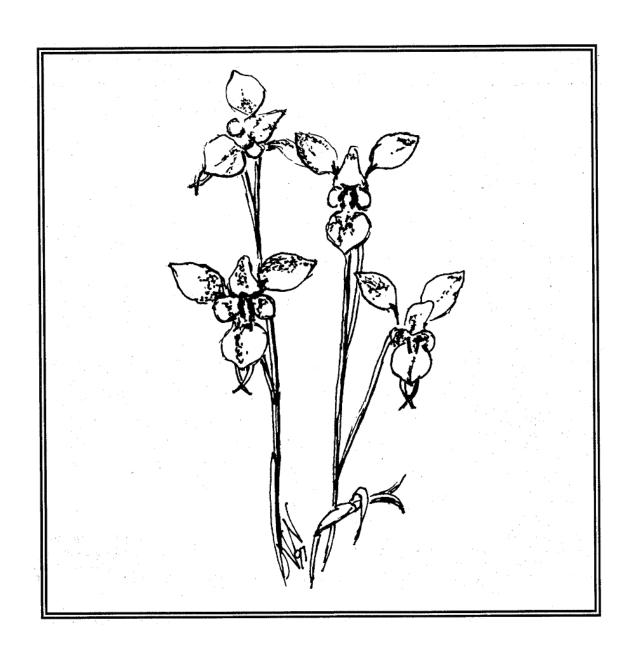


Journal of the Native Orchid Society of South Australia Inc



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

Post office box 565 Unley 5061

The Native Orchid Society of South Australia promotes the conservation of native orchids through cultivation of native orchids, through preservation of naturally-occurring orchid plants and natural habitat.

Except with the documented official representation from the Management Committee of the native orchid society of South Australia, 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 cost \$1 per issue. Subscription \$14 family or single.

NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC MAY 1998 Vol. 22 No. 4 JOURNAL

MAY MEETING

Tuesday May 26th at 8.00 pm: Saint Matthews Hall, Bridge Street, Kensington. There will be several speakers from the Carnivorous Plant Society who will address us on various aspects of the biology, ecology and cultivation of this fascinating group of plants.

Doors open at 7.15 to. allow trading table and library to proceed. Don't forget tea and biscuits afterwards!

PAGE	CONTENTS	AUTHOR
31	Diary Dates	
32	On the Bench	
33	Speaker for April	
34	Genoplesium excursion to Halbury: Report	Kerry Jolly
35	Liparis reflexa	
38	Aussie Dendrobiums number 25	Mark Phillips
39	Letter re Herbarium - for sending!	Cathy Houston
40	Librarian's Report	Geoff Edwards

DIARY DATES

May 23	Caladenia rigida working bee	Milbrook
May 31	Conservation group working with P. bryophila	Hindmarsh Valley
June 23	General meeting: speaker Steve Monkhouse	Kensington
June 28	Bridal creeper spraying	Halbury
July 5	Corybas unguiculatus etc	Kuitpo
July 12	NOSSA survey Lowan CP	Bow Hill
Sept 5-6	Yorke Peninsula weekend	
Sept 13	?Balaklava- Halbury	Lower North
Sept 19-20	Spring Show	St Peters
Oct 10	Prasophyllum Special	Sandy Creek
Nov 8	P. urenicola working bee	Grange
March 99	Genoplesium special to Simpson	Victoria

Next Field Trip: Hindmarsh Valley. Meet 10am Sunday May 31 at Myponga turn-off just north of town. We are monitoring Pterostylis bryophila and will do some weeding if conditions suit. All welcome! Bring lunch.

Next committee meeting at the home of Iris Freeman, 18 Justina Place 3rd Surrey Downs on Wed June at 7:30.

ON THE BENCH:

Epiphytes---- Dendrobium bigibbum, D. Gai Ellen, D. Kim Heinze, D. Sun Star.

Terrestrials --- Acianthus pusillus, Eriochilus cucullatus (3), E. dilatatus, Leporella fimbriata, Pterostylis bryophila, P. aff. bryophila, P. fischii, P. hians, P. ophioglossa, P. truncata, P. X furcillata, P. Rogoff, P. Sentinel, P. Trunkfish.

