

# Book Reviews

## Above the treeline: A nature guide to alpine New Zealand

By Sir Alan Mark

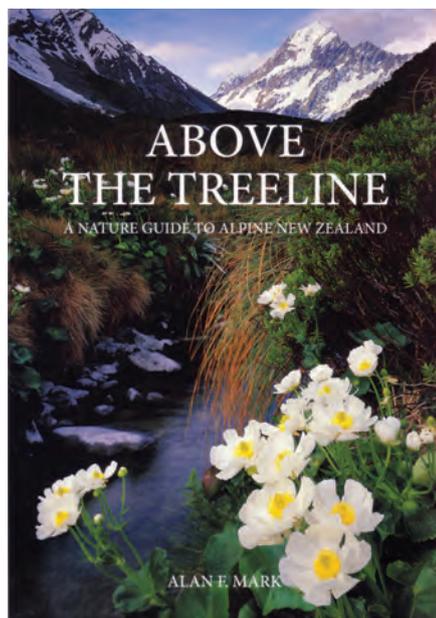
Published by Craig Potton Publishing, 2012

Paperback, colour photos, 472 pages, 215 × 150 mm

ISBN 978-1-877517-76-1

\$NZ49.99

Reviewed by Murray Dawson



A trend of renewal is emerging among New Zealand's plant books and field guides over the last few years. Earlier titles, now out of print and typically with line drawings or botanical illustrations, are being replaced and updated by new offerings formatted in a modern style and illustrated with digital photographs.

Hence, to a greater or lesser degree, Wilson and Given's (1989) *Threatened plants of New Zealand* has been replaced by de Lange et al.'s (2010) book of the same name, Lambrechtsen's (1992) *What grass is that?* has been replaced with Champion et al.'s (2012) *An illustrated guide to common grasses, sedges and rushes of New Zealand*, and Salmon's (1996) *Native trees of New Zealand* has been superseded by Dawson and Lucas's (2011) *New Zealand's native trees* and their (2012) lovechild *Field guide to New Zealand's native trees*<sup>1</sup>.

So too with this latest offering. *Above the treeline* is a reincarnation of *New Zealand alpine plants*, published from 1973, authored by Alan Mark and illustrated by the late botanical artist Nancy Adams.

As emeritus professor of botany at the University of Otago, Sir Alan Mark is well qualified to author this book. As a botanist, ecologist and conservationist, he has spent most of his career working on the alpine vegetation of Otago. He has been a president of the Royal Forest and Bird Protection Society (1987–1990), is a Fellow of the Royal Society of New Zealand, and was knighted (New Zealand Order of Merit) for his conservation work in 2009.

Text from the earlier alpine plant book has been brought across into *Above the treeline* and updated in places to accommodate new information and plant name changes.

Although much of the text for the plant entries is similar, the format of the new book is quite different. It is a semi-soft cover rather than the hardback of old and it is smaller and more field-friendly. Also, the watercolours of Nancy Adams are replaced with more than 1000 carefully chosen colour images contributed by some 70 botanical photographers.

Although most of the entries are of ferns, conifers and flowering plants, reflecting the source work, this new book has been usefully extended thanks to contributing writers. The non-flowering flora is covered, including mosses and liverworts (contributed by John Steel), lichens (David Galloway) and fungi (David Orlovich). Fauna of the alpine region is also represented – most birds<sup>2</sup> (written by Rod Morris), lizards (Mandy Tocher), butterflies, moths, grasshoppers, beetles and other invertebrates (Brian Patrick) including spiders (Cor Vink). This then provides admirable coverage of more than 850 plants and animals likely to be encountered in New Zealand's alpine environment.

According to the Preface (pp. 13–14), 750 species, subspecies and varieties of vascular alpine plants are listed in

this book. The descriptions for each flowering plant, fern and fern ally are clear and concise. This descriptive style is nicely followed for lizards (geckos and skinks), but less so for the other groups.

A useful addition is the New Zealand threat rankings for endangered plants, geckos and skinks listed in the book. I also like the small sized text explaining the meanings of the botanical names following each genus and species entry. This is helpful and adds a nice touch inherited from *New Zealand alpine plants*.

The Preface explains that the phylogenetic (evolutionary) relationships outlined in de Lange and Rolfe's (2010) *New Zealand indigenous vascular plant checklist* are followed in *Above the treeline*. This accounts for the broad groupings above the family level, and the choice of family names to apply to genera. A phylogenetic approach attempts to group together like with like for a more natural arrangement. However, I cannot see a basis for the non-alphabetic arrangement of the plant families, genera and species in *Above the treeline* and its predecessor.

The great majority of botanical names follow recent and accepted taxonomic treatments (such as those on the Landcare Research Plant Names Database). However, botanists' views are seldom in full agreement and so it is for some names chosen in this book.

