The Rhododendron

Volume One 2013

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FOREWORDS

After several years of discussion around the idea of closer relationships with kindred organisations, and tossing around ideas from full integration to a nationwide gardening group model it is pleasing to see sense has prevailed and we have now come up with this joint bulletin publication.

The idea behind this is that both Pukeiti and NZRA have in the past produced a bulletin with similar articles based on rhododendrons and associated plants. Both organisations have had to fund editorial, printing and distribution costs. So it was a no – brainer that a joint bulletin be undertaken that will have even more articles and stories that can be spread across a wider audience of like minded people.

Apart from a joint bulletin the only other benefit that is available to members of both Pukeiti and NZRA is the ability for NZRA members to participate in Pukeiti tours. It is hoped that NZRA will allow Pukeiti members to attend the NZRA annual conference without the non-member penalty applying. After all we have a common interest.

If you haven't been up to Pukeiti recently then I am sure you will be impressed with the positive changes that have been made in the garden. These include new and improved plant labelling, new way-finding signs, all weather gravel pathways, not to mention intensive work within the garden. This includes extensive cutting back in the big leaf section, drainage improvements and an overall lift in presentation.

Future projects that will be carried out in conjunction with our partner the Taranaki Regional Council include a revamp of the Keiller garden, plans to upgrade the members' Lodge and a complete overhaul of the bog garden area, plus a few other surprises which you will need to visit the garden on a regular basis to enjoy.

My thanks to the joint editorial team for putting together this bulletin, the first of what is hoped will be many joint publications.

Gordon Bailey, Chairman Pukeiti

Welcome to the first joint Bulletin published by the New Zealand Rhododendron Association and The Pukeiti Rhododendron Trust. This innovation has been a long time in the making which is perhaps surprising since the two organisations have focused on the same plant, the rhododendron and have had an overlapping membership since their origins in 1944 and 1951, respectively.

Indeed, the current leaders of both organisations,Gordon Bailey and myself, have been members of both groups for a long period and Gordon was my immediate predecessor as NZRA President. The duplication of effort has made increasingly less sense over the years, whatever the original reasons were. Hence the decision was made this year to trial a joint publication, *The Rhododendron.* Subcommittees in both organisations have gathered articles written by members and Lynn Bublitz has taken on the responsibilities of Editor for this critical 2013 issue. Within its pages you will find much good reading for the Christmas holidays. I would like to sincerely thank everybody who has contributed to the success of this new venture and wish *The Rhododendron* a bright future as the joint flagship publication of the NZRA and the Pukeiti Rhododendron Trust.

Dr Sue Davies, NZRA President and Member of the Pukeiti Rhododendron Trust.

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Cover
Rhododendron "Sir Edmund Hillary". This plant, a cultivar of the species *R. arboreum*, was grown from seed sent by the Queen of Nepal in 1970 and named in a special ceremony to honour Sir Edmund in October 2012 at Heritage Park where this photograph was taken.

Back Cover
Rhododendron nuttallii in the Nuttallii Valley at Pukeiti.
R. 'Flava' and *R.* 'Coronation Day'

THE RHODODENDRON VOLUME ONE 2013

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CONSERVATION
WE CAN ALL PLAY A PART

When the articles for this inaugural publication were collated, it became clear that a reoccurring theme inherent in most of the contributions was aspects of conservation. With repeated emphasis in the popular press on the importance of conservation in the wider context of ensuring a sustainable future, it is not surprising that the concept has become a focus for many.

As we move further along the road of climate change, and the effect it could have on the survival of species both directly, and indirectly through the destruction of habitats, the role of parks and gardens in overcoming this becomes more significant. Conservation is not only of local importance but is a world wide problem that we all must be involved in addressing.

A changing climate will mean we will have to constantly reassess what we can grow successfully in our own gardens. Many of our favourites will increasingly fade from popularity because of the lessening cold spells required to stimulate the opening of the flowers in spring, drier summers, violent storms and the increasing number of pests and diseases, many of which will relish the new conditions. Think of thrips which have abounded this year because of the long dry summer earlier in the year. Fungus diseases such as mildew which has spread widely recently will become more of a problem, and phytophthora which enjoys warmer winter conditions and the wet of sodden soils will spread further. Plants affected by them will become less desirable and some will die out and others just won't be grown. We need to identify the more resistant types. It will also be important to continue to import new clones of known species and hybrids to provide a broad range from which to select and breed new varieties.

Rhododendrons growing in the wild will also be under increasing stress because many exist in a very narrow climatic and attitudinal range, and because of competition from other species cannot readily shift to more suitable habitats. Increasingly species will be lost. This will be further exacerbated by the destruction of the natural environment for agriculture and other purposes.

Parks and gardens around the world, if allowed by government authorities, will play a key role in preserving these, for example at Pukeiti, among other species *Rhododendron griesonianum* is flourishing yet it has not been recorded in the wild for over 40 years.

New hybrids and resistant clones will have to be raised to suit the new conditions often using endangered species and some older hybrids which have previously gone out of fashion. Places such as Pukeiti, Heritage Park, and Tannock Glen, private collections and the rhododendron collection at Ilam, University of Canterbury, with their extensive range of plants, along with the trials being undertaken by the Association will play a critical role in growing and selecting these. We do not know the full extent of the importance of these collections, especially the resistance some culitvar and hybrids may have to diseases in the future. It is important also that the trials are spread throughout the country because as is apparent now, but could be more so in the future, the conditions in the different regions better suit some varieties than others. Work being done on computerising plant records at Pukeiti and other gardens, and then making the data widely available is critical in enabling good conservation practice.

In addition, work being done on the DNA of rhododendrons will become increasingly important not only in identification, establishing the range of genetic variation within species, but in finding the genes which provide resistance to infection and nibbling insects.

There is a lot to be done to ensure that these great garden plants retain a significant role in our gardens. Rhododendrons deserve a continued popularity. Good conservation practices and study will ensure this. All who grow these plants can play a part.

Lynn Bublitz,
Editor

REPORT ON THE **RHODODENDRON SPECIES CONSERVATION CONFERENCE:** APRIL 21-22, EDINBURGH

In April 2013 the International Rhododendron Species Conservation Conference was held in Edinburgh at the Royal Botanic Garden. The meeting was jointly organised by the Rhododendron Species Conservation Group (UK), Royal Botanic Garden Edinburgh, and Botanic Gardens Conservation International (London). The conference was held over two days and there was a variety of speakers from around the world.

The conference was opened by Sara Oldfield, Director General of Botanic Gardens Conservation International in London, who is leading the international programme of conservation assessments (red-listing) for plant genera. Rhododendron was assessed in 2008/9 and the red list published in 2011 (Gibbs et al., 2011). Sara summarised the red-list results for Rhododendron, where 1157 taxa were assessed and 384 were assigned a threat category (which indicates there is a conservation problem). A further 290 were designated 'Data Deficient' indicating that there is likely to be a conservation problem, but there is insufficient data to make an informed assessment. The remaining 483 taxa were categorised as 'Least Concern' – these are the 'safe' taxa for which there is not presently any conservation issue.

Sara went on to identify elements of conservation action. One issue was that of the 46% of red-list species of *Rhododendron* that are not in cultivation. Should these be targeted for collecting? Is such activity a wise use of scarce resources? Should ex-situ conservation focus on those taxa that are already in cultivation? Sara also raised the issue of the status and distinctiveness of some of the recently described species, and David Chamberlain (Royal Botanic Gardens Edinburgh) reinforced this point in his address. He suggested that some new species, which are described for political reasons, are not botanically valid and should not be recognised. In his view many of the Data Deficient species may not be valid – but he also conceded that other Data Deficient species are point-endemics and therefore of conservation importance. David Chamberlain also raised the issue of natural hybrids, and whether or not these should be included in conservation planning. Kenneth Cox raised the issue of the variability of some species and how this influences conservation. George Argent supported this general theme and stressed that an understanding of 'what we are conserving' is critical. That is, conservation decisions must be supported by robust taxonomic and field knowledge.

Rhododendron meijeri x *rugosum*, a hybrid vireya

Each of these speakers stressed the need for strong background research, and open exchange of information to support conservation. In a later discussion some members of the group were critical of the red-list, suggesting that it lacked sufficient background information to make a good quality assessment. Sara

Oldfield, as person in charge of that exercise, conceded that there were some limitations to the data used to make the assessments, but argued that one had to start somewhere and get an initial red-list published, and that subsequent documents would address the weaknesses. An important outcome of the meeting was the resolution that people with field experience could apply for a log-in to the IUCN website where they could add field observations to the species data set.

On the afternoon of the first day attendees were taken on a tour of the temperate and vireya rhododendron collections at the Botanic Gardens. The vireya collection is housed in a display house and another glasshouse that is not available to the public, while the temperate collection is outdoors. There were relatively few taxa flowering outdoors – having had a cold winter the gardens were about six weeks behind their usual stage of growth. There were various bulbs and perennials flowering outdoors, but most of the woody plants were not yet in leaf and few were flowering. The indoor vireya collections were flowering though and it was most interesting to see various species that I had heard of but never seen 'in the flesh'. Edinburgh has the largest ex-situ collection of vireya in the world, with some 220 species in that collection including 58 threatened species. (By comparison, in New Zealand we have about 160 species and about 31 threatened species.)

On the second day of the conference speakers from various countries gave an overview of the situation in those countries. Gao Lianming outlined that there are 584 taxa in China and 409 of those are endemic, with the highest number being found in Yunnan, Xizang, and Sichuan. He provided a fascinating set of pictures and his presentation can be seen on the BGCI web site at *www.bgci.org/ourwork/rhododendron_conference2013/*. (The other presentations are also available at that web site.) Dr Gao outlined some of the conservation action that has been undertaken in his country, including a complete on-line flora and a recent assessment of the conservation status of all Chinese species. Dr Gao is the author of several DNA studies (on temperate species) and he presented some of this work to the audience.

Dr Wiguna Rahman spoke about the situation in Indonesia, where there are 173 taxa of *Rhododendron* with most of those being in the vireya group. Thirty taxa are threatened. While Indonesia has a National Plant Conservation Act, this does not include any Ericaceae and has not been updated in over 30 years, so Rhododendron is not protected in that country. He then gave an overview of the main threat factors which included change of land use, invasive plants, over-exploitation, mining, climate change, and natural disasters. An exciting aspect of his report was that the Indonesian government has a programme to form 21 new botanic gardens, but only 5 of those sites will be suitable for cultivation of vireya taxa.

In my speech I gave a summary of the number of taxa in New Zealand collections and compared that to the international collections at Kew and Edinburgh. I also used the database at Botanic Gardens Conservation International to access a world summary of taxa that are in cultivation in botanic gardens. That data set showed that, for vireya collections, New Zealand is the second largest world collection after Edinburgh. For temperate taxa there are 517 taxa documented for New Zealand. This number is larger than the 490 taxa on the Edinburgh database, but the taxa in New Zealand are spread

R. leytense, a vireya species from the Philippines which was assessed as Least Concern. The Edinburgh collection appears to be the only one world-wide.

throughout New Zealand collections rather than on one site, and further, the Edinburgh speaker indicated that they had 668 species and 1279 taxa in their collections (the figure I extracted from their database appears to relate to only the Edinburgh site). Nevertheless, the figures suggest New Zealand has rhododendron collections of significant size.

In the final set of speeches various topics around ex-situ collections were covered. Robert Hatcher reported on Australian collections – in that country they have what appears to be a significant collection with 440 taxa at Emu Valley in Tasmania, plus several other smaller collections. It seems that Australia and New Zealand both have substantial collections, and these may form the nucleus of a southern hemisphere set of world collections. A critical factor though is record keeping – the collections are only useful if they are properly recorded. Several speakers referred to the difficulties of maintaining accurate labelling and records – keeping the right label on the right plant in the garden is a challenge faced by everyone. In a related issue Steve Hootman referred to distribution records, so that plant material could be accurately located in other collections.

In relation to recording collections, Ian Sinclair, from the Species Conservation Group, described an impressive work programme where expert volunteers catalogue and label private collections in Britain. So far they have surveyed 98 sites and created a detailed data set for each one. Dr Hartwig Schepker from Germany described a similarly impressive project where volunteers have catalogued collections, but noted that many of these are hybrid collections rather than species collections. Steve Hootman described the collections at the Rhododendron Species Foundation. He suggested that species are being lost before they have been documented, but at the same time, recent expeditions are bringing new material into cultivation. This highlighted another problem that several speakers identified - species knowledge – many of the threatened species are either obscure or difficult to identify, and there may not be enough people with enough knowledge to make accurate identification. This problem is linked to the need for more research on the threatened and less common species, especially the Data Deficient species.

In the panel discussion I asked the speakers what they believed the next steps in rhododendron conservation should be. (The panel was Sara Oldfield, Hartwig Schepker, George Argent, Kenneth Cox, David Chamberlain, Steve Hootman, Gao Lianming, and John Hammond.) Between them they suggested the following actions or developments:

R. chamaethomsonii var. *chamaethomsonii,* a Chinese species assessed as Vulnerable.

R. apiense, a vireya species from Borneo. The Edinburgh collection appears to be the only one world-wide.

- Development of a world network of collections.
- The need to improve the documentation of collections.
- Finding an effective way to share information on species and collections.
- The need to build capacity, particularly stressing the importance of taxonomy as a basis for understanding species and planning conservation.
- The need to record private collections. It was felt that there were many private collections that contained important material but owners were not aware of what they had, and further, those collections were not always secure in the long term.
- Finding an effective way for

R. forrestii var. *forrestii*, a species assessed as Least Concern.

people with field knowledge and species knowledge to contribute to the red-list assessment.

- The need to establish a clearer legal position under the Convention on Biodiversity and CITES (Convention on International Trade in Endangered Species), so that plant material can be exchanged and ex-situ collections developed without running into legal problems.

The common themes that emerged can best be summarised as the need for good taxonomy, the importance of good documentation, and an effective way to keep records and share information. These are the foundation from which an international network of collections will be built. In a large genus like *Rhododendron* these are substantial tasks, but if individuals or groups are able to contribute a component task then the greater cause will come closer to fruition.

Marion MacKay

Acknowledgements

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THE RHODODENDRON COLLECTION – A REPOSITORY FOR THE FUTURE

Today under the care and stewardship of the Taranaki Regional Council, Pukeiti's world class collection of Rhododendron species and hybrids continues to thrive. From humble beginnings established in 1951 the Pukeiti Rhododendron Trust through its charter, and in particular the first of its key goals and objectives;

". ..To encourage interest in and the development of the genus *Rhododendron*, scientific research into its breeding and culture, and the promotion of such other purposes as may advance the culture of the genus..." set out to establish this collection that is now very much a part of Taranaki's gardening landscape. The framework of the gardens ably built around the hybrids imported from the great gardens of England that whilst largely unknown or appreciated in New Zealand at the time of their introduction, have now become popular throughout both private and public gardens within this country .

