

Fern Society of Victoria Inc. NEWSLETTER



Lastreopsis acuminata

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OUR NEW LOOK COVER FEATURES THE WINNING ENTRY IN THE RECFTM COMPETITION. IT WAS DONE BY MRS. LAURIE ANDREWS. ♦ OPINIONS EXPRESSED IN THIS NEWSLETTER

ARE THE PERSONAL VIEWS OF THE AUTHORS AND ARE NOT NECESSARILY ENDORSED BY THE SOCIETY, NOR DOES THE MENTION OF A PRODUCT CONSTITUTE ITS ENDORSEMENT.

FERN SOCIETY OF VICTORIA Inc.

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Jack Barrett 9375 3670, Gaye Stagoll 9844 1558, Norma Hodges 9878 9584.

SUBSCRIPTIONS:

Single -	\$13.00	Pensioner/student	\$10.00
Family -	\$15.00	Pensioner Family	\$12.00
Organisation	\$15.00		
Overseas -	\$20.00	- Payment by international bank cheque in \$A please. Overseas sent by Airmail.	

Subscriptions fall due on 1st July each year.

OUR SOCIETY'S OBJECTIVES.

The objectives of the Society are;

- *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 and
- *to promote the conservation of ferns and their habitats.

FROM THE PRESIDENTIAL PEN(THOUSE).

Ian Broughton

Greetings and salutations once again. Isn't it wonderful to be able to squelch through our lawns again? With something over an acre of potted plants here, I am delighted to have finally had a break from watering.

I have to confess that I am not easily satisfied. Since my last report, we have spent another three weeks in the Cairns region of Northern Queensland and I want more!! Unfortunately, some areas we wanted to access were closed due to flood damage and logging. We were really surprised when the body for State Forests gave us permits to enter areas that were actually closed by logging works - you might think that they would know what was going on in their own forests (but you'd be wrong)!! We were amused by their road closed signs - they no longer log forests, it is now known by the politically correct expression, "forest harvesting". However, a corpse by any other name would smell as foul (with apologies to Shakespeare).

We have an excursion organised for Sunday 24th October. We will be going to Toorong Falls and other falls in the Noojee area. Transport will be by private car - do get together to car pool - and we will meet

(Continued on page 68)

1999 MEETINGS & EVENTS

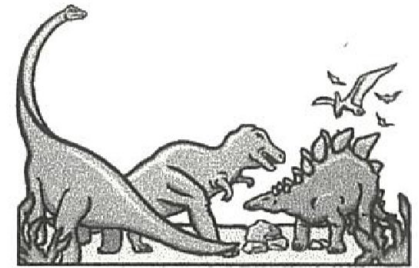
Please remember our new venue.

General Meeting on September 16th

*FERNS THROUGH THE (GEOLOGICAL) AGES.

JACK DOUGLAS

Five Minute Fern Talk; Barry Stagoll Competition; Living ferns from fossil records.



General Meeting on October 21st

PALMS AND CYCADS

BOB FLETCHER.

Five Minute Fern Talk; Jean Boucher. Competition; D^Ypteris (Male Ferns).



GENERAL MEETING TIMETABLE:

- 7.30 Pre-meeting activities - Sale of ferns, spore, books, merchandise and Special Effort tickets. Also library loans.
- 8.00 General Meeting.
- 8.15 Workshops and demonstrations.
- 9.15 Fern identification and pathology, Special Effort draw.
- 9.45 Supper.
- 10.00 Close.

VENUE: Kevin Heinze Garden Centre, 39 Weatherby Road, Doncaster. (Melway 47:H1)




Sunday Excursion on October 24th

TOORONGO FALLS SCENIC RESERVE NEAR NOOJEE.


See separate article .



Competition for November 18th; Athyrium and Diplazium (Lady Ferns)



A fern is a plant which has more important things to do than merely flowering.



Forgotten something???
Don't forget to pay your 1999-2000 subscription!!!

Forgotten something???



If you have not yet renewed your membership, please do so now!

It would be a pity to forego your membership priveleges, including the Newsletter. There was a membership application/renewal form in the last Newsletter. If you've lost it, just send details and your cheque to P.O. Box 45, Heidelberg West, Victoria, 3081.

... FROM OUR PRESIDENT

(Continued from page 66)

OUTside the pub in Noojee at 11.00a.m. Bring a picnic lunch, afternoon tea and walking shoes.

Plans are well under way for our 21st anniversary. We are intending having a smorgasbord at the Clayton R.S.L. at a cost of \$20 per head. We will be wanting to put together a display of memorabilia of early FSV activities, we will probably have a short slide presentation of Society functions and there will be a display of ferns. If you think you may have something of particular interest or you are able to offer any other assistance, please let one of the sub-committee know; you could contact Brian and Pat Nicholls on 9836 6507, Keith and Joyce Hutchinson on 9457 2997 or Reg and Mary Kenealy on 5963 3552.

We have Fern Society mugs available at the meetings. They look really stunning in dark green with gold printing and trim and they are large enough for a decent drink. They can be purchased for just \$7 each or 4 for \$28. We also have some glasses left at the price of \$4 each (or, dare I say it, 4 for \$16).

Our next meeting (September) is our Annual General Meeting. All committee members are standing again, but we do have vacancies. If you would like to be involved, we would welcome you on board. Being on the Committee isn't particularly onerous and we do have quite a lot of fun.

Following the AGM, our guest speaker will be Jack Douglas talking on "Ferns Through the (Geological) Ages. He has spoken to us once before and is very interesting so plan to join with us. The competition category for the night is any fern found in the fossil record, which would include the following genera; Selaginella, Lycopodium, Equisetum (Horsetails), Psilotum, Tmesipteris and Angiopteris. If you have a fossilized fern then that could be included as well. The Five Minute Fern Talk will be given by Barry (or Gay?) Stagoll.

At our October meeting Bob Fletcher will talk on Palms and Cycads. I will be bringing him down in my van so there will be room for some of his larger display plants. If your experience of Palms and Cycads is limited to just a handful of species then make sure you come, and be prepared to be amazed and have your horizons broadened. The competition category is the Dryopteris genus (Male Ferns) and the Five Minute Fern Talk will be given by Jean Boucher.