Terrestrials far outnumbered epiphytes. *Pterostylis hians*, the Opera House orchid was new to most of us and we were surprised how tiny it was. In contrast the *Eriochilus dilatatus* from Western Australia was over 30cm tall and had 8 flowers all perfect. But nothing could compare with the delightful pot of *Leporella fimbriata* with some 20 flowers, all shiny and new. This pot was awarded a cultural certificate. There were 2 distinct plants going under the name *Pterostylis bryophila* and the opinion was that one had been mislabelled at some time or another.

PLANT COMMENTARIES Les Nesbitt and Noel Oliver

JUDGING

Terrestrial species

1st Leporella fimbriata grown by Les Nesbitt

2nd Eriochilus dilatatus grown by Black Hill

3rd Pterostylis truncata grown by the Wells Family

Terrestrial hybrid

1st Pterostylis Trunkfish grown by Les Nesbitt

2nd Pterostylis Sentinel grown by Les Nesbitt

3rd Pterostylis furcillata grown by Mal Tiggeman

Epiphyte species

1st Dockrillia wassellii grown by Noel Oliver

2nd Dendrobium bigibbum grown by Nesbitts Orchids

Epiphyte hybrid

1st *Dendrobium* Sun Star grown by N. Oliver

2nd D. Kim Heinz grown by

3rd D. Ellen-Gai grown by G&P Edwards

POPULAR VOTE

Best Terrestrial: Leporella fimbriata

Best Epiphyte Dockrillia wassellii

Plant Of The Night Leporella fimbriata

NEW MEMBERS:

NOSSA welcomes Paul and Wendy Schmerl as well as Margaret Morgan and Loma Saunders.

CONSERVATION REPORT

Nine NOSSA members met on ANZAC day, with the Threatened Plant Action Group at Belair, to hand pull Broombush from the Long Gully *Pterostylis cucullata* site. Some 48 man hours were put in! Two photo points were set up and before and after shots taken. The status of this species may be raised to Endangered if it can be shown that the short sandhill form belongs to a new subspecies. We have another visit to the area later this year to poison Ivy!

No less than 40 species of weed have been recorded as threatening *P. cucullata* at Belair.

ACTION PLAN:

Project objectives: To restore habitat of the Leafy greenhood orchid and other species of conservation significance by

- removing the threatening processes of weed invasion
- enhancing natural regeneration of native species
- ensuring the long term survival of the whole native community through long term management
- fencing site along track to prevent car parking
- creating a buffer zone to prevent further weed invasion
- monitoring outlying population of P. cucullata in degraded section (Courtesy Yvonne Steed). The complete action plan is available from our secretary.

Some \$4 million has been set aside from the sale of Telstra to buy land of conservation significance in South Australia. Lets hope that whatever is bought does not become a goat infested wasteland like much of our reserve system.

APRIL SPEAKER

Last month we enjoyed a trip to Kangaroo Island as the speaker Bob Bates showed us scenery, wildlife and orchids of the State's largest island. Bob pointed out that his own family's association with the Island began in 1824 when South Australia's first permanent white settler,

George "Fireball" Bates jumped ship near present day Penneshaw and proceeded to carry out such dubious activities as kidnapping Aboriginal women and setting fire to the bush. Bob has visited Kangaroo Island 6 times but on some of these visits, ie his honeymoon, did not see any orchids. Compared to our own Adelaide Hills, orchids are sparse and often only one or two species will be found at a particular site. Despite KI having some 50 endemic plant species there are no named endemic orchids but Bob showed slides of several undescribed taxa including no less than 5

spider orchids! Most of us had never seen many of these orchids before. With the recent discussion on *Dipodium* in the Adelaide Hills, Bob thought it an ideal time to show slides explaining the differences between the three South Australian species. He then completed his talk by explaining how the genus *Pterostylis* is polyphyletic and showing the actual genera involved.

ONE THOUSAND HERITAGE AGREEMENTS

Heritage agreements are legal contracts between a land-holder and the State Government whereby the land-holder agrees to conserve an area of native vegetation on his or her property. The scheme began in 1980 and since then 550 000 hectares of bushland has been placed under agreement. 1997 saw the signing of the 1 000th agreement! Its all very well signing agreements but its another matter to keep the bush in good condition.

