

The Plant Press

Western Australian Regional Herbaria Newsletter

Volume 3 May 1998



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CO-OPERATION WORKS

The Serpentine-Jarrahdale Coastal Plain Herbarium at Mundijong was established in 1994 through the purchase of the Greening WA/Alcoa kit. The Serpentine-Jarrahdale Land Conservation District Committee (LCDC) purchased the kit and placed it in the library.

Interest in a herbarium reflected a growing community awareness of the values of remnant vegetation in the Shire. Penny Hussey and Judy McKinnon had surveyed the area in order to test the Roadside Conservation Committee's (RCC) survey sheets in 1987. Mundijong Road was

revealed as of high conservation value, and Penny approached members of the Shire Council to enlist their partnership in conserving this plant community. The idea of listing Flora Roads grew out of this RCC initiative.

Since 1990 the Wildflower Society has been surveying the bushland of the Eastern Coastal Plain. Bronwen and

Greg Keighery wrote "Floristics of the Reserves and Bushland Areas of the Perth Region (System 6) Parts v-ix". This report, published by the Wildflower Society in 1993, included Brickwood and Cardup Reserves in the Shire.

In 1992 a group of local people formed the Verge Beautification Committee, now called the Roadside Care Volunteers (RCV). Their aim was to preserve and protect the existing native vegetation, to eradicate weeds and to replant degraded verges. The group started without funding but soon obtained funds from the Gordon Reid Foundation and began to show what could be done. With the help of the Men of the Trees, Byford Progress Association, Alcoa, the Whitby Falls Hostel, CALM and the Shire, several small pro-

jects were undertaken. In 1994 the Shire, LCDC and the RCV in a partnership obtained a State landcare grant to prepare a Roadside Bush Protection Plan. In 1996 Bronwen Keighery produced a report for the Shire outlining the plant communities and giving proposals for the management of several Flora Roads in the Shire.

The Shire assisted the RCV by providing a meeting venue, appointing the Shire Environmental Officer to the Committee, financing the printing and distribution of minutes, keeping a register of residents who wanted to participate in the 'free

verge plants' scheme, and providing chemical sprays for roadside weed control by the residents. This developed into an ongoing partnership; part of this success was due to common membership of the Shire Council, the RCV and the LCDC by several interested people.

The Shire Council has prepared a Rural Policy and a Rural Strategy, which

includes environmental matters. These documents were prepared following community workshops, arranged by the Shire, to give the community the opportunity to express their ideas about future directions for the Shire.

In 1997 the RCV, assisted by the Shire, resurveyed all the roadsides in the Shire. The Council has also recently employed a Bush Rehabilitation Officer and a Landcare development Officer on 3-year contracts with Natural Heritage Trust (NHT) funds. These appointees will provide expertise and assistance to the Shire Council.

There has been a proposal from Greening

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Manuscript and Phrase Names

Some of you may have received names which look unusual for some of your specimens. The name may have the letters "ms" after, eg. *Praecoxanthus aphyllus* ms. This means that it is a **manuscript name** and has not yet been published. As soon as the name is published, the "ms" is no longer used, so write "ms" in pencil on your specimen label so that you can erase it easily when the name has been published. Occasionally the researcher may adopt another name (see Ray Cranfield's article – "The Saga Continues") and the ms name is never published.

Other names may have "sp." and a place

name or descriptive words in inverted commas, followed by a collector's name and collection number of a particular specimen in brackets, eg. *Patersonia* sp. "Swamp form" [N.Gibson & M.Lyons 544]. This is a **phrase name** for a plant which is distinct from currently described taxa, but has not yet been studied sufficiently to be given a manuscript name. So any other plants which appear to be the same as the specimen N.Gibson & M.Lyons 544 are given the same phrase name so that they are databased as a phrase name and incorporated in the same folder in the Herbarium ready for further study.

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Cooperation Works

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WA that they could be involved in a seed farm and seed bank exercise in partnership with the RCV. It is further proposed that a joint application for NHT funds could be made with the aim of rehabilitating 100 km of roadsides in the Shire.

