

Journal of the

Native Orchid Society of South Australia Inc



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 from the Management Committee no person is authorised to represent the society on any matter. All native orchids are protected plants in the wild. Their collection without written Government permit is illegal.

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2002 - NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA - 25 YEARS

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NEXT MEETING 25 JUNE 2002

Tuesday, 25 June, 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. Bring your orchids to fill the display table.

Our speaker for June is Peter McCauley to fill us in on the Orchid Conference in Borneo.

DIARY DATES

7 July Conservation trip to Halbury

14 July Corybas unguiculatus special

28 July Conservation trip to Mount Bryan

30 Aug.-1 Sept. Southern Hinders Ranges Field Trip

21-22 Sept. 2002 N.O.S.S.A. Spring Show

23-28 September Kangaroo Island Field Trip

1 December Annual BBQ

18-21 Sept. 2003 16TH Australian Orchid Council Conference Adelaide, hosted by O.C.S.A.

NEXT COMMITTEE MEETING

Wednesday 3th July at the home of David & Rosemary Hirst. Meeting commences at 7:30 p.m.

MAY MEETING

Plants Benched

Terrestrial Species:

Acianthus pusillus, Corybas anconitiflorus, Corybas hispidis (2 plants), Corybas pruinosus, Pterostylis abrupta, Ptst. collina (two plants), Ptst. fischii, Ptst. hians, Ptst. nana 'big bush', Ptst. obtusa, Ptst. ophioglossa, Ptst. procera (two plants), Ptst. reflexa true.

Terrestrial Hybrid:

Pterostylis x conoglossa.

Epiphyte Species.

There were no species benched

Epiphyte Hybrids

Dendrobium Aussie Angel x Lorikeet; Den. Colonial Campio; Den. Hilda Poxon x speciosum var pedunculatum; Den. Warrior; Den. Hilda Poxon x Star of Gold, Den. Aussie Ira x Memoria Ray Hill, Den. Jesmond Dazzler (3 plants); Den. Princess Stephanie; Den. bigibbum x atroviolaceum; Sarcochilus Otways Sunset; Sarco. Velvet

Judging

Terrestrial Species Results Grower 1st *Corybas hispidus* grown by Malcolm Guy 2nd *Pterostylis nana* grown by Malcolm Guy 3rd *Acianthus pusillus* grown by Malcolm Guy

Terrestrial Hybrid

1st Pterostylis X conoglossa grown by Malcolm Guy

Epiphyte Hybrids

1st *Dendrobium* Warrior grown by Brendan Killen 2nd *Dendrobium* Jesmond Dazzler grown by Brendan Killen 3rd *Dendrobium bigibbum* x *atroviolaceum* grown by Kevin Western

Popular Vote Results Epiphyte Hybrid *Dendrobium* Princess Stephanie grown by Brendan Killen

Terrestrial Species

Corybas hispidis grown by Malcolm Guy

Terrestrial Hybrid

Pterostylis X conoglossa grown by Malcolm Guy

Orchid of the Night

Corybas hispidus

Commentary given on Terrestrials by Peter McCauley Commentary given on Epiphytes by Les Burgess

MAY SPEAKER

Les Nesbitt spoke at the May meeting on how he developed an early interest in orchids and ultimately in their preservation, the development of his business of growing and selling tubers and more recently, the purchase of a scrub block at Bridgewater which has a good number of orchids growing on it even though it is very rocky and his hopes for the future. The talk was rounded off with a slide show illustrating the success of the tuber growing venture and of his prowess with growing award winning pots of terrestrial orchids.

FIELD TRIPS FOR JULY

Sunday 7th July CONSERVATION TRIP TO HALBURY

Weeding and other conservation activities.

Please meet on the Balaklava to Auburn Road, just before Halbury at loam. Bring gloves and light pruning tools, also lunch.

Sunday 14th July *CORYBAS UNGUICULATUS* SPECIAL

Field trip on the Fleurieu Peninsular for this uncommon helmet orchid.

Please meet at Kuitpo Forest HQ on Willunga-Meadows Road at 10am. Bring lunch.

Sunday 28th July CONSERVATION TRIP TO MOUNT BRYAN

Marking of Pterostylis despectans rosettes at several sites in the area.

Please meet at Mount Bryan township out of Burra at 10.30am and remember to bring lunch.

Please contact Thelma Bridle 8384 4174 for any further details.

Mt Lofty Botanic Gardens

Arrangements are being made for N.O.S.S.A. members to meet with a staff member Friday 5th July to survey the property for orchid species. Contact Cathy Houston if you are interested.