For your diaries; our December meeting is to be a BBQ lunch at the Kevin Heinze Garden Centre. Further details in the next newsletter. □□□

BLECHNUMS

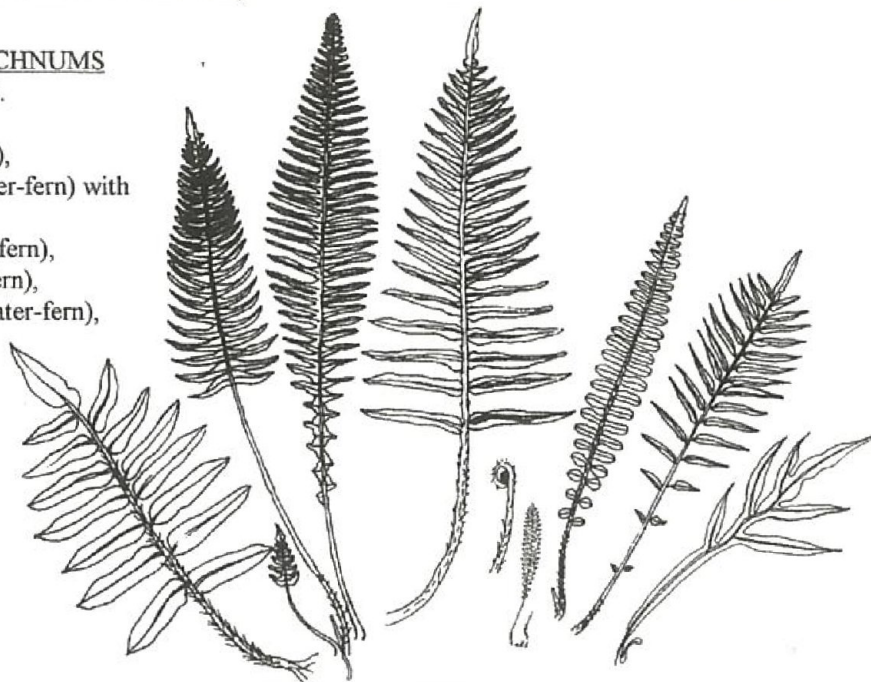
June Speaker Report - the speaker was Barry White.

SOME VICTORIAN BLECHNUMS

and their relative sizes.

From left:

- B. watsii (Hard water-fern),
- B. vulcanicum (Wedge water-fern) with an immature frond,
- B. nudum (Fishbone water-fern),
- B. cartilagineum, (Gristle fern),
- B. penna-marina (Alpine water-fern),
- B. fluviatile (Ray water-fern),
- B. minus (Soft water-fern) and B. patersonii (Strap water-fern).



The name comes from the Greek word *bleknon*, a fern.

Common names: Water fern, Hard fern (USA and New Zealand).

Lomaria is an old name for blechnums with dimorphic fronds.

Fronds are usually pinnate, occasionally bipinnate. In some forms of *Bl. patersonii* all the fronds may be simple (e.g. on Lord Howe Island).

The sori are in a continuous line on either side of the midrib protected by a linear indusium and opening inwards towards the midrib. Most species are dimorphic with the pinnae on the fertile fronds very much reduced, often being only wide enough to contain the sori. Blechnums are mostly terrestrials, often growing in wet situations along banks of streams or in swamps. A few are climbers. Some have a spreading underground rhizome and can form large colonies. They often produce colourful new fronds.

Of the nearly 200 species, only two occur in the north temperate hemisphere. *Blechnum spicant* occurs in Europe and North America, *Bl. niponicum* occurs in Japan. There are 18 species in Australia, 11 of which are endemic. Five species occur on Lord Howe Island of which four are additional to those on the mainland and three are endemic. A further one occurs on Norfolk Island (*Bl. norfolkianum*)

Most adapt well to cultivation. They are not fussy about soil type but prefer acidic, well drained soils.

They like plenty of water but persistent wetness of the fronds, particularly when there is lack of air movement, can cause the fronds to go black.

Blechnums of Victoria, nine species.

Bl. patersonii (Strap Water-fern). Dark green, often simple, strap-like fronds. Widespread in Australia.

Bl. cartilagineum (Gristle Fern). The only Blechnum in Victoria which does not have dimorphic fronds. Pinnae are attached by a broad base and are not markedly reduced towards the base of the frond. Widespread in Australia, also in the Philippines.

Bl. minus (Soft water-fern) (minus = small). The term 'minus' is misleading as the fronds may be up to 2 metres long, as at Ian and Dorothy Forte's farm. Pinnae have a short stalk and are much smaller towards the base of the frond. *Bl. minus* requires plenty of water. Widespread in Australia.

Bl. nudum (Fishbone water-fern). Its erect rhizome sometimes forms a trunk. Pinnae mid-green colour, stipe black and shiny. Pinnae are attached by a broad base. The longest pinnae are in the middle of the frond and the lower ones much reduced. The Fishbone Water Fern likes moist conditions. Widespread in Australia.

(Continued from page 69)

Bl. wattsi (Hard water-fern). Has a creeping rhizome and frequently forms large colonies. Pinnae are shortly stalked, little reduced towards the base. Fronds are dark green and harsh. Widespread in Australia.

Bl. penna-marina (Alpine water-fern). A small fern, *Bl. penna-marina* has a rhizome which is creeping to semi-erect. The pinnae are about 1 cm. long, attached by a broad base. Common in the alpine area of Victoria, this fern also occurs in N.S.W., Tasmania, New Zealand and South America (where it is a larger form).

Bl. vulcanicum (Wedge water-fern). Erect rhizome. Lamina wedge shaped, the pinnae are curved and attached by a broad base, the lower pinnae deflexed. Very rare in Victoria, it has been found in the Wonnongatta River area. It is common in Tasmania, New Zealand and on a number of Pacific Islands.

Bl. fluviatile (Ray water-fern) Common in Victoria. The non-fertile fronds tend to lie flat in a rosette (more so with ferns in cultivation), with the fertile fronds standing more erect. *Bl. fluviatile* is widespread in Australia and also occurs in New Zealand.