Where does the Serpentine-Jarrahdale Herbarium fit into all this activity? After the initial purchase of the kit very little progress was made. However in 1996 the WA Herbarium ran a workshop which was attended by members of the LCDC, RCV and the Shire. A member of the RCV has volunteered to coordinate the local herbarium. The Shire accepted the offer and has provided stationery to enable specimens to be written up, mounted and displayed. To date, the major part of the specimen collection has been made available by Bronwen Keighery, from her work in surveying the Reserves and Flora Roads in the Shire. This will result in about 700 specimens being processed. The herbarium coordinator has over 80 specimens from his own property being processed by the WA Herbarium. Future collections, including those obtained during seed collecting expeditions, will provide further specimens for incorporation in the WA

Herbarium.

Seed collecting and seed farming will benefit from the opportunity for correct identification and description of future plantings through the herbarium. There will also be opportunity to correlate plant communities with soil types to make direct seeding more appropriate and successful. Thus the local herbarium can be both a repository of information about the local flora and a source of information for future projects involving planting of roadsides, reserves, tourist sites and private property.

The Shire has a heritage and tourism outlook which can be supported by vegetation projects through its partnership with many community groups who wish to carry out such projects in the Shire.

The Shire motto is:

"Explore the Beauty"

Written by: Geoff Brand Herbarium Coordinator Ph. 9525 5212

Andrew Delmarco Environmental Officer Shire of Serpentine-Jarrahdale Ph. 9525 5255

Murchison Botanical Walk



I was asked to write something about our Botanical Walk for the Plant Press because there are others who are interested in doing something similar. First of all let me say that we would recommend setting one up if you are thinking of doing so. We really enjoyed it, learnt heaps and were encouraged and helped by everyone we approached for assistance. We don't have any special skills apart from a love of the bush, which we wanted to share.

Our Botanical Walk is at the Murchison Settlement, 200km north of Mullewa on the Gascoyne Junction Road. It all started as an extension to our small museum, which we feel should show people as much about the natural history of the area as about the human history. We were concerned that people were driving up the road not realising how fascinating the bush is. We really wanted them to learn about different aspects – how plants survive the dry times, what the sheep eat and don't eat, how aborigines used the plants and much more, so they could appreciate the bush and how pastoralists try to look after it. We wanted the locals to learn more too.

We had loads of enthusiasm but no idea where to start. We were quite happy to do the physical work ourselves but would need some money for signs, etc. Our very supportive LCDC helped us financially as part of a project on Station Management Planning in which monitoring the rangelands is important and therefore botanical knowledge is essential.

We are scattered very thinly in this part of the world and most of the Museum Committee live on stations up to 2 hours away from the Settlement, so we ended up with a core of 3 or 4 people doing the planning and enlisted help when necessary. Helen Pollock had lived at the Settlement for several years and had a suitable area close by in mind. With the help of Don Burnside from AGWA, she mapped out a route including as wide a variety of perennial plants as possible. We

worked on this and refined it, confirming the identification of the plants with Andy Mitchell, a botanist with AGWA.

The total walk is about one kilometre with 46 named specimens. The walk begins and ends at almost the same place. There is a short cut back to the start from about halfway if you have had enough by then. The named plants are all perennials, sometimes growing close together, sometimes up to 50 m or more apart. We made no attempt to name all plants growing beside the walk and have done no clearing apart from raking the odd pathway to specimens growing behind something else.

We contacted Eleanor Bennett at Kings Park for advice about signs. We decided we would put just the botanical and common name on a plaque beside the plant and all other information about the plant would be in a leaflet. Each plant has a number so the leaflet is easy to follow. Rather than put the number on the plaque, which would make life difficult if a plant decided to die, the numbers are on wooden mining pegs, kindly donated. The plaques were made by Kings Park and are of anodised aluminium engraved with the name. This lasts longer than any kind of plastic. They are about 6 x 4 inches (15 x 10 cm) and riveted to flat aluminium strip, available in lengths from firms such as Metaland. On the bottom of these we put little lumps of cement - using the smallest size plastic plant containers as moulds – so that they are secure and less likely to fall over when buried. The top is bent back a little for easier reading. In between the plants we have arrows if there is any possible confusion about the way. In the second half of the walk, where the plants are much more spaced out, we have used white painted posts to mark the route.