Alan Mark states that opinion is still divided on whether to merge *Hebe* into an enlarged *Veronica* – he has chosen to retain *Hebe* and related genera. As a consequence of this decision, there is an additional note (p. 450) making a new combination *Chionohebe ciliolata* subsp. *fiordensis* (Ashwin) de Lange & A. Mark. Although publishing a new combination in a guidebook does not break the botanical rules, it would have been more appropriate to formally publish the combination beforehand in a botanical journal aimed at a professional audience. This opinion was also expressed in reviews of *Threatened plants of New Zealand*<sup>3</sup> where de Lange and

<sup>1</sup> These newer titles have been reviewed in recent issues of *The New Zealand Garden Journal*.

<sup>2</sup> But oddly not including the pipit as David Glenny points out in his insightful review of *Above the treeline* published in the *New Zealand Botanical Society Newsletter*, No. 112, June 2013, pp. 21–22.

Barkla published combinations for seven new names used in that book.

I would have liked a bit more use of older and alternative names (synonyms) for readers who may not be up with the current names. For example, there is discussion of hawkweeds and *Hieracium* (p. 46) but no mention of the related genus *Pilosella*. Also, the genus *Kelleria* (pp. 104–106) is now well accepted, but it would have been good to refer to synonyms in *Drapetes*.

Recircumscription of *Cyathodes* restricts it to Tasmania meaning the genus is no longer recognised for New Zealand. Therefore, it is a mistake to list it in the Introduction (p. 29, 30) and Notes and References (p. 449) which provides an example where information has been pulled from the older book and not updated for the new. The index and main body correctly recognises the segregate genera *Androstoma* and *Montitega*.

The publishers need to sharpen their proof-reading pencils. Editorial issues were also commented upon by Peter Heenan in his book review of *New Zealand's native trees*, again published by Craig Potton<sup>4</sup>. Likewise, for *Above the treeline*, inconsistencies and minor errors throughout detract from what is otherwise a well presented work.

For example, the ISBN number on the back outside cover (ISBN 978-1-877517-76-1) is correct, but the number on the CIP page (ISBN 978-1-877333-52-1; p. 4) is wrong.

The most jarring errors are in the author authorities following each botanical name. Inclusion of authorities is good practice as it provides certainty on exactly who described what plant. For example, 'Hook.f.' is the standard author abbreviation for Sir Joseph Dalton Hooker (1817–1911), famous English botanist who named and described many New Zealand plants. Although his abbreviation is correct in most instances, *Above the treeline* has a range of incorrect space and full-stop variants (including 'Hook.f.', 'Hook.f..', 'Hook. f.' and 'Hook f.<sup>15</sup>'). Other authorities are inconsistent and all author names should have been abbreviated following the internationally recognised standard (e.g., Brummitt and Powell, 1992).

There are 23 endnotes cited in the Introduction (pp. 15–46) which appear in the Notes and References section (pp. 449–450) and in the Further Reading (pp. 452–453). However, references are then abandoned in the main species entries, where they could have been used to validate statements such as 'recent DNA studies mean...' and 'a recent revision of...' This results in literature alluded to in the main body but missing or at best disconnected from the reading list. For example, David Glenny's outstanding revision of the New Zealand gentians is unreferenced. This illustrates the difficulty in achieving an optimal balance between information depth and readability of guidebooks.

*Above the treeline* essentially delivers New Zealand's first comprehensive guide to understanding the special plants and animals that occupy the alpine zone. The photos, formatting and overall presentation work really well. I just wish that the text was a bit more polished.

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**Available from Touchwood Books and Manaaki Whenua Press**

#### Auckland's remarkable urban forest

By Mike Wilcox

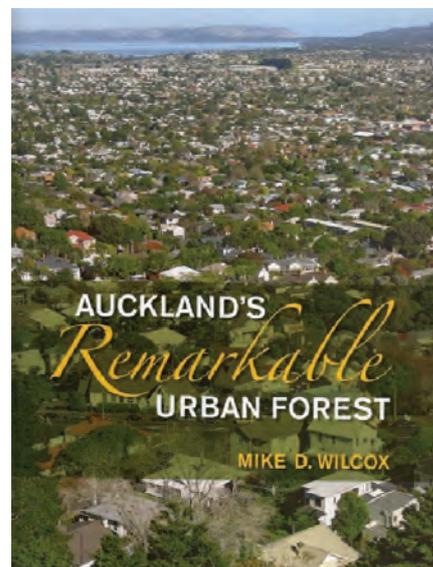
Published by the Auckland Botanical Society, 2012

Hardback, colour illustrations, 348 pages, 252 × 190 mm

ISBN 978-0-9583447-5-3

\$NZ60.00

Reviewed by Murray Dawson



Auckland has a unique growing environment in New Zealand. The Auckland urban region lies at a transition between the subtropical and temperate zones. It has a warm and moderately wet climate, where frosts are rare and snow has been recorded just once.

