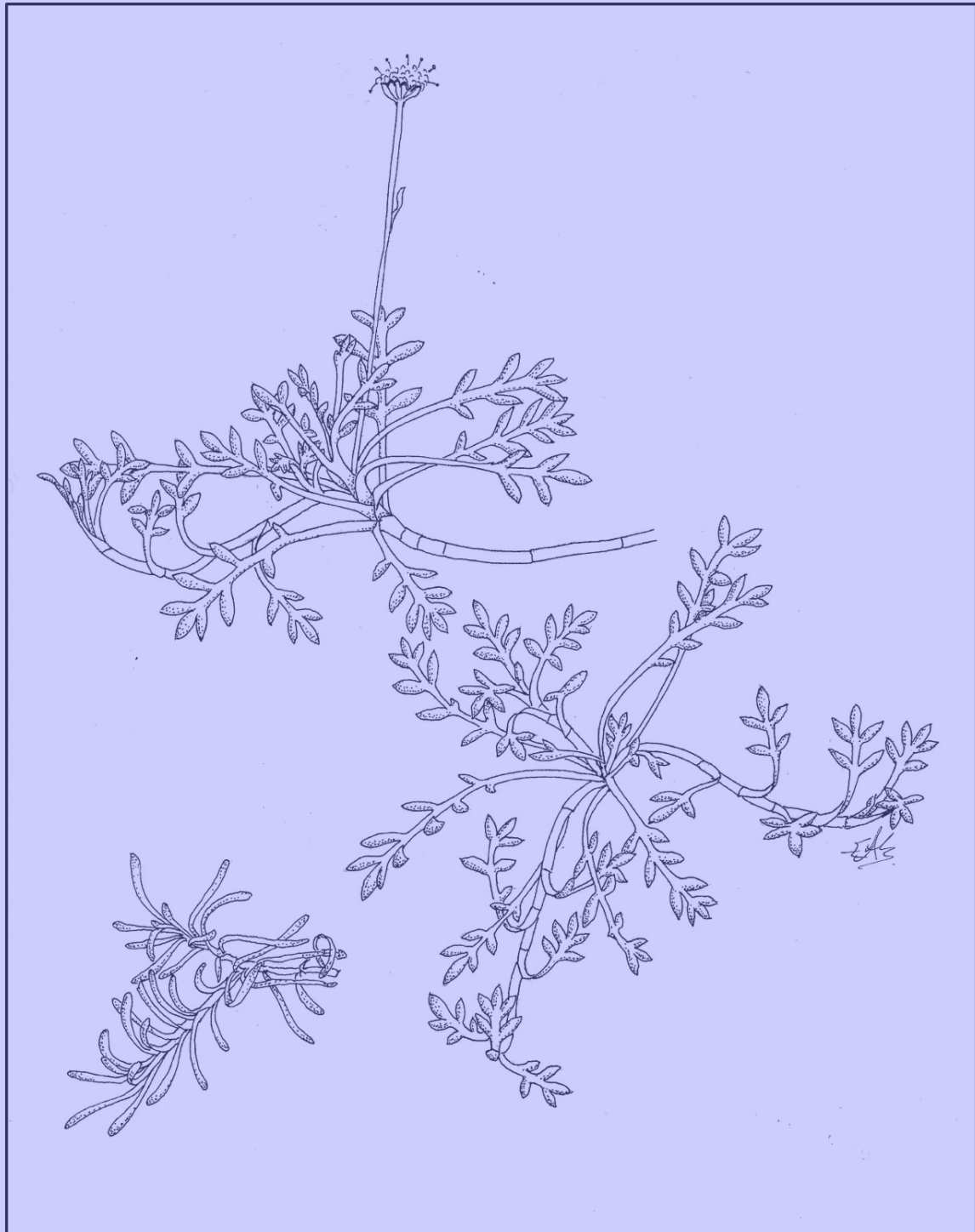


NEW ZEALAND BOTANICAL SOCIETY

NEWSLETTER

NUMBER 133

September 2018



New Zealand Botanical Society

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Secretary/Treasurer: Ewen Cameron
Committee: Bruce Clarkson, Colin Webb, Carol West

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Subscriptions

The 2018 ordinary and institutional subscriptions are \$25 (reduced to \$18 if paid by the due date on the subscription invoice). The 2018 student subscription, available to full-time students, is \$12 (reduced to \$9 if paid by the due date on the subscription invoice).

Back issues of the *Newsletter* are available at \$7.00 each. Since 1986 the Newsletter has appeared quarterly in March, June, September and December.

New subscriptions are always welcome and these, together with back issue orders, should be sent to the Secretary/Treasurer (address above).

Subscriptions are due by 28 February each year for that calendar year. Existing subscribers are sent an invoice with the December *Newsletter* for the next years subscription which offers a reduction if this is paid by the due date. If you are in arrears with your subscription a reminder notice comes attached to each issue of the *Newsletter*.

Deadline for next issue

The deadline for the December 2018 issue is 25 November 2018.

Please post contributions to:
Lara Shepherd
Museum of New Zealand Te Papa Tongarewa
169 Tory St Wellington 6021

Send email contributions to editor@nzbotanicalsociety.org.nz. Files are preferably in MS Word, as an open text document (Open Office document with suffix ".odt") or saved as RTF or ASCII. Macintosh files can also be accepted. Graphics can be sent as TIF JPG, or BMP files; please do not embed images into documents. Alternatively photos or line drawings can be posted and will be returned if required. Drawings and photos make an article more readable so please include them if possible.

Cover Illustration

Leptinella pyrethrifolia by Eleanor Burton.

NEW ZEALAND BOTANICAL SOCIETY
NEWSLETTER
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New Zealand Botanical Society News

■ Allan Mere Award 2018

The NZBS Committee is pleased to announce that this year's award of the Allan Mere is to Dr Ilse Breitwieser, Manaki Whenua-Landcare Research, Lincoln. Ilse was nominated by Patrick Brownsey and Wendy Nelson, supported by four regional Botanical Societies (Otago, Canterbury, Wellington and Auckland), NZPCN, and 15 individuals, including ones from the following organisations: DoC, Te Papa, MPI, Massey University and the Australian Academy of Science.

The proposers included: "As Science Leader Ilse was responsible for determining research priorities, maintaining partnerships with other agencies, and attracting funding. She used an Advisory Board of end-user groups to ensure that only the highest priority plant systematic research was undertaken. She also tried to retain capabilities across major plant groups, and to maintain the services of the Allan Herbarium. It is to her immense credit that in a period when funding declined in real terms, she managed to maintain a functional herbarium, botanical expertise in most plant groups, a range of plant informatics services and a research programme that continues to deliver exceptional outputs...

The main achievements in plant systematics have been the Flora volumes - two volumes on *Lichens* (2007), the first of four volumes on *Liverworts and Hornworts* (2008), and the *Flora of the Cook Islands* (2016). The electronic Flora was launched in 2011 and is available both online and as downloadable pdfs. There are 35 family treatments for mosses, 17 for ferns, and four for vascular plants (<http://www.nzflora.info/publications.html>), with work progressing on *Veronica* and *Carex*. There is also a Weed Profile that provides information and images for numerous species of potentially invasive plants. A huge amount of information on poorly documented plant groups has been made available, and Ilse has regularly promoted the Flora series nationally and internationally...

We want to acknowledge Ilse's outstanding stewardship of plant systematics in New Zealand over the last 13 years. Without her firm resolve, commitment to the highest standards of scholarship, and belief in the long-term value of plant taxonomy and systematic capability, it is likely that staff and resources in systematic botany would have been eroded still further."

