

At time of writing (mid January 1985) some 560 volunteers have registered interest in the Atlas and have been sent recording kits. There has been a recent surge of interest in N.S.W. such that numbers in that State are now second only to W.A.'s. Numbers for each State are as follows;

A.C.T. (34), N.S.W. (80), Tasmania (10), South Australia (5), Queensland (17), Victoria (28), West Australia (386) and Northern Territory (0).

We're still very short of volunteers in South Australia and the Northern Territory. Whilst neither of these states possess a rich Banksia flora they are still of considerable interest in terms of their species distribution. Filling in the record sheets is a good way of examining plants in a systematic manner and it will assist in studying other plant groups. So, if you know of people (particularly in either of these 2 states) with an interest in their native plants and a bit of time to spare, please tell them about the Banksia Atlas.

Completed record sheets continue to pour in. At the time of writing (January 1985), another 463 record sheets have been received from the following 64 contributors (including 41 new contributors).

Laurie and Joan Adams	(5)	WA	Stephen & Meg Le Fanu	(1)	WA
Jennie Allen	(75)	WA	Pattie Leighton	(6)	WA
Mr & Mrs Allen	(10)	WA	Cyril Marshall	(2)	NSW
Robin Anderson	(2)	WA	Peter Mawson	(5)	WA
Diane Baker	(2)	WA	Marjorie May	(13)	ACT
Jeff Beard	(4)	WA	Ros & Bev McGuinness	(3)	WA
Don & Barbara Bellairs	(2)	WA	G.B. Mee	(6)	NSW
Jo Benyon	(3)	ACT	Alan Moore	(3)	WA
John Boyle	(7)	WA	Debbie Martin	(5)	WA
Mary Bremner	(10)	WA	R. Mumford	(15)	WA
Lola Broadhurst	(3)	WA	Alan Notley	(1)	WA
Jim Carpenter	(7)	TAS	Marlene Patersen	(7)	WA
Bruce Champion	(12)	TAS	Margaret Pieroni	(2)	WA
John Chilvers	(4)	WA	Frank & Joy Phillips	(3)	WA
Lyn Clarke	(5)	WA	Alf Salkin	(48)	VIC
Doug Coughran	(1)	WA	George Schmidt	(7)	WA
Ray Cranfield	(1)	WA	Mr & Mrs J. Scott	(2)	WA
Chris Creighton	(23)	WA	R. Scott	(1)	WA
Steve Dawson	(2)	WA	R. Shoosmith	(3)	WA
Graham Edwards	(16)	WA	Ralph Smith	(1)	WA
Charles Felton	(5)	WA	Andrew & Lois Sourry	(1)	NSW
Howard & Dorrie Gibbs	(3)	WA	Norm & Jane Stevens	(2)	WA
Chris Goodsell	(4)	WA	Trevor Stoneman	(1)	WA
Mal Graham	(3)	WA	Tony Trapper	(7)	WA
Lois Grover	(1)	WA	Anne Taylor	(20)	WA
Linley Gueho	(4)	WA	Paul Taylor	(3)	QLD
Mark Gunson	(1)	WA	Helen Taylor	(14)	WA
Roger Hall	(3)	WA	Graham Velterop	(16)	WA
Paul Harris	(1)	QLD	Stan Webster	(1)	WA

Brenda Hammersly	(16)	WA	A. Wheeler	(2)	ACT
Harold Hoffman	(8)	WA	Eleanor Williams	(2)	WA
Ian Keally	(10)	WA	Eric Williamson	(5)	QLD

Many thanks to the 87 contributors who have now sent in record sheets (listed in both 1st and 2nd Newsletters). These are currently being processed and will go to make up the first set of Interim Distribution Maps. It was hoped to have these ready for inclusion with this 2nd Newsletter, but due to unforseen delays they will now be sent out in early May.

There's still approx. 465 volunteers who have received kits but who haven't submitted a record sheet. If you are having difficulties in completing the record sheets don't hesitate to contact either myself or your State Coordinator and remember, whilst the sheets may appear daunting at first, once you have completed the first few, successive sheets really do become easier and more interesting each time.

