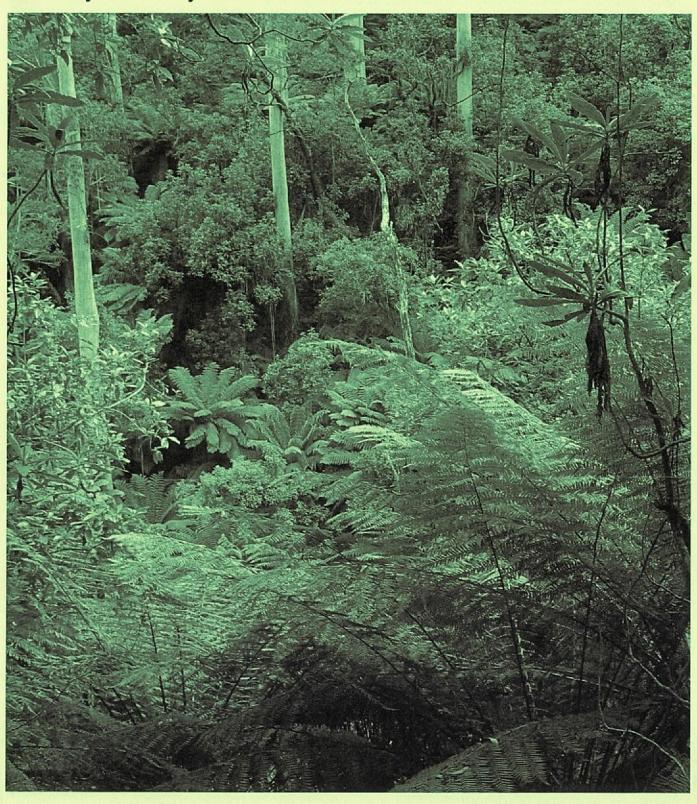
FERN SOCIETY OF VICTORIA

NEWSLETTER

Volume 32, Number 1 January/February 2010



Fern Society of Victoria Inc.

ABN 85 086 216 704

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web: http://home.vicnet.net.au/~fernsvic/

Objectives of the Fern Society of Victoria

To bring together persons interested in ferns and allied plants

To promote the gathering and dissemination of information about ferns

To stimulate public interest in ferns

To promote the conservation of ferns and their habitats

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Editor	Robin Wilson	9597 0742	rwilson@museum.vic.gov.au
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Subscriptions

Single	\$17.00	Opinions expressed in this	
Pensioner/student	\$14.00	Newsletter are the personal views of the authors and are not	
Family	\$19.00	necessarily endorsed by the	
Pensioner family	\$16.00	Society, nor does mention of a	
Overseas	\$25.00 (overseas subscription	product constitute endorsement.	
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payments by international bank cheque in \$Aus, by

airmail please)

Subscriptions fall due on 1 July each year

Meeting venues

The Kevin Heinze Garden Centre, 39 Wetherby Road, Doncaster [Melway 47 H1] Other meetings as advertised in this Newsletter

Timetable for evening general meetings

7:30 Pre-meeting activities – sale of ferns, spore, books, merchandise and special effort tickets. Also library loans and lots of conversation.

8:00 General meeting

8:15 Workshops and demonstrations

9:15 Fern identification and pathology, special effort draw

9:45 Workshops and demonstrations

10:00 Close

Next Meeting

Thursday 18 February 2010 Keith Hutchinson Potting Mixes & Fertilisers

The perfect opportunity not only to benefit from Keith's extensive experience of growing media and fertilisers, but to take part in and learn from the group discussion on this subject.

Fern competition: Davallias



Davallia pyxidata frond (photo: Robin Wilson)

See page 14 for a calendar of meetings for 2010

Cover image: Fern gully with *Cyathea australis* and *Dicksonia antarctica*, Otways National Park, Victoria (photo: Robin Wilson)

President's Note

I hope members had an enjoyable time over Christmas and New Year. I understand that the Society's annual Christmas Lunch, held at the Kevin Heinze Centre on the first Sunday in December, went very well as usual. Gay & I excused ourselves on this occasion as I had to have a hip replacement done some days earlier, so I was supposed to stay pretty much out of action and Gay was making sure that was the case!