Key to this notion of a repository is the range of individual rhododendron taxa held within the collection, both vireya and asiatic, and in the case of the Pukeiti collection the large numbers of these are wild sourced and feature prominently on the Red List of Rhododendrons 2011. The Red List itself catalogues the known status of the genus *Rhododendron* at a given point in time using the following classifications; Not Evaluated, Data Deficient, Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct in the Wild and Extinct. Shown in the graph are the numbers of *Rhododendron* taxa grown at Pukeiti represented on the Red List. It is poignant to note that our collection contains six species endangered, five critically endangered and one species known to be extinct in the wild.

Their value is further enhanced by our holding of clear and accurate records of provenance within the database system used to monitor and document all of the plant collections that make up the garden. The vireya collection in particular is second only, by the range and number of species grown, to that of the Royal Botanic Gardens Edinburgh. And nowhere is its value better highlighted than by the 102 accessions known to be at risk in the wild.

Couple this with the environment that is Pukeiti and we have the ideal growing conditions for a large and diverse number of *Rhododendron* species and hybrids giving us the opportunity to educate, expand the collection through strategic management and provide thoughtful and innovative interpretation for all our visitors.

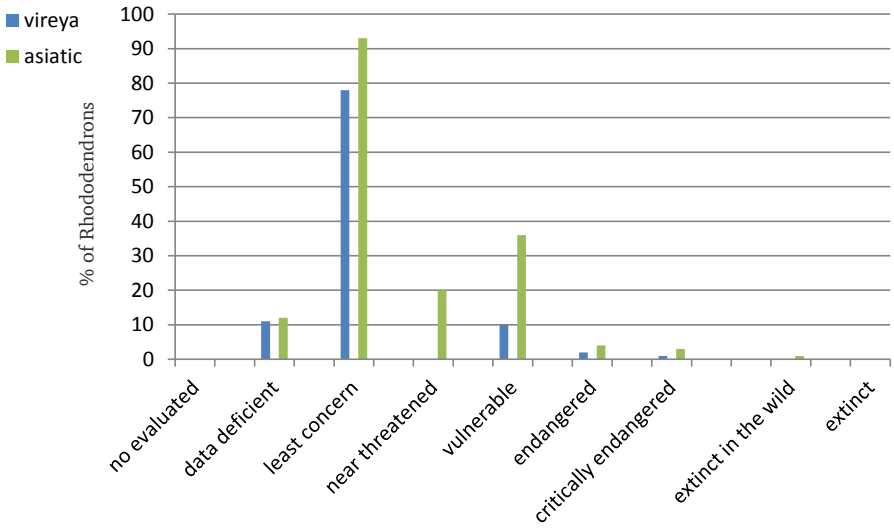
As further research into the genus continues the status of some of the collection will invariably change, with perhaps more species added to the greater-at-risk classifications. The ever changing threats to the ecosystems/ habitats of the genus means that the considered responses by ourselves and other botanical gardens can have a positive effect, increasing the value of such collections. Therefore we are tasked not just with the preservation of what we currently grow but also with looking to extend further the range of species grown here. It is of equal value for the collection to grow as genetically diverse a range of species as possible, ensuring that the gene pool within the garden does not stagnate.

There is a need to continue preserving the collection through propagation and renewal, necessitating replacement of stock which become less vigorous and cease to thrive.

We must continue to develop and nurture relationships with other botanical organisations to facilitate exchanges of material whenever possible.

Recognizing that whilst Pukeiti is a good environment for the cultivation of rhododendrons there is a limit to the range of species that will grow happily there and so careful consideration needs to be given each time a new accession is to be introduced to ensure that it will in fact thrive without requiring manipulation of the growing conditions to do so.

Classification of the vulnerability of Rhododendron species at Pukeiti



By gathering in as wide a genetic range as possible from as many wild collected sources as possible we guarantee the longevity and value of the collection. Ensuring this plus retaining accurate collection records of both new and old material within the database guarantees Pukeiti's place as a repository for the future of the genus.

Andrew Brooker

1

2

1. *R. kanehirai* form Northern Taiwan, now extinct in the wild

2. *R. elliottii* grown from seed collected by Kingdon Ward under the collector number KW 20203

3. *R. macabeanum*, the best yellow form grown from cuttings supplied by George Huthnance. There are a number of other clones grown at Pukeiti

AMERICAN RHODODENDRON SOCIETY CONVENTION - SEATTLE

Anderson garden - Mt Ranier

We had read the guidebooks before leaving for the American Rhododendron Society Convention in Seattle (well Seatac to be precise - a city in its own right between Seattle and Tacoma in Oregon). The guidebooks said that Seattle is also known as the 'Emerald City', reference to the frequency of rain in this part of the USA.

Flying into Seattle the emerald green of the trees and forests were the predominant landscape feature with Mount Ranier glistening with its coating of spring snow and the mountains of the Olympic Peninsula to the west.

We were guests of Fred and Ann Whitney (NZRA and Pukeiti members) and through Fred, as Convention Chair, Brian was to speak at the Convention on New Zealand hybrids.

A day prior to the Convention we had the pleasure of visiting the Rhododendron Species Botanical Garden (www.rhodygarden.org) at Federal Way and attending the Annual General Meeting.

The garden covers 9 hectares and is home to more than 700 species making it one of the largest rhododendron species collections in the world. A truly impressive garden with most species growing very happily in the dappled shade of the Douglas firs and western red cedars on the property.

When we visited *R. rex* was in full flower with trusses sitting on a regal shoulder of perfect leaves. *R. fortunei* was also flowering well as were *R. yakushimanum*, *R. edgeworthii*, *R. vaseyi* and *R. lutea*.

Smaller leaved rhododendrons were also growing well with *R. calostrotum* ssp. *keleticum* and *R. keiskei* forming ground covering mats. *R. williamsianum* was showing off its chocolatey new growth covering a beautiful mounded plant.

In recent years the Rutherford conservatory has been built (covering nearly 500m2) and now houses the collections of vireya and tender species displaying such a wide range of different characteristics. Of note in the conservatory were *R. boothii* with its hairy leaves and red new growth, *R. rubineiflorum* from Papua New Guinea forming a ground cover due to its underground runners, *R. excellens* from Vietnam and *R.taxifolium* from the Philippines with its distinctive foliage, almost like pine needles.

The garden continues to evolve with companion planting adding to the general interest of the garden.

1

1. *R. lutea*
2. *R. vaseyi*
3. *R. rubineiflorum*
4. *R. taxifolium*

2

3

4

The blue meconopsis are now well established in an area of the garden and a Victorian stumpery has been created adding further interest.

The Convention ran simultaneous lecture programmes and garden visits. While we were unable to visit the Whidbey Island garden of hybridizer Frank Fujioka it did mean that we were able to attend the lecture on bonsai by Dave DeGroot of the Pacific Rim Bonsai Collection which is housed adjacent to the Species Foundation Garden. Many rhododendrons are suitable to this style of cultivation which is an art form. As gardens are downsized or if health dictates less active garden participation bonsai is an opportunity that should be considered.

The Convention also had a display of member's blooms and a sale of plants. The plant list at the sale was covetable but of course we could only look on with envy at the range of plants available but we did at least purchase a couple of books to come back in the suitcases.

We also attended the lecture by Kristian Theqvist from Iceland on hardy hybridizing and examples of rhododendron cultivation in Iceland in what many would consider to be the most trying of climatic conditions.

Three other gardens of particular note that we visited as part of the Convention were the Anderson Garden, Soos Creek Botanical Garden and PowellsWood, all very different but stimulating gardens.

The Anderson Garden *(www.eskimo.com/~enumclaw)* is the garden of rhododendron enthusiasts established in 1961 and now has passed to the next generation of the Anderson family. The most predominant landscape feature of the garden was the magnificent vista that one is met with when rounding the house onto a perfect lawn leading the eye to Mount Ranier in the distance which we saw on a cloudless day. The one and a half hectare garden is planted with around 3,000 rhododendrons and 1000 companion plants. Unfortunately a series of snow-ice-wind storms in January 2011 caused considerable damage with many of the large shelter and shade trees being damaged or destroyed. Small plants and trees were continuing to recover but, as is so often the way, will ultimately benefit from this enforced pruning.

The Soos Creek Botanical Garden *(www.sooscreekbotanicalgarden.org)* was only opened to the public in July of 2011. Set on nine hectares it was originally established as a private garden in the 1960s and later extended with more intensive development since the 1980s. With ponds and birdlife and a wide array of native and exotic planting this was a garden full of interest from the smallest of plants to a wide variety of trees and shrubs including a good selection of rhododendrons and azaleas.

PowellsWood (www.powellswood.org) was also not a specialist rhododendron garden but a newly refurbished and reinvigorated garden, in fact the landscaping contractors were departing from the exit as we were coming in the entrance to the garden. PowellsWood was established as a private garden in the late 1990s. The original property had been used for years as a dumping ground and it took two years of rebuilding the soil before planting could be commenced. The property has a natural contour which has been used to advantage in creating different levels and gardens within the garden. It was interesting to see the use of many New Zealand natives including cordyline, phormium and astelia in some of the new plantings within the garden. The garden was extensive with tulips providing a fine display in the spring garden and many very nice specimens of acers displaying their fresh new growth.

A special garden that Helen and I visited with Fred and Ann immediately post convention was the Elisabeth C Miller Botanical Garden *(www.millergarden.org)* on the shores of Lake Washington in Seattle. The garden is situated in an exclusive gated community (Bill Gates is one of

the neighbours) and visitor numbers are strictly limited to comply with the community rules so we felt privileged indeed to have the chance to visit and meet the Curator Richie Steffen who visited New Zealand a few years ago.

The garden has great charm and appeal set around a relatively modest home (compared to its neighbours) with a series of terraces on the sloping site down towards the lake front with a collection of around 4000 different species. Elisabeth Miller was a renowned plantswoman and a collector of choice plants as well as a philanthropist across a range of horticultural areas. Following her death the garden was established as a charitable trust in its present form with the garden being maintained along similar lines to that which she managed. It was refreshing to see a garden not being 'preserved' as it once was but continuing to evolve and develop as Richie and the team consider that Betty would have done if she was still alive.

The range of plants was extensive with a fine representation of rhododendrons (*R.* 'Loderi Diamond' and *R.* 'Noyo Chief' flowering well in the upper garden) and other ericaceous plants as well as collections of epimediums, hepaticas, ferns and many other plants. We were there for too short a time but plants that particularly caught our eye were *Quercus pontica* (Pontic Oak), a charming group of *Tulip batilinii* "Bright Gem', a campanula relative *Phyteuma nigra* and the ground cover planting of *Podophyllum* 'Spotty Dotty'.

On leaving Seattle we made our way south to Portland where we visited the Crystal Springs Rhododendron Garden and the Portland Japanese Garden *(www.japanesegarden.com)* before crossing the border to Canada and a visit to the Butchart Gardens *(www.butchartgardens.com)* on Vancouver Island. This world famous garden was established over 100 years ago on the site of a quarry. Although it is renowned for the impeccable bedding displays the quality of the trees and shrubs was also to be admired. We visited under perfect conditions and the massed displays of tulips were a sight to behold as were the meconopsis and acers. The only frustration for those of us who like to scribble names in our notebooks or to record photographs was that nothing was named however we had to remind ourselves that this was a display garden rather than a botanical garden.

At the conclusion of our trip we visited the Van Dusen Botanical Garden *(www.vandusengarden.org)* in Vancouver. This garden set on 22 hectares is regarded as one of the top ten public gardens in North America.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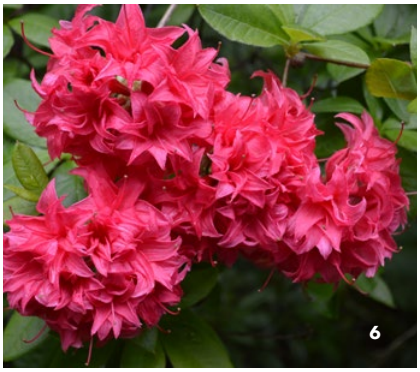
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5. *R.*' Noyo Chief'
6. *R.* 'Homebush'
7. *R.* 'Crest'
8. Meconopsis
9. *R.* 'Whitethroat'
10. *R.* 'Black Widow'
11. *Hosta* 'First Frost'


7

The garden has a series of lakes and ponds and collections of plants established as separate gardens within the site. The laburnum walk was breathtaking with an underplanting of purple allium and the deciduous azaleas were also at their best. Of the deciduous azaleas *R.* 'Whitethroat' and *R.* 'Homebush' were particularly impressive. The rhododendron collection had a good selection of both species and hybrids with one of the best plants of *R.* 'Crest' (which many still regard as the colour standard for yellow rhododendrons) that we have ever seen. Underplanting and companion planting was artfully done with many varieties of hosta such as *H.* 'First Frost' and other choice plants complementing the broader selection of trees and shrubs. A visit of a couple of hours was far too short to do justice to this garden.