I suggest you try a few 'practice sheets' in your local area so that you become confident with the observation and recording technique. Then you'll be ready for those exciting new finds in less familiar areas.

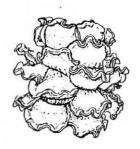


taul Troth

SOME UNUSUAL BANKSIAS - October 1984 - January 1985

The following unusual banksias have been reported. For many species new distribution patterns are also becoming apparent. These will be commented on when the 1st set of Interim Distribution Maps is published.

Banksia laricina. This beautifully sculptured cone was found by Jeff Beard in Moore River National Park. W.A. The horticultural possibilities of such a plant could be enormous. It would certainly be interesting to propagate it and see whether the offspring follow suit.

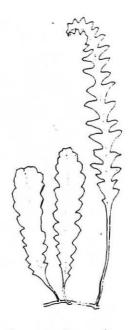


fruiting cone (x·5)

Banksia media? (see front cover). A population of between 10-100 of what appears to be Banksia media with very large flower spikes was found by Peter Mawson, north of Mt Ridley in W.A. The spike is some 60-80% larger than usual. The population is an isolated stand growing beyond the previously known range for B. media.

Banksia gardneri var. gardneri?

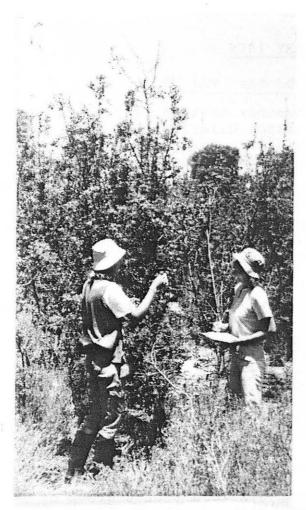
Doreen Davidson has come up with another strange looking prostrate banksia from near Mt Manypeaks, W.A. The new leaf is typical of B. gardneri var. gardneri, while the older leaves are more like B. goodii. The latter, however, can always be identified by its prominent extended bracts at the base of the flower spikes.



leaves (x.25)

A New Banksia?

It had to happen! As soon as Alex George's Banksia Book appeared, a possible new species of Banksia has been discovered in W.A. The exciting new find was made by Ken Wallace (Reserve Management Officer at Katanning).



Volunteer Judith Brown and Anne Taylor examining new Banksia.

Greg Keighery (Botanist at Wildlife Research Centre) writes "the species is another Dryandra-like species, closely related to B. cuneata but differing in the bark, leaves, flower colour and arrangement of the inflorescences. Flowering occurs rapidly over a few weeks in late spring, and when not in flower the species resembles a stand of Dryandra sessilis (parrot bush). Currently, the species is known only from one locality, a small nature reserve east of Arthur River. There are 300-400 plants in an even aged stand (the species is killed by fire). It occurs on small grey sand dunes around riverine clay depressions with Banksia attentuata and B. prionotes.

Any Banksia volunteers in the general area of Wagin/Arthur River/Williams please keep a sharp lookout for this apparently new species.



Flowers mainly in bud, Nov. 19. 1984.