Bl. chambersii (Lance water-fern) This fern, though common, can be difficult in cultivation. Plants often hang down in a curtain on creek banks. Pinnae are dark green, curved, and attached by a broad base. Stipe is pale to brown. The Lance water-fern is widespread in Australia and is also found in New Zealand and on some Pacific Islands.

Zinc cream of the future

CSIRO scientists have discovered a way to make zinc cream transparent — and twice as protective against harmful rays from the sun.

Dr Terry Turney, from the CSIRO's manufacturing science and technology division, said that by reducing the size of particles of the active ingredient, zinc oxide, the sunscreen gave better coverage.

Zinc oxide particles are normally about 250 nanometres but the CSIRO treatment reduces them to as small as 10 nanometres and gives more control over their surface chemistry.

"We can get them down to 1000 times smaller than the diameter of a human hair," Dr Turney said.

Zinc creams work by physically blocking UVB rays which cause redness and burning, as well as UVA rays which lead to photoageing.

The use of ultrafine particles meant fewer rays could get through to the skin: it was like the difference between trying to spread sugar cubes on bread compared to margarine, Dr Turney said.

Normal particles both absorb and scatter light, which is why zinc cream looks white.

If you make the particles small enough they let visible light through and appear transparent, facilitating their use in moisturisers and make-up.

"We're already running tests with several of the world's leading cosmetics companies overseas and we expect there to be a good export market there," Dr Turney said.

The CSIRO, working with Melbourne-based firm Micronisers Pty Ltd under a Federal Government START grant, has developed a way of mass-producing the zinc powder for supply to sunscreen formulators.



Can you help??

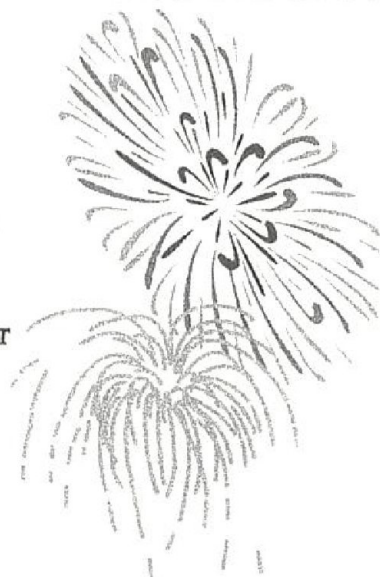
Do you know how to contact any former Society members? We want to include them in the 21st Anniversary celebrations next year.

If you have the address or phone number of previous members please write to:

Keith Hutchinson
17 Grandview Grove, Rosanna 3081

or phone him on 9457 2997 as soon as possible.

Thank you!



LIBRARY BOOKS

Part 2.

TITLE	AUTHOR	PAGES	NOTES
16. What Pest is That?	Frances Hutchinson	107	Garden pests and their control - well illustrated.
17. Exotic Ferns in Australia.	D. L. Jones & C. Goudey	72	Descriptions, cultivation, numerous colour plates.
18. The Ferns of Britain and Ireland.	C. N. Page	447	Line drawings and descriptions.
19. The Genus <i>Pyrrhosia</i> in Cultivation.	Barbara Joe Hoshizaki	100	Descriptions and B&B drawings of cultivated <i>Pyrrhosia</i> ferns.
20. Flora Zambesiaca - Pteridophyta.	E. A. C. L. E. Schelpe	254	Zambian ferns - scientific descriptions and line drawings.
21. Ferns of Queensland.	S. B. Andrews	427	Scientific descriptions and line drawings.
22. The Ferns of Tasmania - Their Ecology and Distribution.	Michael Garrett	217	Descriptions, distribution maps, numerous colour plates.
23. Growing Media.	K. Handbreck & N. Black	401	Everything you need to know about potting mixes.
24. A Guide To Hardy Ferns.	Richard Bush	70	British book - short description, no illustrations.
25. Ferns of Florida.	O. Lakela & R. W. Long	178	Descriptions and B&W plates.
26. Common Ferns and Fern Allies.	E. Heath & R. J. Chinnock	76	Small book of NZ ferns - descriptions and colour drawings.
27. Ferns for Ferneries.	R. W. Martin	80	Small NZ book of ferns. Some line drawings.
28. Welsh Ferns.	H. A. Hyde, A. E. Wade, S. G. Harrison		Scientific descriptions and line drawings.
29. <i>Platycterium</i> Fern Facts.	Wendy Franks	119	Staghorns and elks. B&W plates.
30. Ferns Mosses & Lichens of Britain & Northern & Central Europe.	Hans Martin Johns	178	Descriptions and colour plates.
31. Heinemann Guide to Common Epiphytic Ferns of Malaysia and Singapore	Audrey Piggott	26	Small book - well illustrated.
32. The Genus <i>Adiantum</i> in Cultivation.	Barbara Joe Hoshizaki	196	Descriptions and B&W drawings of cultivated maidenhair ferns.

Speaker Report -May 1999.

THE USE OF BOTANICAL LATIN:

Why it is important, some of its elements, how it is used and how it makes sense.

Terry Turney.

Botanical Latin is a Modern Language.

It would not be understood by an ancient Roman.

- Many of the words are new specialist words used to describe plant parts etc.
- We use a slightly different grammar
- The alphabet is not exactly the same
- We do not pronounce the words the same.

Latin is used to name the plant AND to describe it.

The Botanical Code.

A. P. Candolle and his son Alphonse drew up simple rules which were finally adopted in 1867.

- One name for each plant. A plant name to consist of two words, the genus and the species
- No two plants with the same name
- If a plant has two names the valid one is the one published first after 1753
- The author's name shall be cited after the plant name.

In 1988 botanists agreed that a name validly published after 1/1/1935 MUST be accompanied by a Latin description. A valid publication is one which is circu-

lated among botanists (see Fig.1).

All botanists need to be able to understand the description and recognise a plant from it so a common language was needed. Latin was chosen because it was the universal language among educated people throughout Europe from the seventeenth century until relatively recently.

