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# 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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## JOURNAL OF THE NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC. MAY 2002 Vol. 26 No. 4

# 2002 - NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA - 25 YEARS

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#### NEXT MEETING 28 MAY 2002

Tuesday, 28 May, 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 May is Les Nesbitt. The topic is a mystery, come along to find out what. Members are asked to bring slides of *Corybas diemenicus (dilatatus), C. incurvus, Cyrtostylis robusta, Pterostylis curta, P. mutica* for possible inclusion in the photographic library.

DIARY DATES
31 May Annual dinner at Buckingham Arms; 6:30pm.
2 June Mount Billy weeding
11 June Wongalere weeding
16 June Clare area weeding
30 Aug.-1 Sept. Southern Flinders Ranges Field Trip
23-28 September Kangaroo Island Field Trip.
21-22 Sept. 2002 N.O.S.S.A. Spring Show
18-21 Sept. 2003 16TH Australian Orchid Council Conference Adelaide, hosted by O.C.S.A.

#### NEXT COMMITTEE MEETING

Wednesday 5th June at the home of David & Rosemary Hirst. Meeting commences at 7:30 p.m.

APRIL MEETING Plants Benched Terrestrial Species: Leporella fimbriata, Eriochilus cucullatus, Corybas anconitiflorus, Pterostylis coccina 'red', Ptst. laxa (two plants) Ptst. ophioglossa, Ptst. truncata, Ptst. alveata, Ptst. longipetala, Ptst. obtusa.

Terrestrial Hybrid: Pterostylis Trunkfish.

Epiphytic Species: Dendrobium lichenastrum, Den. speciosum, Dockrillia bowmanii.

Epiphytic Hybrids: *Dendrobium* Wirruna x Gillieston Peace, *Den*. Kathryn Banks, *Dockrillia* Virginia Jupp, *Sarcochilus* Riverdene, *Sarco*. Polka Dot, *Sarco*. Velvet (three plants), *Plectochilus* Lynore.

Note name changes:- *Den*. Wirruna x Gillieston Peace was benched as *Den*. (Hilda Poxon x *fleckeri*) x (Peter x Peewee) and *Plectochilus* Lynore as *Sarco*. Mavis x *Plectorrihza tridentata*. Would those members please adjust their labels.

Judging results Terrestrial species 1<sup>st</sup> *Pterostylis laxa* 'Red' grown by Malcolm Guy 2nd *Pterostylis* aff. *alveata* grown by Malcolm Guy 3<sup>rd</sup> *Pterostylis coccina* grown by Malcolm Guy

Terrestrial Hybrid 1st *Pterostylis* Trunkfish grown by Les Burgess No 2nd or 3rd

Epiphyte species 1<sup>st</sup> *Dendrobium lichenastrum* grown by Wally Walloscheck 2<sup>nd</sup> *Dockrillia bowmanii* grown by Bill Dear 3<sup>rd</sup> *Dendrobium speciosum* grown by Geoff & Pauline Edwards

Epiphyte Hybrids 1st Sarcochilus Velvet grown by Bodo Jensen 2nd Dendrobium Virginia Jupp grown by Geoff & Pauline Edwards 3rd Sarcochilus Polka Dot grown by Graham & Sue Zerbe

Plant of the Night Pterostylis laxa grown by Malcolm Guy

Popular Vote Results: *Dendrobium* Virginia Jupp grown by Geoff & Pauline Edwards Best Epiphyte species: *Dockrillia bowmanii* grown by Bill Dear Best Terrestrial species: *Leporella fimbriata* grown by David Pettifor Terrestrial Hybrid: *Pterostylis* Trunkfish grown by Les Burgess

Commentary on the Epiphytes; Marjorie Chance. Commentary on Terrestrials; Les Burgess.

The latest issue of Australian Orchid Review Vol 67 No. 2 April-May 2002 available from Newsagents has a well illustrated article on *Sarcochilus* hybrids. *Sarco*. Riverdene and *Sarco*. Polka Dot, two hybrids benched at the April meeting are featured along with many others.

#### APRIL SPEAKER

Russell Job spoke at the April meeting on his unique setup at home where he keeps his tropical orchids in a specially designed conservatory inside the main walls of the house. Solar panels and reflectors warm the house and louvre shutters allow air-flow and distribute light. The house is designed around a central water-tank that is solar heated and a fireplace also contributes to heating of the conservatory in winter. Despite being situated at an altitude of 600 plus metres in the Mt Lofty Ranges the temperature in the conservatory falls to only about 11 degrees C. even if it is freezing outside. (It is hoped an article by Russell in a future journal will explain his setup in more detail). A pot of a colorful tropical orchard plus slides shown of the house and orchids grown emphasized the success of this environmentally friendly venture.

