NATIVE ORCHID SOCIETY

of

SOUTH AUSTRALIA

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Volume 2, No. 3 Price 40c

April, 1978 Registered for posting as a publication Category B

NEXT MEETING

When Tuesday, 25 April, 1978, at 8,00 p.m.
Where: Goodwood Boys High School, Hardy Street, Goodwood.
Why: Mr Harry Wright from Longwood will be guest speaker and he will show a slide programme with taped commentary entitled "Vanishing Ranges". Peter Hornsby and Jim Simmons will give a short demonstration of mounting epiphytes on cork,

Plant display and commentary, Popular Vote, Raffle. The trading table will be stocked with epiphytes.

REPORT ON THE ANNUAL GENERAL MEETING

1. The meeting appointed Mr Noel Lothian, Director of the Botanic Garden of Adelaide, the Patron of the Society.

2. Subscriptions remain the same as last year at $4.00 and $6.00 for a family.

3. There were six nominations for four positions on committee so a vote was taken. Your new committee is:

PRESIDENT:	Mr Les Nesbitt	
VICE-PRESIDENT:	Mr Peter Hornsby	
SECRETARY:	Mr Roy Hargreaves	
TREASURM:	Mr Ron Robjohns	
COMMITTEE:	Mr George Nieuwenhoven	2 year term
	Mr Reg Shooter	2 year term
	Mrs Audrey Howe	1 year term
	Mr Jim Simmons	1 year term

4. Auditor for the coming year is Mr K. Yates.

5. The draft constitution as published in the October newsletter and amended in the March newsletter was adopted.

ORDINARY MARCH MEETING Attendance 53

We saw a few slides of the people and orchids seen on last year's field trips. Alwin Clements then showed slides of various Australian orchid flowers. The trading table was well stocked on this occasion and $109.00 was taken. Expenses have to be deducted from this figure. Raffle prizes were *Dendrobium falcorostrum, Den. gracilicaule, Den, smilliae* and *Pterostylis nutans*.

FIELD DAYS;
Our first trip for the year is on Saturday, 29 April, 1978.

Meet at 2.00 p.m. in front of the Meadows Hotel at Meadows, which is about an hour's drive from Adelaide. We will go from there to Kyeema National Paik to look for *Eriochilus cucullatus* in flower plus any other species we can find.

Our second trip will be on Sunday, 2 July. Destination to be decided. Can you suggest a location for future field days? These outings are so much more successful with a local guide who knows the area visited.

SOCIETY EMBLEM
Several designs have been received for our emblem. The closing date is the April meeting, so get busy you late starters. Hand entries to the Secretary.

EPIPHYTES

Native epiphytic orchids are available at reasonable prices. from the Palm and Fern Centre, next door to the BP Service Station at Eagle-on-the-Hill on the South-East Freeway. Open on weekends:

NEW MEMBERS ,

Mr C. Allen, Edwardstown
Mrs Y. Burdett, Adelaide
Mrs C. Butler, Belair
Mr N. Christoph, Myrtle Bank
Mr G. Ker, Clarence Park
Mr D. Mullins, Eagle-on-the-Hill
Mrs G.S. Nieuwenhoven, Hope Valley

SUBSCRIPTIONS DUE

Subs were due on 31 March, 1978.

Rates are:
$4.00 for single member
$6.00 for family

Treasurer is:
Mr R.T. Robjohns
71 Edmund Avenue
UNLEY SA 5061

OUR COVER
Diuris maculata, the leopard orchid is featured this month. It is a common species in the Mount Lofty Ranges and also grown in all the eastern states including Tasmania. The plant has two or three grass-like leaves which grow from a large ellipsoid tuber. Plants appear March to June, and flower in August-September in Adelaide. Flowers are a few weeks later in the hills. Each plant bears two to nine cream and brown spotted flowers about 20 mm from top to bottom on a spike up to 300 mm tall.

D. maculata is a very variable orchid. Some flowers are very. dark and even the stems are maroon coloured. Victorian forms have more yellow colour in the flowers than local plants. *D. maculata* is a rewarding orchid in cultivation because it is easy to grow and. bears its colourful flowers year after year at exactly the same time. Occasionally two tubers are produced but it is a very slow method of propagation. It readily grows from seed scattered around an adult plant but flowers must be hand pollinated or no seed is formed.