The Annual dinner at the Buckingham Arms (31 May) was attended by 26 members who enjoyed the social gathering and the smorgasbord meal.

THE SOCIETY IS STILL IN NEED OF A TREASURER

"I am only one. But still, I am one. I cannot do everything, but still I can do something. And because I cannot do everything, I will not refuse to do something that I can do."

Edward Everett Hale

Give it some thought.

We also need a supper convenor for the June meeting.

Question Time

Members are invited to ask the judges one question following the plant commentary.

Judging Classes: Date for next Judges Meeting: Saturday 6th July at 9:30am

Phone Number

The Phone Number given for the Editor on the inside cover of the journal has been incorrect. If you have been trying this number next time you should have more success. Apologies for any inconvenience.

WAS THERE A RED DOT ON YOUR JOURNAL?

If so, this means you have fallen behind with subscription payments. Failure to rectify this will mean that you may not receive future journals.

SOUTH AUSTRALIAN WETLANDS WORKSHOP

Thelma Bridle

On Feb 16th Bill Dear and I attended a South Australian Wetlands Workshop held at the Botanic Gardens and organised by the Conservation Council of SA. We learnt that the Ramsar agreement (named after the town in Iran where a convention was held in 1971) is a world-wide co-operation to protect wetlands of significance. There are 8 specific criteria to define a significant wetland, but countries can select and modify guidelines according to individual circumstances. Australia has 57 wetlands listed under the Ramsar agreement, but only 4 in SA. The Coorong, Murraylands, Coongie Lakes and Bool & Hacks Lagoons are currently listed. Whilst many of the swamp wetlands in SA are small, they can still be significant as remnant habitats for rare animals and plants, whilst helping to maintain the biodiversity of these areas.

A number of speakers covered topics such as: the Coorong with particular emphasis on water bird populations, River Murray and flooding/drying regimes, Aboriginal relationship to and knowledge of wetlands. They all discussed water management, the importance of revegetation and future management of wetland sites. About 50 people, with a variety of interests, attended the day and there was opportunity to raise specific topics and discussion on wetland management.

Following the meeting NOSSA submitted a written response to the 78 page 'Draft Wetlands Strategy for South Australia' with the following response detailing methods for conservation of orchids in swamps, formulated from first-hand experience, discussion with other groups keen to conserve swamps for various species of plants and animals and with regard to current discussions of 'best management' plans for such areas, bearing in mind that fencing alone causes a decline in orchid populations from lack of light and air circulation as other more rampant species take over. The time for response was short, but if you have any further comments or suggestions, please let me or someone on committee know, so that these can be incorporated into any future submissions.

If you would like to read the 'Draft Wetlands Strategy for SA' document, please let me know.

The response referred to above will appear in a future journal (Ed.)

HOW ITS DONE Reg Shooter

The number of plants on the bench was very light at this meeting as was the attendance. Perhaps it was the 6c degree temperature which put members off or the fact that there were a number of orchid shows on at that time. In spite of that the orchids that were benched were very interesting and I thank those members who brought plants in. Malcolm Guy did very well sweeping the board with his terrestrials. He won first prize for his *Corybas hispidus*, plus the popular vote and orchid of the night, he got second for *Ptst. nana* and third for *Acianthus pusillus* in the species section and first for *Ptst.* x *conoglossa* in the hybrid class. Malcolm grows most of his terrestrials on benches alongside the house under shade. He says sometimes this has the effect of causing the stems to grow toward the light at an angle which is a pity because they grow so very well under these conditions, particularly the *Corybas hispidus* he exhibited at the meeting. Malcolm has written an article on this fascinating species elsewhere in the Journal.

We are getting used to seeing Brendan Killen putting interesting orchids on the bench. This month was no exception. He won first prize with *Dendrobium* Warrior, (Noel Oliver has an article elsewhere in the Journal on this lovely orchid.) The plant that I liked, as did the members, because they voted it best in the popular vote, was *Dendrobium* Princess Stephenie.

This was made by the now extinct nursery Limberlost in North Queensland in 1962. It was registered as Den. Roger Sander the parentage of which is *Den. mirbelianum* x *bigibbum. Den. mirbelianum* is a species from North Eastern Queensland extending into New Guinea. It is similar in growth to *Den. discolor* which when crossed with *bigibbum* produces a vigorous free flowering hybrid. The plant benched by Brendan had one arching raceme of many flowers of a lilac/purple hue having a typical *bigibbum* type flower. As both the parents are from the tropical north of the continent. to ensure reliable flowering some additional heat would be required in Adelaide. Another essential requirement of these types of flowers is plenty of light. Up until recently Brendan has been able to provide these conditions however he tells me trees are growing rapidly on his property's boundaries and is affecting the high light requirements. It will be interesting to see how the orchid fares in the future.