The quality of the gardens that we saw in Washington and British Colombia was impressive and


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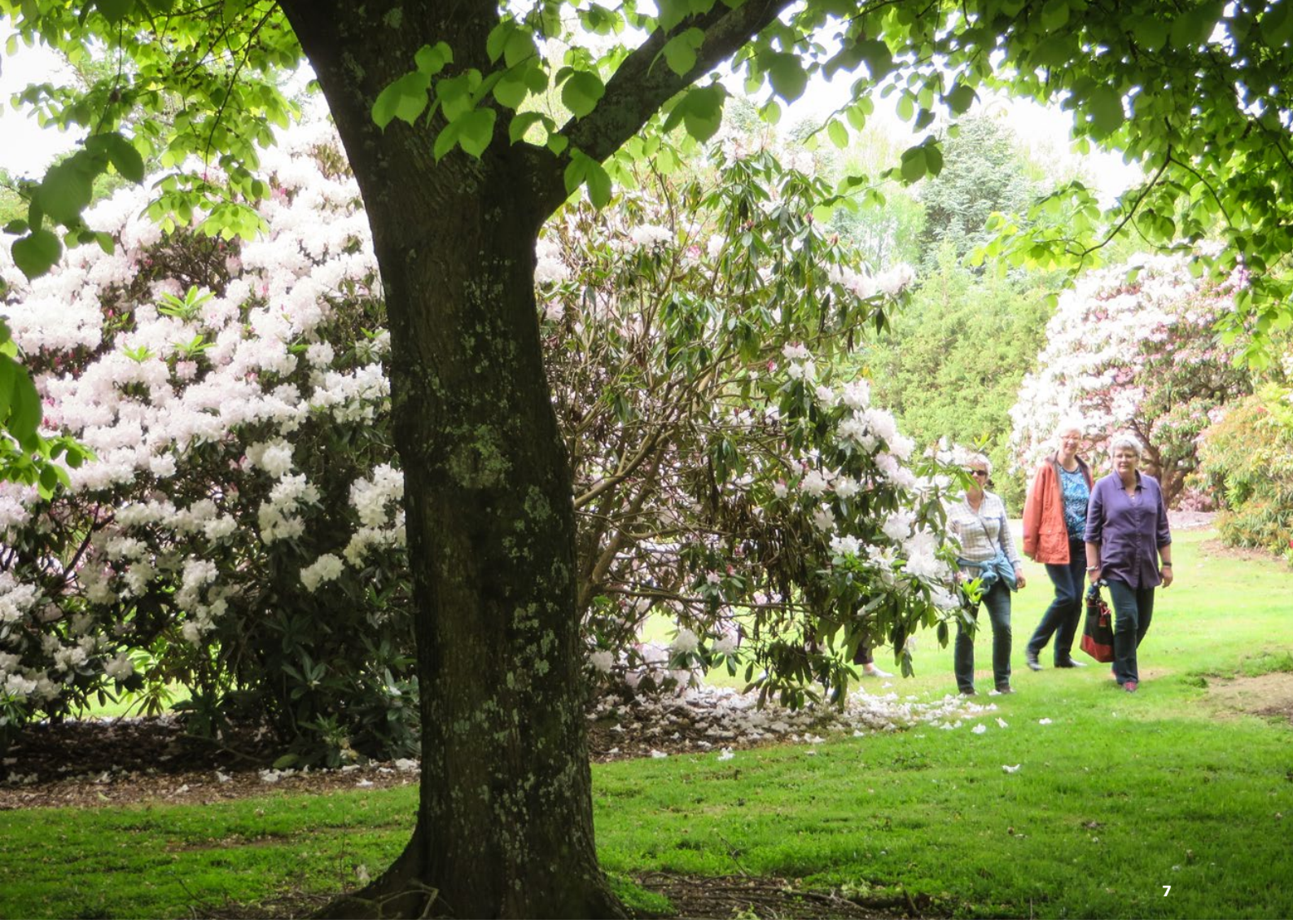
HERITAGE PARK

This was established by the Rhododendron Association in 1969, and in 2006 the Heritage Park Rhododendron Trust was formed to take ownership and management of the park. Key among the over 1500 species and hybrids is the deciduous azalea collection bred by Dr Yeates. one of the founders of Heritage Park. It also incorporates a trial bed for NZRA selections.



1. Lake skirted by deciduous azaleas
2. *R.* 'Charlotte de Rothschild'
3. *R.* 'Kit Collier' a hybrid developed and registered by Gordon Collier, Patron of Pukeiti
4. *R. arboreum* ssp *zeylanicum* (from Sri Lanka)
5. Irises feature in the herbaceous border
6. Trial Bed, *R.* 'Eric's Triumph' being admired
7. A walk through the collection
8. Hybrid deciduous azalea 'Crosshills Frills'
9. *R.* 'Purple Emperor'

ROS TO THE RESCUE
SAVING ENDANGERED HISTORIC RHODODENDRON HYBRIDS

In last year's NZRA Bulletin I wrote an article explaining the frustrations we encountered sending rhododendron cuttings to the UK. These were cuttings of Gill hybrids and were to assist with the restoration of the Garden of Tremough in Cornwall.

A Rhododendron Nursery once operated at Tremough and it was here that the Gill Hybrids were developed. Dave Garwood, the present Head Gardener at Tremough has researched the history of the garden and is endeavouring to replace the plants, especially the Gill Hybrids that have been lost over time. On searching the internet Dave found several Gill hybrids listed on our website and so made contact with us. It was decided the easiest and most cost effective way of sending the Gill hybrids back to Tremough would be in the form of cuttings. Dave put me in touch with Ros Smith at Duchy College in Cornwall who would do the propagating. Ros gave clear instructions as to what she required and after several frustrating incidents our cuttings finally arrived at her laboratory for micropropagation.

On a recent trip to the UK Bernie and I were able to spend four days in Cornwall based at the Penryn University Campus which the Garden of Tremough forms part of. Dave assured us he would take care of the four days we were there and he certainly did that, ably assisted by Toby the Deputy Head Gardener. One of the many special events Dave planned for us was going to Duchy College to meet Ros and gain an understanding of the work she does. Prior to our visit we had no idea of the importance of her work.

Ros operates a conservation programme focussing on historic rhododendrons under threat by age, disease and climatic stress. The propagation programme started in 2005 in order to conserve historic rhododendrons in Cornish gardens, but has since received plant material from other regions. From our own experience we have found cuttings taken from old or diseased plants are very difficult if not impossible to propagate. For this reason Ros uses a technique called micropropagation. Within a very carefully controlled laboratory kept at 22 C, tiny plantlets are produced from small pieces of plant material such as vegetative buds and shoots or floral buds. This explains why Ros asked for the leaves to be removed from the cuttings we sent. At the time it seemed a little odd sending 'sticks' with just tiny leaf buds. Through experimentation Ros has found there is an optimum time to collect material for micropropagation. Fortunately the cuttings we sent at the end of August 2011 were at the ideal stage. A large number of plants are produced from a small amount of material but it does take a minimum of two years to produce rooted plantlets.

In the last 10 years the loss of rhododendrons in the UK has become much greater as a result of the fungus-like disease *Phytophthora ramorum*. A while after the discovery of this disease the presence of *Phytophthora kernoviae* was also confirmed. Two diseases were now taking hold particularly in the mild, humid climate of south west England. Cornwall has the highest number of infected sites in England and Wales. *Phytophthora ramorum* is the main problem and was found in established rhododendron plantings mainly in public and historic gardens, also in unmanaged woodland sites. Soon after the discovery of *Phytophthora ramorum* it became evident that the invasive *R. ponticum* was a highly susceptible disease host. While being driven around Cornwall Dave pointed out large areas where *R. ponticum* had been removed. He emphasised how difficult it is to destroy *R. ponticum*. After being dug out, left to dry then burnt more or less to ash it will start to grow again.

Spores of *Phytophthora ramorum* are produced on infected leaves and distributed by various methods; wind, rain splashes, pruning, waterways, leaf litter, footwear. Rhododendrons are not the only plants affected by this disease. Camellia, magnolia, pieris, viburnum, Japanese Larch have all been found to be susceptible.

The signs of infection vary with the host plant, from leaf blight, leaf and shoot lesions to shoot die-back. However other diseases and environmental conditions can cause similar symptoms.

The spread of *Phytophthora ramorum* prompted the National Trust to survey, map and record their most valuable plant collections. This gave a better understanding of which plants were threatened and needed safeguarding via propagation. This disease has created even greater demand for Ros's expertise. The Duchy College micropropagation unit is the only FERA (Food and Environment Research Agency) licenced facility to process infected material. Any infected material arriving at Duchy College is treated in a dilute solution of bleach and as a result the plantlets produced are free of phytophthora.

Dave had arranged for us to visit several Cornish gardens. We were met and taken around by the Head

Gardener of each - we almost felt like royalty! From the conversations that took place between Dave and the Head Gardeners we became very aware of the enormity of the *Phytophthora ramorum* problem and how important it is for any plants found to be infected to be removed.

While visiting one of the Cornish National Trust gardens we were invited to view a private garden with an amazing collection of species rhododendrons. We felt very privileged to be given the opportunity, as even Dave had not been to this garden. The owner gave us a wonderful tour explaining the history of many of the plants. While walking around he gave Dave a cutting of *R. viscidifolium* and asked for Ros to try propagating it. I wondered "why this particular plant?" The reason was that it was raised from the original seed collected by Ludlow, Sherriff and Taylor in Tibet, and it is thought that it has not been collected since. This form of *R.viscidifolium* is known to be very difficult to propagate hence is rare in cultivation although as the owner said "it is a wonderful plant."

On our arrival at Duchy College Ros greeted us with a cuppa and a biscuit. Dave had warned us this would be the case. She was very warm and welcoming and had 'our' plantlets in agar trays out for us to view. Seeing these little plants that had been produced from wood from our nursery gave us a real thrill. They were just at the root forming stage.

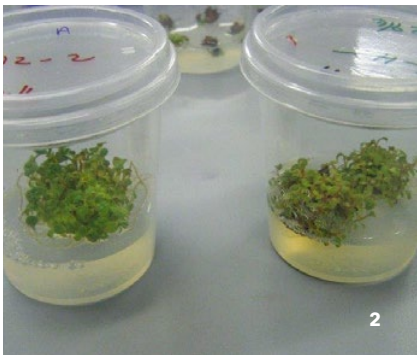
Since returning home we have been informed that Ros is now propagating some of the NZ *R.maddenii* hybrids. There are UK rhododendron enthusiasts keen to have access to these. We and other NZ nurseries have sent plants to a private rhododendron enthusiast in Wales and he has provided Ros with cutting material. On our travels we visited this Welsh garden and it was extremely pleasing to see 'our' plants looking so happy.

The responsibility of saving endangered plants could not be in better hands.

Ros operates a very efficient laboratory single handedly and is ultra conscious of the importance of her work. Although our visit to Cornwall was relatively brief we saw firsthand several examples of the wonderful role Ros is playing in rescuing plants, not just rhododendrons, that otherwise could be gone forever.

Not only is she rescuing endangered plants, she is aiding the distribution of New Zealand hybrids.

Joy O'Keefe



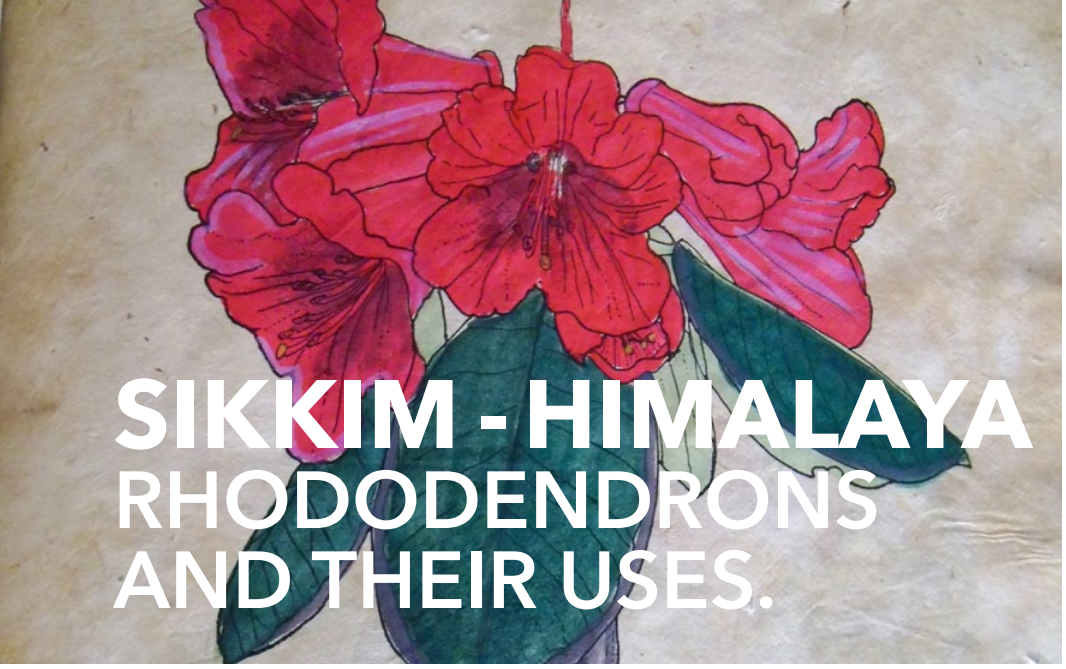
1. *R. viscidifolium*

2. Plantlets growing in a sterile flasks

3. Micropropagation Unit at Duchy College, Cornwall

THE GOODWIN DELL

The Dell at Pukekura Park New Plymouth was named in recognition of John (Jack) Goodwin who was the curator of Pukekura Park and Superintendent of Parks in the New Plymouth for 26 years. He also planned the early planting at Pukeiti and served for many years as the Patron. The Dell features mainly Ilam azaleas and has recently been refurbished.



SIKKIM - HIMALAYA RHODODENDRONS AND THEIR USES.

On a recent visit to Michael Hudson my eye caught on a Collectors Edition of a book titled "Sikkim-Himalayan Rhododendrons". Two things caught my attention: the first was that the book was published on daphne paper; and the second was that it contained 49 illustrated plates taken from field images drawn by the co-author Udai C. Pradham.

Glancing through the text my eye was also drawn to the folklore of the Lepcha people of Sikkim, the various recorded uses of the rhododendron species and the daphne paper itself.

The book provides a revision of all 36 species of rhododendron that grow in the Sikkim –Himalayas along with a series of hand coloured plates. These in themselves are remarkable in that they were initially sketched in the field by Udai Pradham, then later a 15 year old school girl, Hemlata Pradham, spent her winter vacation rendering the field sketches and paintings to ink drawings from which the line blocks for this work were prepared. While the resulting images are perhaps rustic and colours used best described as gaudy, the species illustrated are all recognizable.

These rhododendrons, the majority of which Sir Joseph Hooker introduced into cultivation after his epic expedition to Sikkim from 1848 -1850, are each treated with a useful description and a range of interesting details and background. The introduction for *Rhododendron lindleyi* for example tells off its first description in the Gardeners' Chronicle in 1864, and the early confusion between it and *R. dalhousiae*. So it is a useful book to browse and learn along the way.

The first thing that strikes you as you pick up this book is that it is very light; certainly no where near the weight of traditional coffee table books. The paper is a pale fawn colour and you can clearly see the fibres in this traditional paper known as daphne or Nepal paper. Despite the seemingly coarse fibre that makes up the paper the print images on it are very sharp and clear. So how is this paper made?

The bark from *Daphne bholua, D. papyracea, D. involucrata*, and *Edgeworthia gardnerii* are all used. The fibres in the bark of all these are very strong as any gardener who has tried to pick a stem of daphne without cutting it will know. So the bark is stripped from branches collected and boiled in an alkaline solution containing the ashes of oak to soften the bark. This is then pounded to pulp and made into slurry. I have watched paper makers in Nepal as they dip their screens into this slurry ensuring an even cover then taking the screens and placing them on racks to dry in the sun. Once the paper is dried it is peeled off and made ready for use.

Daphne paper is remarkable for its durability and its smooth silky surface. It will not crack or break when folded and is resistant to moths and unaffected by humidity as well as decay resistant if it gets wet. Little wonder that for over ten centuries this traditional product has been used for the keeping of genealogical records and deeds, official government documents, and Tibetan manuscripts.

