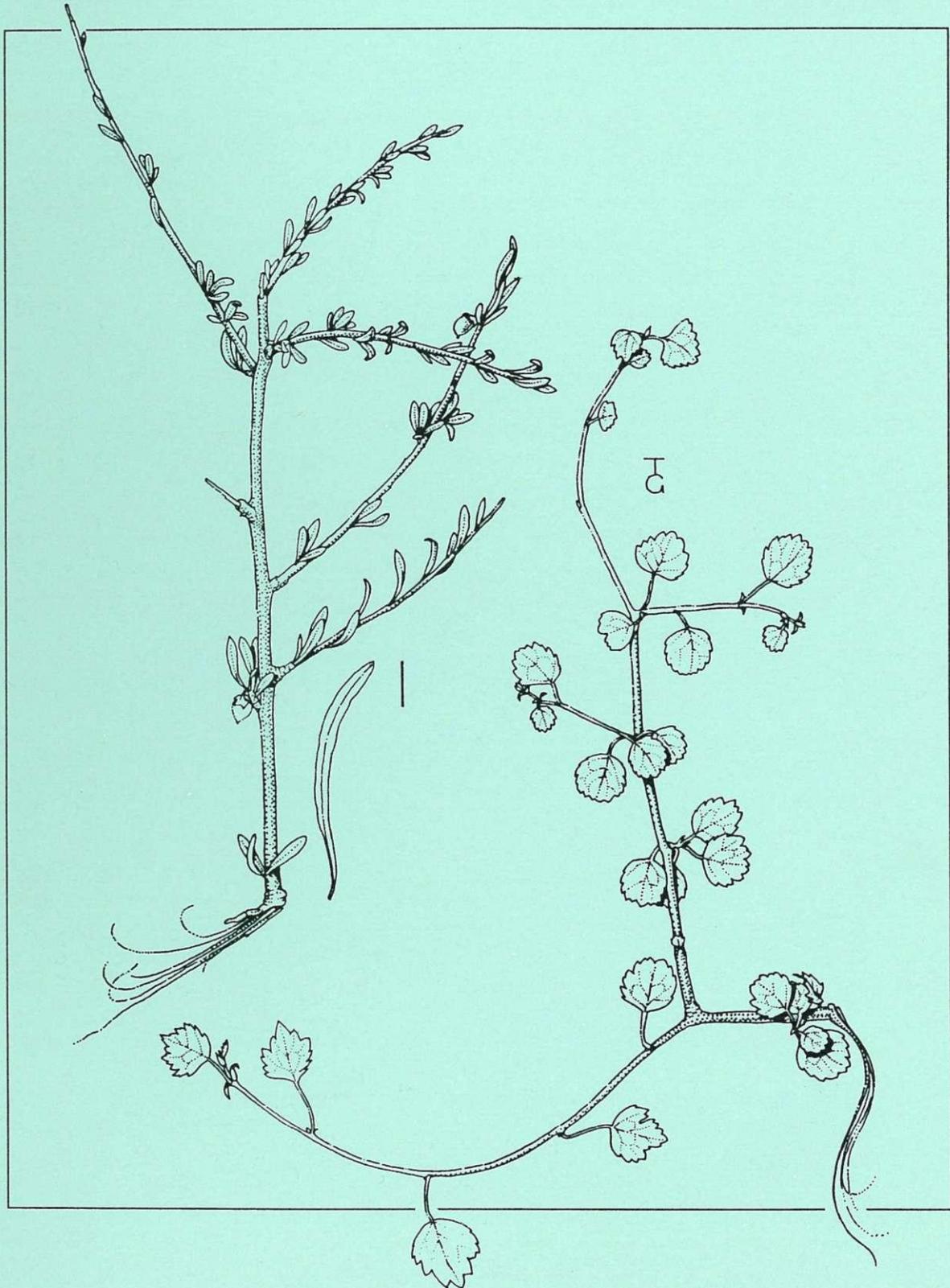


NEW ZEALAND BOTANICAL SOCIETY
NEWSLETTER

NUMBER 33

SEPTEMBER 1993



NEW ZEALAND BOTANICAL SOCIETY
N E W S L E T T E R
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Cover illustration

New Zealand's two species of *Plagianthus* are very different in habit and appearance, yet both are deciduous, and hybrids are known where the two species meet. *P. divaricatus* (saltmarsh ribbonwood, left) is a small-leaved shrub from coastal habitats. *P. regius*, long known as *P. betulinus* (lowland ribbonwood or manatu, right), has a small-leaved, more or less divaricating juvenile phase, but the adult is a handsome, broad-leaved tree. This illustration by **Tim Galloway** is from the new book "Small-leaved shrubs of New Zealand" (see page 15).

NEWS

New Zealand Botanical Society News

■ Call for nominations

Nominations are called for the following positions of Officers and Committee of the New Zealand Botanical Society for 1994:

President
Secretary/Treasurer
3 Committee Members.

Nominations opened 1 September 1993 and close on 20 November 1993. Nominations shall be made in writing to the Secretary, and shall be signed by the Proposer, the Seconder, and by the Nominee to indicate their acceptance of nomination.

If necessary, ballot papers for a postal election will be circulated with your December *Newsletter*.

Anthony Wright, Secretary, New Zealand Botanical Society, C/- Auckland Institute and Museum, Private Bag 92018, Auckland

Regional Botanical Society News

■ Auckland Botanical Society

Programme, September - December 1993:

- 1 September - Evening meeting: Lowland Rarotonga: an assignment to draw weeds (Cathy Jones & Catherine Beard)
- 18 September - Field trip: Odlins Timber Track/Cowan Stream, Waitakere Range (Malcolm Simpson)
- 6 October - LUCY CRANWELL LECTURE: Wendy Nelson: Marine invaders of New Zealand's coasts
- 9 October - Field trip: Hapuakohe Ecological Area - native forest remnant on the Ohinewai-Tahuna Road. (Joint Auckland/Waikato/Rotorua Bot. Soc. field trip, organised by Rotorua Bot. Soc.) *Please note the change of date.*
- 3 November - Evening meeting: Puriri (Astrid Dijkgraaf) *Ramalina* lichen (Daniel Blanchon)
- 20 November - Field trip: Pukekaroro Scenic Reserve, Kaiwaka (Maureen Young & Frank Hudson)

Auckland Botanical Society Journal Vol. 48, No. 2 (July 1993)

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Vascular Flora of Walker Island, Rangaunu Harbour. P J de Lange, L J Forester, G R Parrish
Vascular Flora of White Rock, Southern Wairarapa Coast. P J de Lange, G M Crowcroft
Erythrina speciosa in Auckland. R O Gardner
Some plants of Kawau Island. R O Gardner
Mosses of the Noises Islands, Hauraki Gulf. J E Beever
Additions to the Adventive Flora of the Waitakeres. E D Hatch
Corrections to the Adventive Flora of the Waitakere Range. J Mackinder
Some observations on Mt Tamahunga. M Young
Garden escapes in Auckland. A E Esler
Farewell. J Mackinder