Also at the meeting Edda Viskic presented a certificate of appreciation to NOSSA for the society's contribution to the conservation of South Australian Orchids.

#### FOR YOUR INFORMATION - NOSSA NEWS

#### FIELD TRIP FOR MAY

Friday 31<sup>st</sup> May - NOSSA/ TPAG weeding time at Belair N.P. Meet at the front office carpark at 10:45am. The Director of NPWS will be attending at 11:30am to see what has been achieved at the *Pterostylis cucullatus* site. Weeding is anticipated to be from 11 am - 2:30pm. Please advise the Secretary (Cathy Houston) of your availability that day because Yvonne Steed (TPAG) will be catering for lunch.

#### FIELD TRIPS FOR JUNE.

June field trips are all conservation activities. Please wear old clothes, strong shoes, bring gloves, any light pruning tools and of course your sense of humour!

Sun. 2/6/02 -Mount Billy Con. Park - weeding & Pterostylis bryophila Meet at the Willunga turn-off from Main South Road, just before Myponga township, at 10am.

Tues. 1116/02 -Wongalere weeding with TPAG Meet at SA Water, South Para depot on Kersbrook Road. After crossing the corner of the reservoir heading towards Williamstown, first left through the large gates, at 9.30am.

Sun. 16/6/02 -Clare area weeding Meet at Spring Gully Con. Park lookout at 10am.

Please contact Thelma Bridle 8384 4174 for any further details.

#### A.N.O.S. VIC TERRESTRIAL ORCHID TOUR to W.A.

Unfortunately the trip to Western Australia will not be happening this year due to insufficient demand. They are now planning to go in 2005, so make an early note in your diaries. This excellent value, fully catered trip, accommodated and guided 12 day bus trip provides a good incentive to start saving now as numbers will be limited.

#### ANNUAL DINNER REMINDER

The Society Annual Dinner will be held at the Buckingham Arms on Friday 31<sup>st</sup> May at 6:30p.m. The cost is \$18.50. Bookings can be confirmed with either a deposit or full money at the next meeting. It would be appreciated if no money could be handled on the night, however, this is not preclusive of your attending. Come along. It is always a very congenial gathering and we are still celebrating our 25 years.

#### TREASURER .

Iris Freeman has retired as Treasurer of the Society. The Committee and members thank Iris for her wonderful and tireless effort over the last five years. The Society is still anxious to find a Treasurer. This is your opportunity to give something to the Society. There is the opportunity to split the role into two parts, so it will not be onerous. Give it some thought and give it a go!

Also, we are still looking for a Supper Convenor. Thank you.

#### **NEW MEMBERS**

We warmly welcome new members; Rosemary Allen, Jenny Guerin, Warren & Jaqueline Thompson and Kathryn Greenhill.

Judging Classes: Date for next Judges Meeting: Saturday 1st June at 9:30am

#### N.O.S.S.A. PHOTOGRAPHIC LIBRARY

All photographers are requested to please bring slides or photos of the following species for copying and inclusion in the photographic library. Pictures of both flower and habitat are required. The originals will be returned to you. May meeting: *Corybas diemenicus (dilatatus), C. incurvus, Cyrtostylis robusta, Pterostylis curta, P. mutica.* 

June meeting: *Caladenia stellata, C. carnea, C. gladiolata, C. latifolia, C. rigida, C. toxochila, Corybas expansus, Diuris orientis, D. pardina, D palustris, Pterostylis cucullata, P. cycnocephala, P. erythroconcha, P. excelsa, P. pedunculata, P. plumosa.* 

I realize the names are out of date, but they are probably easier to find in your records under these names.

Slides or prints of those plants requested in previous journals can still be forwarded to Thelma Bridle or Cathy Houston.

#### REMINDER

Copies of "ORCHADIAN" Vol. 10 (2), (4) and (9); Vol. 11 (2), (3), (4), (7), (9) and (10); Vol. 12 (4), (6), (7), (8), (10), (11) and (12); Vol. 13 (6) and the second. A.N.O.S. CONFERENCE PROCEEDINGS will be appreciated if members have copies they are willing to donate to complete the Library sets.

