are slightly swollen at the base carrying up to five large apical leaves it has two distinct sheathing bracts from where the 90cm flower stem arises bearing 4 to 20 5cm brick red flowers with yellow stripes the outside of the flowers are a lovely buttercup yellow. This species grows in rainforests usually close to streams in boggy damp patches it is endemic to north eastern Queensland at between sea level and 800mtrs.

Phaius tankervilleae

This is the species most common in cultivation it has congested 7cm x 7cm ovoid pseudobulbs giving rise to up to seven dark green thin textured leaves. Flower stems can be up to 2mtrs tall but are more usually 1.5mtrs bearing as many as sixteen brick red flowers with a tubular pink labellum having a yellow centre. This species is not confined to Australia but can be found in New Guinea, Indonesia, Malaysia, India and China. In Australia it extends from northern NSW to north eastern Queensland where it grows in moist wet habitats at altitudes from sea level to 900mtrs. The flowers are very showy and given the right conditions are very easy to grow and flower. In Australia it is now quite rare due to excessive collecting from its habitat.

Reference

"Native Orchids of Australia" David Jones

Late July and the morning starts with a talk about the Birds for Biodiversity organised by the Wildlife Support Group and the Friends of Para Wirra Recreation Park. The recovery project of multispecies for declining birds of the Mount Lofty Ranges is operating where less than 10% of the original native vegetation remains. The Aboriginal name means: *The river with scrub* that is Para Wirra a mosaic of plants and animals around the South Para River and its tributaries, Wild Dog Creek.

Our morning walk through the Golden wattle grove and beneath the Pink, blue and long leaf gums followed a track beside the lake. In the leaf litter under the River Red gums near the water's edge, grew a colony of *Corybas dilatatus*, two shiny maroon helmets held above bright green leaves, announcing to the mushroom gnats that they were available. The yaccas and heath understory encouraged the New Holland Honeyeaters as they foraged the *Callistemon*, *Melaleuca* and *Leptospermum* among the scattered *Callitris preissii* pines. I was reminded to look up when a noisy flock of white winged choughs announced their arrival and began feeding in the leaf litter. The green and mossy track verges were abundant in the tiny mosquito mimics, *Acianthus pusillus*, and the Red Midge orchids, *Genoplesium rufum* spread in the moist spots.

The emus and magpies were frequent and friendly with their favours of song and dance. They seem to supplement their omnivorous diet by digging up tubers of dwarf Greenhoods as a patch of *Pterostylis nana* was discovered in upturned disarray. These were easily found in many areas whilst the Blood Greenhood preferred the lower sites of the lake edging scrub.

With gnats about and mosquitoes laying rafts of black peppery eggs on any still water surface, it was not surprising to find *Cyrtostylis reniformis*, the small gnat orchid peeping through among the leaves of *Microtis unifolia*, one of many orchids seen in leaf form only, The dainty delights that open in Winter are not brightly coloured but have alluring smells and shapes for pollinators to investigate. The afternoon track lead to the Devil's Nose on the Western side of the range and bird sightings were few due to the promise of rain. The appearance of the bright Robin Redbreast and the Crescent Honeyeater feeding amongst the *Banksia marginata* and the Sheoaks highlighted the walk beside the carpets of Sundews. The full floral splendour of pure, white flowers opened next to red and green rosettes of sticky leaves, enticed the gnats to feed and be digested by these weird insectivorous plants, the scarlet *Drosera glanduligera* and the green *D. whittakeri*.

The channelled leaves of the Sun orchids were spearing the ground and I wondered which of the four species they were likely to be: either *Thelymitra antennifera*, *T. rubra*, *T. pauciflora*, or *T. aristata*. The purple Hardenbergia flowers contrasted to the orange flame heath bush and the perfumed air encouraged the Wattlebirds who were busy calling through the treetops about the best food find, competing with the Galahs, Parrots and Lorrikeets for title of noisiest flying band. Lower down, the Thornbills travelling in flighty groups, came to inspect the shrubbery and chirped around as the Superb blue wrens became more visible.