PLANTS ON DISPLAY - 28 March 1978

This months benching of both epiphytic and terrestrial orchids was somewhat smaller than last months, probably as a function of a general off-period of flowering in each case.

Comments on the epiphytic section was given by Jim Simmons. Pots of each of *Sarcochilus hartmannii* and S. ceciliae. demonstrated again just how well these plants can be grown locally. The small plant of *S. ceciliae* carried a respectable cluster of flowers in proportion to its own size.

The genus Dendrobium was represented by a hybrid of (D. kestevenii x D. delicatum) x *D. tetragonum* var *giganteum* which carried. a number of buds likely to be open for the April meeting, also a specimen of *D. bigibbum* var *superbiens* sub var *compactum* was seen in bud. This short-caned form comes into flower early enough to beat the winter cold which seems to generally prevent the longer caned varieties from flowering unless they are maintained in heated glasshouses. The diminutive-flowered *D. malbrownii* showed those present just how small its flowers were. Finally, in the epiphytic section there was a specimen of *Bulbophyllum exiguum* growing on a slab. Since this species has a very short flowering period we were fortunate to see some of the flowers still out for the meeting.

There were only a few specimens benched in the terrestrial section. A few were in bud and some were of the smaller flowered species. Commentary in this section was given by Bob Bates, who was generally disappointed with the number of plants benched. The old reliable *Pterostylis curta* was benched again this month and is sure to be seen for many months to come. Anyone who has seen the solid mat of *Pt. curta* which Roy Hargreaves grows in old cement washtroughs could be forgiven for contemplating planting this species as a lawn - it has to be seen to be believed. Also representing the genus Pterostylis were *Pt. revoluta*, a species from the eastern states, which was in bud and again this month, *Pt. parviflora*, this time in flower.

There were a number of the relatively early, flowering Prasophyllums benched, namely *P. nigricans*, a small plant carrying a spike of some 50 diminutive flowers; *P. rufum*, a species often confused with *P. nigricans*; *P. despectans* (which failed to record as having been benched last month) and *P. morrisii*.

Eriochilus cucullatus was seen already in flower. Represented by only two pots this month, we should see more specimens of this species at the April meeting. An interesting feature of this plant is its seeming desire to get on with the business of flowering without delay. Comments from members indicates that this species, sometimes bursts forth from the soil with an already open flower. The leaf develops and, expands after the flower has grown aloft. Finally, a specimen in bud of the somewhat uncommon *Habeneria bandfieldii* was displayed to round off the evenings benching of terrestrials.

POPULAR VOTE

Epiphyte: *Dendrobium bigibbum* var *superbum* forma *compactum* was grown by Jim Simmons in a 5" clay pot. A small plant with 3 large attractive flowers of reddish-mauve on an arching spike. It is a native orchid of Queensland. The compactum form is much more reliable in Adelaide because it flowers earlier than the tall-cane type which. usually drops its buds in cold autumn weather.

Terrestrial: Two plants tied for the honours last month. One was *Prasophyllum nigricans* grown by Bob Bates. Fifteen tiny plants up to 150 mm (6") high and bearing as many as 50 flowers were growing in a 5" square pot. The other was George Nieuwenhoven's *Habenaria banfieldii*. Four plants, three in spike, were growing in a 10" clay pan. The small barely open flowers were cream coloured. This species comes from Queensland.

CULTURAL NOTES Les Nesbitt

South Australian Orchids

We are now well into autumn which means long cool nights, a possibility of frosts, the probability of rain and some warm sunny days as well. Most of our local orchids come to life again under these conditions. Some don't require rain and will come up at the same time each year regardless of the season. One such orchid is *Eriochilus cucullatus* (Parson's Bands), the first buds of which always appears in mid-March and open on 31 March, You could base a calendar on them, they are so reliable, varying only two or three days from this date from year to year. The flowering peak of this species is mid-April.

The majority of species however are affected -by moisture as well as cool nights and will appear much earlier if watered in summer. Pots of terrestrials which are summer watered and kept in a cool, shady spot will produce leaves in February, whilst tubers in pots which are kept dry and in partial sun will not come up until April or May.

