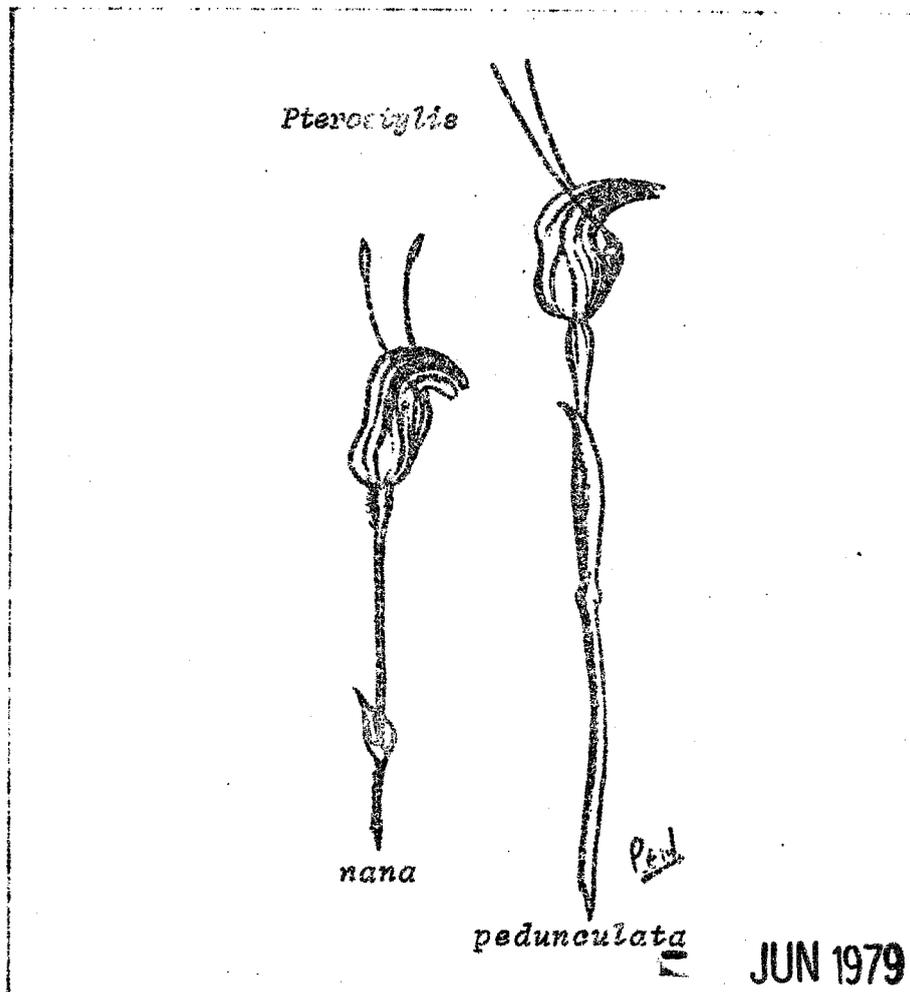
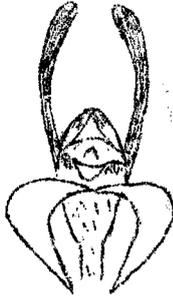


NATIVE ORCHID
SOCIETY
of
SOUTH AUSTRALIA





NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

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NEXT MEETING

When: Tuesday, 26 June, 1979, at 8.00 p.m.

Where: Assembly Hall, Goodwood Boys High School, Hardy Street, Goodwood.

Why: Mr Fred Hall will speak on the orchids and plants of the Tea Tree Gully area. Fred has lived in this area for many years and can remember the days before Tea Tree Gully became just another Adelaide suburb. The sandy areas were not suitable for farming so orchids persisted in these parts until recent years.

LAST MEETING

Attendance 49

Alwin Clements took us on a tour of the wildflower areas of Western Australia from Kalbarri in the north to Albany in the south. The exquisite beauty of the native flowers was clearly shown on the slides. Western Australia is noted for its superb *Caladenias* and those we saw were magnificent.