Sandra Jones, Secretary, Auckland Botanical Society, 14 Park Road, Titirangi, Auckland 7

■ Canterbury Botanical Society

August Meeting Report

"A Botanical Journey in Eastern North America": by Colin Burrows. Good colour slides were used to illustrate the talk. In general, much of eastern North America appears to be totally forested. A pilgrimage to Concord was to visit the home of H.D. Thoreau (1817-1862); an excellent botanist who encouraged

conservation areas and was the first to use the term "plant succession". He wrote several books. Much of this area is broadleaf: beech, maple, shin oak, hickory, lime. Moving further north one finds that there are increasing numbers of conifers. A "not to be missed" trip is up Mount Washington in New Hampshire, with some alpiners including a dwarf *Rhododendron*. After New Brunswick, the next place visited was North Carolina. A flat, more tropical flood plain with many more herbaceous plants: *Cornus*, *Kalmia*, *Fittonia* and ground orchids. *Thuja* occurred in the swamps and long-leaf pine in the savannah-like areas.

August Field Trip Report

On a cold but sunny morning 27 members gathered at the home of Gillian and Miles Giller. Using a system of 'cover' plants, they now have beech trees 3-4 m high. There is also a large range of divaricating shrubs. All this is a tribute to their work over the past 10 years. On arrival at the property of Kevin Platts we were impressed with the well-established tussocks, large beech trees (12-15 m high) and the range of native shrubs. There was a good specimen of tanekaha and of kauri, both appearing to thrive.

Ron Close, Canterbury Botanical Society, P O Box 8212, Christchurch

■ Manawatu Botanical Society

The group meets regularly once a month for a talk or workshop, and once a month for a field trip or excursion. Winter events have been a divaricating plant workshop where members practised their identifications, and a follow-up field trip to the Mataroa Reserve, near Taihape, where a flora of about 25 divaricating species was found in a few hundred metres along the stream banks on south facing slopes. Coping with botanising in the persistent frost pocket, the members, despite the presence of Mike Greenwood, decided divarication was all about temperature, not moa-browse! A recent weekend trip was spent at Wai-iti near New Plymouth, where members browsed along the Mt Messenger track to inspect a range of more northern species, or went on photographic forays along the coast or through the local (non-native) rhododendron gardens. Recently too, Yvette Cottam described her summer trip to Nepal and walk round the Annapurna circuit, bringing back many memories, photos, and souvenirs.

The programme for the next few months is:

September 2 - Dave Havell will talk about his native flora studies.

September 5 - A Sunday excursion to Kai-iwi to look at ventifacts.

October 7 - Hugh Gardiner will talk about native plant cultivation.

October 9 - Inspection of local nurseries specialising in growing natives.

October 23-25 - Labour Weekend trip to the Napier region to inspect the Eastwoodhill arboretum and hopefully some potential botanical sites on the peninsulas of Lake Waikaremoana.

November 4 - Paula Jameson will discuss some of her work on aspects of hormones in plants.

December 2 - Jill Rapson will show some slides on her floristics explorations of Tasmania.

December 5 - All day walk along the Manawatu Gorge Track.

The Society welcomes new members, who should contact Peter van Essen, Department of Ecology, Massey University.

Jill Rapson, Department of Ecology, Massey University, P O Box 11222, Palmerston North

■ Nelson Botanical Society

Although field trips were cancelled due to foul weather in April, May and June, a small group had a good weekend at Takaka in May at Shannel Courtney's place, tree planting. On the Sunday they visited the Little Onahau Valley. There was a magnificent beech-podocarp forest on granite with eight species of conifer present including rimu, silver pine and yellow-silver pine. The understorey was luxuriant containing many more northern species such as *Blechnum fraseri* and *Lindsaea trichomanoides*, kauri grass (*Astelia trinervia*), and *Alseuosmia macrophylla*.

In July a good pack of 20 explored the DoC plantings at the base of the Motueka Sandspit and hopefully were inducted into the subject of weeds. Many familiar garden plants were encountered, some as garden cast offs but many are common plants of wastelands. Familiar shrubs included broom (*Cytisus scoparius*), gorse (*Ulex europaeus*) and silver wattle (*Racosperma dealbatum* - in flower). Grasses were abundant, especially marram (*Ammophila arenaria*), tall fescue (*Festuca arundinacea*) and couch (*Elymus repens*). The main herbs were chickweed (*Stellaria media*), fennel (*Foeniculum vulgare*) and white clover (*Trifolium repens*).

Below the high tide mark, native species predominated including patches of: *Carex pumila*, *Muehlenbeckia complexa*, *Disphyma australe* and the leafless sedge *Isolepis nodosa*. Further out on the sand flats *Samolus repens*, a lone grass that loves the salt - *Puccinellia stricta*, the sand spurry (*Spergularia rubra*), and the glasswort (*Sarcocornia quinqueflora*), mostly rather the worse from frost. Further along the spit marram predominated with the odd patch of planted pingao.

Coming Field Trips

September - Bridle Path Tennyson Inlet
October - Ngaio Bay
Labour Weekend - Patarau
November - Maitai Caves
December - Billies/Wangapeka - camp over?
Christmas - D'Urville/Matakitaki

Graeme Jane, 136 Cleveland Terrace, Nelson

■ **Rotorua Botanical Society**

A very successful Annual General Meeting was held on 12 June at Wohlmann House, Rotorua. Following the standard A.G.M. formalities (election of officers, etc.) members heard a talk by Willie Shaw regarding his trip to the Auckland Islands. Willie's slides showed the magnificent megaherbs present on the islands (*Stilbocarpus polaris*, *Pleurophyllum speciosum*) and also illustrated the threats posed by browsing pigs on the main island.

The field trip planned for 13 June to Mt Ngongotaha was cancelled due to bad weather. A July workshop on Identification of Sedges and Rushes (directed by C. Ecroyd and R. Irving) provided valuable 'hands on' experience in identification using the F.R.I. Herbarium equipment.

Upcoming events include a trip to Omahanui Native Plant Nursery and MacLaren Falls Reserve (exotic trees) 14 August; and a trip to Hukutaia Domain and Coastal Sand dunes at Opotiki 19 September. A talk by Colin Ogle on the topic "When is Dryland Wetland?" (16 September) has also been organised and should prove to be very interesting.

A newsletter (of a more informal nature than the Journal) is planned to be produced 2-3 times per year.

Grant Milligan, 3 Munro Place, Ngongotaha, Rotorua

■ **Waikato Botanical Society**

Our winter programme of field trips was plagued by bad weather. After a week of blue skies Sunday would dawn with torrential rain and unfortunately our last 3 trips have been cancelled. These will be fitted into next years programme. The annual herbarium workshop, held on 18 July, was again successful and much of the backlog of specimens were attended to.