My pots are on benches under 50% shadecloth and are lightly watered once a week at this time of year if no rain falls. Under these conditions the Pterostylis (Greenhoods), Diuris (Donkeys) and Thelymitra (Sun Orchids) come up in April while Acianthus (Mosquito Orchids) and Caladenia (Spiders) come up in May. Corybas (Helmet Orchids) come up in June. Individual species vary a little. The largest tubers are usually the first to produce plants and flowers. For this reason you should select equal sized tubers when repotting, during the dormant period if you want all the plants in a pot to bloom, together.

Beware of the dangers of over watering as rots may get a hold in warm weather and wipe out your plants. There is sufficient moisture in the tuber of a ground orchid to develop a set of leaves in almost dry soil. Let mother nature be your guide. Watch the soil in a corner of your garden which does not get watered and use this as a guide for watering your pots.

Sprinkle seed on top of your pots now, if you have not done so already. It could begin to germinate by the end of May if we get normal autumn rains.

Weeds germinate freely at this time of year. Pull them out as soon as they are large enough to grab hold of. They will smother your ground orchids if allowed to remain. Weeds usually grow much faster than orchids. With a bit of practice you can soon tell the difference

Clean up your growing areas to remove hiding places for grubs, slugs and snails. Lay baits on the ground under the benches and go out at night with a torch and pick off those few pests which always get through your defences. Weeding and slug and snail control are the two most important tasks to be done by the terrestrial grower. Without these two problems we could all grow terrestrials in our front gardens.

Epiphytes

Increase light to harden new growths before the cold weather. Shading can be removed completely now. Species from north Queensland should be shifted from the shadehouse to a position where they are protected from the rain during winter. A heated glasshouse is the best answer but you, can improvise with sheets of plastic or fibreglass in one corner of the shadehouse.

OCCASIONAL NOTES Peter Hornsby

On April 2 this year I visited the Belair Recreation Park with Peter Martinsen of the National Parks and Wildlife Service, and our walk was rewarded with finding two orchids in flower. Neither is particularly remarkable, but the circumstances give rise to comment. This has been

Occasional Notes (Contd.)
a very dry year, with the official Adelaide record showing a total of 16 mm for the first three months of this year (compared with an average of 65 mm and 108 mm for the same period last year).

Probably because of the dryness, none of the orchids expected to flower in the next six weeks or so, such as *Acianthus exsertus* and *Pterostylis scabra* var *robusta*, is yet to be seen. Furthermore, the bushland in the Park is showing distinct signs of the drought, with virtually no greenness apparent in the undergrowth.

In spite of this, we found an example of *Eriochilus cucullatus*, standing 14.5 cm high. Such growth must be on the strength of what has been stored in the tuber as virtually no moisture has been available.. (The measuring rod placed alongside failed to penetrate far because of the hardness of the soil, and it was bone dry when removed.) Similarly, we found two well-developed and one stunted example of *Prasophyllum rufum* nearby. This latter species was apparently erroneously referred to as *P. nigricans* in the newsletter report of last year's first trip to Belair.

Both species were found in an elevated plateau in the Park, and the state of other plants in their immediate vicinity was enough to verify the absence of any favourable water sources. The Prasophyllum were growing in open woodland, whereas the Eriochilus was well sheltered by some Casuarina scrub, with its stem almost due south of a trunk about 7 cm in diameter, and 40 cm from it.

As a footnote: both species should be seen on the first field trip for this year on April 29 to Kyeema Conservation Park, hopefully with additions if we find the right spots.

AN EASTER TRIP TO THE MT. BURR HILLS R. Bates
Roughly twenty kilometres north of Mt. Gambier, between the towns of Glencoe, Tantanoola, Millicent, Mt. Burr and Kalangadoo lie the fascinating Mt. Burr Hills. The area is one of lush native vegetation, tall pine forests, deep swamps, limestone caves and volcanic lakes.

We had been skindiving at Piccaninnie Ponds on the Friday, chasing eels and letting the swift current of "the Overflow", South Australia's shortest "river", a mere two hundred metres long, carry us down to the sea. We spied a few Pterostylis tenuissima on the edge of the Ponds.

Friday night we camped at Lake Leake (beautiful despite its name) nestled in a shallow crater north of Glencoe. We canoed around the lake, admiring the white sand, the clear water, the swans and the solitude of the place.