The Origin of the Latin (Roman) Alphabet.

- Written Latin contained 21 letters only by the time of Cicero (106-43 BC)
- Romans only used capital letters. Lower case was introduced in the 7th century.
- "I" stood for either "I" and "J"
- "V" stood for either "U" and "V"
- (MAGNVS, MAIOR, MAXIMVS)
- Romans conquered Greece in 146 BC
- Greek influence came from slaves, literature
- Romans needed "Y" (upsilon - υ) and "Z" (zeta - ζ)
- "W" was added in the 11th century; "U", "J" and "Y" in the 16th century.

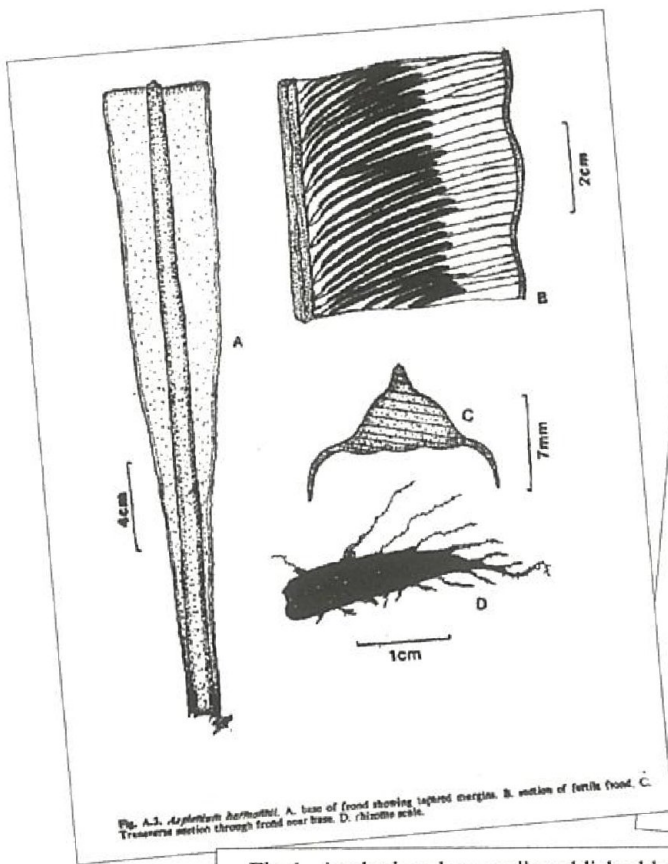


Fig. A.J. *Asplenium harmanii*. A. base of frond showing tapered nerves. B. section of fertile frond. C. Transverse section through frond near base. D. rhizome scale.

Asplenium harmanii D. Jones species nova affinis *A. australasicum* (J. Smith) Hook. Surculis dissitis basalaribus per ramificationem lateralem rhizomatis in plantis veteribus proditis, frondibus rigide erectis rosulum immundulum formantibus et marginibus in basin extensam aloideam gradatim decrescentibus differt. Typus: Queensland. MORETON DISTRICT: McPherson Range, O'Reillys Property, Green Mountains, 17 October 1987, Jones 2481 & Harman (holo: BRI; iso: MEL, NSW).

Lithophytic fern forming an untidy, litter-collecting rosette of fronds. Rhizome erect, stout, woody, with an apical rosette of fronds, below them a large mass of roots bearing copious, persistent, brown root hairs, lateral growths arising sporadically from lower nodes on mature plants. Scales clothing apex of rhizome and base of stipes ca 30 mm long, 2 mm wide, linear, thin-textured, clathrate, pale brown with transparent bases, margins with numerous, prominent, hair-like appendages. Fronds simple, 50-130 cm long, 8-13 cm wide, dark green, coriaceous, shiny, arranged in a very close spiral, ascending steeply to form an irregular, rather untidy rosette. Stipes short, stout, dark greyish black, shiny, ventral surface rounded. Lamina widest just above middle, tapering proximally to a narrow base which is drawn out like a long wing, distally to an obtuse to subacute apex. Costa of similar colour to stipes, flat and very shallowly grooved on dorsal surface, strongly and very acutely keeled on ventral surface, the keel almost wing-like, green and somewhat sinuous. Veins forked once either near the costa or above the middle, at an angle of ca 45° to costa, uniting to form a continuous vein ca 0.5 mm from margin. Sori narrow, linear, present on nearly every vein or vein branch in the distal third of a fertile frond, extending from near the costa for two-thirds of the distance to the margin. Indusia ca 0.5 mm wide, reflexed at maturity. Spores monoletic, light brown, wing thickened or folded.

Fig. 1 *Asplenium harmanii*, published by David Jones, appeared in "Muelleria" in 1988.

(Continued from page 72)

Pronunciation of Latin Plant Names.

- ◆ Latin is not really a spoken language
 - ◆ Scientific names often appear in speech
 - ◆ Classical Latin had/has “dialects”
 - ◆ In English-speaking countries nowadays there are **two ways** of pronouncing Latin:
 - “Traditional English”, used by gardeners and botanists.
 - “Reformed Academic”, used by classical scholars.
- Modern usage in Australia is varied. It is a mixture of “classical” and “traditional”.

- ◆ To determine the sound of botanical Latin, we need to consider three components; **sounds of letters + length of vowels + stress**.
- ◆ Divide into syllables words with more than one vowel or diphthong (ae, au, ei, eu, oe, oi, ui); minus, mag-nus, lu-dens, his-pid-u-lum, art-ic-u-lat-um, ten-er-a, poe-cil-o-phle-bi-a.
- ◆ In Latin every vowel is pronounced; co-to-ne-as-ter (not co-ton-easter), tri-cho-man-o-id-es (not -oides), wats-i-i, Alo-e!!!