#### HOW ITS DONE Reg Shooter

There were some interesting plants at the April meeting, including *Dendrobium*, *Sarcochilus*, Dockrillia and Plectochilus in the epiphytes and a nice selection of terrestrials, mainly Pterostylis. It's not too often that we see Sarcochilus on the same bench as Dendrobium speciosum. Geoff and Pauline Edwards benched a Dendrobium speciosum var. hillii with one nice raceme of cream coloured flowers of the typical hillii and there were several plants of Sarcochilus Velvet alongside it. Dendrobium speciosum var hillii has probably the tallest pseudobulbs of all the seven or so varieties of speciosum, up to a metre tall. The plant benched was not a large plant but was growing strongly with 60cm long bulbs.. Geoff and Pauline grow all their native orchids at their home in the foothills in very hard conditions, some under shade cloth others in the open with light shading from eucalypt trees. The weather in this locality is quite different to the Adelaide plains, being much cooler at all seasons and the orchids very much have to fend for themselves, they are watered when they are dry and receive a little fertiliser when Geoff remembers. Geoff's philosophy is, 'if it doesn't grow under my conditions I don't grow it'. In spite of this he grows and shows many different native species and hybrids. One result of plants grown under these different conditions is the variable flowering times. The 'normal' time for Dendrobium speciosum to flower is August to September it makes one wonder if this plant is flowering late from last year or early for this year!! Its natural habitat is the coastal areas of central NSW to just north of Brisbane. Most of the varieties of speciosum are found growing on rocks, var hillii can also be found growing this way but seems to prefer using trees as a host. Malcolm Guy swept the board this month in the terrestrial section gaining 1<sup>st</sup> 2<sup>nd</sup> and 3<sup>rd</sup> places with three different Pterostylis; Ptst. laxa, alveata and coccina. Ptst. laxa is a colony forming *Pterostylis* having brownish flowers on fairly tall stems, is long lasting and easy to grow. It is found in NSW, ACT and Vic. Ptst. coccina is found in the same area and as the name suggests has reddish coloured flowers. It is also a colony forming orchid and is regarded as easy to flower. Ptst. aff. alveata is restricted in its habitat to a small area in Victoria. In 1982 it was published as a synonym of *Ptst. obtusa* but upon further examination it was obvious it was a distinct species.

Malcolm grows some of his terrestrials under 70% shade cloth and some under camellia shrubs on benches only 18 inches above ground level. This way Malcolm believes they are high enough to keep slugs and snails at bay and at the same time provide ample humidity and air movement around the plants. He tries to repot all his terrestrials on an annual basis and it is at this time that he adds a little Blood and Bone fertiliser to the compost. No other fertiliser is given.

Thank you to all the members for bringing in their orchids for us to see and enjoy.

#### Plant Labels

Many plants that are exhibited are hybrids and instead of the label showing the hybrid name, it only shows the parents names.

A hybrid is the resulting progeny of mating one species or hybrid with another species or hybrid. An example is *Dendrobium speciosum* mated or crossed with *Den. tetragonum* makes the hybrid orchid *Den.* Hilda Poxon. The plant label may show either the parentage i.e. *speciosum* x *tetragonum* or more correctly the hybrid name of Hilda Poxon. It is important that the hybrid name is shown on the label if known. A complication of showing just the parentage can be seen from the following example. *Den.* Hilda Poxon crossed with *Den.* Ellen (which is *Den. kingianum* x *tetragonum*) makes *Den.* Jannine Banks. How much simpler is it to write on a label *Den.* Jannine Banks than *Den. (speciosum* x *tetragonum*) x (*kingianum* x *tetragonum*). It is unreasonable to expect every grower to know the hybrid name of any orchid showing just the parents names. The judging panel do have access to registration books, CD's etc and where we see an orchid exhibited with the parents names only, we will research it and if successful advise the grower of the hybrid name. Please assist in keeping the records straight by using that hybrid name when next showing your orchid.

#### HOW I GROW HOT & COLD DENDROBIUM CROSSES

First year my Dendrobiums were left out in the shade-house during a very wet winter. Flower spikes developed but went yellow and later all the buds dropped off. Since then I have taken more care, placing a sheet of fibre-glass on top of the shade-house keeping the plants on the dry side, and have had no further trouble with the plants flowering.

I have since built a fibre-glass shade-house 3.5m x 3.5m with a door on the eastern side. White shade cloth was also installed on the eastern side and a sliding window on the north side gives additional airflow when needed.

#### FRUIT FLIES AND ORCHIDS

Adapted from the Entomological Society of Queensland Inc. News Bulletin Volume 29(3), May 2001. Written by Dr Tony Clarke of the Australian School of Environmental Studies, Griffin University Nathan Campus, Queensland.

Based on the results of work currently being undertaken at Griffith University (Brisbane), and also in Malaysia and Hawaii, it is considered possible that chemicals produced by particular orchid blossoms are used by male fruit flies to attract female flies. In return, the male flies may pollinate the orchids while visiting flowers. Knowledge of this insect/orchid interaction is of importance in trying to develop new, environmentally sensitive control strategies for fruit fly pests.