GENOPLESIUM SPECIAL EXCURSION TO HALBURY

It may seem odd to have *Genoplesium* Specials in consecutive months but there is not a lot of choice at this time of the year. As it turned out different *Genoplesium* were found on each trip. Despite the inclement weather on April 19th and the distance involved some 20 people attended. Our leaders 'Ken & Barbie' took us to the tiny patch of scrub opposite the fire station. This was mostly *Callitris* and *Alyxia buxifolia* on heavy red loams in 350mm rainfall country.

We had instant success, finding a tiny undescribed, purple-brown flowered species with distinctive white stripes on the petals. Under the lens the flowers proved to be quite intricate and distinctive. There were about a dozen specimens in the area and some seemed to have features of the better known *G. nigricans*.

We then moved 100 metres around on the road to Hoyleton and looked under a patch of mallee on limestone by a For Sale sign. There were about 50 specimens here, many of them the typical *G. fuscoviride* with numerous green flowers having a spoon-shaped, purple labellum but once again there were the obvious hybrids. This hybridising is to be expected as the area has been much altered and crossing seems to be a last ditch effort to survive. Our third site was in an old quarry on the Balaklava road. The ploy of hybridising to increase genetic variability had worked here as the quarry contained the largest concentration of *Genoplesium* hybrids we had ever seen. There were over 100 in a small area. All possible intermediate colour and shape combinations were seen. Some plants were found on the roadside and the colony seemed to be spreading. Despite a lot of searching no other



orchid species were seen, not even the mallee Eriochilus known to occur here many years ago.

We were happy with what we had seen and drove to the Bayley's home for a barbecue lunch. We were pleased to entertain Victorian visitors and David Pettifor's sister all the way from England.

Many thanks to Ken and Barbara for their hospitality. We are hoping to revisit the area in September and may see as many as 20 orchid species in relict vegetation.

Some members visited sites on private property in the Halbury area and found more colonies of the *Genoplesium* mentioned above.

VERSATILE SPHAGNUM

(adapted from an article by Keith Ryan in the latest Orchadian.)

Sphagnum moss has long been known and used in orchid culture as a media promoting root growth. The usual practice was to pot the plant in sphagnum and once roots developed place it in its usual potting medium.

These days sphagnum is used as a permanent medium for a wide range of genera both epiphytic and terrestrial. Well known orchid grower Frank Slattery, for many years imported plants from all over the world, potting them - regardless of genus - in sphagnum moss and ultimately sold the plants still in the moss.

There are many sources of sphagnum ie the pelletised form from New Zealand (which won't regrow) and from Tasmania as dry moss which reconstitutes on addition of water. This comes in various grades from long strand to short, for growing seedlings. You can even buy green, damp, growing moss. In the South East one often finds sphagnum in pine plantations from which it is readily transplanted.

Some growers add perlite or polystyrene to open up the mix but most now use sphagnum on its own.

A recommended method is to

- 1: wet the dry moss with quarter strength liquid fertiliser.
- 2: Un-pot your plant, remove any dead roots and wash off any old media.
- 3: Squeeze the water from the moss with your hands until no more water comes out.
- 4: Turn the plant upside down and work the moss in between and around the roots before placing plant in pot.
- 5: Put your fingers in the pot and work around the edges pressing the moss toward the centre of the root mass. Keep adding and pressing until tight.
- 6: Do not water the plant for a few days and from then on just mist enough to keep the same moisture levelas when potted.
- 7: IMPORTANT! Only use quarter strength fertiliser or you may grow a nice crop of slime. Do not use slow release fertiliser or dynamic lifter.

Advantages of using moss include less water and fertiliser being used, fewer insects in the pot and cleaner tubers. It is wise to re-pot annually. See next issue for further details on South Australian use of Sphagnum!

LIPARIS REFLEXA

Common name: Dog orchid.

This orchid usually grows on rock ledges or in crevices where it forms large stands. The whole plant is somewhat yellowish in appearance. The pseudobulbs are from 2-5 cm long and rather egg shaped. There are 1-3 leaves which are narrow, thick textured and to 30 cm long. The inflorescences, bearing up to 30 yellow-green flowers are up to 20cm long. The flowers generally have an unpleasant wet dog odour (hence the common name) but some recently collected plants have sweet-scented flowers. Each flower is only 1cm across. The perianth segments are all reflexed (hence the Latin name).