Interestingly the introduction to this book outlines the rationale to publish this work on daphne paper as drawing attention to the need to conserve all of these species so that the traditional craft can be perpetuated. Each of the species used are medium to large shrubs often found on the outskirts of lower altitude villages where land for cultivation takes precedence. Oddly enough only 261 of the 311 copies of this limited edition were able to be published on daphne paper owing to a short supply. The images in Michael Hudson's copy Number 129 are hand coloured.

A short section is devoted to folklore. The Lepcha people have one such story about *R. arboreum* (Kemo Reap) from the higher elevations of Kanchenjunga and

1. *R. lindleyi*

The rhododendron images in this article are taken from plates hand painted from field images drawn by co-author, Udai Pradam, of the book "Sikkim-Himalayan Rhododendrons"

the daughter of *Alnus nepalensis*, (Songru Pandi) from the lower elevations where you find edgeworthia. Songru Pandi was a towering beauty bedecked in her costume of elegant catkins, whose father refused to allow Kemo Reap to make an offer of marriage to his daughter on the grounds that he was a dwarf. Kemo Reap was allowed only one glance of Songru Pandi and returned home to the Kanchenjunga Mountains bereft, and resolved to spend the rest of his life in quiet contemplation.

Despite her father's rejection of Kemo Reap as a mere dwarf, Songru Pandi heard about the encounter and decided to set out for the high mountains to find out about this man for herself. Spring had just come and when Songru Pandi arrived at Kanchenjunga there stood Kemo Reap in full bloom brilliantly attired in crimson and scarlet spendour. She was dazed by his beauty but shocked to find that Kamo Reap had decided never to marry but to spend his time in quiet contemplation. In desperation she ran homeward and jumped headlong over a precipice.

It is for this reason that Lepcha people believe that *Alnus nepalensis* grows on steep landslip areas where it is a nitrogen fixing colonizer always below the level of *R. arboreum* and never with it.

Another intriguing section is devoted to a variety of uses of rhododendrons. Perhaps the best known is that of the aromatic foliage of *R. anthopogon* which is harvested and mixed with *Juniperus recurva* to provide incense for Buddhist practices. Early in the morning one can see copper and brass incense burners making their daily offerings at monasteries and outside the houses of the Buddhist people.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Rhododendron wine is made from the wilted petals of *R. arboreum*. The juice is fermented with yeast and molasses for up to 30 days. Freshly made the wine is pleasant to taste and is supposed to prevent altitude sickness. Dried flowers of this species are said to be very effective in checking diarrhoea and blood dysentery, a condition not uncommon in the Himalayas.

Perhaps more importantly the close grained wood of *R. arboreum* is used for making pack saddles for load-carrying on yaks, buffalo /yak hybrids and ponies. It is also used for the handles of the khukri knives, the all purpose knives of the Himalayan people. Khukris are seen everywhere and are perhaps best known as the traditional ceremonial knives of the famous Ghurka soldiers. With a semi crescent shaped blade weighted and thickened on the outer edge they are used every day as a machete for cutting down foliage of trees and shrubs for animal feed and every other purpose down to cutting up seed potatoes for planting. I have seen children as young as five years using them as a play thing whittling wood. Their razor sharp blades are effective in slaughtering animals and so they are an all purpose tool of the Himalayan people.

Another quote dating back to 1892 cites the bark of *R. arboreum* and the leaves of *R. campanulatum* as being exported to the plains and mixed with tobacco and used as snuff.

The corollas of R. *cinnabarinum* are eaten by local children and have a sweet-sour taste despite the leaves and pollen being poisonous to grazing animals. The corolla is also used in making jams by the Buddhist Lamas. In the north east of Sikkim the Lachen people fry the corolla to a tasty delicacy.

R. dalhousiae is dreaded by local people as the leaves cause fatal poisoning to cattle. Just as well it is usually epiphytic!

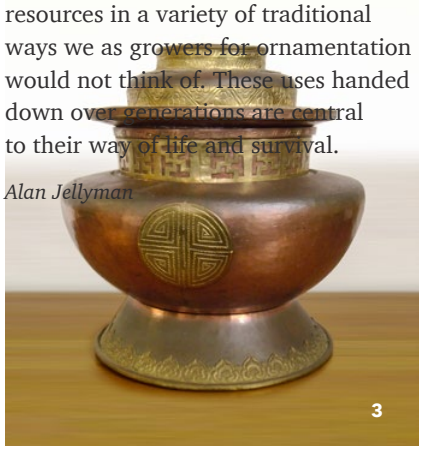
The rough leaves of *R. falconeri* and *R. hodgsonii* are used for the packaging of apples and carrying the pulp of *Arisaema griffithii* corms for bread. The hard un-splitting wood of the *R. hodgsonii* makes cups, spoons and ladles, kukhris handles, and the "T"- topped walking sticks so essential to every porter carrying loads of produce along the mountain trails.

Even the dense tomentum on the undersides of *R. fulgens* is scraped off and used as wick for lighting fires.

Finally *R. thomsonii* is boiled to make a highly poisonous extract used as an insecticide in the villages of north east Sikkim. According to David Leach this compound is toxic to humans and known to cause depression of blood pressure, shock, and death!

Without doubt this work by Udai C, Pradham and Sonam T. Lachunga, published in 1990, provides a refreshing look at the rhododendrons of the Sikkim Himalayas and is a worthy body of work on the genus. Combining this with folklore and other cultural knowledge reminds one how each cultural community use their resources in a variety of traditional ways we as growers for ornamentation would not think of. These uses handed down over generations are central to their way of life and survival.

Alan Jellyman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2. *R. hodgsonii*

3. Nepalese bowl carved from rhododendron wood

4. Khukri ceremonial knife with a handle carved from *R. arboreum*

5. *R. niveum*

RHODODENDRON NIVEUM Hook. f.

Rhododendron 'Dame Cecily Pickerill'

A 'MUSEUM' PLANT – *RHODODENDRON* 'DAME CECILY PICKERILL'

An eye catching red flowered *Rhododendron* 'Dame Cecily Pickerill' is rarely seen in gardens or collections. For many years I had hoped to obtain a plant, and for three reasons. The first because I am always keen on behalf of the Canterbury Rhododendron Society to add to the 'museum' group of plants within their collection; the second because it is from the stable of the late Ron Gordon who I was fortunate to know as mentor, and plantsman extraordinaire.

The third reason is a personal pleasure; plants with associations with special people, places or events are to me the tapestry of knowledge on which we hang our memories, giving an extra dimension to any plant. The humblest plant in my own garden, if rooted long ago from a posy given on the birth of a baby is special.

The pedigree is 'Rubicon' ['Noyo Chief' x 'Kilimanjaro'] x 'Kilimanjaro' [*R. elliottii* x 'Dusky Maid']; it is described as having a compact habit, lanceolate dark foliage, and tight trusses of very deep red flowers with black spotting. In the maritime Banks Peninsula climate, the plant flowers earlier than 'Rubicon'. Each flowering season I was invited to visit the plant in the Cashmere Hills garden of its admiring owner. When he became seriously ill, I was invited to watch the sun go down over the Southern Alps in the company of 'Dame Cecily', to take photos for the CRS data base, (the plant was in dense shade and needless to say so were the photos), and instructed to return the following week and uplift 'Dame Cecily' for removal to her new home within the Canterbury Rhododendron Association garden at Charteris Bay. I am aware that among the Pukeiti and NZRA readers of The Rhododendron are many who attended Otago Medical School with the late Bryce Jordan B.D.S.

Dame Cecily Pickerill O.B.E. and her husband Dr H.P. Pickerill created the garden at 'Beechdale' near Silverstream. She writes of their establishment of the garden in Garden Heritage of New Zealand, where she notes *R. yakushimanum* as her favourite. Dame Cecily's father had been Vicar of Taihape, so perhaps that was where the friendship with Ron Gordon began. During World War II she worked in the UK with her husband Dr H.P. Pickerill, helping soldiers and airmen suffering from burn scars. Together they established Bassam Hospital in Lower Hutt; her particular field in plastic surgery being the cleft palate. Her obituary noted that she had operated on an estimated 9000 children.

Reference: Mary Barnard (editor) 'Garden Heritage of New Zealand. Pub. 1984.

TAKING THE CANTERBURY RHODODENDRON SOCIETY GARDEN TO THE CITY

The Society has, since the 1970's, displayed blooms in a range of ways from standard show bench, to creative and winning efforts at Ellerslie Garden Show. This year we decided to take our garden at Orton Bradley Park on Banks Peninsula to town, and create a display at our combined show with the New Zealand Alpine Garden Society.

Great branches and sprays were picked, loaded into a large car, and transported over the hill (Gebbies Pass) to spend the night in big containers, with plenty of water and water spray. At first light another forty mile journey saw the blooms at the Horticultural Hall, opposite the Christchurch Hospital.

Two weeks previously huge clumps of cardiocrinum with pre-flowering stalks, were dug from the CRS garden, carted over the hill - that other forty mile journey - and left to recuperate in the President's vegetable garden. These were part of the well packed car load which made its way to the Horticultural Hall, along with a teenage sized *R.* 'Teddy Bear'.

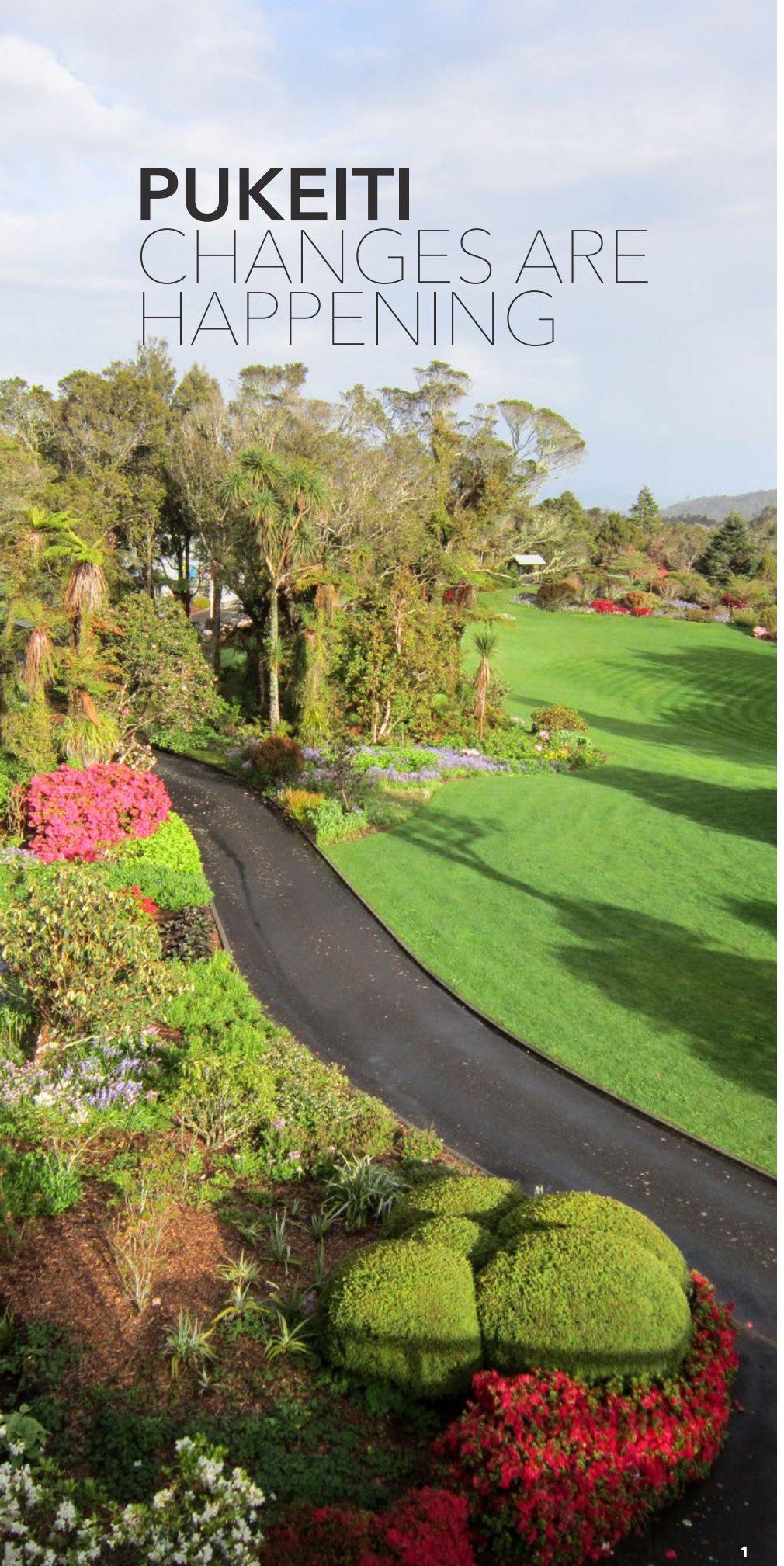
The creative people of our CRS team then took over, and the result was a display which delighted all who viewed it. The cardiocrinums looked fresh, cool and green as though they always lived in a hot busy hall; the early flowering species, including a number of stems of *R. genestierianum*, and hybrids ranging from *R.* 'Dalkeith' to a number of *R. macabeanum* hybrids were astonishing to the visiting public, their obvious pleasure making the effort worthwhile.

Thanks to Adrian Bliss and Robert Duns for photographs.
Kathryn Millar. Garden Chair.

1. *R. genestierianum*

2. Rhododendron display, Horticultural Hall Christchurch

PUKEITI
CHANGES ARE HAPPENING



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1. The Pukeiti Drive showing the extension of the main lawn

2. Graham Smith surveys the Hybrid Block and the new way-finding signs

3. *R.* 'Hydon Dawn' and The Lodge

4. *Cilvia sp.* good yellow form in the display house

5. *Trillium tschonoskii*

6. *R. sinogrande*

7. The Pukeiti Board gathers to hear planned changes from Greg Rine on the new pathway through the Hybrid Block

8. *R.* 'Baron de Rothschild'

BEYOND THE RUBICON: CONSERVATION OF NEW ZEALAND RHODODENDRON HYBRIDS

All photographs accompanying this article are of New Zealand hybrids.

1. *R.* 'Rubicon'
2. *R.* 'Floral Gift'

NEW ZEALAND IS KNOWN AS AOTEAROA by the Maori, a name which means 'Land of the Long White Cloud' and derives from the fact that when approached from the sea, the land appears shrouded in low cloud. With this evocative image in mind, it is easy to picture the whalers and sealers of the southern oceans who had shore bases in New Zealand as early as the 1700s and were fortunate to trade with the Maori who grew sweet potatoes in their vegetable gardens.

