

She has a big heart which shows through her interactions with people and the projects she commits to within the horticultural industry.

Nicola has contributed to the NZ Nursery and Garden Industry Association (now NZ Plant Producers Inc.) as their representative on the board of the then NZ Horticultural Industry Training Organisation, from 2009 to 2012.

She has served as vice-president for the International Plant Propagators' Society New Zealand Region in 2012, and as committee member from 2013 to 2014.

Following her involvement in the RNZIH Education Trust from 2005, Nicola formally joined the parent RNZIH in July 2011.

### 2019 FRIH award

These contributions, and especially her work with the Young Horticulturist Competition, make Nicola Louise Rochester a most worthy new Fellow of the Royal New Zealand Institute of Horticulture.

**Citation prepared by Andrew Maloy and Elenka Nikoloff**

## Award of Associate of Honour of the Royal New Zealand Institute of Horticulture (AHRIH)

### Dr Marion Brenda MacKay



Marion MacKay is a Senior Lecturer in Environmental Management at Massey University, specialising in plant biodiversity and conservation, particularly *ex situ* conservation.

Marion teaches and coordinates a wide range of subjects, including Environmental Science Field Work I and II, Environmental Science I, Integrative Studies, Landscape Revegetation, Managing the Landscape, National Expedition: Agriculture and Environment, New Zealand Environments, and Urban and Farm Forestry.

She has also supervised the research of many Master's and Doctoral students at Massey, who have studied diverse topics including urban trees, naturalised plants, rhododendrons, and seed banking of New Zealand natives.

Marion's own research interests focus on the range and diversity of exotic woody plants held in botanic gardens and plant collections throughout

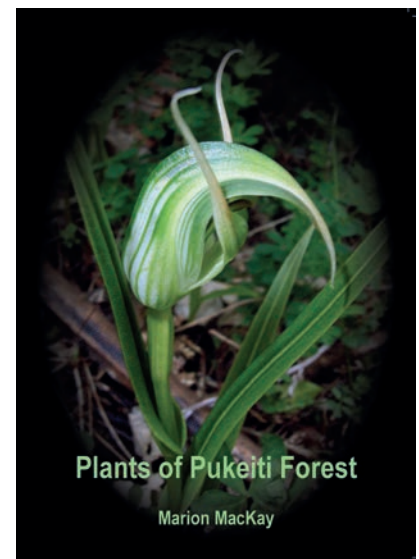
New Zealand, and the management and utility of that plant diversity, specifically:

- development of international conservation programmes for plant biodiversity in botanic gardens and plant collections, with current projects on the genus *Rhododendron*
- utility and management of exotic flora in New Zealand, with current projects on *Rhododendron* and *Juniperus*
- conservation and seed-banking of New Zealand native flora
- management of the environment, with a focus on plant biodiversity.

Marion's research career began while studying for a BHortSc (gaining 1st Class Hons in 1981). In 1979 one of her lecturers offered the chance to visit Eastwoodhill and Marion was immediately hooked by the arboretum. This cemented her interest in exotic flora and led to her PhD studies, during 1989 to 1996, examining the collection and management of exotic woody plants held at Eastwoodhill Arboretum.

Marion became deeply involved with the living collections at Pukeiti and was elected to the Board of the Pukeiti Rhododendron Trust in 2004. In addition to the exotic plantings at Pukeiti Arboretum, she became interested in botanising the native flora of the surrounding 350 ha forest.

This led to her involvement in native restoration of the forest and the 2011 publication of her book *Plants of Pukeiti Forest* (585 pp.)<sup>1</sup>.



Other native flora projects followed, including ongoing work on the regeneration of kauri forest at Limestone Downs, a 300 ha site south of Port Waikato.

Marion has delivered many conference presentations. One highlight was in 2005 when she gave a presentation on New Zealand woody plant collections at an International Dendrology Society seminar on *ex situ* conservation at Cambridge University, England. While there, Marion met Sara Oldfield, then Secretary General of Botanic Gardens Conservation International (BGCI). Sara invited Marion to the

<sup>1</sup> Reviewed in *The New Zealand Garden Journal*, 2011, Vol. 14, No. 2, p. 24.

Rhododendron Red List Assessment Workshop in Singapore in 2008 because of her knowledge of *ex situ* conservation – that was the genesis of the rhododendron projects that followed.