While it may not be pertinent to South Australian conditions it is of interest to know what research is being done and why. The research appears to be directed at finding biological controls of fruit flies with any new knowledge of orchid pollinators being secondary. Dr Clarke was hopeful of information from people observing flies visiting orchid blossoms and even of captive flies for identification. A number of orchid species were listed in the article but I believe the only Australian orchid mentioned as attracting fruit flies was *Bulbophyllum baileyi*. -Ed.

#### PEAT MOSS

#### David Hirst

It is often recommended to use a little peat moss as a component of the terrestrial potting mix. However my experience with this discourages me from following this advice. I have used 100% peat moss for growing native ferns and lignum (Muehlenbeckia cunninghamii - an arid zone plant found along watercourses or swamps) for many years with mixed success. While the peat moss is moist it makes a wonderful growing medium but allowing it to dry out for an extended period can be disastrous. It then becomes water repellent. Its water holding capabilities can be restored by fully submerging it in water for weeks, or It can be revived quickly by placing in a bucket and pouring boiling water on until it is just covered then stirring for a short time (of course the plant must be removed and repotted beforehand). I use this procedure with compressed bags of peat moss bought from the garden shop before placing in pots. It seems apparent to me that using peat moss, at least on the Adelaide plains with its hot dry summers, to retain moisture in a terrestrial potting mix will not work and is an expensive addition to the mix if it serves no other purpose. At the April meeting Russell Job showed some samples of Neem Coir, an organic product which is said to absorb up to 700% it own weight in water and contains a natural insecticide. This may be a better alternative to peat moss.

#### FIELD TRIP REPORT TO KNOTT HILL & ONKAPARINGA RIVER N.P.

Thelma Bridle

Sunday 28<sup>th</sup> April was a perfect, sunny, autumn day. South Australia has been very dry so far this year, with only a few recent showers, so we weren't expecting a large number of orchids to be found. Woods and Forests have made some recent changes at Knott Hill, seemingly more in favour of horse-riders than orchid conservationists. Hopefully the large amount of yellow sand imported to turn the soft, white sandy track into a consolidated surface will not sufficiently contaminate the track borders, where rare orchids, in particular, *Caleana major* and *C. minor* still manage to survive. In a small area where *Diuris brevifolia* flower, native bushland has been destroyed and probably these orchids too.

Leporella fimbriata were well in flower, still with buds to come. The population is steadily increasing along the track and this location seemed to be the best flowering population in SA this year, according to various NOSSA members who had visited other known sites. Flowering plants, growing in open situations in white sand, with 1-3 flowers per stem, were found on both sides of the track and up to the top of the hill. In partial shade were *Genoplesium rufum*, the green flowers nearly all finished, so mainly deep maroon flowers and both long and short-sepalled forms. A lone, small *Pterostylis sanguinea* was almost in flower, there were a few, short *Eriochilus cucullatus* flowers, and at the top of the hill, several *Orthoceras strictum* all with dehisced pods. *Thelymitra* sp. seedpods were quite plentiful but there was no evidence of leaves appearing for this year. They must still be awaiting some autumn rains. *Disa (Monadenia) bracteata* was scattered everywhere, so obviously increasing in range in Kuitpo Forest.

A scarlet robin flew back as far as the gate with us, but surprisingly there were none around as we lunched: Yellow-tailed black cockatoos were calling to each other in the pines as they could be heard cracking seeds from the cones. A sudden scream from Thelma 0' made us jump, but was only the surprise discovery of a millipede scrambling from her hat to her face thinking it had been invited to share lunch.

After a long relaxing lunch we headed to Onkaparinga River National Park. The south-facing gorge wall towering above the Onkaparinga River was very dry. *Genoplesium rufum* had mainly shrivelled prior to flowering and no *Pterostylis* species were recorded, although a few *Thelymitra* species, surprisingly had leaves beginning to show and *Diuris* sp. leaves were up. There were a number of dried flower stalks of *Microtis* sp. from last year, *Thelymitra* sp seedpods and *Disa bracteata*. We did find some *Eriochilus cucullatus* in flower along the track, but only about 20, so not a good season for this species. We wandered back along the path and socialised under the tall eucalypts, where honeyeaters and fantails were busy feeding amongst the mistletoe. *Amyema migueli* was in full flower and parasitic upon it the tube-flowered mistletoe, *Lysiana exocarpi* with yellow flowers. This species cannot parasitise eucalypts in its own right. The warm afternoon had air thermals rising from the gorge, ideal for a pair of wedge-tailed eagles to soar effortlessly overhead. Whilst they can continue this performance for up to 90mins, the larger female drifted away, causing the male to stoop and dive in order to gain speed with minimum energy expenditure, and by repeating the action, eventually catch up to the female.