Vowels and Consonants

Long		Short	
ā (fāther)	baileyānā	ă (făt)	Asplenium
ē (thēy)	australē	ĕ (sĕt)	Elaphoglossum
(machīne or īce)	Isoetes Microsorium	(sīt)	Dicksonia
ō (nōte)	Cibotium	ō(nōt)	Histiöpteris
ū (cūte)	tremūla	ŭ(cūt)	sūbauriculata

- **Sounds to watch** (Terry’s preferences only)
 - c - c as in *cat* rather than c as in *centre*
 - ch - k rather than ch
 - i (consonant) - y as in *yellow* rather than j as in *job*

(Continued on page 74)

REFORMED ACADEMIC

ā as in *fāther*
 ā as in *āpart*
 ae as *ai* in *aisle*
 au as in *house*
 c always as in *cat*
 ch (of Greek words) as *k* or *k-h* (if possible)
 ē as in *they*
 ĕ as in *pĕt*
 ei as in *rein*
 g always as in *go*
 ī as in *machīne*
 ĭ as in *pĭt*
 (consonant ĭ) as *y* in *yellow*
 ng as in *finger*
 ō as in *nōte*
 ō as in *nōt*
 oe as *oi* in *toil*
 ph as *p* or *p-h* if possible
 r always trilled
 s as in *sit, gas*
 t as in *table, native*
 ū as in *brūte*
 ŭ as in *fŭll*
 ui as *oui* (French), *we*
 v (consonant *u*) as *w*
 ŷ as *u* in French *pur*
 ŷ as in French *du*

TRADITIONAL ENGLISH

fāte
făt
 as *ea* in *meat*
 as *aw* in *bawl*
 { before *a, o, u* as in *cat*
 { before *e, i, y* as in *centre*
 as *k* or *ch*

mē
pĕt

 as in *height*
 { hard before *a, o, u* as in *gap, go*
 { soft before *e, i, y* as in *gem, giro*
īce
pĭt
j in *jam*
finger
nōte
nōt
 as *ee* in *bee*
 like *f*

sit, gas
table but *ti* within a word as in *nation*
brūte
tŭb
ruin
 as in *van*
 as in *cŷpher*
 as in *cŷnical*

(Continued from page 73)

oe - oi as in oil rather than ee as in bee
ae - ai as in aisle rather than ea as in meat.

◆ **Stress on 2nd or 3rd last syllable;**

2nd last;

when it has a long vowel or diphthong (indicated here by a bar across the letter)

for-mōs̄-sus (graceful, beautiful)

for-mos-ān̄-um (from Formosa)

(Polypodium) lor-ic-ē̄-um (clothed in mail, referring to the tightly apressed scales on its rhizome)

when 2 consonants separate the last 2 vowels

cru-ēn̄-tus (blood coloured)

Las-tre-ōp̄-sis

3rd last when second last is short

flō̄-rīd-us (flowery)

Di-plā̄-zī-um (duplicate, from its double indusium)

lat-i-fol̄-ium

People's Names.

cunningham-i-i	roberts-i-an-a
billardieri	goudeyi
harmanii	

Note lower case spelling for species name.

Silent Letters from Greek.

In the following examples, the **bold** letter is silent.

Pneumatopteris (Pneuma- wind, breath)

Psilotum (psilo- bare, naked)

Ppseudo- (false)

Ctenopteris (cteno- comb)

Pteris (ptero- wing)

Tmesipteris (Tmesi- separate, divide)

**Some Names in Two Fern Genera -
Their Derivations and Meanings.**

Doodia - Rasp Ferns.

Named by Robert Brown in 1810 after Samuel Doody, curator of Chelsea Botanic Gardens. Fern expert of early 18th century.

D. aspera	"asper" - harsh
D. caudata	"caudex" - tail
D. media	intermediate or middle - size & position of sori
D. maxima	largest
D. squarrosa	"squarrosus" - rough

Latin Names

Grāmm-īt'-īs (short line - sori)

!!!!!!! Pōly'-stīch-ūm or Pōly-stīch'-ūm (stichos - row)

Pā-rā-cet-er-āch (para - near, chetrak (Ab.) fern)

A-splē-n'-i-um pā-lē-āc-ē'-um (spleen, paleacus - chaffy scales)

A-splē-n'-i-um flab-el-li-fō'-li-um (flabellum- fan-shaped)

Ar-ach-n-ō-īd'-ēs ar-īs-tā'-ta (arachnoidieus - cobwebbed, covered with a weft of hairs, aristata - with a beard)

Bel-vīs'-i-a mu-cr-on'-ta (mucro - sharp point)

Bōl-bī'-tīs

Ce-rat-ōp'-tēr-is thal-ict-ro-ī'-dēs (cerato - horn-shaped, Thalictum - Greek place??)

Ce-rat-p'-tēr-is corn-ū-ta (cornus - horn)

Bot-rych'-i-um (moonworts) (little bunch)

Hel-min-thō-stā'-chys zeylanica (helmino - worm, stach-corn cob also stachys - spike - dead nettles in Greek, zeylanicus - Ceylon)

Schiz-ā-ē'-ā di-chot'-o-ma (split)

Schiz-ā-ē'-ā fist-u-lō'-sa (hollow, tube-like)

Schiz-ā-ē'-ā bi'-fid-a (deeply cleft in two)

Act-in-ō- stā'-chys (actino - radiating)

Blech'-num fluv-ī-a'-tī-le

Las-trē'-ōp-sis (Lastrea: opsis-looking like)

Myrm-ec-opt'-ēr-is sin-ū'-osa (myrmeco - ant; sinuosa - wavy)

warszewiczella var-she-vi-chel-la

Con-i-o'-gram-me jap-on'-ic-a (conio - enclosed; gramme - writing)

Cyrt-ō'-mi-um fal-ca-tum (cyрто- curved, convex; falcatum - sickle-shaped)

Da-val'-li-a bul-la-ta (bullata - bumpy surface)

Dry-opt'-er-is (oak-nymph fern)

Dry-na'-ri-a quer-ci-fōl'-i-a (quercus - oak)

Gym-no-pter-is quercifolia (gymno - naked)

Quer-ci-fil-ix zeylandica (filix - fern)

D. heterophylla	"hetero" - different + "phylla" - leaf
D. dives -	India? "Divus" - belonging to the gods?
D. lyonii -	Hawaii - Lyon, a person
D. paschalis	Pascua Is.