Raffle results: *Pterostylis scabra* var *robusta* was won by Mrs Holmes; *Sarcochilus fitzgeraldii* by Andrew Nicholson; and *Bulbophyllum crassifolium* by Jim Simmons.

NEW MEMBERS

Mr G. Rischmueller, Salisbury East
Mrs E. Robertson, Blackwood
Ms E. Viskic, Forest Range
Mr and Mrs G. Weller, Clovelly Park

AUSTRALIAN ORCHID FOUNDATION SEED-BANK

"The Foundation would be appreciative if you would bring to the attention of your Members that the Foundation requires seed of Australian Orchid Species.

Although the demand for this seed is limited within Australia, we have found through personal efforts that there is a demand for this seed overseas. The AOF Orchid Species Seed Bank has been established and is functioning, but has hesitated to let it be known overseas that it is operative because of the limited quantity and variety of seed available. Therefore the need for orchid seed should be known to all orchid enthusiasts.

The Directors of the Foundation view the function of the Orchid Species Seed Bank as an important segment of the workings of the Foundation.

Apart from Australian Native Orchid Seed, the Seed Bank is also very interested in seed from orchid species from other lands; especially of rare or selected species.

The need for seed will be continuous and should be sent direct to the Curator of the AOF Orchid Species Seed Bank:

Mr L.J. Lawler,
Department of Biochemistry,
University of Sydney. N.S.W. 2006

The information required is: name of the species,
name of the collector, and
date of collection.

Any positive assistance your Society can offer the Foundation in this regard will be appreciated.

Yours in conservation, Gerald McCraith."

OCCASIONAL NOTES

Peter Hornsby

Peter Martinsen, of the National Parks and Wildlife Service, and I paid an annual visit to the main orchid area in the Belair Recreation Park on April 11 this year. Last year (NOSSA Journal, April 1978, pp 4-5) we found one specimen of Eriochilus cucullatus and three examples of Prasophyllum rufum. What a contrast this year, with the area littered with patches of up to a dozen P. rufum, at all stages of flowering. In a distance of three hundred metres along the ride, we saw hundreds of them. There were also dozens of E. cucullatus (incidentally, this is one of the orchids available from Les Nesbitt's nursery this year according to his newly-released catalogue). Many specimens had two flowers, though in general what we saw was quantity rather than quality. None came anywhere near the magnificent specimen we found last year. My colleague suggested that this was probably because under last year's unrewarding conditions only the most robust tubers produced flowers, and hence the noteworthy example we saw, whereas this year the climate has been so favourable that just about everything has flowered. If this is a reliable prediction for the remainder of this season, we are due to see plenty of orchids in flower, though we may be a little disappointed with the standard of their appearance.

PLANTS ON DISPLAY - 22.5.79

Terrestrials (commentary - George Nieuwenhoven)

There were three Acianthus exsertus, also the green form, in flower. Keep this species cool in summer and not bone dry or the tubers may dry up. Diuris punctata var alba flowers in April-May in Queensland so has not yet become a spring-flowering species in South Australia. A good display of Pterostylis included five pots of Pt. vittata (a species which needs clay pots and good drainage to prevent tuber rot); Pt. ophioglossa; Pt. unknown (affinity alata) from the mallee; Pt. obtusa; Pt. scabra var robusta (2); Pt. truncata; and an unknown greenhood from the eastern states which was still in bud and could not be identified. We also saw Spiranthes sinensis, which must be kept damp all year round; and Spathoglottis plicata, which needs glasshouse culture in South Australia.

Epiphytes (commentary - Jim Simmons)

We saw examples of Liparis reflexa (3) from the New South Wales coast. This is often lithophytic (grows on rocks) and the flowers smell like a wet dog. Also Dendrobium bigibbum, Dendrobium rigidum and Epidendrum boundii, a hybrid from the Central American species which has become naturalised in Queensland.

Bob Bates sent along five photographs showing some of the varieties of Caldenia carnea.