#### EPIPHYTE ARTICLES

Those members looking for epiphyte articles in the journal no doubt have been disappointed with the April issue and this issue. The editor will appreciate any articles from epiphyte growers to rectify this shortcoming.

#### NOSSA FIELD TRIP TO YORKE AND EYRE PENINSULA'S - SEPTEMBER 2001 Part 2 : KIMBA TO BASCOMBE WELL Thelma Bridle

Mature specimens of Acacia papyrocarpa (western myall) reach 7 metres in height after approximately 200 years in this slow growing species. They were liberally scattered across the northern plains of Eyre Peninsula, and very distinctive with black trunks and dome-shaped grey-green canopies. As the species has no fire resistance they provide an indication of bushfire absence for many years in the region. As we approached Kimba rain began and the temperature suddenly dropped from a warm 22°C to 13°C and we wondered if we had brought sufficient warm clothing: We retreated to the warm, dry hotel rather than commencing the afternoon field trip and were able to view some of Geoff Beilby's digital photos taken on Yorke Peninsula, for some species identification by Bob Bates, who had rejoined us. We also welcomed 3 additional members for the Eyre Peninsula part of the trip. The sky eventually cleared so we set off along the Eyre Highway. Bob took us to a small remnant area of mallee bushland, typical of what, before agricultural use would have covered this part of Evre Peninsula. Despite its bare appearance, it was rich in orchids and a short stop revealed 10 different species, including Caladenia cardiochila, this local type having a turned-up labellum tip rather like C. sigmoidea of Western Australia. A couple of Genoplesium species and 'rufa' group Pterostylis, Thelymitra megacalyptra (the early flowering form of T. nuda) and several Caladenia species, including C. clavula, with small brown clubs, and an undescribed species were noted.

The demise of the rabbit population at Caralue Bluff has seen an increase in vegetation and orchids. Following the creek, a number of Caladenia sp. were found on the lower slopes including 2 undescribed species C. 'golden bayonets', a small-flowered greencomb spider with yellow bayonet-shaped clubs and common on EP, together with C. aff. *tentaculata*, a late-flowering species, only in bud at this stage, with a smooth, rather than hairy, leaf. C. septuosa, the large very red spider orchid with the green labellum base, endemic to EP was common. We could see the rain travelling across the flat plains but could not return to the cars in time, so we got a good soaking and returned to Kimba cold and wet, with mud-covered vehicles, an incongruous sight in a car park full of pristine 4WDs. Rain continued all night but it was fine by the time we reached Carappee Hill Conservation Park. This dome-shaped granite hill stands out above the surrounding agricultural plains. Four NOSSA members were already here looking for orchids and there were plenty to find, including *Diuris pardina* at its northernmost limit, a form of *C. arenaria* and hybrids, C. clavula and the short, inland form of C. stricta. Two un-named C. patersoniilike flowers, the less common one with small pink and white flowers and the other with large flowers, often with a slight greeny tinge and red osmophores, similar to C. brumalis. Pterostylis 'olinthus' was in bud, but P. boormanii was flowering. P. nana 'Hale' was found in a mallee area, making this a widespread species. We could have spent longer in this orchidrich area, although 19 pairs of eves probably revealed most species in the regions covered. A short roadside stop revealed an albino form of C. stricta together with several mallee orchid species and another similar site added Pyrorchis nigricans to the list. Leaving the wheat-belt we drove into the granite country of the Gawler Ranges for a day visit to Scrubby Peak. An emu with 18 chicks crossed the road in front of us. This was an indication of the excellent season with plentiful food for so many young to survive. Views of and from the ranges make this a spectacular area, with many geological attractions throughout the ranges. At Yardina campground were a couple of waterfalls and examples of volcanic rhyolite composing the 'organ pipe' natural structures, some used as rock shelters by the local euro population. A small dragon lizard matched the red granite in colouring. Pterostylis ovata (Gawler Ranges endemic) and P. excelsa were in bud with C. toxochila and C. tensa in flower. Purple-blue flowers of Thelymitra nuda were almost open on higher ground and a number of tall Prasophyllum odoratum in bud. All Caladenia sp. on open ground had their buds chewed off.