Sadly I have to report the passing of two more long-term members in the latter part of 2009: Mavis Potter, and Margaret Radley. Both had been regular attendees at FSV gatherings and events over most of the Society's history, and enthusiastic fern collectors/growers. Margaret performed "door duty" at meetings, and also at our Shows, for many years - right up to the later months of 2009. And amongst the things we appreciated Mavis doing for the Society was her generous donation each year of a home-baked decorated Christmas Cake for the raffle at our Christmas lunches (with the proceeds going to the KHC).

At this juncture I should record the Society's gratitude to Mirini Lang, who was quick to offer to provide the Cake for this year's raffle. Thanks also for the other members of the volunteer helper crew for the lunch, capably led as always by Norma Hodges with John Hodges in charge of "logistics" at the KHC.

Many members will remember Bill Taylor, a former President and now a Life Member of FSV. I learned some days ago that unfortunately Bill suffered a serious stroke and is now in care in a rehabilitation facility. We wish him a fulsome recovery.

We look forward to seeing members at the first of our 2010 activities in February, and hope that in the meantime they all make it through the summer conditions with their ferns in a healthy state. Won't it be an improvement when, in a couple of years (if we're lucky - going by the to'ing and fro'ing to get the desalination project started) we might all be able to have a bit more flexibility in watering our plants. Assuming, of course, that we're prepared to pay several times the present price?

In September 2010 we plan to organise an excursion (probably to Badger Weir Park near Healesville) to study ferns in a natural location. Can I remind members that such activities provide ideal opportunities for inviting nonmembers to attend, to share the experience and learn about ferns. The benefits to the Society, of course, are all about extra exposure and respect for ferns. We will be arranging publicity via various avenues, including for instance via the Royal Horticultural Society and direct approaches to selected horticultural and environmental groups. But I mention the intention to arrange this excursion now for a special reason. That is to encourage all members to put their minds to selecting - from their own circle of friends, acquaintances and family - individuals who may be interested in joining an excursion. Then (when the time comes) if members would please extend personal invitations to these persons, this would be a valuable addition to the publicity efforts. As usual, there will be no charge for joining our excursions.

With this time of year coinciding with the longest interval each year between activities, I would like to reiterate the points I made last issue on the necessity for us to supplement our Committee numbers. If you could be interested in nominating for one of the present casual vacancies, or in learning more about such things as how often Committee meets and how you might be able to play a part as one of its members, please contact me or another Committee member for a discussion.

Barry Stagoll

Editor's Note

Sharp eyes will have noticed that the format of the Newsletter has changed slightly (again). I am not fiddling with formats for the fun of it, but am endeavouring to overcome some problems that caused me strife and late nights last year trying to work out why the drafts of the Newsletter often did not turn out correctly first time. Or sometimes not even on the twenty-first time. Hopefully now that I am using a proper desktop publishing program then production should go more swiftly in future and I might actually have time to do something in the garden. Such as having a go at division into new plants of a very old *Davallia* specimen (not sure of the species) in a hanging basket that has become moribund.

At a recent meeting a member, unfortunately I forget who, asked me to provide captions for the

images I use on the cover. I admit that I thought about it last year but didn't get around to acting so thanks for prompting me. Starting with this issue details of the cover image will be provided, at the foot of the third page. Which is a good opportunity to ask anyone who has a striking fern image, preferably with lots of contrast, to post or email the image to me. I would like to have a larger selection of images available for future covers, and for that matter throughout the Newsletter. Colour images if possible please, and I would only ask that you make sure that you own the image, or that you have permission from the photographer to use the image in the Newsletter. And please provide details for the caption: scientific and/or common name, location, and photographer. I look forward to publishing your photographs in future issues.

Robin Wilson

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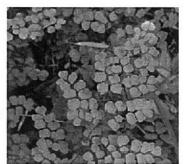
Specialising in supplying retail nurseries with a wide range of hardy ferns; no tubes.