The programme for the next few months is:

9 October - Hapuakohe Ecological Area - Joint ABS, RBS, WBS trip
21-25 October - Cuvier Island - lead by Catherine Beard and Paul Champion
13-14 November - Weekend trip to Kaawa (between Raglan and Port Waikato) - lead by Dieter Adam
7 December - Potluck dinner and members slide evening

For further details on these and next years programme see our regular newsletters or contact me

Paul Champion, President, Waikato Botanical Society, C/- Department of Biological Sciences, University of Waikato, Private Bag 3105, Hamilton

■ **Wanganui Museum Botanical Group**

Chairman	Ian Bell
Treasurer	Pat Robinson
Secretary	Robyn Ogle (06) 345 8593

By the time that the September issue of the Newsletter appears, we shall have celebrated our 25th birthday.

Programme

- 5 September - revisiting Corballis's bush at Marangai
- 7 September - a talk from horticulture enthusiast Clive Higgie
- 2 October - Trip to "Maungaraupi", near Marton to look at patches of secondary bush on the farm
- 5 October - Dr Jill Rapson from Massey will speak on her recent trip to Patagonia
- 30 October - A visit to some native bush up the Turakina Valley road
- 2 November - A talk by Kathryn Whaley on "Regeneration of a lowland remnant - Keebles Bush"
- 5 December - A visit to remnants of native bush on Clive and Nicki Higgie's farm near Fordell
- 7 December - Our Christmas social evening

Meetings are held on the first Tuesday of each month in the Museum classroom, starting at 7.30 pm in the winter and 8 pm after the start of daylight saving. Subscriptions are \$7.50 single and \$10 family OR, if the newsletter only is required, a \$2 charge is made to cover printing and postage.

Alf King, 180 No. 2 Line, RD 2, Wanganui

■ **Wellington Botanical Society**

Jubilee Award

Wellington Botanical Society now invites applications for an award of up to \$1000 to encourage and assist appropriate people to further knowledge of the New Zealand indigenous flora, and to commemorate the Jubilee of the Society.

Purpose of the Award

The Award is open to anyone working in New Zealand and will be granted for:

field work; artistic endeavour; publication; research; the propagation or cultivation of New Zealand native plants for educational purposes; or other studies which promote the better understanding of the New Zealand indigenous flora and vegetation.

The interpretation of these conditions will be flexible except that the main criterion shall be the furtherance of knowledge or promotion of the intrinsic value of the New Zealand indigenous flora and vegetation.

The award may be used to defray costs such as travel, accommodation, materials or publication.

Applications for the Award

Applications should be made in typescript to the Secretary, Wellington Botanical Society, 9 Mamari Street, Rongotai, Wellington 3, by 10 Oct 1993.

There is no prescribed application form but the following information should be provided:

the applicants name, mailing address, telephone number, and any relevant position held;

a summary statement of the applicant's accomplishments in the field of botany (no more than one page); the name, address, telephone number, and designation of a referee who is familiar with these accomplishments;

an outline and timetable of the proposed project for which the award is sought; and a proposed budget for the project.

Selection

The award will be made to one or more applicants selected by a subcommittee nominated by the general committee of the Wellington Botanical Society. An Award will be made, and applicants informed of the results in writing by 10 November 1993.

Successful applicants will be required to provide, at an agreed time, a short report on what they have achieved and account of their expenditure of Award funds.

The names of Award recipients, the value of the Award, and synopsis of the project provided by the recipients will be published in the Annual Report of the Wellington Botanical Society.

Programme

Saturday 4 September - Field trip: Belmont Regional Park

Meet at 9 am at the Dry Creek entrance to the park - junction of State Highways 2 and 58 at the bottom of the Haywards Hill Road. There are two new tracks in this part of the park - the Boulder Hill loop walk and the Waterfall track - which we can explore. Bring lunch and a thermos. Note that the Manor Park railway station is directly across the motorway from the park. Leader: Margaret Aitken

Monday 20 September - Evening meeting: Central North Island mistletoes, survey and conservation efforts
Browsing by possums has led to a rapid decline in mistletoe populations in central North Island beech forests. Speaker: Cathy Jones, Department of Conservation, Tongariro/Taupo Conservancy

Saturday 2 October - Field trip: Matarawa Bush

Meet 9 am at Greytown Post Office. We will drive from there to the nearest point to the bush then walk about 1 km along the railway line. Matarawa Bush (NZMS 260 S26/128133) is a 9 ha remnant of totara forest for which there is very little botanical information documented. We will add to the species list begun by two intrepid Botsoccers after last year's trip to this reserve was cancelled. Bring lunch and a drink.

Monday 18 October - Evening meeting: Around New Zealand in search of miro

In the course of a survey of miro populations in various parts of the country, whilst studying for a PhD at Victoria University, Fran Kell discovered some interesting places and plants. Speaker: Fran Kell, Editor, New Zealand Journal of Botany

Saturday 6 November - Field trip: Some south-west Wellington sites and sights

This trip can be done as a day or weekend outing. Meet at 9 am at Makara village church, on the Saturday morning. Drive c. 5 km down the Sth Makara Rd to Warren's farm (NZMS 260 R27/512876). Botanise Warren's Bush (an important forest remnant with several large pukatea and an ancient rimu) listing species. After lunch, drive back along Sth Makara Rd c. 3 km to GR 518899 (access road to Oteranga Bay). Drive to Oteranga Bay and botanise lower reaches of Oteranga Stream. Overnighters set up camp. Botanise lower reaches of unnamed stream flowing SW off southern end of Terawhiti Ridge. Day trippers return, and overnighters climb to botanise summit ridge and descend to camp. Leaders: Chris Horne and Barbara Mitcalfe. Please phone 475-7149 before 9 pm.