POPULAR VOTE

Epiphytes

- First - Dendrobium rigidum growing on a cork slab, owner Vonne Burdett.
- Second - Dendrobium bigibbum grown cold in a 3" pot by Peter Hornsby.

Terrestrials

- First - Pterostylis vittata grown by Bob Bates. This 10-inch clay pot contained many plants in flower.
- Second - Two pots tied for second, both grown by Les and Kay Nesbitt. Diuris punctata var alba comes from the Atherton Tableland in Queensland. There was one flowering plant in a 7" plastic pot. Pterostylis truncata was also in a 7" pot which contained five plants in full bloom.

FIELD TRIP

PARRAKIE - 27-29 July 1979

All those wishing for accommodation in Parrakie MUST let Roy Hargreaves know by the end of the next NOSSA meeting on June 26. A provisional list has already been forwarded to the Parrakie Group and this must now be finalised.

The rendezvous is the Geranium Area School on Friday, July 27, at 8.00 p.m. when we will be giving a talk to the Parrakie Group on "Orchids of the Adelaide Hills". From then onwards we are at the guidance of our hosts, the Parrakie Group of the Society for Growing Australian Plants.

The day promised to be more rewarding to the seeds than to the seed-sowers, which probably explains why Mrs Robertson and Jock Heath (from the Management Committee of Watiparinga) were met by not more than an equal number from NOSSA. The only other carload to arrive turned out to be a CFS man and his small son, whose simultaneous rendezvous was even more poorly attended!

Fortunately for the stalwarts when the light drizzle dispersed it stayed away until we reached our cars again at the end of the afternoon. In spite of the weather, it was a pleasure to see the number of trees in flower. In the total absence of orchids, we had plenty of time to admire them. The Pincushion Hakea (Hakea laurina) was in full bloom, together with another particularly attractive Hakea species from Western Australia which had deep pink Grevillea-like flowers. Several of the wattles were flowering, with the Flinders Range Wattle (Acacia iteaphylla) a positive blaze of yellow.

Descending the hillside we carefully inspected the site of the earlier planting in the Alison Ashby area, but none of the orchids looked as though they will bloom yet awhile! Anyway, we supplemented the March 10 planting with some more Pterostylis nana, plus P. vittata. Our main aim was to find an appropriate spot for some P. nutans, and after much deliberation we continued nearly to the bottom of the hill where we planted some in a nice damp-looking spot near a Sweet Hakea (Hakea suaveolens). (It looked a very benign specimen by comparison with the South African Daisy and Soursob we had been seeing, so it comes as quite a surprise to realise that H. suaveolens is regarded as a serious pest in the Cape Province of South Africa, where it has become naturalised.) On a drier spot we also sowed some Diuris longifolia seed, while by a nearby Agonis flexuosa we sowed some Caladenia dilatata. This Western Australian Willow Myrtle favours damper areas so we hope the three orchid species will thrive.

We then walked up the creek and climbed up to above the old tunnel entrance. There we chose a spot where we imagined Thelymitra might admire the view and sowed some T. rubra and T. pauciflora, with some more C. dilatata for good measure. This is a far more open and exposed situation so it will be interesting to compare the progress of the last species with those from the earlier site.

At that point we more or less called it a day, and made our way back towards the main gate. On the way we came across a really inviting thicket of Kangaroo Thorn (Acacia armata). Some justification for our enthusiasm came from the copious quantity of sundew (Drosera whittakeri) we found there. They obviously relished the comparative paucity of grass and we reckoned the orchids would do likewise, so we went to town with P. nana, Microtis unifolia, D. longifolia, C. dilatata, T. pauciflora, T. rubra and T. luteocilia seed. We even went on our hands and knees into the thicket and planted some P. nana and P. vittata there too! If many survive, there will be more native orchids in that one thicket than in the rest of Blackwood put together.

After that we really got the bug so were full of confidence as we approached a Casuarina copse a little further along the new tunnel. Once again the Drosera reinforced our choice, so we went ahead with the A. armata selection again. By the time we finished, quite a lot of seed had been planted - millions of them - thanks to the painstaking packing by Don Wells, custodian of the seed bank. All we can do now is to hope that the gentle rain that followed our efforts will inspire some of the seed to grow.