A selection of comments below from her supporters indicates the wide support of Ilse and the projects she has been involved in over the last 13 years:

"Ilse was a key person integral to the development of the Outcome Based Investment (OBI) approach to a large and integrated research endeavour to define New Zealand's Terrestrial Biota. This meant integrating plant, invertebrate and micro-organism systematics and collections and involving multiple institutions. Ilse took on overall leadership of the OBI and this meant increasing interaction with end users and other stakeholders...Ilse has been prepared to move systematics into new approaches with her ability to attract good staff and retain them during challenging budgetary environments. She embraced the need to digitise collections and the published products and her support for the e-Biota will be a lasting legacy."

"She has also been a long standing and active member of the NZ National Herbarium Network.... an active member of the Council of Heads of Australasian Herbaria (CHAH) where her advocacy helped to establish the Australasian Virtual Herbarium, and to secure funding for imaging of collection specimens."

"I strongly believe that the Allan Mere should be rewarded to recipients who 'work outside the box', that is people who do exceptional work outside their required tasks within their employment agreements. Ilse has done this but notably, because she has never sought recognition, public acknowledgement or praise, her 'additional' work has scarcely been noticed.... It is because Ilse doesn't seek the public recognition that I feel the New Zealand Botanical community owes her this long overdue recognition."

"Ilse is also hands down one of the most exceptional science leaders in New Zealand, with a style that is both fearless and peerless...Her various leadership roles are so important and yet often are "invisible" or behind the scenes."

“She has made very substantial contributions to New Zealand taxonomy and systematics, in her previous capacity as Portfolio Leader of Landcare Research’s Characterising Land Biota portfolio, as an Executive Member of the Council of Heads of Australasian Herbaria, more recently as a Council Member of the International Association of Plant Taxonomy, and above all as a taxonomist and systematist of high standing. Her professionalism, leadership, and dedication to the field of taxonomy and systematics are exemplary, as are her advocacy for, and representation of, New Zealand botany on a world stage. On a more personal note, Ilse is one of the most engaging, delightful and caring people in our science community. On many occasions I’ve had cause to value her humour, insight, supportiveness, sound judgment, and good company. Our discipline is strengthened, lightened, and made more convivial by having Ilse in it.”

Congratulations Ilse, and now that you have stepped down to go back to being a researcher, we look forward to your progress with your revision of Craspedia. On behalf of the Society the President hopes to be able to present the Allan Mere to you later in the year at Manaaki Whenua – Landcare Research at Lincoln.

Ewen Cameron, Secretary, New Zealand Botanical Society

■ **From the President: change in Rules required**

As a nationally dispersed Society that does not regularly hold meetings, our Rules were carefully drawn up and accepted by the Registrar of Incorporated Societies to allow the annual financial statement to be approved by the committee for publication in the Newsletter. This has occurred each year since 1989, with the annual financial statement accepted by the Registrar. That is, until this year, when we have been advised that the Incorporated Societies Act 1908 includes this following requirement, which will not be waived:

23 Society to deliver annual financial statement to Registrar

- (1) Every society shall deliver annually to the Registrar, in such form and at such time as he or she requires, a statement containing the following particulars:
 - (a) the income and expenditure of the society during the society’s last financial year:
 - (b) the assets and liabilities of the society at the close of the said year:
 - (c) all mortgages, charges, and securities of any description affecting any of the property of the society at the close of the said year.
- (2) The said statement shall be accompanied by a certificate signed by some office of the society to the effect that the statement has been submitted to and approved by the members of the society at a general meeting.

A Solicitor in the Companies Office at MBIE, who advises the Registrar of Incorporated Societies, has written to us in response to our queries as follows:

It would appear that the Registrar of Incorporated Societies returned the 2017 financial statement for the Society because the statement was not accompanied by a certificate signed by an officer of the Society to the effect that the statement had been submitted to and approved by the members of the Society at a general meeting. The certificate is a requirement of section 23(2) of the Incorporated Societies Act 1908.

I note that over a period of many years previous statements have been accepted by the Registrar without confirmation of submission and approval at a general meeting. I am unsure as to whether this was something that was agreed to between the Society and the Registrar at an earlier time.

The issue for the Society is whether it would be possible for future statements to be submitted to and approved by the members of the Society at some form of general meeting that the rules provide for. The current rules for the Society would likely have to be altered to provide for this. Whether an actual physical meeting has to occur is something that the members could decide upon, particularly if the membership is spread across different geographical locations. For instance, if it is possible, the statements could be sent to members in the Newsletter in advance of a general meeting that is called by teleconference so that approval could take place by teleconference.

Going forward, a new Incorporated Societies Act has been proposed and may come in effect some time in 2020 or later. The proposed Act provides that annual general meetings must be held at which

the financial statements of the society must be presented. The proposed section relating to the methods of holding meetings provides as follows:

An annual general meeting of a society may be held by a quorum of members –

- (a) being assembled together at the time and place appointed for the meeting; or
- (b) participating in the meeting by means of audio, audio and visual, or electronic communication; or
- (c) by a combination of both of the methods described in paragraphs (a) and (b).

The members of the Society could therefore look at this type of wording for an alteration to the current rules which would ready the Society's rules for the possible introduction of the new Act. This would also have the effect of bringing the Society into compliance with the existing legislation.

As a result, and to maintain registration of the Society, the committee is recommending a change to the Rules of the Society to allow a General Meeting to be held by email or teleconference. The Rules of the Society, as they presently stand, are reproduced in full as follows:

RULES OF NEW ZEALAND BOTANICAL SOCIETY INCORPORATED

1. Name

The name of the society shall be the New Zealand Botanical Society Incorporated.

2. Interpretation

In these rules, unless a contrary intention appears, 'Society' means New Zealand Botanical Society Incorporated; 'Committee' means the Committee for the time being appointed under these Rules; 'Year' means the financial year of the Society which extends from the 1st January to 31st December in any year; 'Regional Botanical Societies' means any Botanical Society existing for the time being in a region of New Zealand; 'Newsletter' means the New Zealand Botanical Society Newsletter; 'Resolution' means a resolution passed by a majority of those present or voting at a General or Committee meeting; 'Ballot' means a postal ballot conducted according to these rules; 'Act' means The Incorporated Societies Act 1908.

3. Objects

- (a) To encourage the study of botany, particularly that of New Zealand.
- (b) To disseminate knowledge about, and encourage interest in, the flora of New Zealand.
- (c) To publish a regular Newsletter available to all members.
- (d) To organise occasional meetings to foster the objects of the Society.
- (e) To make statements on matters of national botanical interest and concern.
- (f) To provide an organisation through which regional botanical societies can comment on botanical issues.
- (g) To encourage the conservation of the indigenous New Zealand flora and vegetation.
- (h) To publish and issue such publications as may from time to time further the objects of the Society.
- (i) To own, lease as lessee or lessor, or administer such land or other property as the Society thinks fit.
- (j) To affiliate with any other society or organisation having botanical interests if it is considered to assist in carrying out any of the above objects.

4. Membership

- (a) Any interested person or organisation may join the Society. There shall be three classes of membership:
- (i) Ordinary: any person may become an ordinary member on payment of the annual subscription for an ordinary member.
 - (ii) Institutional: any organisation wishing to receive the Newsletter may become an institutional member on payment of the annual subscription for an institutional member.
 - (iii) Student: any full-time student at a recognised educational institution may become a student member on payment of the annual subscription for a student member.
- (b) Any member may resign their membership by giving to the Secretary written notice to that effect provided that it shall be a condition precedent of such resignations that all subscriptions and levies owing up to the date of their resignation shall have been paid by the member unless otherwise decided by resolution of the Committee.



- (c) The Committee shall have the power to refuse or cancel membership.
(d) The Secretary shall keep a register of members in accordance with Section 22 of the Act.

5. Subscriptions

The annual subscription for all classes of membership shall be set by the Committee from time to time.