Annual subscriptions overdue

Please check the mailing label of your Newsletter: if your address label had a big blue dot then your subscriptions is overdue. Please consult the inside cover for the correct subscription amount and post a cheque to the Treasurer straight away.

Adjantum atroviride Barry White

Adiantum atroviride is very similar to Adiantum aethiopicum but was separated off as a separate species in 1998 by Peter Bostock. Adiantum atroviride has a more northern distribution in contrast with the more southern distribution of A. aethiopicum. A further variation of Adiantum atroviride occurs in Cape York and the Northern Territory. It has been known as A. aethiopicum var. nodosum and has a tufted appearance with a complete lack of stolons. On Lord Howe Island what has been described as A. aethiopicum s A. atroviride.



Adiantum atroviride (photo: Barry White)

F	eatur	re
_		

Adiantum aethiopicum Adiantum atroviride

Adiantum atroviride var. nodosum

General appearance

Mid-green pinnae

Dark green pinnae

Tufted

Rhizome

Creeping

~Erect or short creeping

Very short creeping

Dark brown or yellow

Stipe

Gloss glabrous; reddish

brown

Blackish, with glandular hairs and pale jellow

deposit on young fronds

Rhizome scales

Thin, yellow, translucent, Dark brown, semi with entire margins and

often spirally curled

opaque with toothed edges, may be contorted

but not spirally curved

Stolons

Present

Fewer

Lacking

Margins of sterile lobes

~dentate

denticulate

Pinnules

Round to flabellate;

shallow sinuses

Flabellate, rarely round: deep sinuses As for Adiantum aethiopicum

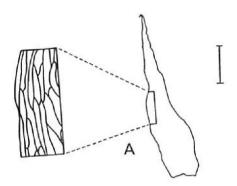


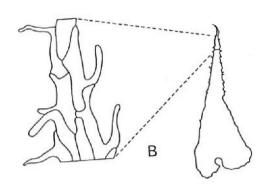
Small whitish 'nodosities'

Junction of pinnule stalk No 'nodosities' and rachis

Adiantum atroviride (continued from previous page)

Adiantum atroviride and Adiantum aethiopicum can also be separated by the form of the rhizome scales, as illustrated by the following images adapted by Barry White from *Flora of Australia* volume 48.





Adiantum aethiopicum rhizome scale with enlarged margin

Adiantum atroviride rhizome scale with enlarged margin



Distribution in Australia of *Adiantum* aethiopicum (generated from herbarium records via the Tasmanian node of the Australian Virtual Herbarium at http://avhtas.tmag.tas.gov.au/ - see article on page 12 for further details)



Distribution in Australia of *Adiantum atroviride* (generated from herbarium records via the Tasmanian node of the Australian Virtual Herbarium at http://avhtas.tmag.tas.gov.au/ - see article on page 12 for further details)

Images from excursion to Colin Cleak's home

The photographs on this page, all by Barry White, were taken during the FSV excursion to Colin's home in September 2009.



Colin Cleak's fernery, September 2009. Photo: Barry White.



Microsorum scandens at Colin Cleak's fernery, September 2009. Photo: Barry White.



Colin Cleak's *Cymbidium* house, September 2009. Photo: Barry White.



Asplenium bulbiferum at Colin Cleak's fernery, September 2009. Photo: Barry White.

Images from excursion to Colin Cleak's home

(continued from previous page) ... more photos by Barry White taken during the FSV excursion to Colin's home in September 2009.



Elk at Colin Cleak's fernery, September 2009. Photo: Barry White.



Some of Colin Cleak's Cymbidiums, September 2009. Photo: Barry White.