This is a very common plant in the southern half of coastal New South Wales as far as the Victorian border and into Southern Queensland. It is always found in slightly shaded situations, often along watercourses. It flowers from February to June.

Liparis reflexa grows well in cultivation and a large pot in full bloom is a pretty sight. It grows best in a coarse mixture of charcoal, pine bark and Cymbidium mix. Liparis reflexa is fairly common in the Sydney region, especially in the Hawkesbury and Blue Mountains areas. It often grows in association with Dendrobium speciosum and the two can be found with their roots intermingled.

(From an article by Michael Harrison in CALEYA March 1998).

R. Brown



APRIL EXCURSION INTO THE ARID NORTH WEST

After travelling 800km from home via Port Augusta and the Stuart Highway we camped on Bulgunnia Station (average rainfall 7"). Much of the station is covered with mulga on red sand plain. Good rains had fallen and summer grasses were in seed. No orchids were seen but the remains of blue pincushions (*Brunonia*) were of interest.

South of Bulgunnia the country changed to poor, bare, calcareous plains with stunted bluebush but due to recent rain we were constantly detouring around ponded water on the road. Our first real search for orchids began on a large rocky hill just before Tarcoola. The environment looked ideal for the desert greenhood Pterostylis xerophila but if there were any present they were still below ground.

Tarcoola itself seemed to be developing into a ghost town. To get petrol into the car involved hand pumping it as the only unleaded petrol bowser in town hadn't worked for months. (The mechanic insisted that the road to Bulgunnia was closed due to flooding but as we had just come down the Bulgunnia road and felt that a Mini Minor could have done the trip we didn't say anything. How often do the locals give false information!) The pub however served excellent and cheap meals.

The next day saw us at the ghost town of Kingoonya (I remembered enjoying a hamburger at the roadhouse there ten years earlier but the broken windows and flapping galvanised iron told a sad tale). If there were any people present they remained well and truly hidden. Not far from Kingoonya we had our first exciting find, a tiny desert ephemeral rush known as *Bulbostylis*, but this one was a species not recorded for SA.

At Kingoonya we turned south on the Kokatha road and lunched at the granite outcrop by Gorge Well, not far from the large salt pan of Lake Harris. Here we found our first sign of orchids. A single rosette of some rufa group *Pterostylis*. We doubted that we would ever have the chance to return and find out what species it was. Certainly no orchids have ever been collected in the area before. We had previously searched the tallest hill (Chittanilga), in 1980 and seen no orchids so it appears it is not the height of the hill that matters but the substrate: granite is better than ironstone for desert orchids!

We continued south to the Gawler Ranges and found our first orchids in flower, at Hiltaba Station, in a patch of mallee. These were *Genoplesium nigricans*. The Hiltaba area has several rare endemic plants but none of them are orchids. The next day saw us back in civilisation: bitumen and real roadhouses (at Wirulla). *Genoplesium nigricans* (*fuscoviride*) were abundant in the extensive mallee but it was not until we reached Caralue Bluff to the east that orchid diversity improved and *Eriochilus* (the smooth leafed, tiny flowered form) appeared as well as *Genoplesium* aff. *rufum* 'mallee'. Signs of various *Pterostylis* rosettes just emerging too.

We camped at Mambray Creek in the Flinders and next day drove into the Pound area. Here we found *Genoplesium nigricans* again and *G*. aff. *rufum* 'Flinders' but no *Eriochilus*. Despite finding no orchids new to us we were well satisfied with our trip having found several plants from other families that we had never seen before. New orchids are very hard to find in South Australia these days.



Pterostylus xerophila

Bob Bates

ORCHIDS WHICH FAKE IT (From the Sydney Morning Herald).

An Orange entomologist has discovered several new species of sexually deceptive native orchids that fool wasps into believing they can mate with them. The wasps fly away frustrated, but as far as the orchid is concerned, the deed has been done; the wasp has transferred pollen from one plant to another, enabling seed set.

Dr Colin Bower a program Leader in horticulture for NSW Agriculture will soon be recognised for his research, done as a hobby, by having one of the orchid species named 'Chiloglottis boweri' after him. It is found only in the New England National Park 70km east of Armidale.