6. Officers and Committee

- (a) The Officers of the Society shall consist of
a President
a Secretary
a Treasurer but the offices of Secretary and Treasurer may be combined.
- (b) The Committee of the Society shall consist of the Officers, 3 elected members, and a Newsletter Editor who shall be appointed by the Committee.
- (c) The Committee shall have the power to coopt additional members to achieve regional representation.
- (d) Vacancies arising in any Office or in the Committee shall be filled by the Committee and members so appointed shall remain in office until the first election thereafter.
- (e) Meetings shall be held from time to time as called by the President or Secretary, or when requested by any two members of the Committee. Meetings may be by conference telephone. A quorum for Committee meetings shall consist of three members.
- (f) Statements on behalf of the Society can only be made with the Committee's authorisation.
- (g) The Common Seal of the Society shall be kept by the Secretary, and used only on the resolution of the Committee.

7. Election of Officers and Committee

- (a) Elections shall be held annually by postal ballot.
- (b) Nominations shall open on 1 September in any year and close on 20 November in that same year, and shall be made in writing to the Secretary. Nominations shall be signed by the Proposer and the Secunder, and by the Nominee to indicate their acceptance of nomination.
- (c) The Secretary shall circulate ballot papers to all members for a postal ballot allowing 14 clear days for return of all ballot papers to the Secretary.
- (d) The Committee shall appoint two independent scrutineers to count the ballot.

8. Control and use of funds

- (a) The financial year of the Society shall be from 1 January to 31 December.
- (b) The Committee shall control and invest all funds at its discretion and shall provide an annual financial statement to be published in the Newsletter.
- (c) The Society may borrow money only on the resolution of the membership.

9. General Meetings and Postal Ballots

- (a) General Meetings or Postal Ballots of the Society may be called by the Committee giving 14 clear days written notice to all members.
- (b) A Special Postal Ballot shall be called by the Secretary within 3 months after the receipt by the Secretary of a request in writing signed by at least 15 financial members requesting the calling of a Special Postal Ballot.



10. Voting

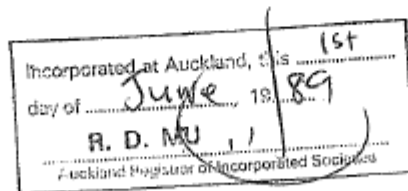
- (a) At all General Meetings every financial member present shall have one vote and in the case of equality the Chair shall have a second or casting vote. A quorum at any General Meeting shall be 15 financial members.
- (b) The mode of voting on all questions at General Meetings shall be by voice or show of hands, or if the Chair or any three members so require, by ballot. A simple majority is required to pass a resolution, excepting the Alteration of the Rules of the Society which requires a two-thirds majority.
- (c) In all Postal Ballots every financial member shall have one vote and in the case of equality the President shall have a second or casting vote.
- (d) In all Postal Ballots a simple majority is required to pass a resolution, excepting the Alteration of the Rules of the Society which require a two-thirds majority.
- (e) The Committee shall appoint two independent scrutineers to count all Postal Ballots.

11. Alteration of Rules

These Rules may be altered, added to, rescinded or otherwise amended by a resolution passed by a majority of not less than two-thirds of those present, entitled to vote and voting at a General Meeting of the Society called in accordance with these Rules, or by a resolution passed by a majority of not less than two-thirds of those members responding to a postal ballot conducted in accordance with these Rules. In either case, 14 clear days notice of any proposal to alter, add to, rescind or amend must be given to all members.

12. Winding up

If a resolution to wind up the Society is passed in a Postal Ballot the Society shall cease to exist and its affairs be wound up pursuant to Section 24 of the Act or any Sections or Acts amending it or passed in substitution of it. After payment of all the Society's liabilities its property shall be divided amongst such associations, societies, institutions or organisations as have similar objects to this Society in such a manner and in such proportions as shall be determined by the Committee.



Notice of Annual General Meeting by means of Postal Ballot to amend the Rules of the Society, and, if those amendments are carried, to adopt the 2017 Financial Statement.

As President, I move, and Ewen Cameron, Secretary/Treasurer, seconds the resolution that the Rules of the New Zealand Botanical Society Incorporated be amended by replacement of sections 2, 9 and 10 with the following:

2 Interpretation

"Ballot" means a postal, email or teleconference ballot conducted according to these rules;

9 General Meetings and Ballots

- (a) General Meetings or Ballots of the Society may be called by the Committee giving 14 clear days written notice to all members
- (b) General Meetings (including an Annual General Meeting) may be held by a quorum of members:
 - (i) being assembled together at the time and place appointed for the meeting; or
 - (ii) participating in the meeting by means of audio, audio and visual, or electronic communication; or
 - (iii) by a combination of both of the methods described in paragraph 9 (b)(i) and 9 (b) (ii).

10 Voting

- (a) At all assembled General Meetings every financial member present shall have one vote In the case of equality the Chair shall have a second or casting vote.
- (b) The mode of voting on all questions at assembled General Meetings shall be by voice or show of hands, or if the Chair of any three members so require, by ballot. A simple majority is required to pass a resolution, excepting the Alteration of the Rules of the Society which requires a two-thirds majority.
- (c) In all Postal Ballots every financial member shall have one vote and in the case of equality the President shall have a second or casting vote.
- (d) In all Postal Ballots a simple majority is required to pass a resolution, excepting the Alteration of the Rules of the Society which requires a two-thirds majority.
- (e) The mode of voting at General Meetings held by audio or audio visual communication shall be by voice, or, if this is not practical, by text message or email to the Chair of the meeting, contact details having been provided with the notice of meeting.
- (f) The mode of voting at General Meetings held by email shall be by email response indicating a vote FOR or AGAINST each Resolution that has been proposed and seconded to an email address advised in the notice of meeting.
- (g) In all voting by email a simple majority is required to pass a resolution, except the Alteration of the Rules of the Society, which requires a two-thirds majority.
- (h) The committee shall appoint two independent scrutineers to count all postal ballots or email meeting votes.

Note that the Rules require a two-thirds majority voting in favour of this resolution to effect the changes to the Rules.

Moving to the question of adopting the 2017 Annual Financial Statement, as President I move, and Ewen Cameron, Secretary/Treasurer, seconds the Resolution That the 2017 Annual Financial Statement published in Newsletter 131 (March 2018), be adopted.

Note that this resolution will only be carried if (i) the Rule changes in the first resolution are voted for by a two-thirds or greater majority, and (ii) this resolution is voted for by a simple majority.

Voting in the Annual General Meeting by means of Postal Ballot, using the Postal Ballot Paper included with this issue of the Newsletter, will close at 5pm on Friday 5 October 2018. Voting papers should be posted to reach the Secretary/Treasurer, New Zealand Botanical Society, C/- Canterbury Museum, Rolleston Avenue, 8013 no later than this closing time.

The results of the Postal Ballot will be notified in Newsletter 134, December 2018.

Anthony Wright, President, New Zealand Botanical Society

Regional Botanical Society News

■ **Auckland Botanical Society**

June Meeting

After our annual book auction Jack Hobbs, manager of the Auckland Botanical Gardens, spoke to us of a trip he had led to Mongolia and Siberia to experience the culture, landscapes flora and fauna.

For the talk he concentrated on the beautiful wildflowers that take advantage of the short flowering season in such northern climes. He noted the wild ancestors of many of our garden plants, such as wild *Delphinium*.

June Field Trip

The several owners of Waterfall Farm, a property on the northern slopes of the Dome Forest, north of Warkworth, kindly gave us permission to explore the regenerating bush that largely covers their land. At first we followed a 4WD track that leads to a Vodaphone tower, then headed down a ridge to the stream in the gully. In the untracked bush we often came upon old fence posts and wire, indicating that the land had once been farmed, maybe 80 or so years ago. Hall's totara and miro were the main gymnosperms, and the presence of several lycophytes indicated the stage of regeneration. Some hard beech trees, including a few saplings, were present.