Monday 15 November - Evening meeting: Title to be announced

We are pleased that Fran Wilde has accepted our invitation to speak at our last evening meeting for the year. Speaker: Fran Wilde, Mayor of Wellington City

Friday evening 3 - Sunday 5 December - Field trip: Bryophyte workshop (with emphasis on mosses)

This will be an introductory course on bryophyte identification based at Camp Wainuiomata (Boy's Brigade Camp) on the Wainuiomata Coast Road. Accommodation will be in 4 and 5 berth bunk rooms: all food will be provided with rostered cooking and chores. The workshop will involve talks, field collection and observation, use of microscopes and learning to use keys to identify common mosses. Bring a hand lens and a copy of *The Mosses of New Zealand* by Beever, Allison & Child. Bookings and further information: Patrick Brownsey, 44 South Karori Road, Karori, Wellington - phone 385-9609 (work) 476-4047 (home) by 19 November. Deposit \$30 payable to P. J. Brownsey. Total cost \$35-40. Numbers will be limited. Leaders: Patrick Brownsey, Rodney Lewington, Barbara Polly

Tuesday 28 December - Saturday 8 January - Field trip: Castle Hill Station

The trip will be based at Castle Hill Station (off the Arthur's Pass road, Highway 73, Map K34 065750). We meet there in the late afternoon of Tuesday 28 December and leave on the morning of Saturday 8 January. The main party from the North Island will use the 8 am ferry on Tuesday 28th December and return on the 7.45 pm ferry on Saturday 8 January. If you intend to take a vehicle, book promptly. There are 15 bunks in the shearers' quarters and ample room for tents. We hope to make a wide range of day trips, with possibly an optional overnight trip. Ski roads will give us drive on access to subalpine levels. Accommodation costs should be about \$10 per bunk and \$6 per person for tents and vehicles. If you propose to come, tell Margaret Aitken, 4 Godley St, Waiwhetu, Lower Hutt. Tel: Home (04) 566 2731. Work (04) 474 9499 ext. 3457.

Carol West, 9 Mamari Street, Rongotai, Wellington 3

Notes and Reports

Comment

■ Leonard Cockayne's view on the possum was wrong

Cockayne failed to understand the dangers of the possum in New Zealand. Hindsight is always easy but it is difficult to comprehend his attitude. He was correct in his view of the deer menace but did not foresee the disastrous effect of the possum on our forests. This note examines the evidence on Cockayne's attitude and was assembled after I received a letter dated 21 May 1993 from Dr Lucy Cranwell Smith of Tucson, Arizona, in which she refers to Cockayne and the possum.

Cockayne in his report on 7 April 1927 to the Director of Forestry (1) wrote, "The question whether the opossum does damage to the forests is of great importance. In the Monograph [2], mentioned above, this matter is considered and the opinion arrived at based upon a knowledge of the forests before the opossum was there, and observations made recently throughout much of the forest-area, is that any damage they do is negligible and they probably do no damage at all".

In Part 2 of the Beech Monograph (2) he writes, "In dealing with the question of deer and other introduced animals as the enemies of forest I have purposely said nothing about the opossum, for these tree-dwellers stand, economically, in a class by themselves. At the present time there are those in favour of the opossum - a considerable majority - and those who decry these animals. As for myself, after a wide experience of New Zealand forests of all types - both prior to the coming of the opossum and at the present time - I certainly come into the first category. Were the opossum doing noticeable damage, the forests would unmistakably point to this in their dead trees. But the forests, so far as damage from opossums goes, are as they ever were. If damage of any kind there be, it is so slight as to be negligible. Nor do these animals affect the all-important floor-covering or reduce the seed crop to any extent. Leaving this matter of problematical damage out of the question, the point of moment is the great value of the skins. If, for instance, it can be shown that an acre of forest, at present bringing in no revenue, will yield as the home of opossums a yearly income equalling that of even very poor pasture, and that a constant revenue can be made by trapping opossums, these animals have come to stay. At any rate, if it is proved eventually - which is most unlikely - that opossums are a menace to the forests, their skins are so valuable that at any time the animals can be reduced in numbers to the extent desired without cost. Unlike the deer, it would pay handsomely to keep the opossum under strict control".

Dr Lucy Cranwell Smith in her letter of the 21 May 1993 mentions that she urged Cockayne (early 1930s?) to write about the menace of the possum to fruitgrowers around Auckland; perhaps this was some of the early evidence for the growing menace of the possum. Dr Cranwell Smith notes that Cockayne was sympathetic, "... but had no personal knowledge of the creature" and expressed the view that the red deer should be exterminated first. Perhaps by the 1930s Cockayne was wavering in his earlier view of the possum. Contrary to his comment to Dr Cranwell Smith, in the above published comments he was claiming substantial knowledge about the possum.

Cockayne's view on the possum was expressed in the 1928 Beech Monograph (2) and in his report to the Director of Forestry in 1927 (1) was possibly arrived at in 1926. Perhaps A.W. Wastney (1885-1956) the doyen of New Zealand foresters helped Cockayne reach his conclusions. Wastney was recognised by Cockayne as a discerning and observant forester in the Nelson region (3, 4, 5) who helped Cockayne with his research on *Nothofagus* hybrids and was a field companion in the Nelson-Marlborough region. In his letter of 2 July 1926 to Wastney (3) Cockayne included the somewhat obtuse statement, "At last I am in favour of the opossum [sic], long may he perambulate and follow the illusive Goddess of the wine cup".

In fairness to Cockayne, perhaps by the 1920s the possum population had not reached the critical level in the areas he examined. But he should have considered the possibility of a massive population increase. Even the fluctuation in the value of skins resulting in a reduction in trapping could have been envisaged. It would have been difficult for Cockayne to have predicted the tuberculosis problem which is now of great significance to New Zealand agriculture. I believe he had in view the importance of the possum to provide income for country folk and others when unemployment was increasing in the 1920s. Also, as indicated in the above quotation, he may have even contemplated the value of possum-containing forest as an argument to prevent further conversion of forest into pasture. Then too there were some influential citizens supporting the introduction and spread of the possum including Premier Richard John Seddon (6), "...

who was an opossum enthusiast, and took a close interest in the establishment of the animal in this country -to the extent of personally liberating a pair of Tasmanian blacks in South Westland in 1898".

Thomson (7) records that Captain Bollons in the N.Z.G.S. *Hinemoa*, "... liberated 72 opossums in the West Coast Sounds". It seems likely that Bollons distributed possums on many of the trips to service lighthouses. Cockayne was given permission to travel on the *Hinemoa* during his vegetation surveys around the New Zealand coast and he may have participated in the distribution of possums to isolated coastal areas.

It appears that the "authorities", including Cockayne, H.B. Kirk (8), L. McIntosh Ellis (9) and C.M. Smith (pers. comm. in letter of 8 July 1993 from Dr Cranwell Smith) had a mind-set about the possum though Dr Cranwell Smith was an early voice expressing concern and in her letter of 21 May 1993 she comments, "... when the Rose family reported severe damage to pohutukawa foliage around Anawhata and Piha I could find nobody interested. Jim Rose was a keen conservationist, alpinist, at one time president of the Auckland Institute and Museum - and father-in-law of Sir Edmund Hillary".

References

- (1) 4 pp. MS report, 7 April 1927, L. Cockayne to Director of Forestry. File 48/2/29 No. 1, "Species Beech (*Nothofagus*) General File".
- (2) Cockayne, L. 1928: Monograph on the N.Z. Beech Forests. Part 2.
- (3) Thomson, A.D. 1979: *N.Z. Journal of Botany* 17: 405-8.
- (4) _____ 1983: *Botany Division Newsletter No. 83*: 11-12.
- (5) _____ 1983: *Botany Division Newsletter No. 85*: 2.
- (6) Rooney, D. 1980: *The Press* (Christchurch), 8 March 1980.
- (7) Thomson, G.M. 1922: "The Naturalisation of Animals & Plants in New Zealand".
- (8) Pracy, L.T. 1974: N.Z. Forest Service Information Series No. 45.
- (9) Roche, M. 1990: "History of Forestry", p.416.