Seed-Sowing at Watiparinga (contd.)

One little lesson we learned was that on future occasions it would help if someone took a small hand-fork to break up the surface - somewhat quicker that way than Roy Hargreaves' penknife, which was all we had for this sowing!

Postscript: Mrs Robertson reported later that there is a strong possibility that the Casuarina stricta seed patch can be fenced with rabbit-proof netting. Once again, with luck this will enable us to assess the effects of such protection by comparing the Casuarina copse site with the Acacia armata area.

THIS MONTH'S COVER

"J.W."

This month's cover features two examples of the genus "Pterostylis". Like several of the other orchid genera, the name is a combination of two Greek words. In this instance, the prefix is quite a common one, coming from the word "Pteron" (meaning a wing). Several Australian plants have this prefix - the same as the pterodactyl, the extinct flying reptile. Not surprisingly, pterography is the collective word for "the description of feathers", though this is a paradox, as the Greek for feather is in fact "Ptilon"!

The second part of the name comes from the Greek "stylos" (meaning column or style), hence Pterostylis - winged column - a reference to the lateral lobes, or column wings, to be seen at the top of the column inside the hood of these "greenhood" orchids.

The smaller of the two shown on the cover, P. nana, has a species title readily befitting it, with the name coming from the Latin "nanus" (meaning dwarf). The relevance of its name can be accepted readily, giving rise as it does to its common name of Dwarf Greenhood! In fact so many of our greenhoods have such easily discernable characteristics that many have common names directly interpretable from their scientific names. Other examples are P. longifolia, the Long-leaf Greenhood; P. mutica, the Blunt Greenhood ("muticus" being the Latin for blunt); P. nutans, the Nodding Greenhood ("nutans" being the Latin for nodding); P. cyanocephala, the Swan or Swan-headed Greenhood. In this instance the species name is a combination of the Latin "cygnus" (a swan) and the Greek "kephale" (a head).

One species where the common name is not related to its scientific name is P. pedunculata, the other orchid shown on the cover. As in Diuris pedunculata, the species epithet refers to the long slender stem - a characteristic particularly noticeable in specimens growing in shady areas among long-leaved grasses: for example in the Belair Recreation Park just east of Echo Tunnel.

Also to be found in the Belair Park is P. curta, another orchid like the former, which responds readily to cultivation! The species name comes from the Latin "curtus" (meaning shortened) - a reference to the absence of the elongation of the lateral sepals that characterises so many examples of this genus. In this respect, the appearance is similar to that of P. cucullata, whose species name comes from the Latin "cucullatus", or "cucullus" (meaning a hood).

P. obtusa, our most recent orchid "find", has a name derived from the Latin "obtusus" (to blunt); itself a combination of "ob" (meaning against) and

Our Cover (contd.)

"tunders" (meaning to beat). Thus the species epithet is a reference to the blunt shape of the labellum.

All the *Pterostylis* mentioned so far, except *P. cycnocephala*, were named (as also the genus) by Robert Brown. Some of them occur on Mount Brown itself, though as Brown visited the area in March it is highly unlikely that he came across any of them in flower. The exception, *P. cycnocephala*, was named by Fitzgerald, who established it as a separate species from *P. mutica*, though he had reservations on this point, and there is no doubt that the distributions for the two species are remarkably similar. (Fitzgerald also mentioned in Volume I of "Australian Orchids" that he successfully fertilised *P. obtusa* with pollen from *P. longifolia*. The result must be quite interesting.) Another hybrid to which Fitzgerald refers is one we could well look out for; namely the crossing between *P. curta* and *P. pedunculata*. He found both species flowering together at Pitt-water, New South Wales, together with what he believed to be intermediate forms. We also found both flowering together in Belair Recreation Park last September (see the Field Trip Report in the October 1978 Journal, pp 7-9), but the thought of looking closely with the idea of finding hybrids did not occur to us at the time. Fitzgerald also crossed *P. curta* with *P. nutans* - the latter being the only orchid species he ever succeeded in raising from seed.