July Meeting

Plant of the Month was *Pinus novazelandica*. What the...? Mike Wilcox cleared up the puzzle – it was an early name given to *P. pinaster* in Northland, but the question still remains of who planted it there in the early years of the 19th century.

Yumiko Baba, associate curator of botany at Auckland War Memorial Museum, spoke of her PhD studies of *Elaeocarpus* in Australia. This research interest in *Elaeocarpus* has taken her to various places in tropical and temperate regions of the world.

July Workshop

A mid-winter lichen workshop proved to be a popular event. It was held in a Unitec laboratory, with excellent microscopes, an assortment of lichen samples, informative handouts, a great lecture by Dan Blanchon, and several able lichen experts at our disposal. The basics of lichen identification and collection were covered, some of the more important genera were looked at in detail and the use of lichens as bio indicators of forest health was discussed.

August Meeting

Jack Warden gave his Plant of the Month talk on *Pimelea tomentosa*. As always, Jessica Beaver entertained us with a spirited bryophyte presentation, this time on two rogues and several Taonga of the moss world. Who knew that mosses could be serious weeds, but *Pseudoscleropodium purum* and *Fissidens taxifolius* fit that bill. Evidence for them being introduced was discussed, as it was for them to be invasive.

August Field Trip

Motukaraka Island at Beachlands is approachable by foot at low tide if one doesn't mind wet, muddy footwear. Bot Soc last visited the island 26 years ago and since then it has been returned to Nga Tai Ki Tamaki but retains its Recreational Reserve status. Fire in the 1960s burned everything except the fringe of pohutukawa, and the flat summit is now a weed haven, with Japanese honeysuckle, pampas and privet overwhelming all else. A robust population of *Blechnum triangularifolium* growing beside the steps to the summit made the trip worthwhile for pteridophiles. We noted with amazement the mansions perched near the soft, crumbling cliff- edge of the mainland.

Forthcoming Activities

5 September	Lucy Cranwell Lecture – Willie Shaw (at Auckland Museum)
15 September	Craigavon Park, Blockhouse Bay
3 October	"Costa Rica" – Ewen Cameron
12-14 October	Camp at Motutapu
7 November	"Plant diseases" – Ian Horner
17 November	Watercare land, Mangere

Auckland Botanical Society, PO Box 26391, Epsom, Auckland 1344

President: Ewen Cameron

Secretary: Stephanie Angove-Emery

aucklandbotanicalsociety@gmail.com

■ **Rotorua Botanical Society**

July Field Trip - Waimangu

Rotorua Botanical Society has visited Waimangu at least 5 times but we still seem to see new things. Some new finds are the result of the regenerating scrub from the last volcanic disturbances around 1917. In addition, a storm earlier in the year caused severe damage in the lower valley meaning some parts of the track were closed and we used the road. Near the lake parts of the track were re-routed due to high lake levels from the wet winter. Just to add to the gloom, the day was overcast with threatening rain, which arrived at 4 pm (as predicted) as we reached the lake and waited for the bus.

Near the visitor centre the vegetation is mostly advanced scrub now opening out to reveal tawa and mangeo seedlings, 8 m tall totara previously hidden and quite a few mistletoe (*Ileostylis micranthus*), arrivals from a large population in the car park. A few weedy plants also appear to be increasing such as *Geranium robertianum*, *Hydrocotyle tripartita*, *Myosotis sylvatica*, *Setaria pumila* and *Lolium arundinaceum*. After the descent to the valley floor we arrived at the thermal vegetation first signified by the prostrate kanuka (*Kunzea tenuicalis*) and the appearance of abundant *Psilotum nudum* on the track banks.

Further down stream the thermal ferns (*Christella dentata*, *Cylosorus interruptus*, *Nephrolepis flexuosa* and *Dicranopteris linearis*) were quite abundant, the first two taking a bit of sorting out at first, especially for the staff from the visitor centre who accompanied us till lunch time. There were also very large *Diplazium australe*, which were at first thought to be *Hypolepis dicksonioides*, which was seen later.

Pteris vittata (a recently recorded adventive) appears to be rapidly establishing along the track. Near the lake there was a long section through wetlands with *Carex lessoniana*, *C. geminata* swards and *C. virgata* with *Schoenoplectus tabernaemontani* and *Elaeocharis spaelata* in deeper water. At the boat landing Spanish heath and *Dracophyllum strictum* both in flower were the last species to note before we joined the bus to head uphill and home.

FUTURE EVENTS

September 9 Arnolds Bush Pairere
October 7 Meremere Scenic Reserve Motu
November 2-4 East Cape Revisited #12
December 2 McLaren Falls

President: Paul Cashmore 027 650 7264

pcashmore@doc.govt.nz

Secretary: Elizabeth Miller (07) 343 5013

rotorua-botanical-society@gmail.com

Web Page: www.wildland.co.nz/botanical.htm

■ **Whanganui Museum Botanical Group**

For monthly meetings the Whanganui Botanical Group has merged with Birding Whanganui (local branch of OSNZ) and the Whanganui branch of Forest and Bird, under an umbrella name of 'Nature Talks'. Each group will arrange a speaker for about 4 meetings per year. Meetings will normally be on the 3rd Tuesday of each month. It is intended to continue with monthly botanical field trips to which members of the other two groups are invited.

President: Clive Higgie (06) 342 7857 clive.nicki@xtra.co.nz

Secretary: Robyn Ogle (06) 347 8547 robcol.ogle@xtra.co.nz

■ **Nelson Botanical Society**

May Field Trip: Wairoa Gorge covenants

We visited two QEII covenants on the western side of the Wairoa River. The first, the Armstrong Covenant is regenerating bush of over 40 hectares and extends from the river to the top of the ridge. The track passed through regenerating *Podocarpus totara* var. *totara* and mixed broadleaf forest of *Melicactus ramiflorus*, *Hedycarya arborea*, *Alectryon excelsus* subsp. *excelsus* and *Myrsine australis* with the ground covered in *Asplenium oblongifolium* and *Microsorium pustulatum* subsp. *pustulatum*. *Kunzea ericoides* was common and in the understorey were juvenile *Hoheria angustifolia* and *Myrsine divaricata*. *Sophora microphylla* and *Prumnopitys taxifolia* were also seen. A rock face was covered with a curtain of *Metrosideros colensoi*. On the bank beside the track we admired a group of

Pterostylis alobula in flower. Three native fireweeds, *Senecio wairauensis*, *S. minimus* and *S. quadridentatus*, were seen on the side of road. We identified *Coprosma crassifolia*, pushed through a jungle of *Blechnum minus* and found *Hymenophyllum flexuosum* growing in the shade of some boulders. Our second stop of the day was the Moorhouse covenant, situated on another terrace of the Wairoa River. It comprises many large native trees including some very large *Nestegis cunninghamii* and tall *Hoheria angustifolia*.

June Field Trip: Brook Waimarama Sanctuary

Most of the group walked along the Koru track. Larger trees standing out among the regenerating smaller trees and shrubs included *Dacrydium cupressinum*, *Prumnopitys taxifolia*, *Beilschmiedia tawa*, *Podocarpus laetus* and *Alectryon excelsus* ssp. *excelsus*. Common smaller trees and shrubs included *Carpodetus serratus*, *Aristolelia serrata*, *Dodonaea viscosa*, *Myrsine australis*, *Brachyglottis repanda* and *Pseudopanax arboreus*. *Coprosma rhamnoides* being particularly obvious along the track. A number of plants of *Astelia hastata* were

evident on Jacob's Ladder track. Fern-lovers were rewarded with the following additions to the species list: *Asplenium gracillimum*, *A. hookerianum* var. *colensoi*, *Hymenophyllum bivalve* and *H. flabellatum*. We were surprised to spot *Pterostylis banksii* in flower then *P. alobula* and a colony of *Acianthus sinclairii*.