Due to a misunderstanding it became a question of who was chasing who as we sped along the highway to Acraman Creek Conservation Park. This appears an unlikely area for orchids, the terrain being dry, sandy, grazed saltbush with a limestone escarpment above tidal swamps and mangrove-lined estuarine creeks. The area supports a few orchids and immediately on getting out of the cars there was an undescribed species of *Prasophyllum*. This colony has increased from 8 plants in 1996 to nearly 30 in 2001. Bob Bates had previously collected this species around Laura Bay and later, on this trip, it was found growing behind the sand dunes at Scaele Bay, together with *P. carnosum*. Calpatanna Waterhole Conservation Park also seemed unlikely for orchids having been heavily grazed in the recent past. However, amongst the *Triodia* sp. was the Eyre Peninsula variety of *C. bicalliata*, several other orchid species and a new *Caladenia* sp., similar to *C. macroclavia* of Yorke Peninsula, shorter with slightly less-pronounced brown

clubs. The limestone soil here was much poorer than the rich terra rossa soils preferred by *C. macroclavia*. Also found was *C*. 'long golden bayonets' with orange-yellow clubs, a species formerly found on salt lake margins in the Gawler Ranges. On Tuesday we met Ellen Carey in Streaky Bay and her friends Heather and Kay

from Port Kenny along the road. We investigated roadside vegetation on the way to Venus Bay. *Prasophyllum calcicola* was found - the first time this species has been seen away from the peninsula tips. It was not quite open but a nearby *P. fecundum* was in full flower. *Pterostylis plumosa* were flowering, but not good specimens in the shallow soil. A number of orchid species were found in the Venus Bay Conservation Reserve (see list next month), but vegetation in the actual park was unsuitable for orchids due to past heavy grazing and soil erosion. The park is now securely fenced and reserved for the conservation and breeding of bilbys and stone curlews. Coastal views were excellent.

Several areas of Bascombe Well Conservation Park were investigated after driving the long way round via Nowhere Else due to possible poor road conditions, following yet more overnight rain. It was hardly surprising that the Eyre Peninsula was exceptionally green with very healthy-looking crops everywhere we went. Diuris orientis, a new record for the area. was flowering on the roadside, together with a number of listed orchids. In the park we soon came across *Thelymitra azurea*, not out due to the cool conditions, with a more upright brighter green leaf than T. nuda and quite frequent through the mallee. Prasophyllum constrictum was far from flowering, P. odoratum about to split the flower spike from the sheath, P. goldsackii in bud and P. fecundum in flower. Pterostylis nana occurred in 4 different forms, D. pardina and D. palustris were flowering and a number of Caladenia species, C. septuosa, C. capillata and C. fuscata the most common. Amongst the array of flowering plants, Grevillea parviflora ssp. latifolia, an endemic with single red flowers and blue-grey foliage had not been seen previously. Further south in the Bascombe Well Conservation Reserve T. x macmillanii was found, as single flowers like T. antennifera, but a bright pink. Prasophyllum aff. occultans was added to the list, an albino flower of C. septuosa, Leporella fimbriata leaves and D. pardina x orientis, a very tall, robust group of plants. Pterostylis cycnocephala was unusual, having a small pin-head green tip on the labellum. This large park with shallow soils over sheet limestone revealed 40 species on a single day visit.

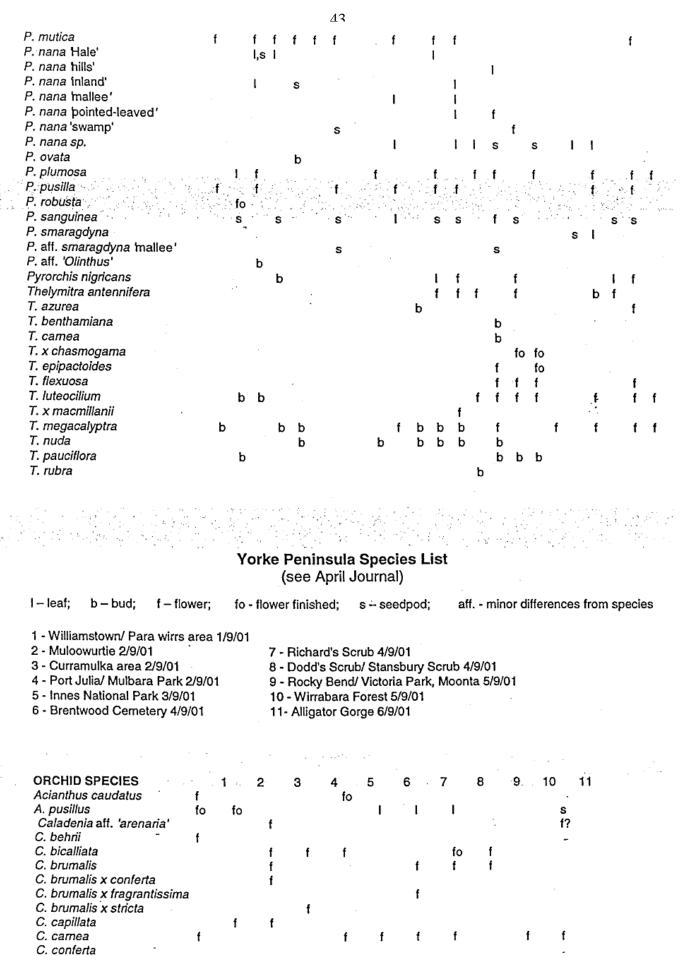
Eyre Peninsula Species List I- leaf; b - bud; f - flower; fo - flower finished; s - seedpod; aff. - minor differences from species