P. vittata is attributable to Lindley, and here the species name comes from the Latin "vittatus" (meaning band or garland) - hence the Banded Greenhood, a reference to the pronounced stripes on the hood. Erickson refers to this as the commonest greenhood in Western Australia!

Finally come two greenhoods that have been subjected to name changes. The first is *P. plumosa*, from the Latin "pluma" (meaning a soft feather). It was given this name by Cady (1969) to distinguish it from *P. barbata*, by which name it had been known in South Australia; *P. barbata* remaining the name for the Western Australian species. In both instances, the species epithet refers to the highly developed and characteristic labellum.

Lastly there is *P. alata* var *robusta*. Here *alata* comes from the Latin "alatus" (meaning a wing), while *robusta* comes from the Latin "robustus" (meaning robust) - a derivation from "robur" (meaning oak): this latter also occurs in its basic form as in *Banksia robur*, the swamp banksia from coastal New South Wales and Queensland. In the present instance, the least contentious part of the name, *robustus*, is presumably an allusion to the erect appearance of flowering specimens, surrounded as they usually are by numerous non-flowering basal rosettes.

MISCELLANEOUS

Have you seen the 1979 South Australian regional telephone directories? The cover illustration for the area code 088 directory (Yorke Peninsula; Mid North areas) is quite a good photograph of *Caladenia filamentosa* "Daddy Long Legs"!

Is this a good omen for our weekend visit to Yorke Peninsula in September?

PLANT RECORDER REPORT FOR 1978

K. Western

This article is continued from the May Journal.

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Dendrobium (contd.)											
o bigibbum x discolor (= bigibbum var superbiens)											
+ howana nioka x agrostophyllum	-										
+ ruppianum x fleckeri									x		
+ (kesteveni x delicatum) x tetragonum var giganteum		-									
+ johannis var giganteum x bigibbum var compactum					x	x					
+ gracilicaule var howeanum x tetragonum var giganteum					x						
+ falcorostrum x tetragonum (Star of Gold)									x		
DIURIS											
aurea									x		
o brevifolia									x		
+ emarginata									x		
+ laxiflora								x			
longifolia						-	x	x			
maculata						x	x	x			
palustris							x				
o pedunculata											
o punctata											
+ punctata var parvipetala										x	
o sulphurea											
o maculata x pedunculata											
o maculata x longifolia							x	x			
o longifolia x pedunculata								x			
ELYTHRANTHERA											
o brunonis											
ERIOCHILUS											
cucullatus		x	x	-							
GLOSSODIA											
major				-		-	x	x			
minor				-							
HABENARIA											
+ banfieldii		x									
+ ferdinandi	-										
LEPORELLA											
fimbriata			x								
LIPARIS											
o nugentae											
o reflexa	-		x								
+ reflexa var parviflora	x		x								
LYPERANTHUS											
o nigricans											
x suaveolens								x			
	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

- = plant benched * = cut flower + = New Species/Variety 1978 only
 x = plant benched in flower o = Species/Variety 1977 but not 1978

Plant Recorder Report for 1978 (contd.)

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MALAXIS											
+ latifolia				x							
MICROTIS											
o atrata											
o orbicularis											
o parviflora											
o uniflora											
o unifolia				-				x			
OBERONIA											
+ palmicola					x						
PAPILLIBALIUM											
+ beckleri							-	x			
PARACALEANA											
minor										x	
PARASARCOCHILUS											
+ spathulatus									x		
PERISTERANTHUS											
+ hillii											
PHAIUS											
+ australis										x	
tancarvilliae	-								x		
PRASOPHYLLUM											
archeri	-										
o australe											
+ despectans	x										
+ elatum								x			
fitzgeraldii									x		
+ goldsackii								x			
o gracile											
o hartii											
+ morrisii		x									
nigricans	x	x									
o occidentale											
o odoratum									x		
o pallidum											
+ rufum	-	x		x							
validum									x		
PTEROSTYLIS											
acuminata var ingens							x	x			
alata				x	x						
+ alpina							x				
baptistii	-		-		x	x	x	x			
biseta								x		x	
boormanii								x			
concinna					-	x					
+ cucullata							x				
curta	-	-	-	-	-	x	x	x			
cycnocephala					x	x	x				
o decurva											
	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

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Plant Recorder Report for 1978 (contd.)