(Continued on page 75)

(Continued from page 74)

D. marquesensis Marquesas Is.

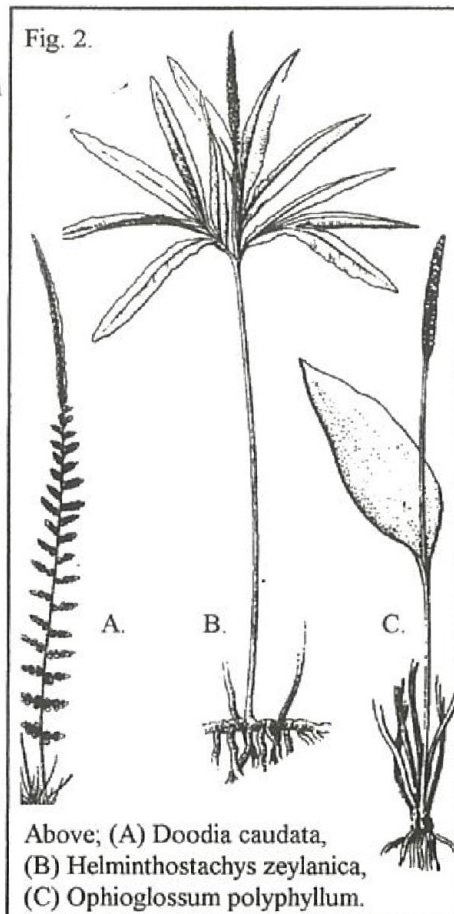
Gleichenia - Coral Ferns.

Named by John Smith in 1793 after Baron F.W. von Gleichen-Ruswurm, 18th century microscopist and botanist.

- | | |
|-----------------------|--|
| <i>G. microphylla</i> | “micro” - small + “phylla” - leaf |
| <i>G. dicarpa</i> | “di” - two + “carpus” - fruit (two sporangia). |
| <i>G. rupestris</i> | “rupester” - living in rocks |
| <i>G. mendellii</i> | “Mendell” - a person |
| <i>G. alpina</i> | alpine |
| <i>G. abscida</i> | “abscissus” - cut off (dwarf coral fern) |
| <i>G. blotii</i> | Mdm Tardieu-Blot (A remarkable French botanist who did all the ferns in French Africa and other French colonies) |
| <i>G. vulcanica</i> | first found on a volcano in Java |
| <i>G. longissima</i> | branches 1.5m long |
| <i>G. linearis</i> | long rhizome |
| <i>G. laevigata</i> | “laevigatus” - smooth. No hairs in adult plants |
| <i>G. opposita</i> | widely spaced, opposite pairs of pinnae |
| <i>G. hirta</i> | “hirtus” - hairy |

□□

Fig. 2.



Above; (A) *Doodia caudata*,
(B) *Helminthostachys zeylanica*,
(C) *Ophioglossum polyphyllum*.

A jolly good time was had by all, judging by the animated buzz of comments, questions, opinions and even contradictions from the audience during Terry's presentation. Thank you, Terry for a very interesting talk.



Forgotten something???

Don't forget to pay your 1999-2000
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MONTHLY COMPETITION WINNERS

for July¹⁹⁹⁹ and August, 1999

JULY

The Pteris Genus

1. Barry White's *Pteris wallichiana*
2. Dick Kissane's *Pteris* species, Nepal
3. Dick Kissane's *Pteris hendersonii*

Exhibitor's Draw: Keith Hutchinson

Special Effort: Keith Hutchinson, Don Fuller,
Rod M^cConchie, Mavis Potter.

AUGUST

An Unidentified Fern

1. Ian Broughton's *Pteris umbrosa* ×
2. Don Fuller's *Nephrolepis exaltata*
cv. *childsii*
3. Dorothy Forte's *Polystichum proliferum*.

Exhibitor's Draw: Ray Harrison

Special Effort: Ivan Traverso, Diane Mayne,
Barry White, Keith Hutchinson,
Gay Stagoll.

ASCOG FERNERY

A Restored Victorian Fernery at Ascog Hall on the Isle of Bute, Scotland.

James Merryweather.

This article was found on the Internet by Barry Stagoll. Thank you, Barry.

By sheer chance and good fortune, last summer I discovered what is probably for the pteridologist, the eighth wonder of the world. I was able to encourage three of my friends to visit and they came back far from disappointed. Any of us will give you the most enthusiastic recommendation to visit, Jack Bouckley (whizzo fern grower of Harrogate, Yorkshire and one time BPS president) remained on the island for several days; Heather McHaffie (Edinburgh University- *Athyrium distentifolium/flexile*) ironically demanded to know why I hadn't told her how wonderful it was and Alastair Wardlaw (who grows tree ferns in Glasgow) wrote about it, and I quote below the first draft of his article for Pteridologist, 1998:

Surely one of the most significant (and least publicised) pteridological events in Britain of the last two years was the opening of this restored Victorian Fernery. It is a story of past love, neglect and decay, accidental discovery in a 'jungle', and romantic and dedicated rebuilding and restocking.