Pterostylis Trunkfish

Les Burgess

A plant of *Pterostylis* Trunkfish was benched at the April meeting by me. Here are a few details of this interesting hybrid.

Pterostylis Trunkfish is a hybrid between two species, *Ptst. truncata* and *Ptst. fischii*. The crossing was made by Les Nesbitt on 16th May 1985 and first flowered in May 1991. It was registered by Les in 1992.

The flower spikes are of the cauline type. This means the flowering plants have no rosette at the base but have leaves on the flowering stem. Plants that produce rosettes will not flower that year but will build up for next year. In my opinion this crossing is an improvement on both parents picking up colour from *Ptst. fischii* and shape and colour from *Ptst. truncata*.

The tubers multiply readily but they do not like to be potted in too large a pot where they multiply in large numbers but do not flower as reliably as in smaller pots. In my opinion this is a very desirable hybrid to have for those who want an early flowering hybrid *Pterostylis*.

Dendrobium Warrior Noel Oliver

Dendrobium Warrior is a hybrid between Den. Hilda Poxon and Den. Ku-Ring-Gai. These parents impart two doses of Den. tetragonum and one each of Den. speciosum & kingianum. It was registered in 1984 by David Banks

The plant benched had one raceme of six flowers on an upright spike presenting the flowers to advantage. The flowers were of good shape and excellent texture with yellow petals and sepals outlined in red with an outstanding red labellum.

The spike habit was very good and although the flowers were of good size and starry in shape they really looked at you.

The canes on this plant were quite long being approximately 18 inches long. The orchid was grown by Brendan Killen under 50% shade-cloth and there are also large trees shading the area. This plant was judged as the best in the division in the epiphytic hybrid section.

Den. Warrior has been used in hybridising; one very nice progeny is *Den.* Warreen made by crossing Warrior with *Den.* Dot Sheen.

This is a plant worthy in any collection, very easy to grow and flower and soon becomes a large attractive orchid.

Thank you Brendan for bringing it in for us to see and admire.

Corybas hispidus Malcolm Guy

Corybas hispidus was discovered by Richard Salisbury in 1805-1807. The name Corybas is very unusual for it derives no apparent relationship with orchids but refers to a Corybant or dancing priest of the goddess Cybile in Phrygia.

Robert Brown placed it in the genus *Corysanthus* from the Greek, Corys = helmet and Anthos = a flower. Then in 1810 it was removed to the genus Corybas. *Corybas* grow in sheltered moist situations protected by other plants. They are tiny terrestrial orchids having a single, rounded basal leaf which are mostly ground hugging with the single flower sitting squat on the leaf. The flowers are pollinated by small gnats. It is believed the flowers mimic fungi that are part of the life cycle of the fungus gnats.

An extensive genus of about 100 species extends from Australia through New Zealand, New Guinea, the Philippines and west to the Himalayas. One species, *Corybas macranthus*, has the distinction of being the most southerly orchid its habitat being on Macquarie Island, almost on the Arctic Circle. Australia has 15 species in temperate regions and 4 from the tropics.

Corybus hispidus D Jones is commonly known as the Bristly Helmet Orchid referring to the coarse tooth like hairs surrounding the labellum. This species can be confused with *C. fimbriatus* (R Brown) H G Reichb which is the Fringed Helmet Orchid, both of which are endemic in the same areas of Queensland, NSW, ACT & Victoria.

Extracted from: Down Under Native Orchids 'Growing Tips' guide to growing epiphytes. "Shade can be introduced to cut back on the hot afternoon sun, 60% is around the level you need depending on how open the area is that you have your orchids placed. *Sarcochilus* can tolerate a darker environment, so observe the colour & appearance of their leaves. If they are turning a little yellow or shrivelling it could mean a combination of excess light & insufficient water."

REGIONAL DIFFERENCES IN AUTUMN FLOWERING ORCHIDS - 2002

Thelma Bridle

In the May edition of the NOSSA journal there was comment on the lack of *Eriochilus cucullatus* flowers in the Onkaparinga Gorge, a statement also true throughout the Adelaide Hills.

Malcolm and Cathy Houston had found numbers of this orchid much reduced in the South-East, those flowering had very small flowers on short stems.