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Pterostylis (contd.)											
+ fischii			x	x							
foliata								x			
o gibbosa ssp mitchellii								x			
hamata								x			
hildae					x						
longifolia				x	x	x	x				
mutica					-	x					
nana				x	x	x					
nutans	-				x	x	x	x			
obtusa			x		x						
ophioglossa				x							
ophioglossa var collina					-	x					
parviflora		x									
pedunculata						-	x	x			
plumosa						-		x			
revoluta		-									
o rufa var aciculiformis								x			
rufa var rufa								x	x		
scabra var robusta											
vittata			x	x	x	x	x				
o curta x nutans											
boormanii x rufa							x				
o baptistii x curta											
o acuminata var ingens x curta											
SARCOCHILUS											
ceciliae	x	x	x				x				
falcatus							x		x	x	
hartmannii		x					x		x		
olivaceus										x	
o roseus x fitzgeraldii											
o Lois x fitzgeraldii											
SPATHOGLOTTIS											
pauline					x						
SPIRANTHES											
sinensis	x										
THELYMITRA											
antennifera								x			
aristata							x		x		
aristata (Queensland form)	x										
carnea									x		
+ chasmogama								*			
+ epipactoides								*			
o grandiflora											
o ixioides											
o luteocilium											
o mucida											
o mucida x pauciflora											
	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

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HABITAT ISLANDS

R. Bates

The Importance of Habitat Islands to the Orchid Enthusiast Working in the Field.

It was Charles Darwin in his "Origin of Species" who coined the term "habitat island". These habitat islands are isolated pockets of markedly different flora and fauna in an otherwise uniform landscape. Darwin's favourite was the mountain peak. These "islands" are caused by differences in geology, climate, altitude, soil types and so on. They contain a high proportion of specialist species which are unable to survive in other areas.

To the orchid enthusiast in South Australia the most obvious habitat island is the small area of undisturbed bushland in a vast area under grazing or cultivation. Here can usually be found a good selection of the orchid species that were widespread and common in the area before settlement. They are not specialist species.

In our dry summer climate, swamps or bogs support a vastly different range of plants and are a good example of habitat islands that are not man made. The orchids here are specialists and generally rare species.

A burnt out area is another good example of a habitat island and with so many fire stimulated orchids, an ideal place to search - particularly in heavily timbered country.

When driving through the Mallee or anywhere on Eyre Peninsula or the South-East a small area of different soil usually harbours orchid species that are not found in the bushland around. A good example is the pocket of terra rossa soil in a general environment of grey limestone soils.

Although there are no mountains in South Australia large enough to really alter the climate and no orchid species confined to high altitudes, many isolated hills and peaks have a very different orchid flora to the plains about them. Examples include Mount Wedge on Eyre Peninsula and Mookna Towers in the mid-North.

In the more arid regions of our state orchids are usually confined to rock outcrops especially of granite or quartzite. Even a very small outcrop may harbour a half dozen orchid species not found within twenty kilometres.

Areas of natural grassland in otherwise dense bush are excellent habitat islands as far as terrestrial orchids are concerned. The problem for the amateur is deciding whether the grassland is natural or a result of man's interference. Several of our endemic taxa were almost confined to natural grassland, e.g. Caladenia gladiolata and Prasophyllum fuscum var occidentale. As natural grasslands were most attractive to farmers these species have suffered more than others.

For those interested in natural hybrids areas of disturbed land are ideal islands for their development. Such areas include quarries, old access tracks and firebreaks as well as natural landslips. Thelymitra irregularis and Diuris fastidiosa (both putative hybrids) have only been collected in such disturbed land.

When next you are out searching for orchids remember that several short stops at small islands of unusual vegetation will be far more rewarding than a long hike through an area of uniform bushland.