Saturday was sunny and calm and Jack Clayson's tiger snakes (see NOSSA, November 1977) were waiting for us as we hiked along the fire breaks at Marshe's swamp. Spiranthes, the pink and white spiral "Ladies Tresses" were numerous on the track itself, flowering much later than in the Mt. Lofty Ranges, and the shy Pterostylis parviflora, with up to ten flowers per stem and gently perfumed, were on the edges of the breaks. The seed pods of Dipodium were under the Yacca trees (Xanthorrea australis).

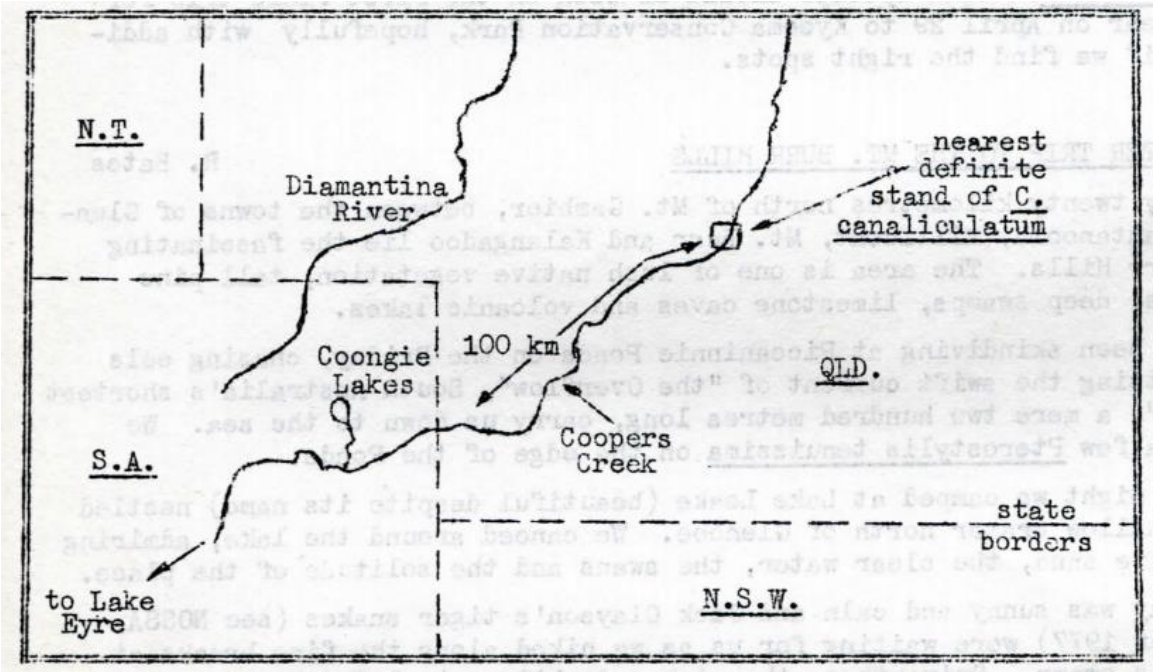
After lunch we headed into Honan's Scrub and saw a surprising variety of orchids in flower despite the season. Right throughout the burnt patches were tiny white Eriochilus. On the fire break itself were a few early Leporella, much more brightly coloured in the South East, and Pt. parviflora was more common here. Crawling around under the yaccas we came across the tiny *Prasophyllum archeri*, with its fringed red and green flowers and while lying on the ground photographing these we found *Prasophyllum despectans*, even tinier than the archeri, and a new record for South Australia. As if that wasn't lucky enough we actually found a hybrid between the two. A plant with the long needlepoint labellum of *Pr. despectans* and yet with the hairy fringe of *Pr. archeri*.

An Easter Visit to the Mt. Burr Hills (Contd.)
On the way out we spotted a very early flower of *Pt. vittata* and leaves and seed pods of Cryptostylus. The Mt. Burr Hills must surely have the richest flora of any area of comparable size in our State. At least five orchid species or varieties occur here that do not exist elsewhere in South Australia and probably more will be found.

Special orchids of the area include the beautiful scarlet *Caladenia congesta*, the spicy *C. augustata, Chiloglottis cornuta* and a navy blue variety of *Thelymitra aristata*.