However, the southern Eyre Peninsula was very different. Pam Hewstone found colonies with up to 100 flowers and flowering was prolific overall, but in contrast their *Leporella fimbriata* were small and only just beginning to flower at the end of May. Knott Hill was the best flowering site for this species on Fleurieu Peninsula, other populations having only a few flowers.

Pterostylis sanguinea was well in bud at the end of May around Port Lincoln, whilst only a couple of leaves high in the Adelaide Hills.

Thanks to everyone who contributed to this information. Please continue to pass on such observations.

CONSERVATION FIELD TRIP TO THE HINDMARSH VALLEY - 216/02

Thelma Bridle

This annual weeding trip attracted 13 members both from NOSSA and the Friends of Mount Billy, who have been busy clearing wild roses, blackberry and boneseed from the creeks. The mosses were green, but the ferns and other greenery were only just beginning to shoot, following some recent showers to this unusually dry area. Orchids were only just thinking of appearing and only 2 rather miserable *Pterostylis bryophila* flowers could be found. Many rosettes had not appeared and other species were notably absent. A few *Acianthus pusillus* had flower buds, but still a couple of weeks from opening.

The birdlife was probably more interesting than the orchids. We watched quite a number of fan-tailed cuckoos collecting large caterpillars, which required a good deal of tenderising on eucalypt branches before being swallowed.

As the Friends had done such a good job, there was mainly only regrowth weeding to do, so we were able to spend the afternoon at Hindmarsh Falls, weeding the steep hillside in the area where *P. bryophila* grows. As last year, we counted about 20 rosettes, all very small, and no sign of flowers. By removing *Phalaris* and plantain from around the population they should have more light and air. The waterfall was flowing to my surprise, but the area was quite dry, with only large numbers of *P. nutans* rosettes on the southern-facing mossy hillside and few other orchids in evidence.

Native Bees as pets

Social stingless native bees have become more and more popular as pets and the commercial stingless beekeeping industry is also growing rapidly. *Trigona carbonariais* the most common species in south-east Qld and is often kept in nests or hived in boxes in suburban backyards.

This might not be as silly as it sounds. Could be a good way to pollinate your orchids- Ed.

A Taxonomic Revision of the genus *Thelymitra* J. & G. Forst. (Orchidaceae) in Australia.

Article by Jeffroy A Jeanes Royal Botanic Gardens, Melbourne Birdwood Avenue, Melbourne VIC 3141 (from Australian Biological Resources Study April 2002)

Thelymitra is a complex genus consisting of about 75 described species, several described natural hybrids and an uncertain number of undescribed taxa. It is mainly concentrated in higher rainfall areas of temperate Australia, but a few species occur in tropical north-eastern Australia, about 10 endemic species occur in New Zealand and four additional species occur in Indonesia, New Caledonia, New Guinea and the Philippines.

J.R. Forster and G. Forster described *Thelymitra* in 1776, the type species being *Thelymitra longifolia* from New Zealand. In 1810 Robert Brown prepared the first account of the genus in Australia in which 10 species were described. Bentham (1873) recognised 16 species in 3 sections, Fitzgerald (1875-94) recognised 19 species, Nicholls (1951) recognised 35 species and Jones (1988) recognised 46 species. The most recent work done on the genus has been either taxonomic treatments at a State level in various popular books and in State floras, or as a piecemeal characterisation and description of species in various journal articles. To date, a complete taxonomic revision has never been done of *Thelymitra* in Australia.

The flowers of *Thelymitra* are unusual for orchids in that the labellum lacks ornamentation and is virtually the same shape, size and colour as the petals and sepals. Traditionally, the column has provided the main suite of characters used to distinguish between the species in *Thelymitra*. To a large degree this remains true in my research, but vegetative characters such as leaf size, shape, texture and colour and the number, size and colour of the sterile bracts can sometimes help to characterise the species. Other useful features that should be taken into account relate to the colour of the flowers, the colour of the various parts of the column, habitat preference and flowering time.

It is evident from the literature, and from my own field and herbarium research, that the genus remains poorly understood and much of the current taxonomy is simplistic and outmoded. In particular several species complexes have never been fully resolved and are in need of further study. The presence of apparent hybrid taxa further complicates the taxonomy of the genus. To date my research has revealed the presence of about 25 new Thelymitra taxa in Australia. I have described five of these in recent journal articles and several more will be described shortly. My ongoing research will undoubtedly reveal the presence of further taxa that are in need of recognition.

Have any snippets of information related to orchids you would like to share. Pass them on to the Editor for inclusion in the journal.