A.D. Thomson, Centre for Studies on New Zealand Science History, 5 Karitane Drive, Christchurch 2

Plant Records

■ A new naturalised sedge

A *Carex* (Fig. 1) of open, damp areas has been collected since 1980 in northern New Zealand. After trying unsuccessfully to key it out in New Zealand floras I sent some to Elizabeth Edgar who thought it might be a new adventive for New Zealand. Suspecting it might be an Australian species I sent some to Karen Wilson at the Royal Botanic Gardens, Sydney, who later identified it as *Carex punctata* Gauchin, which has occasionally naturalised in Victoria, Australia. It is native to west and south Europe, extending locally north-eastwards to south-west Sweden, north Poland and south-east Austria (Tutin *et al.* 1980). In New Zealand it has been known under the tag name "Carex 6386", referring to Alan Esler's first collection number for this taxon.

Herbarium specimens (and a published unvouchered record):

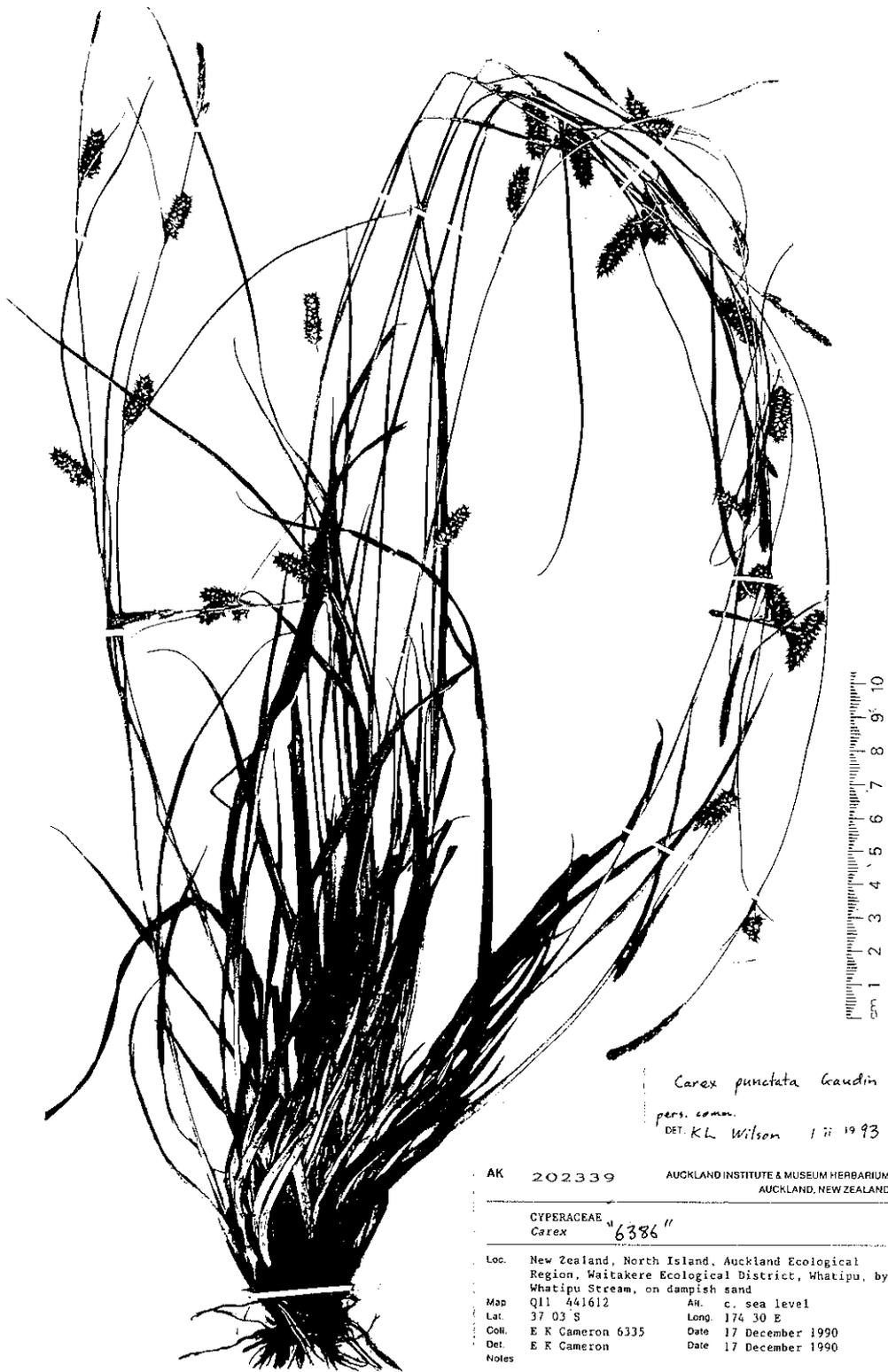
Tutamoe Ecological District (ED), Waima Valley:
17 December 1980, A E Esler 6386 (CHR 385301), open ungrazed roadside

Waitakere ED, Whatipu:
6 Mar 1983, A E Esler (AK 214161 and CHR 385302), wet sand plains
15 Nov 1986, R E Beever (AKU 19733), dune hollow
15 Mar 1987, E K Cameron 4354 (AKU 20180), wet sand
17 Dec 1990, E K Cameron 6335 (AKU 22563), damp sand
Parau: (Esler 1987 : 556)

Tamaki ED, Papatoetoe, Kohoura Crater:
18 Mar 1983, A E Esler (AK 214162), swamp.

Manukau ED, Drury Creek:
3 Dec 1991, R M Bartlett (AK 204280), grassy area by outlet pipe.

Fig. 1 *Carex punctata*, a new sedge for New Zealand



Tairua ED, Kauaeranga Valley:

13 Dec 1982, E K Cameron 1856 (AKU 14491), track margin near river
23 Feb 1984, E K Cameron 2854b (AKU 16163), open track margin

Meremere ED, Opuatia Wetlands:

15 Nov 1986, P J de Lange (WAIK 6576), near lake
27 Dec 1990, P J de Lange (AK 200871), damp pasture

First record: Esler & Astridge (1987: 533) as "*Carex* 6386"

Because *Carex punctata* is relatively widely dispersed in northern New Zealand and does not stand out from several other *Carex* species, it is likely that its New Zealand distribution will prove to be wider than is currently known, and that it has been present for some time prior to its first collection in 1980. It is unlikely that earlier herbarium specimens exist because Elizabeth Edgar studied most New Zealand herbarium *Carex* specimens during her research towards the publication of *Flora of New Zealand*, vol. II (1970) and vol. III (1980).