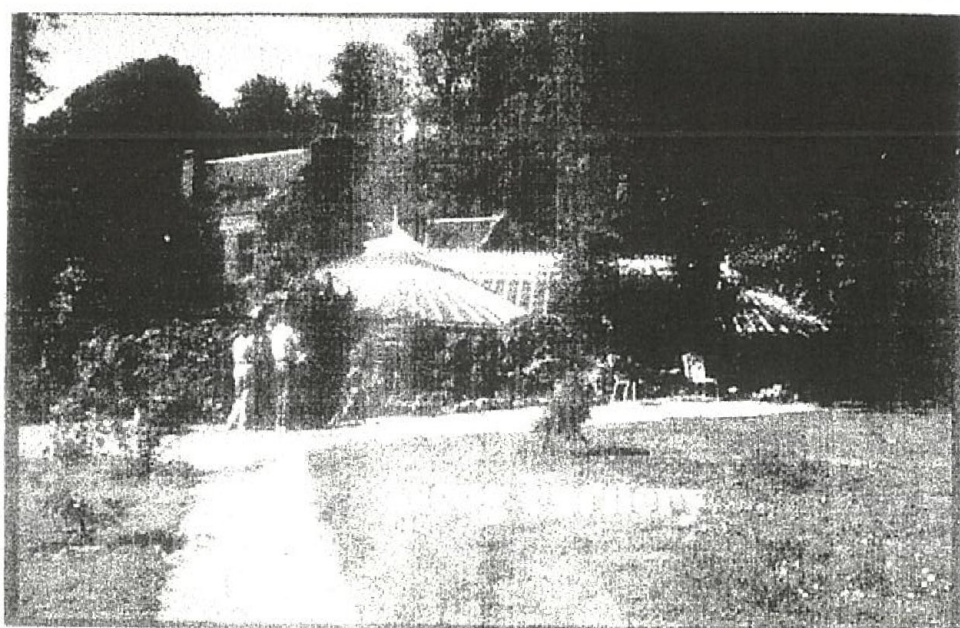
The place is Ascog Hall, the location is the Island of Bute in the Clyde Estuary, and the energetic restorers are Wallace and Katherine Fyfe who own the property.

The story starts around 120 years ago and is reported in *The Gardeners' Chronicle* of October 25, 1879, when the fernery had recently been completed. This early article, illustrated with a woodcut (above) showing tree-ferns, describes much of what the visitor sees again today. For the restorers, it provided details of the construction and a list of the ferns in the original collection.

When the Fyfes first stumbled on the ruined structure about 20 years ago, they did not recognise its true nature. It was totally derelict, the roof having collapsed and the interior cavity, like the basement of an ancient building, was choked with trees and brambles. Miraculously, one large fern had survived! A huge specimen of *Todea barbara*, with a

mountainous rhizome about a metre in diameter and 1.5 metres high, is still visible today.

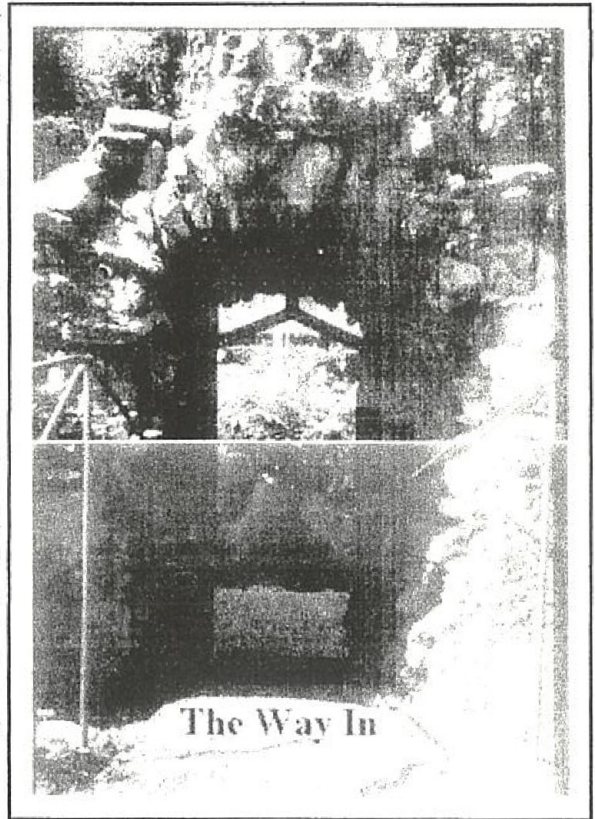
The basic structure is an L-shaped canyon, excavated in a natural bank and with a span roof of iron girders and glass, at ground level. Thus one enters the structure by going down steps as if into a grotto. This semi-burial in the ground allows the fernery to be unheated and yet be suitable for a wide range of sub-tropical vegetation. Indeed in summer, there is a problem of keeping it cool, even with all the vents open. The interior walls are of the local red-sandstone, in blocks of menhir dimensions that are very sculp-



tural and pleasing. At the far end is a waterfall which divides into a stream that meanders down the centre around a pool with an elongated island crammed with ferns. The whole interior has to be watered every day.

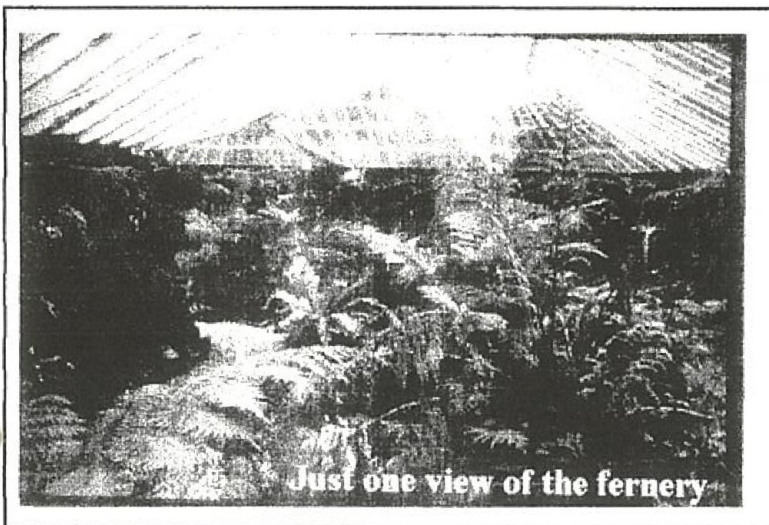
The original builders, and modern restorers, knew all about the psychology of surprise, because the fernery does not properly disclose itself until you are actually inside. You go down steps to an ordinary wooden door, under a sandstone arch, that might lead into a storage shed.

But instead, you find yourself making a transition into an unexpected, brightly-lit world almost of make-believe, with a large *Dicksonia antarctica* right in front. Everything is identified with professionally-produced engraved labels. The section at the entrance is mainly for Atlantic Island ferns, planted in crevices and natural shelves on the sandstone walls. Among the species are *Adiantum reniforme*, *Asplenium aethiopicum* and *A. hemionitis*, *Culcita macrocarpa*, *Dryopteris crispifolia* and *Woodwardia radicans*. Then in succession there are sections for ferns from South-East Asia, China and Japan, South America and Australasia. Particularly striking are the several species of tree-fern, in addition to the *D. antarctica*: *Cibotium schiedei*, *Cyathea cooperi*, *C. lunulata*, *C. milnei* and *Dicksonia squarrosa*.