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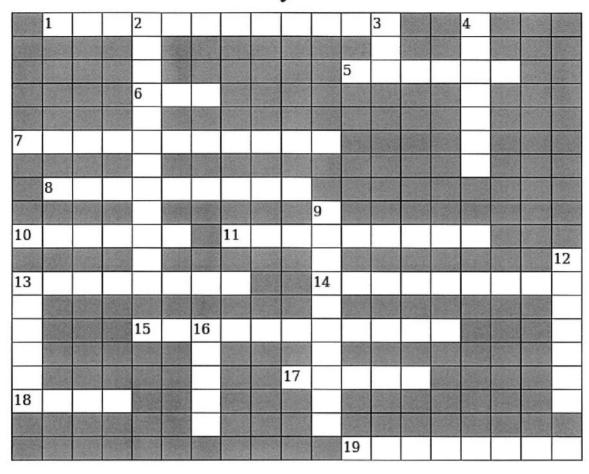
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A ferny crossword



ACROSS

- 1. Scientific name for the group comprising all true ferns (12)
- 5. Elongated stem (6)
- 6. Mammal that has given it's name to a group of ferns (3)
- 7. Structure in fern life cycle alternating with sporophyte (11)
- 8. Where botanists collect and study plants (9)
- 10. Common name of fern eaten by Aboriginal Australians (6)
- 11. Structure that protects sori in some ferns of arid areas (9)
- 13. Fern genus literally meaning "unwettable" (8)
- 14. Growing on other plants (9)
- 15. Fern genus name referring to kidney-shape (11)
- 17. Name given to the stalk of a fern frond (5)
- 18. Tip (4)
- 19. Swedish botanist who devised the binomial naming system (8)

DOWN

- 2. First botanist to write about Australian ferns (6,5)
- 3. Type of insect living in association with potato fern (3)
- 4. Fiddlehead (7)
- 9. Species name of most recently described Australian Sticherus (10)
- 12. The study of interactions between organisms and their environment (7)
- 13. A floating fern (6)
- 16. Part of a divided leaf (4)

(See next Newsletter for the solution)

Australia's Virtual Herbarium Robin Wilson

The article by Barry White on Adiantum atroviride (pp. 6-7 of this Newsletter) included two distribution maps provided by Barry from the Flora of Australia Volume 48. However, I chose to use instead two maps that I generated myself. My main reason for doing that was that it gave me an excuse to write this article about the web site I used to generate the maps, a web site called Australia's Virtual Herbarium (AVH). Many readers probably know of this already, but some may not. Nearly anyone can get Internet access these days, if not in their own home, then via a local library or similar, so this may be of some interest. Anyone with Internet access can generate

their own distribution maps of any Australian plant that they may be interested in.

But first a little background. Australia's main storehouse of knowledge about where plants can be found in the natural environment is to be found in the collections and databases of the State museums. Each State, and the Northern Territory, has it's own herbarium. The Federal Government also suppports the Australian National Herbarium in Canberra. These collections are studied by botanists who research the identity and classification of the flora of Australia. Since plants vary so much across their range, and (continued next page)



AVH nodes

- · Adelaide, SA
- Brisbane, Old
- (under construction)
- · Canberra, ACT
- Darwin, NT
- Hobart, Tas
- Melbourne, Vic
- · Perth, WA
- Sydney, NSW

About the AVH Project

- About the AVH project
- Promotional flyer (PDF)
- Participants
- Priority taxa
- Copyright and disclaimer notice

ABRS - Flora

· ABRS Flora of Australia Online

Plant Checklists

- · Australian Plant Census
- New South Wales
- South Australia
- Victoria
- Tasmania
- Western Australia

Assistance

- AVH Help
- AVH Webmaster

Technical

- HISCOM
- HISPID
- SourceForge

Progress

Activity report

Screenshot: main page, Australia's Virtual Herbarium http://www.anbg.gov.au/avh.html

Australia's Virtual Herbarium (continued)

since it is not always clear where to draw the line between species, botanists collect herbarium specimens from many localities, and have been doing so since the start of European exploration of Australia. The combined collections of Australia's herbaria now amount to over 6 million records. Not so long ago, the best catalogues of the content of these collections were ancient leatherbound ledgers and a multitude of drawers of index cards. But the advent of computers, and then the Internet, mean that the managers of herbaria have been able to convert their collection data into computer databases that can be combined and searched - this is the AVH, Botanists regularly consult the AVH but there is also a public version which can be found at

http://www.anbg.gov.au/avh.html. (The main difference between the public version and the

"restricted access" version is that precise information about some rare plants such as orchids is omitted from the public version. The botanists don't want to make it easy for unscrupulous collectors to illegally remove rare species from their natural populations.)