The Chiloglottis orchids practise deceit on a large scale with the wasps they attract.

The male wasps think they have found a female and even go as for as attempting to mate with the flower before they realise they have been duped.

Dr Bower said that probably two thirds of the world's orchid species were pollinated by deceitful mechanisms. He had spent ten, years photographing orchids in the wild before he began, studying their biology. He said that different species of Chiloglottis use specific scents to attract a different wasp.

"I've been, using this unique relationship between the orchids and the wasps to identify new orchid species," he said. "I've found that flowers people thought were the same attract different wasp pollinators and on looking more closely have noted subtle differences."

AUSTRALIAN DENDROBIUMS No 25

Dendrobium racemosum (Nicholls) Clemesha & Dockrill The name refers to the distinctive flower racemes.

This species is endemic to the Atherton, Tableland and adjacent areas near Cairns. It occurs in cool, wet highland rainforest, mostly on exposed ridges especially on hardwood trees. It is a spring flowered species with tall leafy, hardly branched stems. The leaves are terete the flowers about 2.5cm across. They are of a creamy colour with purple anthers.

The species is easy to grow in a cool glasshouse or bush-house in frost-free areas. It seems to do best mounted on hardwood but we have seen it in Adelaide on tree-fern,.



AUSSIE NATIVE ORCHID HYBRIDS 1997 REGISTRATIONS

NAME	PARENTAGE	REGISTERED BY
<i>Caladenia</i> Harlequin	flava x latifolla	G. Nieuwenhoven (R.Bates)
Dendrobium Doncaster Surprise	Colonial Surprisa v Star of Gold	Florafest (I Klein)
Edan Stripes	Colonial Surprise x Star of Gold Edda x Ellen	N. Roper
Elsie Bayldon	Angeline x Pinterry	N. Mitchell
Enzed Charm	Gracious Falcon x Doug Burgess	D. Burgess
Enzed Elegance	Narraweena x Doug Burgess	D. Burgess
Gillieston Gold	Karen Nair x Star of Riverdene	W Skillicorn
Gillieston Magic	Suzanne x Lynette Banks	W Skillicorn
Jonquil	Jombock x canaliculatum	WT Upton
Korowin	Brolga x Aussie Victory	N. Roper
Maddison	racemosum x rigidum	R. Currell
Nerissa	Berry x Star	G. Leafberg
Numbat	linguiforme x rigidum	D Smedley
Penny Flere	superbiens x semifuscum	La Flere Orchids
Purple Heart	Nerang x kingianum	G. Leafberg
Shelleen	Ellewong x Dot Sheen	N. Mitchell
Sid's Surprise	Colonial x Aussie Child	I. Klein
Victorian Flare	kingianum x Rutherfords Blushing Bride	W Turville
Victorian Humbug	kingianum x Rutherford Sunspot	W. Turville
Victorian Mascot	Aussie Treat x Rutherford Sunspot	W. Turville
Victorian Star	Merrymaker x Aussie Parade	W. Turville
Victorian Tetra	Kathking x tetragonum	W. Turville
Plechtochilus		
Minirose	Sarcochilus ceciliae x Plectorrhiza erecta	N. Finch
Yabbie	Sarcochilus Sue x Plectorrhiza tridentata	Riviera
Rhinochilus		
Yellow Cascades	Sarcochilus Canary x Rhinochilus Dorothy	Florafest
Sarcochilus		
Cherry Cheer	Ruby x <i>hirticalcar</i>	R. Clement
Dove	Melody x hartmannii	N. Finch
Gunnadoo	Cherie x Melba	B. Gregory
Highton Magic	Pinkhart x <i>fitzgeraldii</i>	Florafest
Highton Sparkle	Bongeen x fitzgeraldii	Florafest
Nabiac	Melody x Heidi	B. Gregory
Patricia Hill	Frances x fitzgeraldii	S. Hill
Pink Cascades	Shooting Star x fitzgeraldii	Florafest
Red Cascades	Pinky x fitzgeraldii	Florafest
Selcher	Selwyn x Cherie falcatus x australis	WT Upton R. Currell
Wongie	jaicaius x ausiraiis	K. Cuiteii

The State Herbarium

At the April general meeting the following resolution was proposed and duly passed by those present

"That NOSSA members support the sentiments as expressed by our Patron, Mr Noel Lothian in our March journal and that NOSSA continues to maintain an active opposition to the proposed alteration to the Herbarium."