The New Holland honeyeaters repeated their calls as I discovered more orchid leaves promising a plentiful Spring flowering of *Diuris pardina*, *D. affin. corymbosa*, *Caladenia behrii*, *C. carnea*, *C. leptochila*, *C. patersonii*, *C. reticulata*, *C. rigida*, or *C. tentaculata*.

A return visit may be necessary to fossick out the elusive Purple bearded orchid, *Calochilus robertsonii*, or the vivid Bluebeards, *Cyanicula deformis*, or to find the Purple Cockatoo orchids, *Glossodia major* and the *Leptoceras menziesii*, Hare orchids in full bloom. The abundance of Greenhoods including *Pterostylis alata*, *P. longifolia*, *P. nutans*, *P. pedunculata* and *P. robusta* in clumping colonies made up for the lack of birds whose calls were rarely heard in the distance. Threats to birds include habitat clearance, fragmentation and degradation, introduced predators, weed infestation, adjacent agriculture, loss of year round food sources and competition from 'increaser species' like noisy miners are largely the result of human manipulation of the landscape.

The Friends of the Para Wirra Group are actively addressing these issues and have been recently fighting bridal creeper with spore water from rust and weed control. Many researchers, landholders, community groups and conservationists have been cooperating on Bird Surveys for this special region. Eight bird species are already regionally extinct and many others have declined including the Diamond Firetail and the Brown Treecreeper. The rich ecological legacy is shrinking as the bird numbers fall. Prevention of clearing and habitat restoration are priorities in linking remnants leaving dead wood and trees in place to develop hollows for future nests.

Threats to native orchids follow similar lines with loss and degradation of original habitat structure. Yet here at Para Wirra Recreation Reserve there seems to be a working balance on the road

to recovery for the birds and the flora they depend on.

[Plant list by Rosemary Taplin 1999]

The roadside sheep-grazed paddock at Callington was green from the recent rains and it was not long before the first *Pheladenia (Caladenia) deformis* were found. Only one white bud was located but the blue of those in flower was brilliant in the morning sunshine. *Caladenia stellata* nearly all had short stems. More than 20 were in bud with half that number in flower. An attractive flower and the first flowering of the *Caladenia* species, these creamy-yellow spiders were eagerly photographed.

Diuris palustris were fewer in number than found here previously and only one very long-sepal flower was open. *Wurmbea dioica* were in full flower and Adder's tongues (*Ophioglossum lusitanicum*) were plentiful between the clumps of sedge. Broad, hairy *Caladenia stricta* leaves had buds developing in the axils. A colony of *Pterostylis* leaves were the subject of debate, until eventually one flower was found, confirming *P. robusta*.

Monarto Conservation Park had many *Caladenia* species developing buds, including *C. capillata*, *C. cardiochila* and *C. stricta*. Numbers for all species were good this year, so the park should be delightful in a few weeks time. *Pterostylis nana* and *P. sanguinea*, both in mallee form, were in flower. Several large colonies of *P. dolicochila* had flowers and a colony of *P. aff robusta* was flowering.

By now the warm, afternoon sunshine had everyone removing jumpers as we arrived at Ferries McDonald Conservation Park. Almost immediately *C. capillata* was found flowering in the pale sand, and this continued wherever we walked in the park. Again the early spring-flowering *Caladenia* species had buds developing. *P. cycnocephala* were still in bud whilst the taller *P. mutica* had flowers open and very attractive with the afternoon sun shining through the hoods, although of course, you did have to lie on the ground to see this. *Cyrtostylis robusta* and *Acianthus pusillus* leaves were plentiful in both parks, but neither species flower well in this mallee environment. A colony of *P. nana* 'Hale', with red-brown tips to the galea, were in flower. Other *P. nana* colonies were the mallee form with small flowers and hairy stems.

Nine NOSSA members and a visitor from Victoria all enjoyed a lovely day of sunshine, searching for orchids and were pleased to see many buds developing.