Apart from the plants we have various information boards at intervals on the walk. The first shows the topography of the area and has an aerial photo with the walk marked on it so that you can see the various types of country — mulga wash, wanderrie bank, etc. This photo has unfortunately faded despite having an overhang for shade on the top of the sign. We'll have to replace it and think

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Murchison Botanical Walk

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of a better way to protect it from the sun. The next sign is beside a termite mound and explains how they live their lives. A little further on is a demonstration monitoring site such as all pastoralists have, with an information board beside it. Then there is a seat under a shady tree for a rest and another board explaining how plants cope with the arid conditions we have. All the information boards were made by Geraldton Signmakers, planned by fax.

We wrote the leaflet amongst ourselves. Janice Simpson, who lives at the Settlement, helped us with the aboriginal usage and names. It is a simple photocopied leaflet with a drawing on the front and a short introduction. These are available for 50c from the Shire Office or Museum. That is the only charge we make.

All in all the cost was about \$3000 and we completed the work in a few months in 1994. We had tremendous support from AGWA and from Neville Marchant at the Herbarium, who was very enthusiastic and full of suggestions for us. There were a couple of concerns people had when we were looking for advice, which we luckily paid no attention to. The first was that our signs would be pulled out or vandalised - not one has been in 4 years – and the second was that people would not want to look at more than about

10 plants. There are plenty of people that do want to and hopefully the others can enjoy it as a walk anyway!

From what we have learnt, we probably would not greatly change the way we set it up. With more money we could have made more innovative and exciting signs to capture the imagination of those who are not really interested in plants and probably don't stop to look now, and perhaps we could somehow have made it more fun for children. We would love to have some kind of booklet or noticeboard with photos of annual flowers, which grow in such profusion here at certain times of the year. Of course the walk is only at its best after good rains. For at least 6 months of the year the plants are usually in shutdown mode and can look quite dead but we can't control that and luckily people don't generally feel like walking through the bush in midsum-

We sometimes think we should make another walk in the breakaway country further up the road, where the plants are quite different, but I must admit this has got no further than a thought!

Meg Officer Woolgorong Station via Mullewa WA 6630 (08) 9963 7981

Species come and go

The saga continues

Ray Cranfield

Taxonomy can be akin to an annual herb which rushes headlong to achieve flowering but can falter along the way through lack of nurturing. As previously reported in this newsletter, a *Brachyloma* species collected at Kojonup has once again see-sawed and at this stage has had to be placed on the back burner awaiting further information. There was some confusion as to which name should apply to this ?new species. Initially Ray Cranfield considered this to be a new species that he named *Brachyloma mogin*. Closer examination suggested that this may not be a new species but a variety of *Brachyloma*

delbi collected at Kulin. The variety rank was settled upon and the name Brachyloma delbi var. mogin coined and it existed for a half-life of 1 week. At this stage the author decided to tread carefully and has requested the type of Brachyloma preissii var. brevifolium, of which there appear to be no collections at PERTH. It is highly possible that the type may indicate either that the Kojonup and the Kulin specimens are this taxon or with luck prove to be new, as previously thought. The author is awaiting the arrival of this type material from Melbourne to decide in which direction to go.

If you think that some plants take a long while to reach fruition, then a botanist logically has the same time problems; it must rub off from the plant!

Bushland Plants: 1998 Plant Survey Project

Do you want to know what species grow on your land or in your district?

The Wildflower Society of Western Australia through its "Bushland Plants Survey Project" may be able to help you survey, document and monitor your local flora. A group of Wildflower Society members give their time, knowledge and experience to help landowners or community groups survey bushland areas.