The following letter may be used by members to send to Members of Parliament. Members may alter, adapt, make substitutions, or change the letter according to their own requirements.

RE: DEMOLITION OF THE STATE HERBARIUM

I am a member of the Native Orchid Society of South Australia and have an active interest in our native orchids as well as other native plants.

The proposal to demolish our State Herbarium is totally unacceptable. As our patron, Noel Lothian points out, the land on which the existing building stands was dedicated for Botanic Garden purposes in 1935.

The building is relatively young, the oldest parts of it being only about forty years old. It has been purpose built, and as such, incorporates up to date technology for the housing of its valuable collection in the most suitable environment. It is a priceless collection of some 800 000 "plus" plant specimens, a testament to this State's biodiversity. Included in the collection are irreplaceable specimens of obvious historical value. Readily recognised as such are specimens collected during Cook's and Flinders' voyages but of equal significance are plants collected from areas in which they are now extinct. Our Herbarium and its collection enjoys international acclaim, for it to be removed and replaced by a National Wine Museum is an inconceivable suggestion.

After all, there are a multitude of suitable sites for the proposed Wine Museum. The demolishing of the existing buildings (which are far superior to any Tram Barn) is financial folly and not the least of the reasons why the Herbarium should be maintained on its present site. To consider transfer to the Tram Barn is untenable!

The cost of this exercise would appear to be grossly underestimated. What provisions are to be made for the safe transport of the collection? Current plans indicate the need for some interim storage time, how and where will suitable housing be found?

How will people working with the collection and in the areas of research be able to continue their work during this "interim" period?

What additional costs will be caused by this unnecessary move?

I urge the Parliament to give this matter urgent consideration and perhaps rethink the current proposal.

DROUGHT-BREAKING RAINS AUGER WELL FOR ORCHIDS

Easter and the week following saw heavy soaking rain throughout all South Australia except parts of the north where orchids don't occur anyway. Up to 150 mm fell in some areas and farmers declared it to be the best break in the season for many years! Even if only average winter falls occur we could see a fabulous display of wildflowers in the north and good flowering of most orchid species. However a very dry May could spoil the show

(as to May 12 little or no rain has fallen. Eds)

LIBRARIAN'S REPORT

G Edwards

After a most enjoyable evening at the Buckingham Arms, pleasant company, good conversation and delightful food; a good book is the perfect way of finishing off any day. So a cross section of smaller books which are suitable for browsing whilst propped up in bed are the order for this month. Some are on the older side (could be described as historical) but they still make for interesting reading.

'Orchids of Green Mountains - Lamington National Park, Queensland' is signed by the author C. W. Harman, 9/10/71. This 20 page book gives a simple explanation of what orchids are and the structure of their flowers. This is followed by descriptions of eight known species which occur in the National Park. It appears obvious that the book has been used 'in situ' with many of the 49 named varieties ticked with notations such as 'fl out', 'spike out', 'smoke ridge' along side of the name.

'Geological and Botanical Notes on the Victor Harbour District' by Professors Cleland and Howchin appears to have been published in 1931 and sold for one shilling. It is publication No: 2 of the Field Naturalist's section of the Royal Society of S.A. This 28 page book also appears to have been used 'in situ' as many named orchids are underlined. Some very old photographs have been reproduced.

We now have two copies of a very small, locally written and published book 'Kangaroo Island Orchids' by Ida Jackson. It appears that it was published in 1976 by the Islander Newspapers, Kingscote K.I. A short description of orchids is followed by 27 pages of description and hand drawings of the K.I. terrestrial orchids.

The Orchids of New South Wales' by Rev. H. M. R. Rupp appears to have been, produced in 1969, although it was first issued from the National Herbarium, Sydney, as part of the Flora of New South Wales series in December 1943. At the time Rupp was an honorary member of the staff of the NSW National Herbarium. In the foreword, the herbarium's chief botanist states; "the book would be of most use to qualified botanists, but it was hoped that it would appeal to all interested in our native orchids." The introductory remarks and the glossary would be of considerable assistance to persons with little technical knowledge, while the fine plates would also be helpful to all readers.

Pleasant reading.