Railside near Kimba 719/01
 Caralue Bluff 7/9/01
 Carappee Hill Conservation Park 8/9/01
 Mallee roadside 8/9/01
 Scrubby Peak, Gawler Ranges 9/9/01
 Acraman Creek Conservation Park 10/9/01
 Calpatanna Waterhole Conservation Park 10/9/01
 Sceale Bay 11/9/01
 Flinders Highway roadside 11/9/01
 Venus Bay Conservation reserve 11/9/0
 Bascombe Well roadside 12/9101
 Bascombe Well Conservation Park 12/9/01

13-Bascombe Well Conservation Reserve 12/9/01
14-Tod Reservoir 13/9/01
15-Reservoir Drive and roadsides
16-Wanilla Settlement Reserve 1319/01
17-Wanilla Forest 1319/01
18-Tulka roadside 14/9/01
19-Port Lincoln National Park 14/9/01
20-Pamkalla Trail, Port Lincoln 14/9101
21-Wharminda roadside (1) 1519/01
22-Wharminda roadside (2,3) 1519/01
23-Wharminda Soaks 15/9/01\_

## Eyre Peninsula Species List

ORCHID SPECIES	1	2	з -	45	6	78	39	10 1	11 1	12 1	3 14	15	16 17	7 18	3 19	20	21 2	2 23	
Acianthus caudatus											•	f							
A. pusillus		s						1	1	f	1	fo		I	1 -	1	fo	fo fo	
Caladenia aff. 'arenaria'		Ŭ,	f					•	•	•				•					
C. aff arenaria x golden bayonets			f																
C. aff arenaria x septuosa			f															· ·	
C. bicalliata		e e e	f and		f		S	0.10	· · f			3 S.		100	÷. •.	f		4.	
C. 'brumalis'	j.		f					1				fo	f			ing fe			÷.
C. capillata	f	f	f≚f	f	ंं		f	ff	- f	⊡ f	8 - A 1	1	f		f	f	f∵ṫ	f	
C. cardiochila	f		f f	f				f		f									•
C. clavula	f -	f	f	f											•				
C. clavula x 'arenaria'			f																
C. deformis			f -					1	f f	f f							f	f	
C. fuscata		- f						_	f	f f									
C. latifolia			f		· 1	f		f	1			f		f	f	,			
C. aff 'macroclavia'					1	f										f			
C. pusilla							,					f ·		T	T 4	-		f	
C. septuosa		f	f				f	T	I I	fi	ſ	T	1 1		1				
C. sp. 'Eyre'			I					4								f	-		
C. stricta	4		1 4	f		f f	1	f		f	f		f	f	f	•	f f	f	
<i>C. tensa</i> <i>C.</i> 'golden bayonets'	f	f	f	1		1 1		•		•			f.	•	•	. *	•		
C. 'long golden bayonets'		4				f							•						
C.x variablis			f			1													
Corybas despectans			•											I	s	s			
Cyrtostylis robusta			f		s		s	L	1	1	1			1	1	I			
Diuris orientis			f		-		-	-	f			f		f	f	f			
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Eriochilus cucullatus Genoplesium fuscoviride G. nigricans G. rufum Leporella fimbriata Leptoceras menziesii			S	S		-	ľ	l s		S	1		I			- <b>1</b> .	S	1	
Eriochilus cucullatus Genoplesium fuscoviride G. nigricans G. rufum Leporella fimbriata Leptoceras menziesii Microtis arenaria			S	S	b	s	 <b>I</b>	l s		s b	- 1 - 1		1	: - (4) - (	f	- <b>I</b> .	S	1	
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C. conferta x stricta