Carex punctata looks closest to the native, *C. dissita*, but instead of forest it grows in damp open places, often near the sea. Plants are tufted with a short creeping rhizome; leaves are bright-green; and the utricles are shiny.

I am grateful to Karen Wilson for the *Carex* identification.

References

- Esler, A.E. & Astridge, S.T. 1987: The naturalisation of plants in urban Auckland, New Zealand. 2. Records of introduction and naturalisation. *New Zealand Journal of Botany* 25: 523-537.
Esler, A.E. 1987: The naturalisation of plants in urban Auckland, New Zealand. 3. Catalogue of naturalised species. *New Zealand Journal of Botany* 25: 539-558.
Tutin, T.G.; Heywood, V.H.; Burges, N.A.; Moore, D.M.; Valentine, D.H.; Walters, S.M. & Webb, D.A. 1980: *Flora Europaea*. Vol. 5. Cambridge University Press.

Ewen Cameron, Auckland Institute & Museum, Private Bag 92018, Auckland

Field Report

■ The Seventh Fungal Foray: Okataina, Rotorua, 10th to 14th May, 1993

Forty-one participants assembled at the very comfortable Outdoor Education and Recreation Centre on the road to Lake Okataina on Monday night. Marie and Lawre Taylor were again our excellent organisers for fungi and food, ably assisted by the local organiser, Lindsay Gibbons, whose local knowledge and contacts made this a memorable foray. We had several overseas participants again this year, Mr M Izawa and Ms Hirome Tanaka from Japan; Professor Wang, Professor Gao and Ms Yang Xiao from China, now at Invermay and Auckland; and Dr Don Walker from Sydney. A small party of bryologists added another collecting strength to the foray.

The first day started very early for some, with a visit to the forest towards the Pongakawa Valley at 7 am to hear the kokako. The not-so-early birds joined the first party at a novel event, a barbecue breakfast at the intriguing "Equine Nursery", which turned out to be a magnificent estate once belonging to the Gibbons family and now owned by a German company. After breakfast we all piled back into the cars and were treated to a tour of the estate before we visited the Carrie Gibbons Memorial Reserve at the entrance to the estate. It is named after Frank and Lindsay Gibbons' mother and consists of tawa forest. Our next stop was a reserve on the shores of Lake Rotoma where we ate our lunch in the sunshine and even forayed amongst the beach gravel. Back into the cars again for a long drive through the pine forests near Kawerau, heading for the forest surrounding Lake Tarawera outlet. Most of the forest was mixed tawa and manuka, with, towards the Tarawera Falls, an almost pure pohutukawa forest, somewhat less productive of fungi than tawa. On Wednesday evening we had the privilege of a magnificently illustrated lecture by Chris Ecroyd on his work concerning the fertilisation of *Dactylanthus* by bats. This was followed by Peter Austwicks's film of travels in Thailand showing market stalls of local fungi.

On Thursday the party broke up into several small units, some going to Rainbow Mountain, some to Rotorua and some exploring the tracks near the lodge. The Ngahopua track round the crater lakes

opposite the lodge, through an almost pure tawa forest, yielded some very interesting fungi including the biggest find of the Foray, a huge *Bondarzewia* more than 50 cm in diameter on a rotting log. The evening was devoted to a showing of slides of fungi contributed by various foray members. The third day was spent in the Rotorua area, visiting the grounds of the Forest Research Institute, Whakarewarewa forest, and the Blue Lake.

Lists of fungi species observed on the Okataina Foray indicated that 1993 was a "good" year for the fungi and Okataina an excellent place to enjoy the benefit of good hunting. (Copies of species lists can be obtained from the author). The Foray closed with the usual discussion about next year, with opinion strongly in favour of a South Island venue. The probable site will be Nelson Lakes, Lake Rotoiti; and the dates May 16-20, 1994.

Barbara Segedin, 16A Landscape Road, Mt Eden, Auckland 4

Herbarium Report

■ Auckland Institute & Museum Herbarium (AK) Report for period 1 July 1992 to 30 June 1993

Staff News

On 1 July 1992 Anthony Wright was appointed Acting Manager Collections, and vacated his position as Curator of Botany after 12 years. At the same time Ewen Cameron was appointed Acting Curator of Botany with full responsibility for the Botany Department.

Jack Mackinder resigned after nearly six years as a half-time Botany technician. During that time he developed the highly successful AKILLES computerised database system for the Museum's herbarium, which has now been installed into two other NZ herbaria and is being investigated by two others. In April Michael Clearwater was appointed as temporary Botany technician.

Collection Management

Twenty seven per cent of the herbarium is now on the computer database (AKILLES). The ongoing databasing of existing herbarium specimens (backlog) is being funded by a Lottery Board Grant. 6005 of these backlog specimens, mainly native ferns, were processed. This was a smaller amount than anticipated because time was spent converting the existing bryophyte and orchid labels to include Ecological Districts. This backlog work was carried out by temporary staff; Marcel Smits during university holidays, Chris Mackinder for six months, Cecelia Street part-time since March and Douglas Rogan since June.

By systematically working through the native dicotyledon specimens, all type material is being located and registered in another project funded by a Lottery Board Grant. This work was begun by Melanie Gatt and Melanie Newfield over the summer vacation, and continued since February by Juliet Herrick. To date over 700 presumptive dicot type specimens have been identified, protologues for all have been collated and full labelling of the specimens is well advanced.

The third project funded by the Lottery Board is the accessioning of three gifted private herbaria into the main collection. Rhys Gardner, part-time, is well advanced with the coding of Alan Esler's herbarium, and half of the Auckland Regional Authority Hunua Forest herbarium is fully incorporated into the Museum herbarium.

The 4387 new accessions come from a variety of sources including staff, donated herbaria, ongoing exchange programmes and donated specimens. Over 600 duplicate fern specimens collected by Dr Barbara Parris and presented by Kew Gardens Herbarium were incorporated into the Museum herbarium, along with a family donation of 109 Cook Island fern specimens collected by J. & T.B. Graham in the 1930s and 40s.

The small number of plant fossils held in the herbarium were sorted and moved for permanent storage with the Geology Department fossil collection.

Volunteer support for the herbarium continues to be high with all new specimens mounted by the weekly attendance of Joan Dow, Kay Haslett, Vic May, Meryl Wright, and, up until December, Chris Mackinder. Since January new lichen specimens were packeted by Joshua Salter 1-2 times per week. Wendy Patterson has continued her twice weekly proofing of new AKILLES labels for the bryophyte backlog

specimens, assisted weekly since March by Brenda May. Rhys Gardner has continued to file all new vascular plant specimens into the herbarium and assist with difficult identifications. Lynda Jones spent three weeks sorting the Department's correspondence and reports for archiving. There was a total of 1283 hours completed by the volunteers.