FIELD TRIPS/VISITS OCTOBER 1984 - JANUARY 1985

- 1. Esperance Wildflower Society. A November weekend of Banksia Atlas activities was arranged by the Esperance Wildflower Society. A Saturday evening meeting was followed by a day of field work in the beautiful Cape Le Grand National Park. Thanks to the Ranger and his wife, Ian and Eve Solomon, who led us to some of the best Banksia spots. We recorded B. occidentalis, B. repens, B. violacea, B. pulchella, B. nutans var. nutans, and B. speciosa. People around Esperance are certainly used to long distances, some volunteers travelled up to 70 km each way to come to the meetings.
- 2. Esperance to Perth via Cascades and Newdegate. A circuitous route back to Perth via the farming areas of Cascades (NW of Esperance) and Newdegate. Many thanks to Jack and Maxine Woodhouse, I hope you enjoyed the Banksia Atlas Video as much as we enjoyed the Cascades Drama Society's production. Also to Jeff and Rosemary Cugley who arranged a very pleasant Banksia Atlas evening at their farm near Newdegate. On a nearby Nature Reserve we found B. prionotes. A very interesting record which extends the previously known range of this species by approx 120 kms eastwards.
- 3. Belmont High School. An illustrated talk to a year 8 group of students was followed by a workshop session in the field where a group of exuberant 13 year olds practised mapping the Banksias along the western side of Lake Joondalup, W.A. B. grandis and B. attenuata were in full flower and were very spectactular. In the afternoon we visited Pinnaroo Valley Memorial Park where caretaker John English kindly showed us some of the many different types of Banksias that are growing there under cultivation.
- 4. Melbourne and Mornington Peninsula. In mid-December a meeting and audio visual at the Victoria College of Agriculture and Horticulture was followed by a field trip to the Mornington Peninsula led by Victorian State Coordinator Alf Salkin. Alf has spent many years studying the banksias of the Eastern States and is keen to help with any queries on Victorian banksia's. So if you're unsure about an identification, send a photograph and/or a leaf specimen to Alf (see "Confirmation of Species Identification', page 7 Instruction Booklet). Alf also showed me the very interesting collection of banksias being grown at the Cranbourne annexe of the Royal Botanic Gardens. The variation and hybridization of some Eastern States banksias was intriguing and also very confusing!

1. THE LAT. AND LONG. PROBLEM!



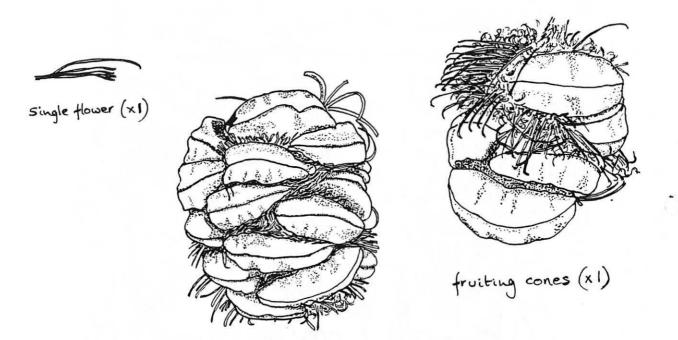
P.S. Answer to above in next newsletter!

By now everyone should have received the amended Lat and Long. maps from the 1st Newsletter. The error was due to the original maps being photoreduced without a corresponding change in the mm measurements. I hope the amended version will have helped sort things out.

Instead of using a ruler to measure and calculate Lat. and Long. another method that can be used is suggested by Brenda Hammersley. She writes "Instead of marking lines all over the map, rule up a grid appropriate to the map scale you will be using on plain paper. Then copy this onto transparant photocopy film - as used for overhead projectors. The time taken to rule the grid is more than compensated for the time saved later and one master grid can produce transparencies for all the group. The film is available as single sheets at about 30¢ each in A4 size."

NB. An overlay grid like this is only accurate for the map on which the grid was drawn up. Since lines of Lat. and Long. curve around the earth, the distance between such lines will vary in different localities and therefore the grid will not be accurate on maps of other areas.

2. BANKSIA ILLUSTRATIONS IN NEWSLETTER NO. 1. These suffered the same fate as the Lat. and Long. maps and the size scales given were therefore incorrect. Since the comments made on B. nutans var. nutans (page 2) required a correctly sized illustration, the same drawing appears below, full size.



3. BANKSIA IDENT. IN S.E. QUEENSLAND. Paul Harris of the Ipswich Branch, Wildlife Preservation Society of Queensland has suggested that a good publication for volunteers in South Eastern Queensland is "Wildflowers of South Eastern Queensland Volume I", 1977 by Beryl Lebler. The book is available from;

Department of Primary Industry GPO Box 46 BRISBANE 4001

for \$2.50 plus \$1.20 postage.