1997 was a very busy year with the following achievements:

- A site visit to prospective survey areas before final selections
- One day workshops at Bold Park, Eastern Hills Wildflower Society, Armadale Settlers Common and Denmark with interested individuals from community groups, to teach the bushland survey technique
- Four weekend bushland surveys: at a Uniting Church Camp at Baker's Hill and rail reserve at Clackline, at shire reserves in Merredin and on private properties at Woodanilling and Manjimup
- Half day survey of an urban remnant at Coolbinia
- Herbarium identification workshops for each survey area
- Preparation of field herbaria for each survey site.

With funding under the Natural Heritage Trust Bushcare program, similar activities are planned for 1998 and later.

A Good Idea

When sending a box of vouchers, some of the Regional Herbaria include a list of all of the enclosed specimens. The list contains the collector's name, collector's number and the field identification of all the specimens (vouchers) within the box. Where no field identification has been made just the collector's name and number are given. A list is a great idea, it provides a check list for the volunteers so they know how many and what specimens are in the box. The volunteer then knows how many vouchers she or he must be able to account for and there is less chance of vouchers being missed or mislaid.

The criteria for site selection are:

- The land may be privately owned, local government land or unvested crown reserve. (National Parks and Nature Reserves cannot be included in the programme)
- The degree of disturbance: least disturbed sites rank highest
- The current level of knowledge about the site: if poor in greater need of survey
- The level of community participation: participation by the local community is expected
- The bushland conservation value of the site in a local and regional context
- Accessibility to the site: given the limited time and involvement of volunteers, the sites need to be readily accessible by vehicle
- Size of site: it is preferable to be able to conduct the initial field survey over a weekend period
- The long term security of the bushland
- A demonstrated commitment by the landowner or community group to manage the bushland for conservation.

The programme for 1998 is currently being planned and details will be provided in a later newsletter. People are welcome to attend sessions in their own area or maybe you would be interested in expressing interest for a survey next year. If you or your community want further information contact:

Ann Gunness
Bushland Plants Project Coordinator
34 Winery Drive Karnup WA 6176
Tel – (08) 9524 2221 Fax – (08) 9524 2239



Congratulations!

To the Tammin and Gascoyne Junction groups on receiving grants to help establish their Regional Herbaria.

1998 Workshops: Ravensthorpe & Esperance

1998 got off to a great start with workshops held at Ravensthorpe and Esperance on February 26th and 27th.

Ravensthorpe is a new Regional Herbarium which we are delighted to welcome into our program. Under the guidance of Merle Bennett a very enthusiastic group of people, already very experienced in plant collection for their annual wildflower shows, promises well for the future.

On the afternoon before the workshop, the CALM Herbarium party of 9 was taken into the Ravensthorpe Ranges to see some of the local flora. The variety was amazing and the view a wonderful mosaic of remnant bushland and cleared farmland. We were told the Shire as a whole has 65% bushland.

Esperance has had its own Wildflower Society herbarium for a number of years and is a foundation member of our Regional Herbarium program. As we well know after travelling to Esperance, it is a long way from Perth, but that has not stopped Coral Turley and her collectors

from sending us lots of very interesting vouchers. We greatly appreciated the opportunity to see something of this fascinating flora and to work with the many people who attended the workshop at Esperance.

Both the workshops were similar to the 1997 workshops in that they concentrated on the quality of the specimens collected and on the recording of good and complete field notes.

We plan to conduct another 2 workshops at regional centres in the winter/spring of this year. We also hope to hold another one in Perth; this would most likely concentrate on the role and use of computers as an essential tool in databasing our growing knowledge of the flora.

A very special thank you goes out to all the people at Ravensthorpe and Esperance who participated in the organisation and work required in putting on successful workshops.



New in 1998

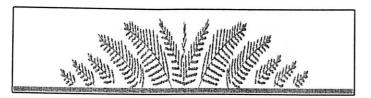


New Volunteers:

We are happy to introduce four new volunteers - Maureen Hart, Jan Evans, Mark Allen and Gwen Watson. They have recently joined our team of volunteers which now numbers 20.