Acianthus sinclairii. Photo by Don Pittham

Report: The unique habitats and plants of Ata Whenua / The Fiordlands. Speaker: Rowan Hindmarsh-Walls

Rowan has worked for DoC for six years and is now based at Hokitika. Rowan's job was to re-monitor 20 x 20-metre plots, which have been set up every 8 km across the conservation estate and visited every five years. The geology of Fiordland is diverse with some alpine marble and ultramafic areas. There are podocarp forests with rimu, miro, mataī and kahikatea, with some mānuka. Silver and mountain beech are plentiful, with the latter growing to the water's edge. Here is found *Dracophyllum fiordense* and the Australian heath shrub *Sprengelia incarnata*, which has found its way naturally to the extreme western part of Fiordland. All sorts of interesting plants are found in wetlands including *Parahebe lyallii* and the Fiordland endemic *P. catarractae*. There are 24 species of *Celmisia* in Fiordland, including the regional endemics *C. coriacea* and *C. holosericea*. Fiordland also has 12 species of *Chionochloa* some of which are endemic, such as *C. spiralis* on limestone.

July Field Trip: Glen covenant

The Glen covenant is a privately owned coastal forest remnant at Glenduan north of Nelson. The first thing noticed was a very large *Passiflora tetrandra*, also at the bush edge were abundant *Coprosma areolata* and *Lophomyrtus obcordata*. As we made our way up the rocky slope there were magnificent specimens of *Prumnopitys taxifolius*, *Beilschmiedia tawa*, *Fuscospora solandri*, *F. truncata*, *Podocarpus totara* var. *totara*, *P. laetus*, *Alectryon excelsa*, *Elaeocarpus dentatus*, *Pennantia corymbosa*, *Rhopalostylis sapida*, *Pittosporum eugenioides* and *Melicytus ramiflorus*. The many ferns included *Arthropteris tenella*, *Lastreopsis glabella*, *Asplenium hookerianum* var. *hookerianum*, *A. oblongifolium*, *A. polyodon*, *A. bulbiferum*, *Histiopteris incisa*, *Hypolepis ambigua*, *Polystichum neozelandicum* subsp. *zerophyllum* and *Lastreopsis velutina*.

We continued up the steep slope and a striking feature here was the number of large vines and the abundance of the climbing fern *Icarus filiformis* (*Blechnum filiforme*), which, together with some huge specimens of *Metrosideros perforata*, a *Griselinia lucida* that had completely swallowed a nīkau trunk, and *Freycinetia banksii*, gave the forest an almost tropical feel. We also discovered more ferns: *Tmesipteris elongata*, *Trichomanes venosum* and *Lastreopsis hispida*.

FUTURE EVENTS

September 16: Field Trip - Booth's Cottage Howard Valley.
September 17: Evening Talk on Abel Tasman National Park by Philip Simpson
October 19–22: Labour weekend camp at Kaikoura.
November 18: Black Birch, Awatere Valley.

President: David Grinsted (03) 5424384, davidgrinsted@gmail.com

Secretary: Don Pittham (03) 5451985, pitthamd@xtra.co.nz

Treasurer: Uta Purcell (03) 5450280, mupurcell@xtra.co.nz

■ **Botanical Society of Otago**

FUTURE EVENTS

10 October Talk: Were native plants on settler's farms in southern New Zealand used or abused?

9-11 November Fieldtrip to Southland.

14 November Talk: Native Plants are vital to Nationhood not just 'nice to have, optional extras.

1-2 December Fieldtrip to Oteake Conservation Park

Chairman: David Lyttle djlyttle@ihug.co.nz www.otago.ac.nz/botany/bsol/

Secretary: Allison Knight, P O Box 6214, Dunedin North. bsol@otago.ac.nz

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Hawke's Bay Botanical Group

<https://www.facebook.com/Hawkes-Bay-Botanical-Group-590670161140095/>

Manawatu Botanical Society

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Wellington Botanical Society

President: Jon Terry

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Canterbury Botanical Society

President: Gillian Giller (03) 313 5315

Secretary: Alice Shanks **Website:** www.canterburybotanicalsociety.org.nz

Wakatipu Botanical Group

Chairman: Neill Simpson (03) 442 2035

Secretary: Rebecca Teele 027 314 2610

NOTES AND REPORTS

- **Milestone for Frances Duff who has reached 50,000 herbarium accessions at the Auckland Museum (AK)**

Ewen K. Cameron, Auckland Museum, Private Bag 92018, Auckland

In March 2003, after returning from England, Frances Duff joined the botany department at the Auckland Museum as a volunteer. Two months later she had her first casual contract completing the databasing the NZ section of the herbarium. This was soon followed by a TFBIS (Terrestrial and Freshwater Biodiversity Information System) grant, via the NZ Herbarium Network, to image and label the botany primary types (1543 specimens at that time – we now recognise 2259). This was followed by a contract from the Auckland Regional Council biosecurity to database 3,000 backlog naturalised specimens.

After several smaller contracts and a one year break, she returned in May 2008 to work 4 days/week accessioning the gifted Auckland University herbarium (AKU) of 55,000 specimens (only the vascular plants were already accessioned, but still needed to be checked), funded by three separate Environment and Heritage Lottery Board grants: vascular plants 22,846 specimens; bryophytes and lichens 16,523; and algae 15,752 which included the valuable historical algal collection of Victor W. Lindauer (1888-1964) (Fig. 1). After six years accessioning was completed in June 2014. An Auckland Museum Institute grant then kept

Frances going part-time on updating the botanical names in the database and on the specimens.



Fig. 1. Frances Duff at her desk entering an AKU Lindauer seaweed onto the AK database. Photo: by E. Cameron, Dec 2013.



Fig. 2. Thirty people helped celebrate Frances Duff's achievement of 50,000 accessions at a special morning tea. Auckland Museum staff tearoom. Photo: D. Ranatunga, 1 Aug 2018.

In June 2016 Frances was successful in gaining an Auckland Museum contract, 3 days/week for four years, as part of the Collections Cataloguing Project – her longest Museum contract. In this project she has been databasing the accessioned foreign Conifers (completed) and is now working on the foreign Ferns (over half way). This work includes updating the taxonomy and adding geo-references. Frances' Museum work has been punctuated by annual 6-8 week holidays in Europe to catch up with her sister in London and long solo botanical exploration in remote parts of Spain, France and Italy. Frances' single-handed 50,000 accessions is unequalled in the Museum, and Dhahara Ranatunga organised a special morning tea to mark the occasion (Fig. 2).

The current accessioned total of AK herbarium is 288,000 specimens – making it New Zealand's largest institutional herbarium database. Of the accessioned specimens left to database there remains only the foreign ferns (close to completion) and the foreign angiosperms (estimated to

be 60,000 undatabased). The botanical community owes a debt of gratitude to Frances' dedication and eye for detail as these 50,000 records are now all available *online* at: Australasian Virtual Herbarium website, GBIF, JSTOR (types only) and at the Auckland Museum website – currently only the two latter sites contain images.

■ A name change for *Oxybasis* in New Zealand

Peter J. de Lange (pdelange@unitec.ac.nz), Environmental & Animal Sciences, Unitec Institute of Technology, Mt Albert, Auckland, New Zealand, and **Sergei L. Mosyakin** (s_mosyakin@hotmail.com), M.G. Kholodny Institute of Botany, National Academy of Sciences of Ukraine, Kyiv (Kiev), Ukraine

The indigenous chenopods ('goosefoots') of New Zealand are a small group. While their New Zealand diversity may be low (Schönberger et al. 2017), arguments rage about the family to which they belong—Amaranthaceae or Chenopodiaceae (in New Zealand we tend to use Amaranthaceae), what names we should use for the genera present here, and even the correct names for the species we have here.