European pioneers, pre 1840 – some of them farming squatters from Australia – by necessity put survival of themselves, their family, and animals before flower gardening and it was not until the late 1800s that a few wealthy settlers began establishing gardens such as those their families had on the great estates of the United Kingdom – bringing into New Zealand shrubs and trees of quality, usually in wardian cases, and occasionally as seed.

Rhododendrons are not part of the natural New Zealand flora, the first to arrive being those imported from the United Kingdom ex Hooker's collections.

New Zealand growers of rhododendrons enjoy a wide range of climate because the two main islands extend over a thousand miles in a north-south line with a maximum width of 200 miles, the west coast being wetter than the drought prone east coast. Summer is two months longer than in the United Kingdom, however out of season frosts following late snow on the Southern Alps can wipe out flower buds on camellias and magnolias, as well as rhododendrons. Many climate zones exist; in Auckland and Tauranga, vireyas may be grown with ease and a proliferation of registered seedlings has resulted. In sheltered micro areas throughout New Zealand may be found pockets where maddenias are grown in profusion – such might be valleys near Dunedin, or the valleys of Banks Peninsula near Christchurch, resulting in a number of registrations of excellent forms of selected species or first cross hybrids.

According to 1850s local legend, the first rhododendrons which came into the port of Lyttelton near Christchurch in the South Island, sat forlornly on the wharf awaiting their owner's arrival by horse and cart from his property in the foothills of the Southern Alps 60 miles distant. These plants, and their open pollinated seed were the parents of many fine hybrids and species seedlings still to be seen in the environs of country estates.

Conservation Methodology

When making decisions about preservation of historical rhododendrons (for the purpose of these notes, principally the hybrids) the oral history, now for the most part written, was invaluable. An early importation of significance was the packet of seeds brought to New Zealand circa 1860 by Sir John Cracroft Wilson of Cashmere Estate near Christchurch. In India he had served in what is now called Uttar Pradesh with its many hill stations at altitudes of 6000–7000ft where he collected seed of the Himalayan *Rhododendron arboreum*.

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Within the campus of the University of Christchurch is the Ilam garden and home of Edgar Stead from 1917 to 1950. His hybrids from the Cracroft red *R. arboreum*, named for location points in the garden, e.g. 'Ilam Kaka' was near the Kaka's (parrot) cage, are now at risk because they tend to be leggy, and not favoured. Their recorded conservation is in the hands of the Pukeiti Rhododendron Trust and also Heritage Park Trust, home to the original collections of the New Zealand Rhododendron Society.

The Canterbury Rhododendron Association is conducting an important exercise in conservation, assembling a collection which includes almost all New Zealand hybrid registrations and some species selections (Kingdon-Ward to the present day), with careful recording of the original crosses or collection numbers. For Canterbury, I continue to record the pedigree of plants as listed originally, resisting lumping in this respect; and being rewarded by unexpected matchings up with other plants from a seed pod distribution.

The Tannock Glen collections of the Dunedin Rhododendron Group situated on the outskirts of Dunedin City has similar objectives, and the Dunedin Botanic Garden has a proud history of plant breeding and selections of quality, currently growing from seed for distribution to collections, plants which may otherwise be lost to cultivation.

A few knowledgeable enthusiasts also maintain and add to their collections of significance as do proactive nurseries dedicated to the preservation and conservation of at risk plants.

Without researching and recording oral history from senior members of the Association over the past decade, we would by now have lost track of the whereabouts of many species and hybrids of significance – however many remain vulnerable. The general membership endeavour to stay vigilant, adopting realistic local conservation procedures. During the 1980s we became aware of how many registered and unregistered superior plants would be lost to recognition as their owners died, and also pressing was the need to record the whereabouts of named species forms.

In 1998, the publication of Crossing the Rubicon, a Handbook of New Zealand Raised Hybrids gave the rhododendron enthusiast information about rhododendrons developed in New Zealand. (An unexpected and ongoing benefit from advising on the preparation of a second edition has been members and growers providing information about where other New Zealand hybrids are located, whereupon we usually advise on the steps necessary to propagate such a plant.) Fifteen years after publication the NZRA Trials Committee and other discerning folk have realised that within the pages are potentially superb garden plants, and these, as Gordon Bailey notes later in this article, will be assessed for commercial potential.

In discussing preservation and conservation, I note that the hybrids developed at Ilam permeate the early decades of rhododendron hybrids in NZ, not least because so many successful breeders used seed or pollen or grew on open pollinated seedlings sourced from there.

In 1931, when the Rhododendron Association was formed in the United Kingdom, there were four New Zealand members including Mr Stead. He went on to be the Founding (1944) President of the New Zealand Rhododendron Association. During visits to the great UK gardening estates he observed the plants of collectors such as Hooker. Using his importations from the UK, most of them gifts, he was successful in breeding to New Zealand conditions (especially Canterbury with its hot dry and windy summers); registering plants with the RHS in London; and writing for their journals. Edgar Stead was instrumental in conserving "bloodlines" of precious first crosses; his practice was to load boxes of seedlings to give away into the boot of his car and, through visiting friends for Sunday lunch on country properties often over a hundred miles away, he encouraged the growing and conservation of

thousands of seedlings, the best of which can still be seen today. An acknowledged ornithologist, on one occasion he exchanged a bush canary egg for very special seedlings of ex Hooker introductions. Mr Stead registered many fine plants with the RHS and was very particular with selection criteria. The public visiting Ilam during open days are sometimes critical of plants without labels, and astonished when I supply the missing information – that the plants (never named) are from Mr Stead's rigorous selections: usually two for the garden, two or three for distribution to friends or sold and the rest destroyed. Friends always knew if they had the best or second best seedling of a cross.

Time passed and throughout New Zealand the collections and gardens of pioneering enthusiasts became part of city developments or were handed down in families where great care was taken of the plants but nothing was known of their breeding or which needed to be taken extra care of. In the period following the Second World War the newly established New Zealand Rhododendron Association (NZRA) (1944) was instrumental in encouraging conservation, although they may not have described it as such, and today we are proud of the success we have had in that field. Thousands of seedlings grown at Massey College (now University) were distributed to members; some fortunately were named and registered.

New Zealand now has stringent bio-security laws, making it close to impossible to introduce new material. All the more reason to search out through the Association's Trial Programme the best of the past and the present, thus providing new material for the rhododendron enthusiast.

The Trials Programme Initiative

We assess hybrids in a trial programme with the eventual outcome being successful introduction to commerce, and thus conservation. For many years

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the NZRA and the Pukeiti Rhododendron Trust awarded, on the recommendation of assessors, an Award of Distinction (AD). In recent years the Council placed all award proposals in abeyance, and commenced a trial programme. I invited Gordon Bailey president of the NZRA and also the NZRA Trials Committee to comment.

He writes: 'since 2005 the NZRA has been undertaking trials of New Zealand bred rhododendrons with the eventual aim of determining whether a plant was deserving of an Award of Distinction.

To be considered for an AD the plant would have to be easily propagated, and perform well across many climate zones in ordinary garden situations.

There are three trial sites reflecting the wide climatic variation experienced across New Zealand. The sites are Heritage Park Trust Garden at Kimbolton, (formerly the NZRA's Garden), Pukeiti Rhododendron Garden in New Plymouth and Marshwood Gardens, a private garden owned by Geoff and Adair Genge in Invercargill. Initially, bud wood was sourced from all manner of rhododendrons that someone thought would be good to trial, without much thought being given as to whether the plant would do well in general, in a garden situation, could be easily propagated etc. Many were just one-off favourite plants of well-meaning individuals.

As the trials progressed it became

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obvious that many of the early plants sourced for trial were not going to do well at all and struggled to score points, be it through slowness to flower, poor leaf quality, non-vigorous growth and the like. This brought about a re-think of how to choose future plants for trial.

It was agreed that the trials committee had a good in-depth knowledge of what plants existed across New Zealand that were locally bred and were actually good 'doers' and thus more likely to score favourably in a trial situation. In other words, why not start with something that may actually pass the test rather than something that hasn't a hope.

This is where we are at now. We do have rhododendrons from the earlier trial period that have passed and others are undergoing further evaluation. We run two evaluation score forms, one for hardy rhododendrons and the other for maddenias and vireyas due to the marked difference in growth and flowering habit between the two groups.'

Thus the NZRA has decided to identify plants of excellence, and promote those to a status of commercial popularity and thus safety. You may ask, as do I, what should we do about the hundreds of plants named, many of which are registered. For many years the flower was paramount, often on the show bench; folk waited for years for a nurseryman to supply their order, only to be disappointed when the plant was leggy or disease prone or hated sunshine.

So to sum up, we are looking at conservation of hybrids with the potential to be widely grown garden plants of excellence; and secondly, on an informal basis within the Regional Rhododendron Groups, the major collections as noted and through private individuals, we aim to preserve named hybrids.

We simply cannot do as King George VI did when he moved the fabled rhododendrons of Tower Court to the Valley Gardens, although just recently the Canterbury Rhododendron Association gave such a project a good try. They learnt that to place a 'rescued' collection within an existing collection compromised both; the outcome being formulation of a policy that the next time we are asked to relocate a collection in its entirety, we will find new homes for the best plants rather than relocate them all. However, had we not done so, the last remaining plant of *Rhododendron* 'Dame Cecily Pickerill' would have been lost forever.

Preservation of the unique collection of 'made in New Zealand' rhododendron hybrids is important, the 'what to do' of 'conservation' is difficult and even more important.

Kathryn Millar and Gordon Bailey

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Kathryn Millar is a Past President of the New Zealand Rhododendron Association and author of 'Crossing the Rubicon', a Handbook of New Zealand Raised Hybrids

Gordon Bailey is immediate Past President of the New Zealand Rhododendron Association.

This article first appeared in the RHS Rhododendrons, Camellias and Magnolias Handbook 2013.

The photographic images are different from those which were published in the original article.

3. *R.* 'Ilam Cream'
4. *R.* 'Irene Stead'
5. *R.* 'Lemon Lodge'
6. *R.* Eric's Triumph'

A FAMILY TRADITION
A TRIBUTE TO THE COX FAMILY

Kenneth Cox with his father Peter

R. edgeworthii at Pukeiti grown from Cox collected seed.

2013 is a special year for the Cox family of Glendoick Gardens near Perth, in Scotland. In May they celebrated the 60th anniversary of the nursery and the 40th anniversary of the award-winning garden centre. In June it was the golden wedding anniversary of Peter and his wife Patricia. Glendoick is the home of Britain's largest selection of rhododendrons, expansive garden centre and award winning cafe. Three new double flowered decorative azaleas have been created to celebrate the 60th Anniversary.

The first plant hunters

Members of the then exclusive Rhododendron Society, which was formed in about 1916, commissioned daring plant hunters to travel to the Far East to collect seeds of new species. In 1919, Euan Cox teamed up with botanist Reginald Farrer on a plant-collecting expedition to Upper Burma. The trip was a success and yielded several important discoveries. It changed Euan's direction in life and so began the Cox family's nigh-on 100 year association with rhododendrons.

Following Farrer's death in 1920, it fell to Euan Cox to catalogue their finds. His interest in rhododendrons grew and by 1929 he was editing the magazine *New Flora and Silva*, which charted all the plant introductions flooding into the West from international plant hunting expeditions.

Euan began bis own rhododendron garden at Glendoick and with Peter, his son, established their rhododendron nursery in 1953. Peter's passion for discovering new species of rhododendron took him on numerous hunting missions across China, Nepal, India and Burma.

By the late 1940's Peter started breeding dwarf rhododendrons as there was an interest in miniatures, more suited to a small garden. This is what the nursery specialises in and now are grown all over the world.

Family footsteps

At the age of four Kenneth's party trick was to go around naming rhododendron species. He had also caught the plant-hunting bug from his father, Peter, and his grandfather, Euan, and has led many international expeditions, most notably to the remote Arunachal Pradesh region of lndia.

His proudest achievement is the discovery of a new species of rhododendron called *R. titapuriense*. It has a white flower and distinctive red underside to the leaf. Kenneth named it after 'Titi Puri', the pilgrim route the team were following the day they made their discovery.

Arunachal Pradesh, just across the border from Tibet, an unexplored area, produces enormous 20m rhododendrons. Clambering around the Himalayan Mountains brings its dangers such as falling off a cliff or down a ravine or when being hauled up with rope by the locals. The Coxes also often work in politically sensitive areas and have been arrested a number of times, despite always having a permit to be there. New material brought back has not flowered yet and Kenneth suspects they have found another new species.

Perhaps one or maybe both of Kenneth's sons will follow in the family tradition.

Note from Editor, Pukeiti grows a number of species collected by the family members and Kenneth has spoken at both a past NZRA Annual Conference and the Pukeiti Annual Meeting.

NEW REGISTRATIONS

THE FOLLOWING THREE HYBRIDS HAVE BEEN ADDED TO THE NEW ZEALAND RHODODENDRON REGISTER.

373 *R.* 'Stead's Best'

R. nuttallii x *R. lindleyi*

Hybridised and grown by Edgar Stead of Ilam Gardens, Christchurch before 1950. Registered by University of Canterbury where Ilam Gardens forms part of the University campus.

Trusses of four tubular funnel shaped flowers with lobes with wavy margins. Buds red at tip, green in the mid-section and cream at the base, opening to white with distinctive yellow colour at the base of the inside corolla. Distinctive red new leaf growth aging to mid-green wedge-shaped cuneate leaves with an obtuse rounded apex. Strongly scented with paper like bark. Frost tender when young. Grows to 4m high by 2.5m wide in 60 years.

374 *R.* 'Daphne's Pearl'

R. 'Lemon Lodge' x *R.* 'Alice Hennessey'

Hybridised, named and registered by Tom Garbutt of Oamaru and grown to first flower by Jean Leggett of Waianakarua, North Otago.

A conical shaped truss of 15 openly campanulate flowers with seven lobes with wavy margins. Flowers in pure white with no blotches or spots but having a green calyx. Large ovate leaves 145mm long by 55mm wide. Plant is fully hardy, flowering in November and grows to 2m high by 1.5m wide in 18 years.

375 *R.* 'Dan Carter'

R. 'Lems Monarch' x *R.* 'Alice Hennessey'

Hybridised, named and registered by Tom Garbutt of Oamaru and grown to first flower by Ann Sim of Waianakarua, North Otago.

A ball shaped open truss of 20 openly campanulate flowers 60mm long by 25mm wide and having 8 lobes with frilly margins. Red buds opening pink with deep pink picotee edging. The outside corolla is mainly deep rose pink. Leaves are lancolate, oblique at base and acute at apex being 110mm long by 35mm wide. Plant height after ten years is 1-3m high by 2m wide.

Contact the Registrar for registration forms and assistance.