New Regional Herbaria:

Welcome to groups from Useless Loop, Tammin, Gascoyne Junction, Friends of Warwick SHS and Carine TAFE. We look forward to working with you.



New Appointments:

Identification Botanist: Mike Hislop

Mike is available full-time to assist and train volunteers to identify specimens. His first workshop, on Myrtaceae genera, was very helpful and his next one is eagerly awaited.

Assistant Coordinator: Margaret Lewington

Margaret assists Jan in running the program and prepares The Plant Press and brochures, etc. for publication. She is in the Reference Herbarium most of the time, so you can speak to her if Jan is not in.

Database Manager: Sue Carroll

Sue continues her role in putting information from your vouchers into the database and sending name changes and barcodes back to you.

Bar Code Number

Each voucher has its own bar code number. The Perth CALM Herbarium now has more than 434,000 vouchers, each of which has its own unique barcode number prefaced with the acronym PERTH, eg. PERTH 04992520. This number is placed on the top right hand corner of the voucher. All of the information from the field notes is entered on the database under the barcode number. Thus if you know the barcode number you can readily access everything about that voucher from the database.

You collect vouchers in duplicate, one for your herbarium and the other for the PERTH Herbarium. Because these 2 vouchers are duplicates they will carry the same bar code number. Sometimes there is a backlog in databasing, so it may take several weeks be-

fore your vouchers are assigned bar code numbers. However, it is essential that you do get the bar code numbers assigned to each of your vouchers. Thus twice a year we shall send each Regional Herbarium a list of their bar code numbers with current and previous identifications. These bar code numbers should be written on the top right hand corner of the correct voucher and the list filed for future reference.

Then in any communication about a particular voucher all you need to do is quote the bar code number. In the near future your Regional Herbarium may be electronically linked to the PERTH Herbarium database, which will enable you to access the database directly. This is an invaluable resource for all those interested in conservation, revegetation and management of our state's flora.

Computer Info

If you are considering buying a computer to be able eventually to use Max, the new CALM Herbarium database software, the minimum requirements are an IBM compatible machine running Windows 95 or NT (not Macs or Windows 3.1). For installation, 15 Mb of free disc space is needed; Max will run on a 486, but rather slowly, so 586 or Pentium is faster and better.



A botanical collecting party?

If you're wondering why this silly picture is here, check what's on the back of this page!



New Books



Bougher, N & Syme, K. 1998. Fungi of Southern Australia. UWA Press. \$75.00

Grieve, B.J. 1998. How to know WA Wildflowers Part II Revised. UWA Press. \$75.00 in time for the coming spring.

Due out

Keighery, B.J. 1994. Bushland plant survey - a guide to plant community survey for the community. Wildflower Society of Western Australia. \$10.00

Hussey, B.M.J. 1998. How to Manage your Granite Outcrops. \$10.00

Young, J. 1997. Hakeas of Western Australia: Botanical District of Avon: the wheatbelt. W.A. National Parks & Reserves Association. \$15.00

Nicolle, D. 1997. Eucalypts of South Australia. Dean Nicolle. \$20.00

Watts, P., Pomfrett, J.A. & Mabberley, D. 1998. An Exquisite Eye - the Australian Flora and Fauna Drawings 1801-1820 of Ferdinand Bauer. Historic Houses Trust of NSW. \$45.00

These books can be obtained through the WA Wildflower Society, in most cases with a discount on the prices indicated. Orders can be sent to the following address:

WA Wildflower Society Attn. Mrs Barbara Backhouse Unit 8/38 Ednah Street Como WA 6152

To keep our records up to date; would all Herbaria please complete the following, tear off and send to us at:

Regional Herbaria Project

Regional Herbaria Project
Western Australian Herbarium
Locked Bag 104
BENTLEY DELIVERY CENTRE
WA 6983
as soon as possible.
Full Name of Regional Herbarium:
Main Contact:
Full Name:
Address:
Phone:
Phone:
Fax:

Other Collectors:

Do you have access to a computer?
If so, what is it?