f

C. deformis		f		f	f			f	f		f	f	
C. fragranti:	ssima			•	•			f			•	•	
C. fuscata						f		•				f	
C. gladiolat	а					1						i f	
	a x arenaria												
C. latifolia	a x archana					,						,	
					T	Î	T	T	T	T		T	
C. macrocla			T'	t	t								
- C. macrocla	avia hybrid		f	t ·									
C. rigida		f											
C. sp. 'Bren							f						
C. stellata	and the second secon			·		1.1.1	ترجي بالمت	· ' '	23. F		۰. بر در ۲	f	1.1.2
C. stricta		112	f .		f	ь		f	f	b			
C. stricta h	ybrid	Ϋ́.				17			1 1 m				1. N
C. tensa				- i i					•	• •		Ь	
C. tentacul	ata	b										ĥ	
C. woolcoc		U										ž	
C. verrucos												Ŧ	
			T										
Corybas de			-			s							
C. diemeni		t											
C. incurvus		f											
Cyrtostylis												f	
C. robusta		f	f	f	f	f	1		1	1			
Diuris behi	nii										f		
D. orientis		f									-		
D. x palaci	hila	ŕ											
D. pardina		÷											
D. palustris		•			4		4						
Eriochilus		,		1	T		T	· .	-		1	1	. •
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Genoplesi	um nigricans		S	S		s		s					
Glossodia		b											
Microtis sp		1		1	1	1.	1	1	I	I	I	b	
	lum calcicola					f							
P. camosu	ım					f		b					
P. elatum					b								
P. fecundu	ım							b			5	1. A.	1
P. sp.				1	1 2								
Pterostylis	biseta		· · · ·					19. <sup>1</sup> .				Ь	
P. cycnoc	eohala											f	
P. erythro	concha		f			,						•	
P. foliata	oonona					•							
r . Ionala		h				f							
D mutico		b				t		4		4			
P. mutica		b b	f			T		f		f		4 -	
<i>P. nana</i> 'h	ills'		f			t		f f		f	f	f, s	
<i>P. nana</i> 'h <i>P. nana</i> 'n	ills' nallee'		f			t		f f		f 1.	f	f, s	
P. nana 'h P. nana 'n P. nutans	ills' nallee'		f			Ť		f f		f 1.	f	f, s	
P. nana 'h P. nana 'n P. nutans P. peduno	ills' nallee' culata		f			ţ		f f		f 1.	f	f, s	
P. nana 'h P. nana 'n P. nutans P. peduno P. plumos	ills' nallee' culata		f			ţ		f f		f 1.	f	f, s f	
P. nana 'h P. nana 'n P. nutans P. peduno	ills' nallee' culata		f			ţ		f f		f 1.	f	f, s f	
P. nana 'h P. nana 'n P. nutans P. peduno P. plumos	ills' nallee' culata ca	b f .f f	-			ţ		f f		f 1.	f	f, s f	
P. nana 'h P. nana 'n P. nutans P. pedunos P. plumos P. pusilla P. robusta	ills' nallee' culata ca		b			T		f f		f 1.	f	f	
P. nana 'h P. nana 'n P. nutans P. pedunos P. plumos P. pusilla P. robusta P. sangui	ills' nallee' culata sa a nea	b f .f f	-			f		f f		•	f	f, s f	
P. nana 'h P. nana 'n P. nutans P. peduno P. plumos P. pusilla P. robusta P. sangui P. smarag	ills' nallee' culata sa nea nea gdyna	b f f f f f	b fo			f				f I	f	f	
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P. nana 'h P. nana 'n P. nutans P. pedunos P. plumos P. pusilla P. robusta P. sangui P. smarag P. aff. sm Pyrorchis Thelymitr	ills' nallee' culata a nea gdyna aragdyna 'mallee' nigricans a antennifera	b f f f f f f	b fo		ь	f		fo	I b	•	f	f	
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P. nana 'h P. nana 'n P. nutans P. peduno P. plumos P. robusta P. sangui P. smarag P. aff. sm Pyrorchis Thelymitr T. grandif T. luteocii	ills' nallee' culata nea nea gdyna aragdyna 'mallee' nigricans a antennifera lora	b f f f f f f	b fo			f	b	fo fo	I b	•		f s b	
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P. nana 'h P. nana 'n P. nutans P. peduno P. plumos P. pusilla P. robusta P. sangui P. smarag P. aff. sm Pyrorchis Thelymitr T. grandif T. luteoci T. nuda	ills' nallee' culata a nea gdyna aragdyna 'mallee' nigricans a antennifera lora lium alyptra	b f f f f f f b b	b fo	b b		f	Ь	fo fo b	l b	•		f s b	
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