Currently, of the species traditionally treated as Chenopodiaceae in New Zealand, we more or less accept the following genera: *Atriplex* (c. 10 species, 5 indigenous, 2 endemic), *Bassia* (1 naturalized species, formerly often placed in *Kochia*), *Beta* (1 naturalized species), *Blitum* (2 naturalized species), *Chenopodium* (now including *Rhagodia* and *Einadia*; c. 12 species, 4 indigenous, 2 endemic, 8 naturalized), *Dysphania* (3 species, 1 endemic, 2 naturalized), *Oxybasis* (1 indigenous species), *Salicornia* (including *Sarcocornia*: 1 indigenous species), *Salsola* (at least 2 species, both considered for now as naturalized—but more work on those treated as *S. kali* is needed), and *Suaeda* (1 endemic species) (Schönberger et al. 2017).



Fig. 1. *Oxybasis ambigua* – here seen growing on sand at Little Hellfire, Rakiura (Stewart Island). (image: John Barkla).

Recently there has been further debate about which genus and rank one of our indigenous goosefoots should belong (Mosyakin & de Lange 2018). The 'goosefoot' concerned was initially described in 1810 as *Chenopodium ambiguum* (Fig. 1.) by Robert Brown (1773–1858), who besides being an exceptional botanist, was also the scientist who discovered and documented 'Brownian Motion'. Brown named his new species from Australian material (Brown 1810). The same plant was then noted in New Zealand, and eventually on Easter Island.

Almost from the onset, the taxonomic status of this little plant has been up for debate. The first salvo was fired when in 1857 Kew based botanist Joseph Dalton Hooker (1817–1911) decided that Brown's plant was the same as the Northern Hemisphere *Chenopodium glaucum* (Fig. 2.) (Hooker 1857). For the most part Hooker's view was followed in New Zealand, though on occasion Brown's species (*C. ambiguum*) was resurrected by Australasian botanists (notably Allan 1961). In the early 1980s, Wilson (1982) decided that the plant should be treated as a subspecies of *C. glaucum*, following the decision that Albert Thellung (1912) proposed in his pioneering early study of the alien flora of Montpellier, France. Following this usage in New Zealand at least, acceptance of *Chenopodium glaucum* subsp.

ambiguum was widely adopted (Webb et al. 1988). The only issue clouding this was the discovery that three New Zealand plants (from different locations) were tetraploids, unlike northern hemisphere *Chenopodium glaucum*, which is diploid. On the basis of that discovery, de Lange & Murray (2002) argued that the little herb should again be treated as a full species—*Chenopodium ambiguum*. The tetraploid nature of *C. ambiguum* may indicate that it emerged due to some ancient hybridisation between two yet unidentified ancestral diploid taxa, accompanied by duplication of the chromosome number (allopolyploidy event). Plants of different ploidy levels in *Chenopodium* and related genera normally do not hybridise easily, and thus our tetraploid should be reproductively isolated from *C. glaucum*.



Fig. 2. *Oxybasis glauca* – a Northern Hemisphere species not currently confirmed in New Zealand. This plant was photographed as a weed in a garden in the Ukraine, Kiev Region, at Hrebinky. (image: Sergei Mosyakin).

There matters would have rested except that, on the basis of DNA-based phylogenetic studies, a major revision of the world chenopod genera published in

2012 (Fuentes et al. 2012) resulted in the resurrection of *Oxybasis*. *Oxybasis* is one of several segregate genera split at various times from *Chenopodium*, only to be subsumed into it later. With the resurrection of *Oxybasis*, *Chenopodium ambiguum* was placed within it, initially as a synonym of *Oxybasis glauca*, and then in 2013 as a subspecies—*O. glauca* subsp. *ambigua* (Mosyakin 2013). When that combination was made, Mosyakin (2013) was unaware of the differences in ploidy between *Oxybasis glauca* and his new combination within it, the Australasian / Easter Island subsp. *ambigua*.

Meanwhile, back in New Zealand during the early 2000's, botanists and ecologists noted that what was now *Oxybasis glauca* subsp. *ambigua* was in decline. Formerly widespread and common in coastal saltmarsh, shell banks and, on occasion, inland on salt pans, *Oxybasis glauca* subsp. *ambigua* was now much less common than it had been. In fact, it appeared to be going extinct over large parts of its northern North Island New Zealand range. As such, people were being encouraged to record its presence. Also, with the advent of iNaturalist (initially in the local 'Nature Watch New Zealand' format—see inaturalist.nz) people were posting observations of it, using the name *Oxybasis glauca* subsp. *ambigua*, the name advocated for it by Ngā Tipu o Aotearoa (New Zealand Plant Names Database) (Schönberger et al. 2017).

Then in February 2018 on iNaturalist *Oxybasis glauca* subsp. *ambigua* had yet another name shift—this time the genus and subspecies vanished completely into *Chenopodium glaucum*. The first we knew about this in New Zealand was when one of us (PdL) received outraged emails from New Zealand botanists wanting to know why this happened?! Inquiries by de Lange to iNaturalist revealed that the Kew based 'The Plant List' (see <http://www.theplantlist.org/>) was responsible. For plant names and taxonomic decisions, the iNaturalist website uses that website as the 'preferred' resource for the names they use—considering the volatility of plant names and myriad databases offering opinions this is understandable. However, the experience of many botanists has been that 'The Plant List' is not always up-to-date with plant taxonomy, particularly where Southern Hemisphere plants are concerned. Something more formal on the fate of *Oxybasis* needed to be done.

And it now has. In our paper we detail the taxonomic history of *Oxybasis*, examining the evidence for merging that genus into *Chenopodium* and conclude that this ‘lumping’ is not warranted. Having established this, we also investigated the status of the various subspecies and species that have been merged into *Oxybasis (Chenopodium) glauca*. We concluded that three species, two that had been merged into *Oxybasis glauca* as subspecies by Mosyakin (2013), and the South American *Chenopodium parodii*, are actually distinct species in their own right that belong in *Oxybasis*. Accordingly, three new combinations have been made at species rank: *Oxybasis ambigua* (R.Br.) de Lange et Mosyakin, *O. amuensis* (Ignatov) Mosyakin et de Lange (Fig. 3), and *O. parodii* (Aellen) Mosyakin et de Lange.



Fig. 3. *Oxybasis amurensis* – a Northern Hemisphere species allied to *Oxybasis glauca*. This plant was photographed in the Russian Far East, Khabarovsk Province, left bank of Amur opposite Nizhnetambovskoe Village.

Evidently, more work has to be done to solve the problem of geographic and evolutionary origins of our native *Oxybasis*. No doubt there will still be disagreement over our taxonomic decisions at the global level but, for now at least, the species rank allotted to the Australian – New Zealand – Easter Island *Oxybasis ambigua* makes the best use of available cytological, morphological and phylogenetic

information. We hope that this decision accords some nomenclatural stability for those interested in its conservation status in the New Zealand part of its range.

**Chenopodiastrum* is represented in New Zealand by the naturalised *C. murale* and indigenous *C. erosum*. The latter species, treated as *Chenopodium erosum* by Webb et al. (1988) and as *Oxybasis erosa* by Mosyakin (2013), is now correctly assigned to *Chenopodiastrum* (Uotila 2018; see also Mosyakin & de Lange 2018). Though treated as naturalised by Webb et al. (1988), it is treated as indigenous to Australia and New Zealand by Wilson (1984). In New Zealand it appears to be confined to inland areas of the South Island (McKenzie Basin, Central Otago), herbarium specimens that we have seen of other reported New Zealand occurrences are referable to *C. murale*.