It contains 10 pages on the local Banksias including line drawings and a key. Recently described species are covered in the Banksia Atlas Supplementary Field Guide.

4. <u>DIFFERENTIATING B. SERRATA AND B. AEMULA</u>. Many eastern states volunteers have experienced difficulty in separating these closely related species. The following notes are taken from Alex George's Banksia Book.

B. serrata shrub or tree. Leaves 7-22 cm long, mostly 2-4 cm wide. Flower spike 7-15 cm long, 9-12 cm wide at flowering. Flowers creamy-grey; styles cream. Perianth 38-42 mm long, style 47-60 mm long, pollen presenter elongated, spindle shaped and finely 8-ribbed. Follicles 25-35 mm long, 20-25 mm high, 15-22 mm wide. Flowering period Jan-June.

1

he

A n

S

.ne

01

pe

E tł

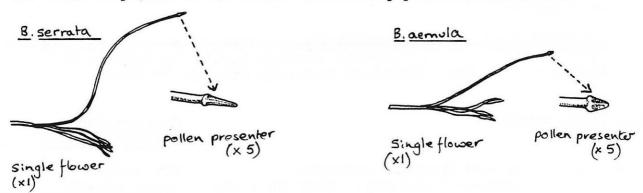
a}

ć

l.

as no f

n a B. aemula. Shrub or tree. Leaves 3-22 cm long, mostly 1-2 cm wide. Flower spike 4-20 cm long, 8-9 cm wide at flowering. Flowers pale yellow-greenish cream, including styles. Perianth 35-45 mm long; style 35-45 mm long, pollen presenter conical - club shaped, 1 mm long, faintly ribbed. Follicles 30-45 mm long, 20-35 mm high, 20-35 mm wide. Flowering period March-June.



In conclusion, \underline{B} . \underline{aemula} has generally narrower leaves, larger follicles and creamy-yellow flowers ($\underline{serrata}$ flowers more creamy-grey). The most reliable characteristic is in the different shape of the pollen presenters - that of \underline{B} . \underline{aemula} being club shaped and shorter

5. BARREN GROUNDS BIRD OBSERVATORY COURSES. The following 3 courses may be of interest to Banksia volunteers.

WEEVILS, MOTHS AND BANKSIA SEEDS

Leaders: Dr Rob Whelan and Ross Goldingay Dates: 3-5 May 19845 Cost: \$58

You have no doubt squashed insects feeding on your plants. What damage do they do in the wild? Find out on this course which will examine the effects of various bugs on the survival and reproduction of the famous Banksia paludosa! A course with serious ecological content — but suitable for those with a general environmental interest.

HONEYEATERS & LYREBIRDS

Leaders: Richard and Pat Jordan
Dates: 21-23 June 1985
Cost:

June is the time of year when the Superb Lyrebird is at the peak of its courtship activity. We shall be examining its amazing powers of mimicry and attempting to observe its courtship display. It is also the time when large numbers of honeyeaters pass through the area and we shall be trapping some with mist nets and identifying pollen to find out about their feeding habits. For

beginners and those with some experience.

THE WORLD OF THE HONEYEATER

Leader: Dr Graham Pyke Dates: 23-25 August 1985

es: 23-25 August 1985 Cost: \$64

There are many honeyeaters in the Barren Grounds area in winter — taking advantage of the flowering Banksia species. Graham has spent several years on research into these birds and will introduce course members to our current knowledge about them. We shall be capturing some for a close-up look and to examine pollen grains adhering to their plumage. Why does the Eastern Spinebill have a bill which is longer in the winter than the summer? Help us to find out!

For further information please contact Richard and Pat Jordan, Barren Grounds Bird Observatory, P.O. Box 3, Jamberoo, N.S.W. 2533. Tel. (042) 360195.