New Zealand Rhododendron Registrar
Brian Coker
8b Barnsley Crescent,
West Melton 7618
Phone: 03 355 8395
Email: b.hcoker@xtra.co.nz

RHODODENDRON SUOILENHENSE

A NEW RHODODENDRON SPECIES

It's hard to imagine I know, but new rhododendron species are still coming into cultivation. You might visualise tiny alpine plants missed or ignored by the early plant hunters, where every part is so small, they were easily overlooked. But if I told you these are giants, absolute monsters, possibly bigger than any rhododendron ever found then you might be shocked. But it's true, several new giants with enormous leaves have been discovered in the last two decades and because they take so long to begin flowering from seed, it's taken us a while to realise they are genuinely new species.

Whilst most of us thought there was nothing new under the sun, a small band of dedicated fanatics have been scouring the Himalayas for plant treasures. It's no surprise to learn Kenneth Cox from Scotland is one of this elite band of brothers, given that his father Peter and grandfather Euan were serious rhodophiles and plant hunters dating back to the Reginald Farrer days.

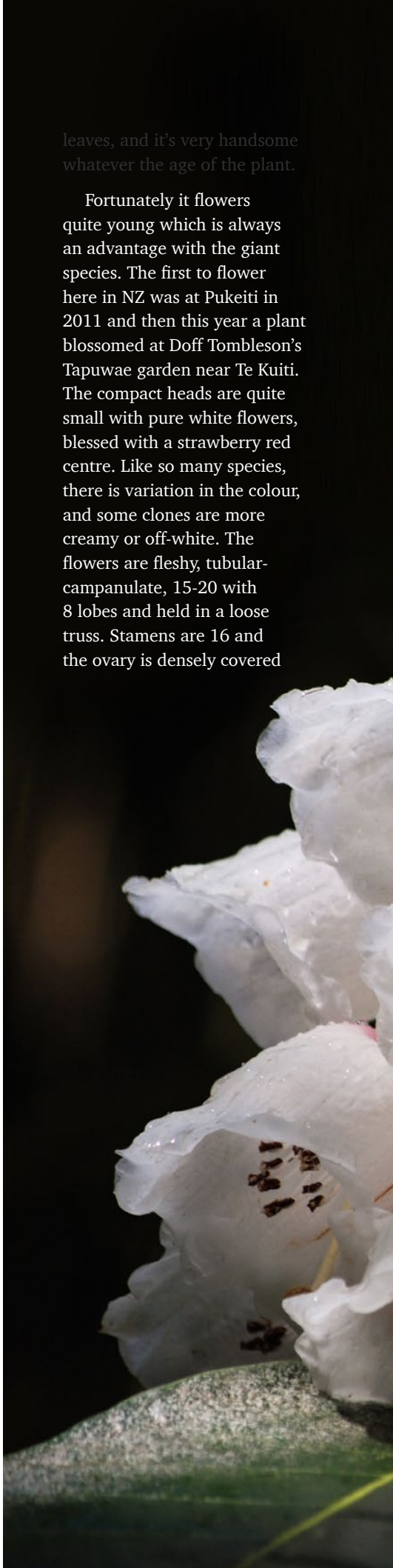
Steve Hootman from the Rhododendron Species Foundation in Seattle is also a regular member of the teams. Keith Rushforth and Alan Clark are two fanatical Brits who take every opportunity to go plant hunting, and a Cornish based Kiwi, Tom Hudson makes up the main contingent. Tom is based at the Tregrehan Garden in Cornwall and he is the son of Michael Hudson of Gwavas Garden fame.

Back in 1991, Tom, Keith and Alan were searching the mountains of northern Vietnam for new plants. You might wonder why, given the mountains are not much more than 3,000m (10,000 feet) high, so you might not expect much of any great interest or hardiness. But there on a mountain peak called Mt Suoilen near the town of Sapa they found a new big leaf rhodo. Initially described as a *R. grande* type resembling both *R. protistum* and *R. sinogrande* it turned out to be an entirely new species and it's known as *R. suoilenhense*, pronounced swoe-lin-ense and was officially named by D.F.Chamberlain and Keith Rushforth.

The seed sent to New Zealand by Tom Hudson was labelled as AC 425 and AC 448, the AC being Alan Clark. If you want to be all Ed Hillary about it then Tom was the first of the group to lay eyes on the plant, but in typical modest fashion he was quite happy for Alan to get the credit and put his name on the seed collection.

Not long after, another cluster of plants of the same species was found growing on Mt. Tay Con Linh, north and east of the Red River, very close to the Chinese border, this time around 2,400m (8000 feet) growing in tsuga forest. These trees in the wild grow as high as 15m (50 feet) with bold broadly-oblong leaves up to 30-37cms (12-16 inches) long on a young plant. The top surface of the young leaves glisten like a tropical plant. Below they are matt green and have no indumentum at all to begin with, and then gradually a marginal band of indumentum develops near the edge of the leaf, eventually covering the whole underside on a mature plant in much the same way as with *R. protistum*. Older plants have smaller elliptic leaves, and it's very handsome whatever the age of the plant.

Fortunately it flowers quite young which is always an advantage with the giant species. The first to flower here in NZ was at Pukeiti in 2011 and then this year a plant blossomed at Doff Tombleson's Tapuwae garden near Te Kuiti. The compact heads are quite small with pure white flowers, blessed with a strawberry red centre. Like so many species, there is variation in the colour, and some clones are more creamy or off-white. The flowers are fleshy, tubular-campanulate, 15-20 with 8 lobes and held in a loose truss. Stamens are 16 and the ovary is densely covered



with white hairs. Flowers are similar to *R. sinogrande* but usually smaller.

The plant has several appealing attributes apart from the huge glossy leaves. They flower at a young age and the blooms appear quite late in the season during October and hopefully miss any frosts. Because they come into growth quite late in the spring the plant is less prone to frost damage. It seems the recent *R. excellens* and *R. nuttallii* types collected in northern Vietnam are also hardier than the usual clones. We think of Vietnam as hot steamy jungle, but a fiercesome cold wind comes down from the north in wintertime, delaying plant growth. We won't know for sure until the plants are tried across New Zealand, but the signs are promising that these can be grown in many rhododendron areas of the country.

There are other amazing new giant rhododendrons coming out of the Himalayas, especially from Arunachal Pradesh in north east India bordering Tibet and Bhutan.

Kenneth Cox, discovered a new species in the Pemako region of Arunachal Pradesh. The tallest trees are at least 27m (90 feet) tall and possibly some are over 30m (100feet). He says it's nigh on impossible to measure the trees in such dense forest on very steep hillsides. George Forrest's famous *R. protistum giganteum* discovered in 1919 in south west Yunnan was measured at 24m (80 feet), so already this new species is the tallest rhododendron ever discovered.

Kenneth along with Tom Hudson and Steve Hootman found another grove of the same species in a new location, but in the same general region. So it's reassuring to think there is more than one population. As it was discovered in part of the Titapuri mountain complex, the plant has been named *R. titapuriense*.

Graham Smith and Glyn Church have just completed a book on the giant or big leaf Rhododendrons with photos by Pat Greenfield, and original paintings by Susan Worthington. Hopefully the book will be released next year.

R. suoilenhense AC 448

NZ RHODODENDRON ASSOCIATION 70TH ANNIVERSARY INTERNATIONAL RHODODENDRON CONFERENCE 2014 IN DUNEDIN – **FIRST FOR RHODODENDRONS**

The NZ Rhododendron Association will be celebrating its 70th Anniversary next year with an International Rhododendron Conference in Dunedin, considered by many to be one of the best places in the world to grow a wide range of rhododendron species, from the tall, large-leaved Grandia and Falconera Subsections to the dwarfs of the Pogonanthum Section and Campylogynum Subsection, and the many hybrids bred by staff of the Dunedin Botanic Garden and enthusiastic local amateurs. The first commercially available New Zealand-bred rhododendron hybrid is thought to be *R.* "Marquis of Lothian", bred at Fairfield, on the outskirts of the city. It was on sale in the 1880s and is still available commercially. It was described by Sir Truby King (who might have had a local bias) as "universally admitted to be quite the finest rhododendron in the world".

Maori have lived in the Dunedin area for centuries, mainly in small coastal settlements dependent on seafood, but organized European settlement began in 1848 as a Scottish "Free Kirk" settlement. "Dunedin" is an old form of "Edinburgh" and Dunedin still values and emphasises its Scottish heritage. A statue of Robbie Burns looks down on the central Octagon, with, until a hotel in the Octagon was closed some years ago, "his back to the Kirk" (St Pauls Cathedral – an inspiring neo-gothic nave in Oamaru stone, with a Modernist apsidal chancel) "and his face to the pub". The city, thanks to its eminence as New Zealand's commercial capital in the late 19th century, has a large heritage of Victorian buildings. It is the home of the University of Otago, New Zealand's first, and in many ways most prominent, university, drawing students and scholars from all of New Zealand and many other countries. It contains New Zealand's first medical school and has a number of other specialist schools. Otago Peninsula, part of the city, supports much native wildlife, including seals, Yellow-eyed and Little Blue Penguins and many other seabirds, and has the only mainland nesting place in the world of the Northern Royal Albatross. The 307 hectare, predator-proof Orokonui Ecosanctuary, New Zealand's only Cloud Forest where native plants and animals can live in the wild free from introduced pests, is home to some of New Zealand's most fascinating and rare forest wildlife.

Overseas speakers at the Conference will include Hartwig Schepker, of the Rhododendronpark in Bremen, North Germany, and Steve Hootman, Executive Director and Curator of the Rhododendron Species Foundation and the Rhododendron Species Foundation Botanic Garden at Seattle, USA. New Zealand speakers include Neville Peat, Lynn Bublitz, and Denis Hughes.

The Conference will run from Registration, from midday on Monday 20th October, to lunch on Friday 24th October, leaving time to travel to and from Dunedin. But for those who would like to see rhododendron and other gardens in wider New Zealand there will be (subject to numbers) a Pre-Conference Tour beginning in Auckland on Monday 13th October (plan to arrive in Auckland by 12th October) and visiting New Plymouth, Rotorua, and Queenstown, with a trip to Milford Sound possible. A Post-Conference Tour is also planned, leaving Dunedin on Saturday 25th October, visiting Mount Cook and gardens at Waianakarua, Tekapo, and South and Mid Canterbury, and concluding in Christchurch on the night of Monday 27th October. These tours are open to New Zealanders as well as overseas visitors.

The Conference will be based in the Dunedin Centre, part of the Town Hall complex, and will include lectures, and visits to a number of private and public gardens, including Tannoch Glen, the garden of the Dunedin Rhododendron Group. There will be guided tours of the Dunedin Botanic Garden, New Zealand's first, founded in 1863, which is renowned for its Rhododendron Dell and geographic garden areas, and is a Garden of International Significance, one of only five in New Zealand. Larnach Castle Garden, which Conference members will also visit, is another Garden of International Significance. It is hoped that plants, books and clothes will be available for purchase, and there will be social occasions, a display of blooms, and a formal Conference Dinner.

New Zealand Rhododendron Association

INTERNATIONAL RHODODENDRON CONFERENCE 2014

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Dunedin is a city (pop. 120,000) on the east coast of the south of the South Island of New Zealand, set at the head of a beautiful harbour. The hills which overlook the city are distinguished by the "Town Belt" – a long strip of native bush set aside as a public reserve by the settlers. Mark Twain, who visited in 1895, said "The people here are Scottish: they stopped here on the way to heaven, thinking they had arrived".

There have been small coastal settlements of the indigenous Maori near Dunedin for several centuries, and the first European settlers were whalers, sealers and farmers. Organised European settlement began with a mainly Free Kirk Scottish project in 1848. Thanks to its role servicing farming and the Otago gold-rushes, Dunedin expanded rapidly and was the commercial capital of New Zealand in the late 19th Century resulting in a fine legacy of Victorian buildings.

New Zealand has no native rhododendrons, but Dunedin is one of the best places in the world for growing a wide range of rhododendrons, from subalpine dwarfs to the large-leafed Grandia and Falconera Subsections.

By the 1880s an early nurseryman was selling a variety of rhododendron species and maybe New Zealand's first home-bred rhododendron hybrid. The Dunedin Botanic Garden, New Zealand's first, has an extensive Rhododendron Dell: the Dunedin Rhododendron group has a garden nearby, and there are a number of private gardens with plantings of rhododendrons. The Dunedin Rhododendron Trust has planted many rhododendrons which now decorate the city. The Botanic Garden staff over the last century, and many private individuals, have produced a number of hybrids, and selected forms of species.

New Zealand Rhododendron Association

International Rhododendron Conference 2014

Dates:
Monday 20th October
to Friday 24th October

Contact:
14 Forrester Ave, Liberton
Dunedin 9010

Email: rhododunedin2014@gmail.com
www.rhododendron.org.nz

BOOK THESE DATES IN YOUR DIARY NOW,

and look out for the Registration Form which should be available before the end of 2013.

CONTACT

The organising committee can be contacted by email at *rhododunedin2014@gmail.com* or by post to Tony Fitchett, "Lindenfield", 14 Forrester Avenue, Liberton, Dunedin.

WE HOPE TO SEE YOU IN OCTOBER 2014, IN DUNEDIN – **FIRST FOR RHODODENDRONS**.

RENOVATIONS AT DUNEDIN BOTANIC GARDEN'S RHODODENDRON DELL

This year's 150th anniversary celebrations at Dunedin Botanic Garden have prompted much retrospection and produced several articles and talks promoting the nature of its origins and subsequent development. For my own part, investigating the history of the Rhododendron Dell has underlined how dynamic a process gardening is. The vision and drive of firstly David Tannock and then Maurice Skipworth, created the basic structure of today's 4 ha woodland garden. They cleared bush, planted hundreds of new rhododendrons - no doubt with great anticipation - and laid out a network of paths. Although rhododendrons were the key component of the Dell they also ensured a diversity of other genera to complete the woodland garden effect. Using plants from temperate regions around the world they planted trees, shrubs and herbaceous perennials to represent all the elements of a natural woodland whilst also aiming to create as beautiful an effect as possible. Although bush was cleared they recognised its value as shelter for the rhododendrons so retained it around the outside of the Dell and also as pockets within the area. Not only does this give the woodland garden style a strong New Zealand influence but it also adds a wilder aspect that contrasts well with the more cultivated parts of the Dell.

With such vision and energy having established the Dell, it has been the responsibility of those staff who have followed Tannock and Skipworth to both maintain and build on their achievements to ensure the Dell's continued value as a rhododendron collection and recreational asset. The life cycles of the plants also become the life cycle of the Dell as a whole, with each border going through its own phases of initiation, establishment, maturation and decline. During these phases we need to monitor and modify conditions so that the highest standards of presentation possible during each phase are achieved. Eventually though, there comes a time when in spite of our best efforts, standards cannot be maintained and decline must give way to renewal. Within the Dell's 4 ha area there are 46 different borders and collection areas, and it is rare for a year to go by without at least one border being renovated. Most recently it has been the turn of the lower Dwarf Area.