*Rhododendron* research gathered pace following the Singapore workshop, leading to the formation of a research team working on the New Zealand *Rhododendron ex situ* Conservation Project. Marion MacKay leads this team, comprising Dr Susan Gardiner (New Zealand Institute of Plant & Food Research), Doug Thomson (Dunedin Botanic Garden), Graham Smith (Pukeiti), Andrew Brooker (Pukeiti), and collaborations with the New Zealand Rhododendron Association, New Zealand Pukeiti Rhododendron Trust, New Zealand Institute of Plant & Food Research Ltd, James Cook University (Australia), Rhododendron Species Botanical Garden (USA), and BGCI (UK).

Marion says that the collaboration works because there is an excellent group of people who all have different skills to contribute. She jokes that while she is reasonable at identifying *Vireya* rhododendrons, she can barely tell a temperate rhododendron from a fence post! Jokes aside, Marion is considered by her peers to be a world-authority on *ex situ* conservation of *Vireya* rhododendrons, working with national collections and collaborating with the Global Rhododendron Conservation Consortium and various international collections.

Marion hopes that the New Zealand *Rhododendron ex situ* Conservation Project will become an exemplar of *ex situ* conservation management that can be applied to other exotic genera held in New Zealand.

In 2013 Marion was appointed to the research team who is assembling a seed bank for New Zealand flora (New Zealand Indigenous Flora Seed Bank) and she has contributed to the target species prescribed by this programme.

She was invited to join the Global Trees Campaign 2013–2017, an initiative established in 1999 dedicated to saving the world's threatened tree species in their natural habitats.

Marion is a member of the steering committee of the Global Rhododendron Conservation Consortium that was formed in 2018 based at BGCI (UK).

Marion's most recent project on utility of exotic flora in New Zealand is her participation in a research consortium investigating the diversity of *Juniperus communis* in New Zealand, and the potential for development and utilisation of a juniper 'berry' production system in New Zealand for gin production.

Marion has professional affiliations with numerous organisations. Internationally, she is a member of Botanic Gardens Conservation International (UK), the Global Trees Campaign and Species Survival Commission (UK), the *Rhododendron Magnolia Camellia* Group of the Royal Horticultural Society (UK), the Global Conservation Consortium for *Rhododendron* (UK), the American Rhododendron Society, the *Rhododendron* Species Foundation (USA), and the International Dendrology Society.

Nationally, Marion belongs to the New Zealand Institute of Agricultural and Horticultural Sciences, the New Zealand Rhododendron Association, and the Royal New Zealand Institute of Horticulture (RNZIH).

Marion has been a member of the RNZIH since 1986. She was made a Fellow (FRIH) in 1997 while serving as a member of the National Executive. At that time, she was also part of the RNZIH plant collection subcommittee working towards the registration of significant plant collections in New Zealand. In 2012 Marion presented the RNZIH Banks Memorial Lecture, covering her work on both native and exotic flora.

An Associate of Honour of the Royal New Zealand Institute of Horticulture AHRIH(NZ) is conferred to "Persons who have rendered distinguished service to horticulture."

This is the highest award conferred by the RNZIH and limited to no more than 60 people at a time. With the achievements outlined in this citation, the National Executive consider Dr Marion Brenda MacKay to be a most worthy recipient.

#### **Selected research grants:**

- 2001: Massey University Academic Women's Award.
- 2007–2012: funding from the New Zealand Rhododendron Association for the *Rhododendron* project.
- 2008: funding from the L.A. Alexander Trust for the Pukeiti Forest Project.
- 2009: research award, with Dr Susan Gardiner, from the American Rhododendron Society.
- 2009: Peter Skellerup Conservation Award of the Royal New Zealand Institute of Horticulture.
- 2010–2009: two research awards from the Sir Victor Davies Foundation to support two PhD students.
- 2010–2012: research funding from the C. Alma Baker Trust for the Limestone Downs Biodiversity study.
- 2011: research award from the George Mason Charitable Trust for the *Rhododendron* project.
- 2016: research contract with Pukeiti Rhododendron Trust for the New Zealand *Rhododendron ex situ* Conservation Project.
- 2018: research funding from AgMardt for the Juniper research project (project leader: Svetla Sofkova-Bobcheva).

#### **Publications:**

- 29 publications
- 26 peer reviewed publications
- 12 reports to external organisations
- 1 book: *Plants of Pukeiti Forest: A visual record of the Pukeiti Forest Project (2011)*.

#### **Other achievements:**

- 24 conference presentations
- 12 public addresses
- 15 theses supervisions
- 8 theses examinations.

**Citation prepared by  
Alan Jolliffe**