- 6. FIELD TRIP TO ENEABBA BADGINGARRA AREA, W.A. A trip is being planned for Saturday April 13. The emphasis will be on learning to identify the Banksia sphaerocarpa group e.g. B. grossa, B. incana, B. micrantha etc. Our leaders will be members of the Mt Lesueur group W.A. Wildflower Society. Numbers will be limited to 20. Please contact Sally Wilson (09) 3681553 for further information.
- 7. <u>VOLUNTEERS IN NSW AND QUEENSLAND</u>. I hope to meet as many of you as possible during my travels through N.S.W. in March and Queensland in May. Dates of meetings etc. as follows:

NEW SOUTH WALES Contact Person for further details Barren Grounds, Jamberoo Tues Mar 5. Pat Jordan Banksia Field Day. Meet at 9 am. (042) 360195 Mar 8 - Mar 11. In Merimbula area. Rosalie Cox Meet volunteers? (064) 959069 Thurs Mar 14. Canberra. Illustrated talk Lyndal Thorburn (062) 486549 on Banksia Atlas - 8 pm. Sun Mar 17. Blue Mountains. Talk on Atlas Margaret Baker (047) 541196 plus excursion. Meet 9 am. Glenbrook Plant Reserve In Kanwal area. Mar 19-21. Paul Spratt (043) 923701 Meet volunteers? Fri Mar 22. Narara, Central Coast SGAP group Greg Lamont Illustrated talk on Banksia Atlas (043) 284296 Sat Mar 23. Field excursion with Narara group Tues Mar 26. Armidale. New England SGAP group Maria Hitchcock Illustrated talk on Banksia Atlas (067) 751139 Wed. Mar 27. Armidale field excursion to New England National Park Fri Mar 29. Coffs Harbour, SGAP group Margaret Smith Illustrated talk on Banksia Atlas (066) 536682 Sat. Mar 30. Coffs Harbour Field Excursion For all field excursions please bring own lunch etc.

QUEENSLAND

Mon May 13. Brisbane SGAP main branch Eunice Clark Illustrated talk on Banksia (07) 349 912 Atlas 8 pm.

- 8. VOLUNTEERS IN VICTORIA. A visit to the Cranbourne annexe of the Royal Botanic Gardens is being organised by Alf Salkin on Sun. Mar 31. The gardens contain an excellent collection of banksias, many of which have been planted by Alf over the past few years. A trip that should definitely not be missed contact Alf for further details (232 6213).
- 9. N.S.W. STATE CO-ORDINATOR. Due to the increasing number of volunteers in N.S.W. it's been decided to have two State co-ordinators (otherwise Paul Spratt will not have time to draw us any more cartoons!). Volunteers living south of Sydney harbour please send your record sheets to

Ross Goldingay C/- Dept. of Biology University of Wollongong NSW 2500

Volunteers living north of Sydney should continue to send their record sheets to Paul Spratt.

- 10. AUSTRALIAN WILDLIFE CLUB VOLUNTEERS. Welcome to the 20 or so members of the Australian Wildlife Club (junior branch of the World Wildlife Fund) who have become Banksia volunteers. I hope you enjoy taking part in the Atlas. So far, only one of you, Mark Gunson, has sent in a record sheet. If any of you need help, do let me know. There may be another Banksia volunteer living close by who could give you some assistance. How about showing the Kit to your biology/science teacher. They may like to use the Atlas as a school project.
- 11. GRATEFUL THANKS FOR ASSISTANCE ON THE CLERICAL SIDE FROM STEVE DAWSON, YOLANDE BALDWIN, SALLY WILSON AND JENNIFER ROWE. It has become increasingly apparent that the project will need extra help if it is to continue at its present rate so any offers of assistance are greatly appreciated.

STOP PRESS. Many of the banksias in Kings Park, Perth are flowering at the moment and are well worth a visit. The gardens of the $\underline{\text{W.A.}}$ Herbarium, Jarrah Road, South Perth also contain an impressive array of banksias (particularly good for the prostrate types). These gardens are open between 8.30 - 4.30 Mon-Fri.