Acknowledgments

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■ **Obituary - Professor Emeritus John R. Flenley (15 July 1936 - 22 June 2018)**

Lara Shepherd, Museum of New Zealand Te Papa Tongarewa, lara.shepherd@tepapa.govt.nz

John was born in the rural village of Ormskirk in Lancashire, England in 1936. He obtained a BA in Natural Sciences from Cambridge University in 1958 and then, after a period teaching biology to secondary school students, undertook a PhD at the Australian National University in Canberra. His PhD thesis examined the Quaternary environmental history of Papua New Guinea using palynology (the study of pollen). Following his PhD he returned to England where he lectured at the University of Hull between 1967 and 1989.

John moved to New Zealand in 1989 when he was appointed Professor of Geography at Massey University. I was fortunate to have taken John's undergraduate biogeography course at Massey University in 1997. This course was one of the highlights of my undergraduate degree and not just because of the fieldtrip to Rarotonga! My aim in writing this obituary is to champion John's contribution to botany because I feel that he has been overlooked by the New Zealand botanical community, probably because his research here was undertaken in a geography department and much of his research was conducted overseas.

John's research largely focused on using palynology to understand vegetation changes in Southeast Asia and the Pacific. His best-known research was on Easter Island (Rapanui), where he and his collaborators collected sediment cores from craters on the island. The pollen in these cores showed that the now largely treeless island had previously been forested and that a number of its past species are now extinct. This research was published in the prestigious journal *Nature* (Dransfield et al., 1984; Flenley & King 1984) with the authors suggesting a link between deforestation and the decline of Easter Island's megalithic culture. This research was later expanded in the books *Easter Island, Earth Island* and *The Enigmas of Easter Island*, both co-authored with Paul Bahn (Bahn & Flenley, 1992; Flenley & Bahn, 2003) and reached an even wider audience when it featured in a chapter of Jared

Diamond's international bestseller *Collapse* (Diamond, 2005). John has also featured in three documentaries about Easter Island and was a consultant for the movie *Rapa Nui*, produced by Kevin Costner.

Once in New Zealand, John set up a palynology laboratory and, as well as continuing his research overseas, he began researching the Pleistocene and Holocene vegetation changes in this country (e.g., Elliot et al., 1998; Okuda et al., 2002; Li et al., 2008). This research provided insight into the timing of the arrival of Māori to New Zealand (e.g., Striewski et al., 2009). In New Zealand, John also worked towards automating the laborious process of pollen identification and counting (Langford et al., 1990; Li & Flenley, 1999; Holt et al., 2011). Along with Massey University collaborators, John's work led to the development of Classifynder, a desktop microscope that uses robotics and neural network technology to count and classify pollen. Classifynder won the supreme award at the New Zealand Engineering Excellence Awards in 2013, has been commercialised and is being used for forensics, determining the origins of honey, pollen monitoring for allergy sufferers, and identifying how insects function as pollinators.

John received much recognition for his research contributions including a DSc from Cambridge University, a rare honour for a New Zealand scientist. He was elected a Fellow of the Royal Society of New Zealand in 2012 and was the Distinguished New Zealand Geographer for 2016 (Mansvelt & Roche 2016).

Although he officially retired in 2001, John continued to publish research and even wrote a book for the general public about combatting climate change (Flenley, 2016). He also practiced what he preached and was a founding member of the Manawatū branch of the church-based group A Rocha, which revived a disused nursery and offered the plants they grew to environmental groups around Palmerston North.

In 2001 Peter Holland and Michael Roche wrote 'John Roger Flenley is a scientist of the old school, a person driven by deep curiosity about the natural world and how it works, yet as a teacher he is as comfortable interacting with Arts as with Science students and is able to help all of them surmount technical problems. In his teaching and research he particularly enjoys working on a large canvas and posing 'big' questions. He encourages his students to pose research questions that other people might not have considered, then to identify novel ways to answer them' (Holland & Roche, 2001).



John Flenley by a toppled moai, Easter Island. Photo by Troy Baisden.

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BIOGRAPHY / BIBLIOGRAPHY

▪ **Biographical Sketch — Kenneth Willway Allison (1894-1976)**

Val Smith, 80 Mill Road, New Plymouth 4310.

Kenneth Willway Allison was born in Whanganui on 1 February 1894. His grandfather James Allison from Avondale, Lanarkshire, Scotland, graduated from the University of Glasgow with a medical degree in 1839, the same year as fellow student James Dalton Hooker. However, neither practised medicine.



Allisonia cockaynei Photo by Bill and Nancy Malcolm.

James Allison came to New Zealand in the early 1840s and settled in Whanganui. His marriage in 1844 to 15 year-old Georgianna Gilfillan, conducted by missionary Richard Taylor, was the first European marriage in the area. Their first child Alexander Gilfillan Allison, born in 1846, died the following year in the aftermath of the killing of other members of the Gilfillan family by upriver Māori. Shortly afterwards, James and his wife moved south

and pioneered a sheep run, Avondale, in the Wairau Valley. Their second son was born in 1849 at Boulderbank, Marlborough, and named Alexander in memory of the baby who died; he became the father of Kenneth Willway Allison.

In 1855 James Allison sold up and returned with his family to Whanganui and the 1,000-acre property he called Lambhill (after a farm near his family home in Scotland), the title of which had been arranged in Scotland through the New Zealand Company. Alexander was 17 years old when his father died of yellow fever during a voyage to England in 1867, and he managed the farm until after his mother's death, also at sea, twenty years later. Three blocks were then sold, with Alexander retaining 200 acres of the original farm, which became known as Letham. He was a successful mixed farmer, stockbreeder, orchardist and grower of the first Chinese gooseberries (kiwifruit) in New Zealand. In 1893 at Shannon he married Kate Shaw Willway, and the next year Kenneth, the first of their three sons, was born. All three boys attended Wanganui Collegiate School to matriculation standard.

Kenneth shared his father's interest in plants, and in 1914 at the outbreak of World War I he enlisted, not only to see other parts of the world, but also its plants. He rose through the ranks to become lieutenant of the Rifle Brigade, and took opportunities to collect and identify wild flowers in England, Scotland and Western Europe. Surviving the wholesale slaughter of young men, he returned to New Zealand in 1919, and the following year married Olive May Lawrie of Rotorua. He took up a government leasehold of 9,000 acres of unimproved land in the Whirinaki valley, but the isolation and development costs proved unsustainable and he relinquished it in 1925. The only work then available was in the Rotorua nursery of the New Zealand Forest Service, but it led to his lifetime career in all aspects of forestry from land preparation and planting ("the hardest work I ever tackled") to responsibility for new and existing forests in the central North Island, Waipoua in Northland ("a forest filled with plant treasures") and Otago, where he was ranger for the Dunedin district from 1945 until ill health forced his retirement in 1959.

For his first botanical interest, the orchids, he sought help from H B Matthews in the far north, and then T F Cheeseman. He next concentrated on the ferns, and in 1927, while cutting a firebreak, he came across a curious, almost leafless moss, which he sent on to H Carse and then G O K Sainsbury who forwarded it to the expert on mosses in England, H N Dixon. It was *Buxbaumia aphylla*, until then unknown in New Zealand. The discovery of another *Buxbaumia* species a little later was the start of Allison's new interest, many years of correspondence with Sainsbury, and for help with the hepatics (liverworts and hornworts), Amy Hodgson, and he contributed numerous specimens to the herbaria and publications of both. A new collaboration in 1968 with John Child, a Dunedin naturalist, resulted in publication of introductory books on mosses in 1971 and liverworts in 1975.

A member of the New Zealand Institute of Foresters, Royal Society of New Zealand, New Zealand Ecological Society and Friends of the Otago Museum, and closely associated with the Botany Department of the University of Otago, Kenneth Willway Allison died in Dunedin on 15 December 1976, survived by his three married daughters Leona Coatsworth, Avis Jack and Dorothy Robertson. His wife Olive predeceased him in 1967.