Strictly speaking the AVH is actually comprised of 8 separate nodes or access points, each of which is available through a different herbarium. Each is supposed to "mirror" the same data, so it should not matter which node is used. The design is robust because if one or other node is not accessible for technical reasons then it is simple to search via another node instead. For example, when I wanted to illustrate Barry's Adiantum article, the Melbourne Herbarium node was down, so I used the one in Hobart instead. The first of two "screenshots" accompanying this article lists all the nodes, and gives some idea of the other resources that are (continued next page) available online,



Map Search Interface

Tasmanian Herbarium (HO) public version



pecies		
Search the Following Herbaria	Turn On the Following Overlays	Display Options
☑ Canberra	☑ Terrain	Show By Herbaria
☑ New South Wales	☐ Temperature (Av. Max Annual)	O Show By Species
☑ Northern Territory	☐ Rainfall (Annual)	O Show By Precision
☑ Queensland	✓ States	O Do Not Separate
☑ South Australia	□ Ibra regions	
☑ Tasmania	☑ Lat/Long Grid	
☑ Victoria		
☑ Western Australia		

Submit Ouery

Screenshot: Australia's Virtual Herbarium search page (Tasmanian Herbarium node) http://avhtas.tmag.tas.gov.au/cgi-bin/avh-2-1-1/avh.cgi

Australia's Virtual Herbarium (continued)

including plant checklists, background on the project and participants, and some technical information about the database side of things for those so inclined.

The second "screenshot" shows a typical search page with genus and species fields to enter scientific names of the plant(s) to be searched. Click the "submit query" button and your computer screen will then display a map just like the two that I copied into page 7 of Barry White's article. Other information can also be selected. The search can be restricted to individual herbaria (botanists use this option to discover

herbaria (botanists use this option to discover which herbarium has the most suitable collection to solve a particular taxonomic problem).

Various map overlays can be used, for example rainfall (if you select this option you will discover what we already know: that most ferns occur in wet parts of the country). Future versions of the AVH will allow different kinds of searches and overlays, and are bound to be useful in discovering less obvious correlations. And in the not-too-distant future, botanical databases will be combined with zoological databases (generated in the same way by the State natural history museums) in a project called the Atlas of Living Australia (ALA). When it is working, the ALA will allow such things as distributions of animals and plants to be overlayed to see if there is any correlation. For example this may reveal overlapping distributions with interesting explanations: communities of species with particular ecological requirements, for example, or even closer associations like an insect that only pollinates a single species of plant.

The Atlas of Living Australia will be used by all sorts of people, but Australia's Virtual Herbarium can be used right now, to discover where different plant species occur. Or just to plan your next fern outing. Give it a try.



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Calendar of meetings for 2010

Thursday 18 February 2010 Keith Hutchinson Potting Mixes & Fertilisers

The perfect opportunity not only to benefit from Keith's extensive experience of growing media and fertilisers, but to take part in and learn from the group discussion on this subject.

Fern competition: Davallias

Thursday 18 March
Barry Stagoll
Ferns of Western Australia and Queensland

Fern Competition: Adiantums

Saturday and Sunday 20-21 March Mirini Lang's Open Garden

Sunday 18 May

Visit to members' gardens: Don fuller, Barry White and Brenda Girdlestone

Thursday 20 May Barry White Ferns of Mt Lewis

Look for further details of these coming events, and for details beyond May, in the next Newsletter