Orchids recorded 7/8/04

	Callington	Monarto	Ferries
<i>Acianthus pusillus</i>	1	1	1
<i>Caladenia capillata</i>		b	f
<i>C. cardiochila</i>		b	b
<i>C. stricta</i>		b	b
<i>C.sp.</i>		b	
<i>Cyrtostylis robusta</i>	1	1	1
<i>Diuris palustris</i>	f/b		
<i>Eriochilus cucullatus</i>		1	
<i>Genoplesium rufum</i>		s	
<i>G. nigricans</i>		s	
<i>Microtis sp.</i>	1	1	
<i>Pheladenia deformis</i>	f/b		
<i>Pterostylis cycnocephala</i>	b		b
<i>P. dolicochila</i>		f	
<i>P. mutica</i>			f
<i>P. nana</i> - mallee		f	f
-'Hale'			f
<i>P. plumosa</i>		b	
<i>P. robusta</i>		f	
<i>P. aff. robusta</i>		f	
<i>P. sanguinea</i>		f	
<i>Pyrorchis nigricans</i>	b		
<i>Thelymitra sp.</i>		s/l	

Monarto Ferries

With the common name of the fairy tree orchid because it is the smallest and daintiest of the genus in Australia. It is named from its resemblance to the Asian genus *Coelogyne* and the Greek word *ides* meaning resembling (resembles *Coelogyne*) This is due to its large stigmatic area that is similar to the *Coelogyne* genus.

Previous names *Sturmia coelogynoides* F.Muell. 1860

Leptorchis coelogynoides (F.Muell.) Kuntze 1891

Liparis leptorchis Bailey 1898

A common and widespread species that is found from the Hunter River in N.S.W. to the Bunya Mountains in Queensland although Dockrill claimed that it had been recorded much further north at Thorntons Peak between Daintree and Bloomfield although I have never seen it north of Bunya Mountains.

In this growing area it is almost a true epiphyte whereas others of the genus can be epiphyte, lithophyte or terrestrial. While very similar to *Liparis reflexa* it is smaller and has less flaccid leaves and is found in small clumps scattered on tree trunks and lower branches of mature trees with its roots buried in moss, which gives protection to this root system. In the more southern areas it favours lower altitudes in cool moist gullies of the rain forests while further north it tends to grow at higher altitudes while still maintaining its growing habit of cool moist locations. At times it can be found growing in exposed conditions on trees such as the *Casuarina* and other non rainforest trees but these plants are usually smaller, stunted and bleached with a yellowish appearance and if they dry out to much will quickly die.

Mature pseudo-bulbs usually have two sometimes three long, slender thin leaves from 50 to 150mm long that are pale green in colour. Older bulbs are 8 to 12 mm long, ovoid, deeply grooved, wrinkled and covered with papery bracts while younger bulbs have small sheaving leaves which die as plant ages. For an epiphyte these bulbs are short lived.

Flowers which number 18 to 20 are small in size, about 18mm across, coloured pale green to yellowish and only grow from the centre of new growths on inflorescences 100mm to 200mm long. These can be erect, arching or pendulous and are also quite thin. Like most *Liparis* the flower odour can be quite unpleasant and at other times the odour can be completely absent. While not a large flower it can be eye catching if grown into a healthy large clump with a large number of flower scapes. Flowering period is from November to February.

Cultivation. Plants respond to good cultivation and need good light to flower. If mounted place on a good slice of tree-fern fibre or some similar type material with some bush moss around the roots to maintain moisture as long as possible while plant is becoming established and if potted place in a deep saucer with a good moisture retentive mix and whether the plant is potted or mounted place in a cool spot near a breeze if possible. A shady spot near the floor of the bush-house where the humidity is high would be best. Remember the plant should not be allowed to dry out and water well during flowering and the growing period. Water should be kept to a minimum during winter as bulbs will easily rot if over watered as they are susceptible to fungal rot during these cooler months, so careful use of water is most important and also careful use of fungicides can play an important part. Protecting new growth, new leaves and young racemes from insect attack is also most important.