Researching the Collections

Fieldwork and collection of specimens was carried out by Ewen Cameron during two days on Mt Camel (organised by the Department of Conservation), two days on Northern Great Barrier Island, five days in Tongariro National Park (organised by the University of Auckland), and during monthly field trips with the Auckland Botanical Society. Unusual species of woody plants cultivated in the Auckland Domain were searched for and vouchered.

Dr Rhys Gardner returned to Waya Island in Fiji during July and collected a further 300 vascular plant specimens. His work will contribute to a dictionary of the Western Fijian language.

Most of the 23 incoming loans numbering 952 specimens were for two researchers based at the Museum: Dr Leif Tibell of Uppsala University who worked in the herbarium over the summer studying crustose lichens, and Dr Barbara Parris of Auckland who continued her world-wide study of the fern family Grammitidaceae. Both of these scientists have provided valuable expertise in the management of herbarium by providing numerous specimen identifications.

Public programmes and activities

Lectures and talks were given to three Auckland University courses (Advanced Plant Taxonomy, Conservation Biology, Introduction to Landscape), Northland and Central Auckland Branches of Forest & Bird, and NZ Tree Crops Association.

Horticultural students from Carrington Polytech and the Auckland Regional Council Botanic Gardens, students from Environmental Studies of Auckland Institute of Technology, and the Mid-North Branch of Forest & Bird were separately guided around the Botany Department and shown how to prepare and store herbarium specimens. Enquiries numbered 215; the majority of these were from the general public.

Visitors using the Herbarium included:

Dr Bob Chinnock, Botanic Gardens & State Herbarium, Adelaide; David Glenny, Museum of New Zealand; Peter de Lange, Department of Conservation, Wellington; Dr Helmut Mayrhofer, Karl-Franzens University, Austria; Bill Sykes, Landcare Research NZ Ltd, Lincoln; Dr Colin Webb, Landcare Research NZ Ltd, Lincoln.

Donated specimens

Drs J.E. & R.E. Beever, Dr P.J. Bellingham, Dr R.O. Gardner, Dr M.G. Goodey, Dr B.W. Hayward, Dr L. Tibell, Ms L.J. Forester, Ms M.L. Fromont, Mr A.R. Jamieson, Mr P.J. de Lange, Mr E.D. Hatch, and Mr H.T. Lumbsch.

Staff

Acting Curator	Ewen Cameron
Associate Botanist	Ted Bangerter
Hon. Botanist	Lucy M. Cranwell
Research Associates	Jeanne H. Goulding, Rhys Gardner
Technicians	Jack Mackinder (until April)
(temporary)	Michael Clearwater (since April), Juliet Herrick (since February), Douglas Rogan (since June). Cecelia Street (part-time since March)

Statistics (12 months)

New accessions		(1991-92)
30 June 1993	211,193	
30 June 1992	<u>206,806</u>	
Increase	4,387	(4,620)
Records on AKILLES electronic database		
30 June 1993	57,894	
30 June 1992	<u>47,502</u>	
Increase	10,394	(15,521)

Exchange specimens	
Inwards 222 specimens from 6 institutions	(307 from 6)
Outwards 576 specimens to 12 institutions	(142 to 2)
Loans of specimens	
Inwards 23 [952 specimens] from 16 institutions	(23 [2521] from 10)
Outwards 71 [1748 specimens] to 28 institutions	(38 [1185] to 19)
Total number of specimens out on loan	4614 (4856)

Ewen Cameron, Acting Curator of Botany, Auckland Institute & Museum, Private Bag 92018, Auckland

Biography/Bibliography

■ Biographical Notes (11): Magnus Earle Johnson (1885-1976)

Magnus Johnson was born in Auckland on 11 February, 1885. Up to about World War I his home address was at Kauri (Whangarei) and after that at Henderson (Auckland). His father's occupation was mixed farming (1,2). Magnus attended "public school and high school" (but neither was Kings College or Auckland Grammar School as a search shows). Before leaving North Auckland he spent 6 years as a volunteer in the Marsden Mounted Rifles attaining the rank of sergeant. At the outbreak of W.W.1 he was working as a "road engineer" for the Public Works Department at Ohakune, with a base at Wanganui (2).

On 3 November, 1914, Johnson enlisted as a trooper in the Auckland Mounted Rifles, and on 1 December sailed for overseas, where he was wounded at Gallipoli and convalesced in England. Back in the Middle East with the rank of lieutenant, Johnson was mentioned in despatches on 16 January, 1918, for distinguished services in connection with the operations under the command of General Allenby, Commander-in-Chief, Egyptian Expeditionary Force; and on 15 April, 1918, he was awarded the Military Cross "for distinguished services in the field in connection with military operations culminating in the capture of Jerusalem". Then, on 16 September, 1918, he was awarded a bar to his Military Cross "for conspicuous gallantry and devotion to duty when his regiment had crossed the river and a squadron was sent forward to attempt a surprise attack. He was in charge of the advanced guard, and came suddenly on a post of nineteen enemy infantrymen. Calling to his troop to follow him, he galloped straight at the enemy and in spite of determined resistance captured the whole post" (2).

Johnson returned to New Zealand in 1919 with the rank of Captain. After demobilisation he successfully applied for a commission (Lieut.) in the New Zealand Staff Corps, beginning an Army career during which he received the Efficiency Decoration (E.D.) and rose to be Area Officer, Area 9 (Nelson) with the rank of Major. In November, 1940, having reached the normal retiring age, he was posted to the retired list (2).

Most of Johnson's retirement was spent in Auckland, where he lived at 168 Upland Road, Remuera (3), and sailed his yacht *Rosemary*. This was the 26 ft. "C" Class Keeler with auxiliary engine which he took to the Three Kings Islands on at least eight occasions as follows:

1,2: 1945? 1946?

In connection with the third and fourth visits Buddle (4) thanked "Major Magnus Johnson, whose local knowledge, derived from two previous visits to the group, proved invaluable".

3: January, 1947

The party consisted of Johnson, his crew (Ernie Beaver and Murray Green) and Major G.A. Buddle, Associate Ornithologist, Auckland Institute and Museum (4). Important achievements were the second landing by Europeans on South West Island, discounting some 73 *Elingamite* survivors who had landed where they could not climb the cliffs (5); and the first landing by Europeans on North East Island.