Allisonia cockaynei

The genus *Allisonia* was created by Herzog in 1941 to accommodate an unusual thallose liverwort sent to him by K W Allison. *Allisonia cockaynei* is the only species in the genus, and is endemic to New Zealand. Vegetatively, the plant resembles a thin *Marchantia*, but the sporophytes are quite different. The fronds are dull green, thin and fragile, 12-14 mm wide and up to 3 cm long, with undulate margins and narrow midrib, which is densely clothed on the under surface with reddish-brown rhizoids. Found throughout New Zealand, and originally collected from the volcanic plateau in the North Island, it is said to be quite common in sub-alpine sites in the South Island.

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Lambhill Homestead: <http://maps.whanganui.govt.nz/> (accessed 30 June 2016).

Macmillan, B H 1978. Obituary Kenneth Willway Allison 1894-1976. *New Zealand Journal of Botany* 16: 169-72 (accessed online 21 March 2016).

Matarawa Killings: <http://www.nzhistory.net.nz/> (accessed 30 June 2016).

Roll of the Graduates of the University of Glasgow from 31 December 1727 to 31 December 1897: <https://archive.org/stream/> (accessed 3 July 2016).

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PUBLICATIONS

■ Publications Received

Auckland Botanical Society Journal June 2018 Fieldtrips to Waiatarua Reserve, Eskdale Reserves, NW Westland, vegetation of Hauturu and Motuarahi Islands and Orewa reserves, Algae from Whatipu, Botany of Lynfield coast, ferns of Maungakiekie, historical notes on northern grasses, *Coprosma* browsing, *Hydrocotyle umbellata* naturalising, effect of *Gazania* on our beaches.

Canterbury Botanical Society newsletter June 2018 Upcoming meetings and trips. Meeting report on Chatham Islands talk and trip report for Burkes Bush, Christchurch.

Canterbury Botanical Society newsletter July 2018 Upcoming meetings and trips. AGM report, meeting report on MSc research on plant root experiments.

Canterbury Botanical Society newsletter August 2018 Upcoming meetings and trips. Meeting report on the relationship of invasion success with plant trait diversity. Trip report for Allan Herbarium.

Nelson Botanical Society newsletter June 2018 Upcoming meetings and trips. Trip report for Wairoa Gorge. List of publications available for loan.

Nelson Botanical Society newsletter July 2018 Upcoming meetings and trips. Meeting report on Madagascar. Trip report on Brook Waimarama Sanctuary and its orchids.

Nelson Botanical Society newsletter August 2018 Upcoming meetings and trips. Meeting report on Fiordland plants. Trip report for Glen covenant.

Botanical Society of Otago newsletter 84 June 2018 Upcoming meetings and trips. Two new species of Otago *Cardamine*. New Zealand Lichens book review. Trip reports for Southland covenants and Mt Hamilton Station.

New Zealand Orchid Journal 149 August 2018 The type locality – *Aporostylis bifolia*, *Pterostylis* natural hybrids?, NZ orchids 2018 list of species.

*You are invited to a special celebration:
the 50th anniversary of the
Whanganui Regional Museum Botanical Group
Saturday 27 and Sunday 28 October 2018*

Programme:

Welcome to all attendees on Saturday at 1 pm

(Quaker Settlement, 76 Virginia Rd, Whanganui)

Followed by a visit to Bushy Park¹

Saturday evening dinner from 5.30 pm at

Whanganui Camera Club Rooms, 2 Handley St, Whanganui

(includes pre-dinner drink, toasts and speeches, historical slide show, a quiz and cake cutting)

Sunday morning visit to Paloma Gardens², a Garden of National Significance (includes a catered picnic)

Farewell at 2pm

\$60 each

RSVP³ by 31 July (early bird price \$50) to Margi Keys

margikeys93@gmail.com or 06 344 1250

Visits

We will carpool to Bushy Park and Paloma Gardens. Local drivers will provide transport.

Please book your own accommodation

Some is available at the Quaker Settlement:

Twin share \$45 each, per night, or your own room \$60 (including linen and towel), sleeping house \$30 each (take your own bedding and towel).

www.quakersettlement.co.nz/facilities-bookings/charges-and-fees/

Getting to Whanganui

Air Chathams provides daily flights to and from Auckland.

<https://www.airchathams.co.nz/Airline-Info/whanganui-schedule/>

We can arrange pick-up from and delivery to Whanganui airport.

Would you like to stay longer?

By arriving a day or more before, or staying on after Sunday, you can check out some of the other local botanical options. Members of the Botanical Group may be available to show you around if you would like a guide.

Places to explore include Gordon Park Scenic Reserve (10 ha of swamp forest with an all-weather track); the James McGregor Arboretum at Kowhai Park on the true left of the awa; coastal dunes at Castlecliff (see a local dune restoration project or unmanaged dunes to the west, with interesting garden escapes among lots of splendid spinifex; Bason Botanical Gardens.

For the more adventurous, consider a day trip to the Waitahinga Trails (mainly tracked black beech forest). The Botanical Group has plant lists available for most of these places.

www.doc.govt.nz/parks-and-recreation/places-to-go/manawatu-whanganui/places/gordon-park-scenic-reserve/

www.basonbotanicgardens.org.nz

www.visitwhanganui.nz/waitahinga-trails-whanganui

¹ www.bushyparksanctuary.org.nz

² www.paloma.co.nz

³ You will be sent a registration form with bank account details for payment by 15 August.

**Registration form for 50th anniversary of the Whanganui Regional Museum Botanical Group,
Saturday 27 and Sunday 28 October 2018**

1. Name(s)
.....
2. Postal address
.....
3. Email address
.....
4. Phone number(s)
.....
5. Where will you stay? Please circle your preference:
Quaker Settlement Other paid accommodation With friends Local resident
6. Attendance. Please circle your preference:
 - a. Yes, I /we would like to attend the whole weekend. Early bird (pay by 31 July): \$50 or \$60.00 (from 1 August).
 - b. I/We would like to attend the dinner only. Early bird \$35 (pay by 31 July) or \$40 (from 1 August).
7. Date of payment

Registrations close on 30 September.

Please email this form to Margi Keys margikeys93@gmail.com and transfer your funds, noting the names of those attending. MA Keys 0315 78 00 12854 01 (Westpac, Whitianga)
Alternatively a cheque may be sent, with your completed form, to 42 Stafford St Springvale Whanganui 4501. **Please make your cheque payable to Whanganui Museum Botanical Group.**



NEW ZEALAND PLANT CONSERVATION NETWORK

PLANT CONSERVATION AWARDS: 2018

The New Zealand Plant Conservation Network is now accepting nominations for the 2018 awards. The purpose of these awards is to acknowledge outstanding contributions to native plant conservation.

The award categories are:

- Individual** involved in plant conservation
- Plant nursery** involved in plant conservation
- School** plant conservation project
- Community** plant conservation project
- Local authority** protecting native plant life
- Young Plant Conservationist** of the Year (under 18 years on 30 June 2018)

More information about the awards and additional nomination forms are available on the Network website - www.nzpcn.org.nz. You can make multiple nominations under different categories. Anyone is eligible to make nominations, not just Network members. The awards will be presented at the **2018 NZ Plant Conservation Network AGM** in November. Winners will be informed in advance of the meeting. Nominations close on **Friday 5th October**.

NOMINATION FORM

Category (please circle):

Individual *Plant* *Nursery* *School*
Community *Local Authority* *Young Plant Conservationist*

NAME OF NOMINEE: _____

Contact details for person, school, nursery, community group or local authority:

Address: _____

Phone: _____ Email: _____