Fern Society of Victoria Spore Bank

Fern spore is free to members of the Fern Society of Victoria who donate spore. Otherwise the cost is members 20 cents per sample, non-members 50 cents, plus \$1.00 to cover postage and handling. Available at meetings or by mail from Barry White, 34 Noble Way, Sunbury, Vic. 3429 Australia, Ph. (03) 9740 2724. There is no charge for spore for overseas members, however to cover postage two International Reply Coupons would be appreciated; or alternatively spore may be exchanged. International Reply Coupons can be purchased at most Post Offices. Overseas non-members may purchase spore at three packets for each International Reply Coupon, plus two coupons per order to cover postage and handling. Alternatively spore

Acrostichum speciosum 4/09 Adiantum formosum 3/08 Adiantum pedatum 2/07 Amphineuron opulentum 4/09 Anemia tomentosa 8/08 Arachniodes simplicior 1/09 Asplenium aethiopicum 12/07 Asplenium australasicum 1/08 Asplenium nidus 5/08

Asplenium nidus cv.5/08 Athyrium filix-femina (red stipe) 12/08 Athyrium niponicum 'Pictum' 2/08 Blechnum ambiguum 1/08 Blechnum braziliense 3/08

Blechnum chambersii 9/07 Blechnum fluviatile 9/07 Blechnum gregsonii 4/09 Blechnum spicant 7/08 Blechnum wataii 12/08 Chingia australis 12/08 Christella parasitica 4/09 Christella subpubescens 12/08 Cibotium schiedei 1/07 Cyathea australis 4/08

Cyathea baileyana 12/08

Cyathea brownii /07

Cyathea cooperi 1/09 Cyathea cooperi (blue stipe) 1/07 Cyathea cooperi 'Brentwood' 3/08

Cyathea cunninghamii /07 Cyathea felina 10/08 Cyathea gleichenioides 2/07 Cyathea incisoserrata /07 Cyathea intermedia 2/07 Cyathea lunulata /07 Cyathea medullaris 11/08

Cyrtomium falcatum 'Butterfieldii' 3/08 Dicksonia antarctica 8/08 Dicksonia fibrosa 10/07 Diplazium australe 4/08

Doodia australe 12/08 Dryopteris affinis 'Cristata' /08 Dryopteris wallichiana 1/09 Hypolepis glandulifera 12/08 Hypolepis rugosula 2/07 Lastreopsis acuminata 12/08 Lastreopsis decomposita 6/09 Lastreopsis glabella 4/07 Lastreopsis marginans 1/07 Microsorum punctatum 1/09 Nepholepis falcata 3/08 Ophioglossum pendulum 7/08

Pellaea cordata Pellaea sagittata 3/07 Pellaea viridis 1/08

Platycerium bifurcatum 'Hula Hands! 10/07 Platycerium bifurcatum 'Venosum' (Mt.Lewis)

10/07

Platycerium superbum 4/08 Platycerium veitchii 10/07

Pleisioneuron tuberculatus 12/08 Pneumatopteris sogerensis 12/08 Pneumatopteris costata 12/08 Polypodium formosum 10/07 Polystichum formosum 6/09 Polystichum proliferum 11/08 Polystichum retroso-paleacum /08 Polystichum setiferum 'Congestum' 12/07

Polystichum vestitum 2/07 Polystichum xiphophyllum 3/08 Pronephrium asperum 2/07

Pteris dentata 1/09 Pteris sp. (Nepal) 3/07 Pteris umbrosa /08 Revwattsii fragile 12/08

Sphaerostephanos heterocarpus 7/08 Stenochlaerna palustris 2/07 Thelypteris navarrensis 1/07

Rumohra adiantiformis(Cape form) 2/08

Thank you to the following spore donors: Marco Calvimonte, Brenda Girdlestone, Don Fuller, Warren Simpson Nada Sankowsky, Sheila Tiffin, Werner Neumeuller, Frank Hardung, Kylie Stocks, Neville Crawford, Wendy Johnston, Claire Shackel, Dot Camp, and Crosby Chase.

The above list was current as of June 2009. Updates can be found at http://home.vicnet.net.au/~fernsvic/Sporlist.html.

NEWSLETTER
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