The Dwarf Area is in a corner of the Dell that at one time was home to a broad swathe of bamboo. Eventually this all flowered and died leaving a large new planting space. It was decided this would be ideal for smaller growing rhododendrons and gave rise to the current area name. The area is bisected by an informal woodchip track with *Rhododendron yakushimanum* and some of its hybrids as the key rhododendron feature there. The downhill side originally contained a remnant pocket of bush which was cleared to make space for more rhododendrons and so take full advantage of the site's north- west aspect. Over time though, pressure for planting space meant that larger rhododendrons have also been included.

At the south end of the border there is a group of vigorous old rhododendron hybrids whose size provides a sense of balance and integration with remaining native bush to the north and two large *Pinus radiata* to the south. Their stature also complements maturing specimens of *Magnolia stellata*, *M.* 'Vulcan' and *M.* 'Apollo'. Between the latter two magnolias grow some medium large hybrids, with the most captivating being a *R.* 'Marquis of Lothian' seedling. Along with the big old rhododendron hybrids at the south end grow some camellias which are a remnant of the original Botanic Garden Camellia Collection. These longer lived structural plants provide an impression of continuity while around them other plants come and go.

In decline most recently have been a group of *R.* 'Trewithen Orange', a specimen of *R.* 'Lady Chamberlain' and an assortment of others including several of a grouping with connections to Subsection Campylocarpa. In addition, where plants had grown well, they were competing for space, becoming obscured, misshapen and detracting from each other's display. The time had come.

There is great satisfaction in finally getting stuck into an area that has been annoying you for a long time. The first step was to lift and heel in any worthy perennials, so *Asarum caudatum, Primula pulverulenta, P. prolifera, Anemone nemorosa, Helleborus orientalis* and *H. niger* were set aside. Dealing with any sparse and spindly eye sores was next. From the Campylocarpa group, out came straggly specimens of *R. wardii, R. souliei, R. souliei x* 'Crest' and *R.* 'Crest'. An almost defoliated *R.* 'Mrs Percy McLaren' followed and then, all six *R.* 'Trewithen Orange" and the *R.*

'Lady Chamberlain', whose susceptibility to mildew and rust over the years, had left them increasingly unsightly. Two specimens of *R.* 'Yellow Hammer' that had been squeezed into spindly mop-tops by neighbouring plants came out as did a dying *R.* 'Buttermint'. In total, including other unnamed rhododendrons in poor health, 18 rhododendrons ended up on the chipping pile.

I also took out a semi-mature myrsine, Ngaio and cabbage tree which were growing just beyond the fringe of native bush to the north. For so long, these had been regarded as part of the bush and retained, but with the fresh perspective of renovation planning I saw that their shade was inhibiting rhododendron growth below, obscuring a large *R. macabeanum* behind them and hiding the trunk of a 20m Kahikatea which now stands out as a valuable specimen tree.

With the removals phase completed, it was time for transplanting. Two 2m double form *R. griffithianum* on the bottom edge of the area now looked out of place because the space behind them had been completely cleared. These were as large as both my apprentice and I could manage without needing help but using a length of scrim and loading boards we were able to shift them to space on the lower side of the camellias to the south. Emboldened, we then moved a 2.5m *R.* 'Crossroads' from next to a group of *R.* 'Michael's Pride' over to space by the large old hybrids. Unlike the *R.griffithianum* this one did not need to be loaded on and off a trailer to get it to its new position, so, although larger, was easy enough to manoeuver along boards to its new space 4m away. That was joined by 3 much more manageable 1.5m *R.* 'Pierce's Apricot'. Having dealt with all rhododendrons requiring transplanting, two camellias remaining on the north side of the border, were transplanted to spaces amongst the main group on the south side. They were probably over half a ton in weight, so this time, although we did wrench them, we hired a digger and driver to lift and reposition them. With a skilled driver, the dexterity of a digger is quite remarkable. The digger scooped each camellia up, carried them along the Camellia Walk, extended them into the border between the existing camellias, placed them down, dug the holes, placed them in the holes and even adjusted their orientation to give the best view. All we had to do was hold a couple of branches back and do the back-filling.

Refurbished are in the Rhododendron Dell with (right to left) *R. mallotum*, *R. souliei* x 'Crest', *R. auriculatum*

The result of all this was large new planting spaces in the lower half and north east corner of the area. Drains had been installed during a previous renovation in the early 90s, but the soil still required extensive preparation before planting, especially on the bottom side where particularly heavy clay prevailed. Here, as well as forking it over and adding compost, we first forked in gypsum followed by semi rotted pea straw that until now had been a surface mulch.

This effort would have been required for any rhododendrons, but as I was planning for a selection of species, it was even more necessary. In addition to the general soil renovation above, I also added gravel and compost to the bottom of each planting hole and where necessary, dug and filled with gravel, a short channel on the lower side of any hole that I thought would still hold water around the roots.

In the north east corner of the lower Dwarf Area I planted two specimens of *R. concinnum* whose deep rosy purple flowers will contrast well with a group of yellow *R.* 'Parisienne'. I replaced the *R.* 'Trewithen Orange' with three *R. leptocladon* which were raised from seed from a distinct Vietnamese yellow form hand pollinated by Peter Cox. Already they make a much more satisfying combination with the deep lilac pink *Magnolia* 'Apollo' behind them. A group of *R. sikangense* from Subsection Maculifera fills the remaining space by the upper track, whilst several specimens of *R. sphaeroblastum* var. *wumengense* continue the indumented theme in gaps around the older planting. The broad new space by the Camellia Walk has now become home to *R. pachysanthum, R. prezwalskii, R. souliei, R. auriculatum, R. pseudochrysanthum* and *R. mallotum*. The first three are from wild source, and the last three from plants hand pollinated at Muncaster Castle by Alan Clark. The colour range here is white to pink. *R. mallotum* throws in a splash of red, characteristic of Subsection Neriiflora to which it belongs. Entirely uncharacteristic though are its dark green, rugose leaves with dense woolly cinnamon-brown indumentum. These are more reminiscent of Subsection Falconera and add outstanding foliage to the mix.

With the rhododendrons in place the last phase has been to restore under-planting. The asarum and primulas returned to the upper half whilst the anemone and hellebores returned to the lower side along with new plantings of *Lamprocapnos spectabilis* 'Alba'(syn. *Dicentra spectabilis* 'Alba'), *Primula sikkimensis, Meconopsis pseudointegrifolia* and *Trillium chloropetalum*.

Although they are much more transient than the woody plants, herbaceous plants are none the less, still very important in completing the woodland garden effect. Their faster life cycles bring rapidly changing form and texture at ground level whilst their delicate nature helps emphasise the structure and longevity of the upper layers. When the woody plants have settled back into their wood ripening or dormant stages, it is the herbaceous plants that

continue to inject colour and a sense of vitality throughout the garden.

As time goes on more herbaceous plants will be added to the Dwarf Area to extend the seasonal displays there, but essentially, the initial stage is complete. The soil has been refreshed, tired old plants have gone, and the selection of new rhododendrons planted.

Not only has this project renewed an area of the garden in need of attention, but it has also been another chance to include more species in the Dell. The fact that these are either from seed collected in the wild or from cultivated plants with reliable origin, adds further value to the exercise. Their beauty will enhance the amenity value of the area and their origin lends botanical authenticity whilst subsequent labelling will educate the public about their names. Working by these principles of amenity, botanical and educational importance continues the efforts of the Dell's founders and ensures its relevance today and into the future.

Doug Thompson


2

1. Dunedin Botanic Gardens -a summer view
2. *R.* 'Michael's Pride'
3. *R. leptocladon*
4. *R. Griffithianum* 'Double Form'


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4

AUSTRALIAN RHODODENDRON SOCIETY

NORTH QUEENSLAND VIREYA EXPEDITION SEPTEMBER 2012

Dan, John, Prue, Ian, Rob & Jacki

ARS Vireya Expedition members assembled at Malanda Falls on Thursday 30 August 2012. They comprised the President of ARS Robert Hatcher (South Australia) and Jacki Hatcher, President of the Victorian Branch, John O'Hara, Prue Crome, Andrew Rouse, Dan Macleod and Simon and Marcia Begg (Victoria) and Ian Chalk (Emu Valley).

The plan was to explore Mt Bartle Frere, Mt Bellenden Ker and Bell Peak for *R. lochiae* and Mt Lewis, Mt Finnigan and Windsor Tableland for *R. viriosum* in the following two weeks. The genesis of the plan was Simon's visit to the Vireya Species Glasshouse at Royal Botanic Garden Edinburgh in May 2008. Included in their collection were two Australian species. Dr Argent from the Glass-house stated there were differences in *R. viriosum* plants, for example in their seeds. It was noted that these Australian plants had no definite provenance. They lacked basic information as to the source mountain, GPS coordinates and altitude as well as growing conditions. Simon subsequently wrote an article "Australia's Native Rhododendrons: Their Provenance", which included extensive quoting from an article by Mary Gandini. Mary's article "An Investigation of *Rhododendron lochiae* F. Muell". Its taxonomy, distribution and genetic variance was published in 2002 and she concluded that there was only one Australian species but more work needed to be done to express a definitive view. In 2008 Lyn Craven CSIRO, Canberra, a now retired taxonomist (and a longstanding ARS member) reaffirmed the view he and Dr Withers expressed in 1996 that there were

two Australian species. In October 2010 Lyn Craven and Dr Sue Gardiner (Principal Scientist, Plant Gene Mapping, The Horticulture and Food Research Institute of New Zealand Limited) were both speakers at the ARS Golden Jubilee Conference at Olinda. They discussed a further study into the Australian rhododendrons and involved Mary Gandini and the Queensland Tropical Herbarium.

Unfortunately our expedition was not granted a permit to collect cuttings. The expedition went ahead with the intention of assessing rhododendron populations and gaining an understanding of locations and habitats. Visitation to Windsor Tableland was not granted.

Mt Lewis

The full expedition and four volunteers set out for Mt Lewis early on 03 September. We found plants of the Mt Lewis form of *R. viriosum* at 1236m. The colony was perched precariously on granite rocks on the edge of a south east facing escarpment. There was very small annual growth, they were straggly plants and most leaves had suffered insect attack. There were many new seedlings on the edge of the rocks but fewer young plants. Obviously few seedlings survived their early years. Although growing in an exposed area there was some overhead cover provided by *Leptospermum wooroonooran* and the rhododendrons grew in areas of thick moss.

Simon Begg and John O'Hara

Mt Bartle Frere

Six members ascended Mt Bartle Frere from the Atherton side and at around 1550m encountered *R. lochiae* in flower with a beautiful truss. The plants were growing in similar conditions to *R. viriosum* on Mt Lewis. We then climbed to the summit and started down the other side where we found rhododendrons again at about 1550 to 1600m. Extreme weather conditions made it impossible to observe these plants in detail.

Observations of *R. lochiae* on Bartle Frere were somewhat cursory by comparison to Mt Lewis and, later on, Bell Peak and Mt Finnegan. However some conclusions can be drawn.

The plants on Bartle Frere grow in much the same conditions as at Mt Lewis. They are in a location that receives high rainfall and rarely would dry out even in the dry season. Threat to their survival would have to be if this regular moisture disappeared. Collection of material from Bartle Frere would have to be rated as hard and field pressing would not be recommended owing to the need for equipment. Unless there is evidence of imminent extinction my personal view is that the population at Bartle Frere should remain as a known entity and only be collected if absolutely necessary.

What I take away from this is there are definitely two species and at present they are healthy wild populations. What climate change will do is anyone's guess but my guess is the plants will still be there in 50 years time.

Rob Hatcher

There is the important issue of genetic differences, if any, between the disjunct R. lochiae and R. viriosum populations and between those of the apparently different species and the associated question of the source, development and history of the rhododendron populations in Australia). This was the point of Mary Gandini's 2002 paper and the further study now being undertaken at Queensland Tropical Herbarium in consultation with Lyn Craven (Australian National Herbarium Canberra) and Dr Sue Gardiner (Principal Scientist, Plant Gene Mapping, The Horticulture and Food Research Institute of New Zealand Limited). For this Lyn Craven believes further specimens are needed.

Simon Begg

Bell Peak North

Bell Peak North is south of Cairns, on the Malbon Thompson Range and north east of the Bellenden Ker Range. The peak is on Yarrabah Aboriginal Land, which abuts the Coral Sea and the only access is from the western side through private property and state forest. The climb, which included ARS members Ian Chalk, Dan Macleod and Prue Crome, was achieved with the assistance of the Cairns Bushwalkers. It took approximately 4 hours to reach the summit at 1026m where the wind whistled through the communication tower. The first *R. lochiae* appeared over the lip of the peak, facing south-east, sheltered in forest yet on top of a rock exposed to light and moisture. This first large flower was nothing compared to the population that was accessed by a sheer vertical descent through forest onto large boulders at approximately 998m facing the prevailing winds to the south-east. The sight of *R. lochiae* in full flower, with their bright red blooms shining through the gusting clouds, negated the pain of my frozen hands and cold wet body.

Ian Chalk and a member of the Cairns Walking Club

R. lochiae

The plants were magnificent both in form and flowering. They ranged in size up to approximately 1.5 metres high and 1 metre wide, some dense and well formed and others straggly, depending on exposure and their position. Leaves were generally large and entire and were maintained on the stem, unlike those on Mt Lewis, and the plants were very healthy with little insect damage. The botanical characteristics were generally as described by Dr George Argent, "Rhododendrons of subgenus vireya" p324, with the leaves broadly elliptic etc. but the inflorescence was 6-12 flowered, not the 2-6 as in Argent's description. There were many buds still to come so the peak flowering period might extend for some time. It would be very difficult to ascertain whether this was a usual or a freak flowering event without further investigation.

The vireyas were lithophytic and terrestrial with roots within a tangle of vegetation and moss- covered humic matter that had collected on and in rock crevices.

Given we were accompanied by the Cairns Bushwalkers our schedule necessarily needed to work in with them, so time exploring the vireya population was limited. It was very hard to evaluate the size of the population due to the compromised viewing conditions and very steep terrain. The descent was made easy due to the lingering excitement of abundant flowering and it was definitely the highlight, for me, of the vireya survey on this expedition.

Prue Crome

R. viriosum seedling

Mt Finnigan

By the time we headed off towards Cooktown and the ascent of Mt Finnigan we were reduced to four members, Ian Chalk, Prue Crome, Dan Macleod and John O'Hara.We based ourselves at Helenvale, 30km SW of Cooktown. Prior to heading to Queensland we had organized for Charlie Roberts, a holder of land at the base of Mt Finnigan to act as guide. On Tuesday 11 September we met him at his property at Shiptons Flat and proceeded on foot through his grazing property and up the northwest ridge of the mountain. The ridge was a steady climb through mostly open woodland, being eucalypt woodland at the base with pockets of rainforest species.