After leaving Auckland on 27 December, 1946, and waiting for several days at Mangonui for suitable weather, *Rosemary* reached the Three Kings early on the morning of 3 January. With conditions favourable at South West Island a landing place was selected "near or identical" to that used by Cheeseman in 1889. Buddle wrote (4): "Waiting till slack water; and carefully timing the approach to the landing to coincide with the top of the surge [7 to 14 feet] the dinghy [7 foot] was backed in to within jumping distance of the rock face (which descends vertically into 20 - 30 fathoms) and one at a time Major Magnus Johnson (the

owner of the yacht) and the writer were landed successfully; while the dinghy was rowed back to the yacht, which was anchored in 40 fathoms about a quarter-mile off shore. Once ashore the ascent of the cliffs was not difficult." Collections were made.

On the morning of 4 January a suitable landing place was discovered on North East Island and, taking advantage of the slack water, Johnson and Buddle "landed one at a time without great difficulty, and found the climb to the top not as difficult as it appeared from the sea: we took rope to assist in climbing, but fortunately found it was not required" (4). Collections were made.

4: December, 1947

The party was the same as in January, with the addition of Dr G.T.S. Baylis, University of Otago, who spent "in all about 18 hours on Great Island" (6). On 31 December Johnson and Buddle landed again on North East Island. Collecting was curtailed by the approach of bad weather (4).

5: January, 1950

The party consisted of Johnson, Baylis and Green. Baylis was landed on South West Island and Great Island; and Johnson made the first European landing on West Island (7). While Green rowed Johnson ashore Baylis had charge of the yacht (8). "The ascent appears to be practicable only by the ridge which arises from the south-eastern point. Johnson succeeded in making his way onto this from the lip of a cave on its eastern side but only with much difficulty" (7). Baylis adds (8): "Johnson's solitary day on West Island had a touch of drama. He did not return to his landing place at midday as arranged, and we could not go to look for him, lacking a fourth man (you cannot beach a dinghy on the island). The yacht could not lie off the landing place to wait for him (too much tiderip) but we returned at afternoon slack-water and he was waiting - not where he landed but in a better place at the toe of the slope. The Kings were often a bit frightening!" But also, in this case, most rewarding. Johnson, who had a keen eye for the unusual, had found an unidentifiable tree with karaka-like leaves and relatively small brilliant-red fruits in large bunches. It was considered by Melville of Kew to be referable to the Myrsinaceae (9).

6: January, 1951

In search of flowers of the new tree, Johnson and Baylis were put ashore on West Island "thanks to the skilled boat work of Mr E. Beaver of Whangaroa" (9). A fourth crew member remained on board the *Rosemary*. "The landing was accomplished in a dense fog which made photography impossible, and was depressingly reminiscent of the circumstances primarily responsible for the wreck of the *Elingamite* upon this island about fifty years previously, with much loss of life" (7). Despite the conditions, flowering and fruiting specimens were found and this material showed that Johnson had discovered a new species and genus of the Myrsinaceae. It was described as *Elingamita johnsonii* by Baylis in 1951 (9). At first it was thought to consist of only about a dozen trees confined to West Island, but in 1983 a viable population was found [by Anthony Wright and Ewen Cameron] on Hinemoa Rock, one of the Princes Islands between South West and West Islands (10).

7: December 1955

Since his two landings on North East Island in 1947 Johnson had made several attempts to put Baylis ashore, as had Ernie Beaver on two occasions with his own boat (8). Finally, in 1955, Baylis and Dr P. Brooke (D.S.I.R. Mount Albert) were landed from *Rosemary* for about 3 hours (7). Johnson had now achieved his objective of landing Baylis on all the forested islets of the group.

8: January 1958

Adams & Nelson (11) list *Sargassum johnsonii* from "South West Is., M. Johnson, Jan. 1958, AKU 30, type collection"; etc. This brown seaweed, endemic to the Three Kings, was described in 1961 by Chapman (12) who wrote: "The plant is named after Major M. Johnson who discovered it and has brought back material on more than one occasion".

In describing his botanical survey of the small islands of the Three Kings group Baylis wrote (7): "No landings can be made on small islands in the open ocean without suitable boats and equipment, and without a great deal of skill, judgement and perseverance in tackling the nautical aspects of the problem. My great indebtedness to Major Magnus Johnson, from whose yacht *Rosemary* all the pioneer and most of the subsequent landings have been made, will be obvious. The assistance of Mr Ernie Beaver, who until recently operated the fishing boat *Miss Kaikohe* from Mangonui and Whangaroa, has also been invaluable, and his generosity in twice placing this powerful launch at our disposal is gratefully recorded".

About 1970 Johnson left Auckland for Gisborne where he died on 28 May, 1976, in his 92nd year, and was buried in the Taruheru Lawn Cemetery (1,3,13). His yacht, which he named after his daughter, is

commemorated in Rosemary Rock, one of the Princes Islands of the Three Kings Group.

I am very grateful to Professor Geoffrey Baylis for his help with this note.

(1) Death Certificate; (2) N.Z. Defence Force records; (3) Wise's NZ Post Office Directory; (4) G.A. Buddle *Rec. Auck. Inst. Mus.* 1948; (5) Wade Doak *The Elingamite and its Treasure* 1969; (6) G.T.S. Baylis *Rec. Auck. Inst. Mus.* 1948; (7) G.T.S. Baylis *ibid.* 1958; (8) G.T.S. Baylis pers. comm.; (9) G.T.S. Baylis *Rec. Auck. Inst. Museum* 1951; (10) C. Wilson & D. Given *Threatened Plants of New Zealand* 1989; (11) *Nat. Mus. N.Z. Misc. Ser. 13* 1985; (12) *Bull. Res. Council Israel* 1961; (13) *The Gisborne Herald* 29 May 1976.

Eric Godley, Research Associate, Manaaki Whenua - Landcare Research, PO Box 69 Lincoln

Publications

■ Small-leaved shrubs of New Zealand

By Hugh Wilson and Tim Galloway

This book is due for release in September 1993. It will be officially launched at the Christchurch Botanical Society meeting on Friday, October 1st. It is available to Botanical Society members at 20% less than retail (see order form below).

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■ Books and journals received

Wildflowers of southern Spain

A selection of wildflowers of Southern Spain by Betty Molesworth Allen. Published April 1993 by Mirador Publications S.L., Spain. ISBN: 84-88127-06-5, price not given, 254 pp.

This magnificently illustrated field guide was written by Betty Molesworth Allen formerly botanist at the Auckland Institute and Museum. In a letter to Dr A.D. Thomson, Dr Lucy Cranwell Smith refers to Betty as a "self-made botanist" whose primary interest was in ferns which she continued to study in Malaysia and since has become involved in systematic botany in Spain where she now lives.

Orchid Journal

New Zealand Native Orchid Group Journal Number 47 September 1993 edited by Ian St George. ISSN1170-4543, 32pp.

Most notable contents include an updated list of New Zealand orchids by Ian St George, and papers on the *Corybas rivularis* complex by Bruce Irwin and Dan Hatch.

Editor

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Fig. 96. *R. haastii* subsp. *haastii* from Porters Pass

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