OUR RAREST ORCHIDS - No. 9 R. Bates

Cymbidium canaliculatum R.Br. is an epiphyte which thrives in hot sunshine and dry air. It occurs right across the north of Australia from Western Australia to New South Wales. In very dry areas it is found only along watercourses on river gums (*Eucalyptus camaldulensis*). The centre of the trunk on many of these trees has been hollowed by termites and is filled with rotted wood which remains damp even after months without rain. The roots of the Cymbidium penetrate this rich humus and huge plants often result. The channelled leaves guide the rare rainfall into the hollow branch or trunk and the many short pseudobulbs store water to make *C. canaliculatum* a true xerophyte.



Location Map — *C. canaliculatum*

Despite this drought resistance it can not yet claim to be a true "resident" of South Australia and appears to be absent from the "Centre". Tate records it for "near Lake Eyre" and later authors have copied this. Rogers recorded it only from "sightings" and had no actual collection from South Australia. However, after the flooding of Coopers Creek and the Diamantina River in 1974-76 Brew collected a plant at Coongie Lakes in our North East. As it was growing in a broken branch in rubbish deposited from the floods it is probable that the plant had been carried from Queensland. It is likely that Rogers' and Tate's records results from a similar earlier flood. It is doubtful that such "visiting" plants would survive long under S.A. desert conditions and for these reasons *C. canaliculatum* is not listed as a true S.A. species.

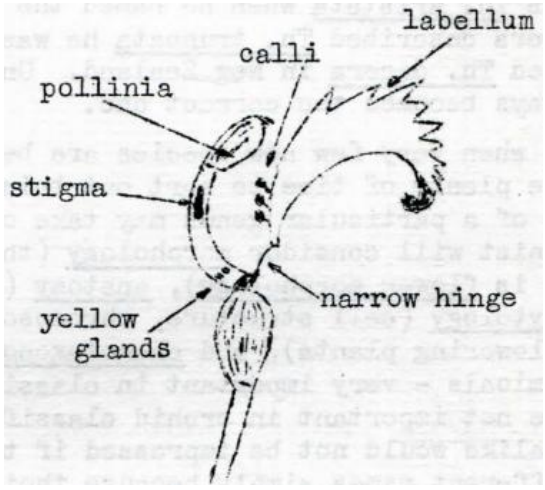
POLLINATION OF ORCHIDS -- Part 7

"The spider gets the fly" refers of course to the pollination of our "hairy legged" spider orchids, the long sepalled orchids of the genus Caladenia. These include some of bur best known S.A. orchids: *Caladenia testa, C. patersonii* and *C. rigida.*

The hairy legs (stems) of these Caladenias prevent ants from climbing up and stealing the pollinia and becoming intoxicated on the stigmatic secretions.

As a child I was always delighted to find that when I left a few spider orchids in a vase for a few days, there would be dead flies in them, not as many as on the sticky fly paper we used in those days but always there were one or two insects in the orchids.

We know that unlike the drachmids or 8-legged spiders the orchids do not eat the flies. They lure them with sex pheromones, sweet secretions and sometimes colour and scent. The orchids provide a delicately balanced landing platform, the labellum, which has rows of calli on its upper surface. When the fly lands it must walk with its feet on each side of the calli, an evolutionary development which ensures that the fly stands in exactly the right place.



As the fly moves closer to the two yellow glands at the base of the column (it is likely that these glands emit the pheromones which attract the flies) the labellum on its narrow hinge tips back and the fly is imprisoned with its head pressed to the sticky stigma. The insect struggles to escape but is unlikely to do so unless a 'breeze pushes the labellum back. As the labellum falls back into the open position the glue on the fly's head collects the pollinia, the fly buzzes off and repeats the procedure, thus pollinating the orchids. In a closed room without wind assistance the flies often cannot escape and die, thereby causing many people to believe that the orchids "eat" flies.

Next month: Late evening rendezvous -- Caleana and the jewel beetle.

CHANGES IN ORCHID NOMENCLATURE - Part 2 R. Bates

When a species of plant is named it should be described in botanical Latin in addition to English (or the botanist native language). The description should cover every part of the plant's morphology and should be accompanied by an illustration. Pressed specimens, known as the "species type", should be preserved.

A species should not be described on the basis of one or two specimens or from mere "freaks", mutations, "sports", colour variations, etc.

Unfortunately in the past botanists did not follow these rules, They published descriptions as short as ten words, without illustration and without keeping pressed specimens. Species were described in obscure agricultural journals and even political publications. New species were regularly described on the basis of a single dead fragment of a plant sent by a field collector who did not even record the location of his find. Often the flower of one plant was mixed with the leaves of another and a truly mixed-up species was described.