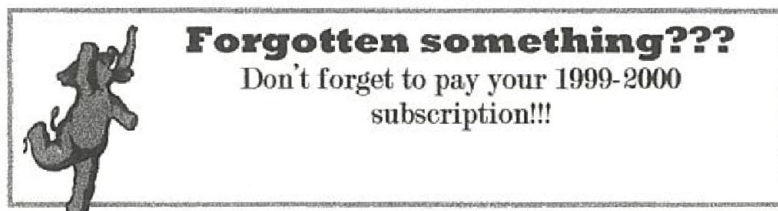


Space here does not permit a complete listing of all the ferns in the collection. Suffice it to say there is a feast of mainly exotic species, but including the local *Hymenophyllum tunbridgense* (growing on the *T. barbara* rhizome). When we visited in the summer of 1997, the Fyfes had representatives of some of the ferns for sale.

Credits for the restoration must go to Historic Scotland for helping to fund the new greenhouse roof, which would have been impossibly expensive for private owners, and to the Royal Botanic Garden, Edinburgh, for the restocking of the fernery. But the major credit must be reserved for Wallace and Kath Fyfe for their vision, initiative and sheer hard work to get the fernery restored and then to maintain it. □□



For information about getting to Ascog, visiting times, a visitor information service and other places of interest on the island of Bute and nearby Dunoon, you can contact me on 5796 2466 or visit the website at <http://www.york.ac.uk/depts/biol/units/ground/ascog/welcome.htm> -Lyn.



For true serenity, spend an hour either stroking a cat by the fire or wandering through a fern glen.

May '99's Five Minute Fern Talk

SPHENOMERIS CHINENSIS

Ian Broughton.



This very attractive fern-with-the-curly-name, which is sometimes listed as *Lophosoria*, is in the Lindsaeaceae family, though some authors put it in the Dennstaedtiaceae family, in the sub-family Lindsayoideae. *Odontosoria* is listed as an old name that has apparently now become the current one for this fern.

Found in Japan, Polynesia, Madagascar and I think as far as Fiji (Holttum has it in Malaya) from lowlevel tropical rainforests up to fairly high elevations in the mountains. I once read that it grows up to three or four thousand metres.

It has a short creeping rhizome so is a fairly densely clumping fern, with fronds 20 to 80cm long. It is very versatile, growing well in moderate light up to full morning sun and fairly happily in full sun.

It has almost got two distinct characters, depending where it is grown. In an exposed position it develops a lot of red colour; quite red new foliage and will retain some of that colour in the foliage and particularly in the stems. The old foliage turns quite red before it dies, too. The texture is rather leathery. In a more protected position it will be quite green, lush and soft. As could be expected, it grows quite small in an exposed position and in higher altitudes, and much larger in a protected position.

This is a terrific fern for growing in baskets, pots, treefern planters and the ground. Seven or eight years ago Melbourne Zoo put in a Japanese garden, including in it a number of fern species. It was a very exposed position in full sun with white gravel under it and of all the ferns they put in, this survived the best. Chris added that in Fiji it is found on roadside cuttings high up in the mountains (in high rainfall) in full sun all day. It has a lot of red colouring. Ian grows a plant in his garden which experiences temperatures down to -3°C. It is against the house which would protect it a bit.

It is quite likely that the Australian population of *Odontosoria/Sphenomeris chinensis* originated with material that Chris Goudey brought back from Fiji. Ian's stock seems to have done so, via one or two other ferneries. □□

(I have just proved that a little research is a bad thing! I could find no reference to the name *Lophosoria* in relation to *Sphenomeris* but did find some other synonyms. They are; *Odontosoria chinensis* J.Sm., C.Chr., *O. Palmii* Rosendahl., *Davallia tenuifolia* Sw., *Sphenomeris chusana*, *Stenoloma chinensis* and *Stenoloma chusanum*!!! Aaaaaahhhhhh!!! Lyn.)

TRIP TO TOORONGO FALLS

Sunday October 24th

Gather outside the Noojee pub (VR80 H8)
at 11a.m. SHARP

Transport from Melbourne is by private car. Suggested access from the north-east of Melbourne is via the Warburton Hwy, at Yarra Junction taking the Yarra Junction - Noojee Road through to Noojee. Otherwise take the South Eastern Freeway, Princes Hwy/Fwy and turn north (left) up through Drouin West, Neerim South etc. to Noojee.

Bring your lunch, some afternoon tea and walking shoes.

About the Reserve: It is a picturesque area of 16 hectares beside the Toorong and Little Toorong Rivers in tall mountain forest. The main feature is a circuit walking track which leads to the base of the Falls (on the Little Toorong River) and there is a viewing point on the way there. The track continues across to the Toorong River and eventually back to the carpark, with a branch going upstream to the Amphitheatre Falls. The walks beside the streams are most pleasant, with rock formations and many species of ferns. The main circuit is about 1800m in length and takes non-fernies about an hour to walk. For us? Weeeeell...

Spring is the best time to see the many plants in flower, but the fern glens are attractive any time.

Comments by members who visited recently:

"I thought it was delightful and possibly the best falls I have seen in Victoria. They are quite accessible now that the Baw Baw road is sealed, and an ideal spot for a fern club visit."

"On a glorious sunny day we ventured to the Toorong Falls. The path was wet and slippery and rocky in places but otherwise very easy walking. The falls were truly lovely and under the falls we found many ferns nowhere else on tracks. We did the complete circuit walk in approximately 2 hours. The falls were almost 80ft falling in stages and as there had been plenty of rain they were covered with foaming white water. The rocks were covered in green moss surrounded by spectacular tree ferns"

As well as Toorong Falls we hope to visit another impressive fern site in the area, time permitting. Sounds fabulous, doesn't it!! You will be made most welcome when you join us on this day -

please do!



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