Sun Orchids (*Thelymitra*) of Mount Remarkable National Park in the Flinders Ranges

Bob Bates

Mount Remarkable National Park has more sun orchid species than any other part of the Flinders Ranges, due presumably to its diversity of habitat. The one major habitat missing is swamp. Despite this at least a dozen taxa have been recorded, some of them at present undescribed.

I treat each of the species below in alphabetical order:

Thelymitra antennifera this species is highly restricted in the Flinders, having been collected only from the sandy, mallee-broombush habitat of the central pound between Mambray Creek and Alligator Creek. It was found after a bushfire growing in small colonies in loose white sand at the base of small rock slopes where it grew with colonies of *Pyrorchis*, also known only from this one location in the whole of the Flinders Ranges!

Thelymitra azurea although no collections exist, plants probably of this species were also seen in mallee broombush here.

Thelymitra x *chasmogama* rarely seen along tracksides where *T. luteocilium* or *T. rubra* occur together with members of the *T. nuda* complex.

Thelymitra grandiflora by no means common this species occurs on most of the higher ridges of the Park in shallow clays over quartzite. The Flinders Ranges form has a red base to the leaf and is less glaucous than southern forms. It also has a broader hood to the column, perhaps due to hybridising with species of the *T. nuda* complex.

Thelymitra aff. holmesii... this small, few flowered species is little known from the area. It differs from *T. holmesii* in the rocky habitat and fewer more purplish flowers, green or brown not grey outside. It has only been found at higher altitudes in Blue-gum woodland.

Thelymitra luteocilium this early flowered species is the commonest of the pink flowered species in the park and occurs mostly above 300metres, especially in shallow rocky soils usually in small clumps.

Thelymitra aff. *megcalyptra* (red leaf base) This species is more frequent at lower altitudes, especially in mallee areas. It flowers earlier than similar large, blue-flowered, insect pollinated species and is less common than them. It may hybridise with *T. antennifera* in the Pound.

Thelymitra aff. nuda (glaucous leaf) there are two forms of this spectacular large flowered, bee pollinated species present, both common at higher altitudes, the later flowering form often has silver rather than blue flowers and the flower spikes rattle when shaken. The column mid-lobe is considerably more flattened

than in *T*. aff. *megcalyptra* and the flowers larger with more pointed sepals. Possible hybrids with *T. rubra* and *T. grandiflora* have been noted.

Thelymitra pauciflora Several species at present are lumped under this name. The best known of these at Mt Remarkable is the small blue, self pollinated species from higher altitudes.

Thelymitra aff. pauciflora (no cilia) This leathery leafed species has been seen in large numbers some years, especially along the walk from Mambray to Alligator. It is most easily recognised from the lack of hairs on the column arms. It is not easy to locate as the flowers only open briefly on warm mornings just before a storm. It seems to replace *T.* aff. holmesii at lower altitudes. The flowers are a deep to murky blue sometimes with darker veins.

Thelymitra aff. pauciflora (white flowers), locally common at higher altitudes in Bluegum woodland, this species has a much more slender and delicate leaf than other members of the 'pauciflora' complex in the Flinders. It is also common in the Mount Lofty Ranges.

There are also other odd plants that resemble *T. pauciflora* but have only ever been seen in ones or twos so that their taxonomic status can not be resolved. One of these has a thick textured, greenish column unlike any other sun orchid known in SA.

Thelymitra rubra This pink flowered species is not as common as *T. luteocilium* in the Flinders and flowers later. It is restricted to higher altitudes. The similar but smaller *T. carnea* may have been spotted on boggy soil of a bulldozer scrape many years ago but was a probable adventive visitor.

There is potential for other species to be found especially in boggy ground on the high flats west of the summit of Mount Remarkable itself or along creeks where water oozes out at the base of rock shelves. Many of these locations are almost inaccessible in the wet years when flowering is likely.

How to survive a heart attack when alone.

Without help the person whose heart stops beating properly and who begins to feel faint has only 10 seconds left before losing consciousness. However, these victims can help themselves by coughing repeatedly and very vigorously. A deep breath should be taken before each cough, and the cough must be repeated about every two seconds without let up until help arrives, or until the heart is felt to be beating normally again. Deep breaths get oxygen into the lungs and coughing movements squeeze the heart and keep the blood circulating. The squeezing pressure on the heart also helps it regain normal rhythm. In this way, heart attack victims can get to a phone and, between breaths, call for help. Tell as many other people as possible about this. It could save their lives.

This article has appeared in other newsletters including the June 2002 A.N.O.S. Victorian Group Bulletin where this version appeared.