Changes in Orchid Nomenclature (Contd)

Communication was difficult and botanical journals almost non-existent. Little wonder that an enormous amount of confusion arose in the scramble to describe all new species. Often a species was described half a dozen . times by as many different authors resulting in the same plant having six different names. Other plants missed out altogether. Fitzgerald wrote, when describing *Caladenia reticulata*, that it was probable that such a common and widespread plant had already been described but it was not until recently that A.S. George discovered the earlier name (*C. huegelii*) in the middle of a paragraph. When Rogers described the common and widespread *Prasophyllum odoratum* in 1909 he probably, realised that the chances of it already having a name were rather high. Dr. Rogers was a very busy man and had little time for field trips. Many of the species he described he has never seen actually growing. Certainly it was an unwise practice to describe new species this way.

Many orchids common to the western and eastern sides of Australia were given a different name in each area. Thus *Thelymitra canaliculata* had been named in Western Australia before Rogers described it again as *Th. azurea* in South Australia. Similarly Fitzgerald was unfamiliar with Lindley's *Th. aristata* when he named the same orchid *Th. grandiflora* and when Rogers described *Th. truncata* he was unaware that it had previously been named *Th. decora* in New Zealand. Under these conditions the earliest name always becomes the correct one.

Nowadays when very few new species are being discovered taxonomic botanists have plenty of time to sort out this confusion. A proper systemic revision of a particular genus may take one botanist ten years to complete. The botanist will consider morphology (the most important aspect of orchid taxonomy is flower morphology), anatomy (structure of vascular bundles, etc.), cytology (cell structure, chromosome number, etc. - very important in non-flowering plants), and chemotaxonomy (reaction of tissues to certain chemicals - very important in classification of bacteria). The last three are not important in orchid classification because growers or taxonomists alike would not be impressed if two orchids looking alike were given different names simply because their vascular bundles were arranged differently and they reacted differently to a certain salt.

The floral revision in the reprint of S.A. Flora, Part I, is not a systemic revision. It is purely a temporary measure and must be treated as such.

WHAT CHANCE OUR WILD ORCHIDS? R. Bates

Despite the quite considerable areas of South Australia being set aside for the purposes of conservation there is no guarantee on the survival of our native orchids in the wild.

Very few orchids occur in the larger conservation parks because they are arid zone parks. Conservation reserves in the higher rainfall "orchid districts" are generally small with orchid populations below the critical number for long term survival. All these reserves are separated by vast areas of "orchid desert", cleared land which makes it very difficult for orchids to "migrate" from one reserve to another. If a population of orchids in a national park is destroyed by disease, pests, fire, drought or any other cause it will not be replaced as it would have been prior to settlement.

Plant species throughout the world are constantly changing as conditions change - once successful species become failures and are replaced by new species. New hybrids are formed and some replace the parents. A species diversifies and becomes several new species. All this is possible because past changes have built up large and varied gene pools within species. Unfortunately the orchids of Australia often have small

What Chance Our Wild Orchids (Contd.)

gene pools similar to much of our wildlife, as conditions have changed less in Australia over the last few thousand years than in other Continents. They have evolved to fit a very narrow range of conditions. Most orchids require a soil fungus (mycorrhiza) which will not survive long in cultivated soil. When the sensitive fungus dies out does the orchid.

Many orchids rely on a single species of insect for their pollination. Often the insect itself is very susceptible to change; at some time in its life-cycle the insect may depend on a single species of plant for food. An orchid may be very common in a conservation park but if its pollinating agent depends on a plant which does not occur within the park and dies out, then so does the orchid unless it is fortunate enough to find a new pollinator.

Introduced pests

Introduced pests take their toll within conservation parks just as they do outside them. Previously a balance had been reached between native herbivores and plants - kangaroos for example prefer to eat older growth and leave young plants. Rabbits in particular have upset that balance and in dry areas have reduced orchid populations to concentrations below the required level for future survival. 'In rocky country favoured by orchids wild goats destroy orchids directly by eating them and indirectly by removing sheltering vegetation and hastening erosion.

The policy of running a few sheep in many of our conservation parks adds to the destruction and the damage caused by livestock outside reserves is all too obvious.