Half way up to the top, Charlie Roberts left us to our own devices. The western peak (Mt Finnigan has about 4 peaks) was reached after about 3.5 hours of walking. The weather at the top was, as for most of the other mountains climbed, challenging, strong winds, thick wet mist, surprisingly cool for the latitude and not pleasant for humans. The rainforest stopped at the top of the mountain, the winds obviously limited everything to the height of the rocks forming the razorback ridge. We found *R. viriosum* amongst the rocks, either in crevices between rocks or growing from cracks in rocks where enough humus might collect, and occasionally away from the very top of the mountain, at the base of the rocks.

The *R. viriosum* we found during this part of the expedition differed significantly from what we had seen on Mt Lewis. The rhododendrons found here appeared very healthy, well clothed in thick smallish leaves and were short, well branched tight bushes about 300mm tall and perhaps half as much again across. This short stature was understandable for bushes in areas of high exposure to the wind, with this leading to wind pruning, but the bushes remained short even in sheltered positions. Some plants on the edge of rocks grew with their branches hanging down, forming neat pendulous bushes. There was no sign of flowers, either as flower buds, spent flowers or seed capsules.

Mt. Bellenden Ker - 2nd Highest Peak in Queensland

Some Conclusions

Rhododendrons were easily found on the tops of all the mountains we climbed. They were fairly common if given the right conditions, but the right conditions were of very limited extent and confined to the exposed tops of mountains. We only saw them growing on or immediately adjacent to large granite boulders. There was considerable variation between the appearances of plants from different locations. The Mt Lewis *R. viriosum* and Bartle Frere *R. lochiae* were generally very scraggy plants, tall and sparsely branched, their flower trusses had only a few flowers per truss (based on only a few sightings). Mt Finnigan plants were stout, good shaped bushes, but we did not see any flowers. Bell Peak provided the highlight of the trip, its plants were healthy, well formed and carried numerous trusses with up to twice as many flowers per truss than we have seen in cultivation.

Further Work

If no permit is ever issued to us then there is still much which can be achieved. The Bell Peak exercise shows that poorly explored regions can give exciting results. Places like Thornton Peak and Devils Thumb are well explored and we will probably find little that is new there. There are however places like Bell Peak South and Mt Tozer in the Iron Range, well north of Cooktown, both of which are reported by reliable sources to have rhododendron populations. The species and nature of the plants in these locations is not known.

If a permit to collect is issued to us then there is a lot more work that needs to be done.

Garden trials of plants collected from different locations would lead to an understanding of their differing growth and flowering habits. DNA studies could resolve the issue of the history of the Australian species and whether there is more than one species.

Closing

This trip brought ARS members from three states together. It provided an opportunity for those members involved to get to know other ARS members and have a very enjoyable (if very strenuous) time. It significantly improved the knowledge of our Australian rhododendrons, not only within the expedition party but also more widely throughout the ARS. If this study can be continued on into the future then it could provide an avenue allowing young fit members to be attracted and take part in more such expeditions.

John O'Hara

A proposal to seek funding for a collaborative Australia/New Zealand project to elucidate the relationship between R.viriosum and R.lochiae using DNA technology has been developed recently. The NZRA has granted partial financial support already and further in kind and financial support is being sought in both countries to enable the project to proceed. NZ contact person is Sue Davies, email: sue.gardiner@plantandfood.co.nz

Acknowledgement: *This article has been reproduced in an abridged version with permission from the authors. Thank you to Ian Chalk who assisted by sending copy and photographs.*
Sue Wagstaff and Chris Wilson

TARANAKI REGIONAL COUNCIL GARDENS

Hollard Gardens

As Manager at Hollard Gardens I struggle to ever have a single favourite plant. We're spoilt for choice in this plantsman's garden and it's easier to have favourites of the month.

Recently I have discovered the beauty of mahonias. I always used to curse this plant when its holly-like, sharp, glossy green leaves would pierce my hands through gloves when weeding around it. But now I can overlook that mean streak because of the beautiful scent that mahonias produce.

I had no idea their yellow raceme flowers produced this scent – I had always presumed there was a daphne bush growing close by, since they both flower in winter. The beauty doesn't stop there, either. Mahonias also produce delightful blue berries that are reputed to be high in vitamin C.

Mahonias are closely related to berberis, to the point where some would argue that mahonias should be included in the genus *Berberis* because several species in both genera are able to hybridise.

Another favourite is the woodland anemone or *Anemone nemorosa*. These petite perennial plants emerge in woodland areas at the very start of spring and get all their business (flowering, pollination and so on) out of the way before trees come into leaf and shade out much of the light. The flowers are usually white or mauve and come in single or double form. Woodland anemones spread by rhizomes underground but are nowhere near as invasive as the Japanese anemone that is commonly grown in New Zealand.

The woodland anemone is a great little perennial for those pesky shady areas in your garden that struggle to grow other pretty plants.

We also have a good collection of abies in the garden. Most of them have a pyramidal form that spreads more than the average home garden would like. But a visitor to Hollard Gardens told me about *Abies amabilis*, whose form resembles a column. Research revealed that it is planted as an ornamental tree in parks for its columnar form, but it too is probably better off in a larger garden, as it can grow to 30m high. Its requirement for cool, humid summers means that outside its native range of north-western North America, it is restricted to areas like western Scotland and colder parts of New Zealand.

Now the colder months are all but over, the excitement of spring and summer will bring to us another bevy of plants vying for that title of favourite of the month.

Sandra Powell, Garden Manager

Hostas and woodland anemones

R. dalhousiae at Tupare

Tupare

If I were to name a species that gives Tupare its hues of blues through summer, it would have to be the macrophylla hydrangeas.

All too often, hydrangeas are taken for granted in the garden. To visitors who know no better, they appear to be a bunch of sticks in winter. But if those visitors return in late spring, their sighs of admiration are loud enough to drown out the resident bird song.

The first things to catch your eye of course are the large, ball-shaped blooms of the mophead types. But opinions can vary, and the lacecap types, with their flowers arranged on a horizontal plane, are crowd-pleasers too.

But I believe the flowers of either type would not stand out half as much if it were not for the lush, bold and green foliage that provides the ideal background for those eye-catching blooms.

By the time we exhaust our patience pruning Tupare's hundreds of hydrangeas in late August, the gardeners still marvel at how such healthy leaves can emerge from those bunches of sticks.

We prune depending on how we want our plants to perform. If we desire fewer but early and spectacular blooms, we cut out all previously flowered canes and weak shoots. We leave any canes that have not flowered, as these will display their flowers at the tops of the canes.

Sometimes we may shorten all canes to fat healthy buds, resulting in an even, rounded shrub with flowers smaller and later in the season.

Depending on your soil conditions and the site, an annual dressing of compost will keep the soil healthy, providing on-going nutrients and moisture for plants with hungry flowering and growth. Where our hydrangeas grow in high-demand, intensive plantings, this is a priority of garden maintenance.

Our ample rainfall, coupled with friable soil and sloping topography, results in the garden beds leaching nutrients quickly. Therefore composting is critical for us.

Tupare does favour blue hydrangeas, as our soil has low pH (that is, it is acidic). If the blues become a little washed out then a very light watering of aluminium sulphate on the soil will ensure they return to colour.

The few red and purple cultivars we have do benefit from a dressing of hydrated lime. This will sweeten the soil surrounding each plant.

The garden at Tupare has other hydrangeas as well as the *H. macrophylla* types.

H. paniculata types such as 'Kyushu' and 'Grandiflora' do well and are distinctly different to the others. *H. serrata* cultivars such as 'Grayswood' have serrated narrow leaves. There are oak-leaved types too.

Recently we planted the popular *H. arborescens* 'Annabelle' with its large floppy white blooms and lovely soft downy new growth. Unfortunately the rabbits have developed a taste for the new spring growth of 'Annabelle'.

To deter these hungry pests we have taken the opportunity to water the plants with seaweed and fish fertiliser which will also benefit our hungry hydrangeas. So we can look forward to more sighs of admiration from our garden visitors.


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1. The Main Drive , R. 'White Pearl'
2. Russell Avenue
3. The Cottage and cottage Lawn
4. Ups and Downs Olive Jar and R. 'Fatuosum Flore Pleno'


4

A NEW GARDEN IN KING EDWARD PARK STRATFORD.

In 2011 the NZRA Conference was held in Stratford. The Conference Committee, all NZRA members, worked for 2 years to organise the event. We were successful in gaining grants from the local community which assisted us greatly. The Taranaki Electricity Trust was very generous. As well we received a grant from the Stratford District Council and assistance in 'time' from the Taranaki Regional Council. The profit when holding a Conference is in the extra numbers that register above the budgeted number. We had 207 registered. This included many of our local Rhododendron Group who were only partial registrations but it gave them an opportunity to meet many of the National Association members.

We did not intend to make a large profit, as we did provide all 3 dinners as well as the usual morning and afternoon tea and all the drinks. We had local service groups cater for many of these events which assisted in their 'fund raising'. The 3 gardens owned by the Regional Council which we visited received $400 each which was earmarked for purchase of plants. (These gardens offer free entry to everyone).

Any final profit after a Conference is equally divided between the NZRA, and the organising group. We felt that as the district had been so generous we would like to put our share back into the community. The Conference Committee put a proposal to the local Rhododendron group for our share to fund a garden in King Edward Park in Stratford. For those of you who attended our conference this is where you had your afternoon tea on the Wednesday afternoon, served by the girls in medieval costume. It is just a short walk from the Conference Centre at the Wall Memorial Hall in Stratford.

The Stratford Council had planned to make a garden beside the small curved lake in the Ted McCullough Dell which has all those beautiful rhododendrons surrounding it. The Taranaki Rhododendron Group had donated money for some of those rhododendrons many years ago. We felt it was applicable to fund this garden in the park in Stratford as everyone could enjoy the benefits.

The Stratford District Council has created an area raised for good drainage which slopes down to the lake. They have planted rhododendrons in groups such as John Bull and Charisma and many other larger leaf rhododendrons which are well spaced out. It is all well mulched. For height there was an existing swamp cypress and they have added a *Nyssa sylvatica* and a *Magnolia* 'Woodsman'. I think it complements the area well. A grey duck had 8 very new ducklings on the pond when we visited. It is a tranquil garden. The Council will continue to maintain this garden.

There will be a plaque commemorating the NZRA 2011 Conference and the fact that the Taranaki Rhododendron Group made the garden possible.

Margaret Hodges
Convenor of the 2011 NZRA Conference
NZRA Council member of Western North Island Ward 2.

Rhododendron griersoniana.

A tender species used widely for hybridising was first introduced in 1917 by Forrest who collected it in West Yunnan. He named it in acknowledgement of the help given by R. C Grierson the Chinese Maritime Customs at Tengyueh (Tengchong).

RHODODENDRON NUTTALLII
NAMED AFTER AN EXCEPTIONAL MAN

1. *R. nuttallii* growing at Pukeiti

2. Self-seeded young plants growing on the clay bank at Lake Mangamahoe, New Plymouth

3. *R. nuttallii* growing at the Lake

R. nuttallii has a wide distribution and range of habitats, north and south of the eastern Himalaya Range into Yunnan and Guizhou provinces in China, growing at altitudes from 1100 - 1700m in monsoon valley forests.

In cultivation it enjoys a temperate climate but is considered less hardy in the UK. It grows well outside in New Zealand.

Like most species it does show variation and *R. sinonuttallii*, often later in bloom, with smaller flowers, and once considered a different species is now included with it, albeit as a variant.

The species was first collected by Thomas Jonas Booth(1829-1861) who was sent by Kew to collect in Sikkim. Troubles, including the imprisonment of other collectors, Hooker and Campbell , forced (or encouraged) his expedition to go to Assam and Bhutan, resulting in a number of new species being collected. Among them was a large flowered, nutmeg and lemon scented, bullate leafed rhododendron which he named for his uncle Thomas Nuttall.

Thomas Nuttall (1786-1859) was a pioneer botanist and plant collector who travelled mainly in the USA and who according to Stephen Pile, in his publication, "The Book of Heroic Failiures" was almost permanently lost. During his expedition in North West America in 1812 his colleagues frequently had to light beacons to help him find his way back to camp. One night he failed to return. A search party was sent out and as they approached him in the darkness, Nuttall, remembering stories of scalping, assumed they were Indians and fled. The would be rescuers pursued him for three days until wandering in a circle, he accidently returned to camp. On another occasion, after an extensive collecting trip, he was exhausted and looking so pathetic that a passing indian took pity on him picked him up and paddled him back to camp in his canoe.

It was not his foibles but his botanical skill that led his nephew naming this wonderful plant after him. He is regarded as one of the most adventurous and knowledgable of botanists, ornithologists and printers who collected and named many new species in the USA. His reputation as a plant collector was indeed well earned.

Rhododendron nuttallii has been a treasured plant at Pukeiti since the early days. It flourishes in the temperate climate of New Plymouth. At Lake Mangamahoe, the city's water storage lake, a road passes along the western margin. Adjacent, many rhododendrons are planted, among which is a group of *R. nuttallii*. These flower profusely and produce copious amounts of seed, which has been blown onto the clay bank cut alongside the road. Over the years many seeds have germinated. The vegetation on the bank is cut back each year by the council staff mowing the banks. The nuttalliis are scalped and beheaded. Still they flourish and some have even flowered.

This clone is really at home far from its eastern Himalayan origin.

Provide the right conditions and most species can be conserved and sustained.

Lynn Bublitz

R. spinuliferum

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Taranaki Regional Council

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PROPOSED TRIP

INTO THE MIDDLE OF THE WORLD

A THREE WEEK JOURNEY - SEPTEMBER 2014
INCLUSIVE COST (APPROX) NZD $6,500

Guan Kaiyun who has arranged many tours for Pukeiti has organised a 3 week adventure to the outer reaches of China in the Xinjiang Province, visiting historical sites and travelling through the desert and into the surrounding mountains.

Guan is presently the Deputy Director of Science in the province of Xinjiang and is based in Urumqi.

If you are interested in sharing in this unique adventure search 'Google' for a look at the cities and places that will be visited including Urumqi, Fyun, Yining, Kashgar and Turpan, and places which were on the old silk route which we follow for part of the journey.

We plan to fly to Guangzhou and then directly to Urumqi. Travelling in Xinjiang will be by comfortable bus often over long distances. You will be staying in good quality hotels. All meals will be provided.

The trip will be led by Lynn and Robin Bublitz
Contact them for further details at
Email ***lrbublitz@xtra.co.nz***
Phone (06) 7582903

Faces and places Xinjiang