Travellers to mallee areas near the coast will have noticed the bleached white shells of snails festooning plants and posts along the roadsides. These are some of the seven introduced snail species, all of which do incredible damage to orchids and will continue to do so because few predators eat snails. Introduced aphids, caterpillars, mites and "rusts" are an even greater problem, but the most severe impact is caused by weeds, especially in parks where orchids are most common. Smothering African daisy, boneseed daisy, thistles, bridal creeper and blackberries soon oust all orchids.

"Desertisation"

Recently there has been much discussion of "desertisation" or the formation of deserts due to man's activities - overstocking, removal of vegetation, ploughing of dry soil and "burning off". Once well vegetated areas are now biological wasteland. South Australia is probably the best example of "desertisation" in the world. In the other continents clearing for cultivation has been gradual, extending over hundreds or thousands of years, giving animals and plants time to adjust.

In our State 81% of land within the 250 mm isohyet has been cleared in just over a century and another 9% has been eaten out by stock. The impact of this activity on our environment has been disastrous already.

Droughts before the time of white settlement had no long term affect on orchids, wet land species were-pushed further south only to return again in better seasons. Similarly cold wet seasons saw dry land species pushed northward only to have them return in milder times along corridors of suitable environment. Now these corridors have gone.

The dry winters of 1975, 76 and 77 have caused a reduction of orchid numbers in all but the highest rainfall areas. In 1974, I had the pleasure of seeing a sandhill in the Gawler Ranges with hundreds of *Caladenia deformis* and *C. tesselata* on its southern slopes. In 1977 that same sandhill was unvegetated and shifting, this isolated patch of orchids was gone. It would not be replaced.

What Chance Our Wild Orchids (Contd)
Domestic stock have cloven hooves which bite deep into sand or wet soil crushing orchid tubers whereas native animals merely squash the leaf temporarily and do no permanent damage.

Felling of trees exposes orchids to wind and frost damage. Surprisingly most of our native orchids are susceptible to frost damage. In the natural bush the icy fingers of frost seldom reach orchids sheltered by the trees and bushes and strong winds did not penetrate. These two factors make it impossible for orchids to ever return to open paddocks.

Conservation.
I have discovered colonies of rare orchids "safely" growing in a Conservation Park only to discover a few years later a barbecue area, ranger's hut or golf course had replaced the orchids.

Misplaced conservation ethics which have Prevented a native orchid grower from collecting tubers or seed of a rare species or form from the bush has often resulted in the extinction of a valuable plant. It has certainly. happened to me - I did not collect any tubers of a white-flowered *Acianthus caudatus* because it was in an area that seemed "safe". Last year I went to photograph it and found only a ploughed field.

Rescue!
NOSSA can save many of our rarer species by rescuing plants, increasing them in cultivation, sending tubers interstate, returning them to safer parts of conservation parks, etc. However it is practically pointless in removing any orchid from the bush until you are sure you will be able to multiply the species - that your cultivation practices are satisfactory. It must be one of our aims to "rescue" orchids from areas being cleared and perhaps a rescue committee could be formed.

In a million years or so I think a visitor to planet Earth will find that there are still many orchids but that any humans will be seen seems more doubtful.

CURTA EXPERIMENTS Les Nesbitt
Last year some 50 pots of *Pterostylis curta* were sold on the trading table and members were asked to report on their progress. Results of the committee's efforts are summarised below. More reports would give a more accurate picture of what actually happened to those plants. Are there only 90 plants left from the original 200? We want to know failures as well as successes. Roy planted seven tubers in each 5" pot; one large and six smaller tubers. Only one plant flowered in my pot in 1977 and this was probably typical of other pots

Grower	Tubers 76/77	Plants 77	Tubers 77/78	Plants 78
A	7	6	16	none yet
B	7	7	24	?
C	7	7	?	11 so far
D	7	5	9	?
E	7	7	32	31
	35	32	90+	42 so far

We can see from these few results that the original tubers have more than doubled. If we keep this up for a few more years we could have a continuous *curta* carpet from Gawler to Port Noarlunga. Note the 10% loss between repotting time and the growing season in 1977. In my experience an average loss of this magnitude occurs each year with most species whether repotted or not. With colony types it is of little significance but with seedling types a 10% loss is vitally important and must be minimised or countered in every possible way.