<sup>3</sup> *The New Zealand Garden Journal*, 2010, Vol. 13, No. 1, pp. 31–32; *New Zealand Botanical Society Newsletter* 100, June 2010, pp. 21–23; *Australasian Systematic Botany Society Newsletter* 151, June 2012, pp. 42–44.

<sup>4</sup> Reviewed in *The New Zealand Garden Journal*, 2011, Vol. 14, No. 2, pp. 21–23.

<sup>5</sup> 'Hook.' is also used but is correct as this abbreviation refers to Joseph Hooker's father, Sir William Jackson Hooker (1785–1865).

Before forest clearances, and long before urbanisation, Auckland was home to the mighty kauri. Kauri still grows in bush remnants and in cultivation, but now the peri-urban areas are better known for new weed naturalisations (Esler, 2004) and Auckland is said to have more weeds than anywhere in the world.

Despite deforestation and weed incursions, much of Auckland's rural and urban native flora is still to be found. Mangroves dominate estuaries, there are still broadleaf forests in gullies, and the iconic pōhutukawa is found clinging to the coastal cliff-tops and is common as an urban street tree.

The lush growing conditions also favour semi-tropical exotic species lacking in more southern latitudes. African, Asian, Australian, New Caledonian and South American tree species are cultivated in Auckland. Some of these interesting exotic species are rare elsewhere in New Zealand and mentioned in the book. These include *Castanopsis cuspidata* (Japanese chinquapin), *Dysoxylum pachyphyllum* (Lord Howe Island apple), *Jubaea chilensis* (Chilean wine palm) and *Phytolacca dioica* (the ombú from Argentina).

As the title states, Auckland has a remarkable urban forest and author Mike Wilcox systematically explores the botanical treasures area by area. After the Introduction, following chapters cover components of the urban forest such as native bush remnants, exotic woodland, home gardens, amenity street trees, parks, campuses, school grounds and cemeteries.

The remaining chapters change gear from an area focus to overviews of different groups, both native and exotic. Notable trees and flowering trees are covered, as well as climbing and perching plants, weeds, fungi and lichens.

There is a good set of colour photographs throughout, showing both the plants and the places they grow. Dates of photographs are provided for a historical context. Maps, tables and lists in the book provide useful summary information.

The main body of the text has a mixture of botanical and common names throughout. Sometimes in the text a common name is followed by its

botanical name in brackets, otherwise readers will need to look up the corresponding names in the index, where both are given together.

The majority of botanical names are correct, but I noticed a few minor spelling errors, especially in the index. Also, there are no macrons in the Māori plant names – this is not incorrect but it's perhaps technically better to include them.

Many new names are followed, such as *Austroderia* for native toetoe (instead of *Cortaderia*), *Leionema nudum* (instead of *Phebalium*), *Leptecophylla juniperina* (instead of *Cyathodes*) and *Veronica* (instead of *Hebe*). Other treatments are not followed, including *Macropiper melchior* which is now *Piper melchior*, *Pennisetum clandestinum* which is now *Cenchrus clandestinus*, and *Senecio mikanioides* which is now *Delairea odorata*. The Landcare Research Plant Names Database (<http://nzflora.landcareresearch.co.nz>) provides an invaluable guide to current taxonomic treatments and names used by them.

A great strength of this book is that it does not regurgitate old information. There are plant books published that represent little more than summarised botanical descriptions with a few images thrown in. Not so with *Auckland's remarkable urban forest*. Mike Wilcox has spent more than 20 years conducting fieldwork and carefully recording his observations on the plants growing at each location. He should be thoroughly congratulated on this meticulous approach.

I'm familiar with one example demonstrating his original research. The most commonly cultivated Australian tea-tree in New Zealand is *Leptospermum* 'Copper Sheen'. In his book, Mike Wilcox independently arrived at the conclusion that the correct species for this cultivar is *L. morrisonii*. Coincidentally, I reached the same conclusion in my article documenting cultivars of this genus (Dawson, 2012). This is the first time that *Leptospermum morrisonii* has been associated with this popular dark-leaved cultivar in New Zealand<sup>1</sup>.

The order of the Summary near the beginning of the book and the CIP (Cataloguing In Publication) page at the back is unconventionally reversed

but does not detract from the work.

*Auckland's remarkable urban forest* concludes with a specialised reference list of books, journals and websites that focus on Auckland's trees. The GIS draw-and-measure tool, referred to on pages 7 and 9, could have been referenced here (for the record, it is at <http://maps.aucklandcouncil.govt.nz/aucklandcouncilviewer/>).

I would have also liked the inclusion of the Notable Trees of New Zealand (NTNZ) website ([www.notabletrees.org.nz](http://www.notabletrees.org.nz)) as a reference. The NZ Tree Register database allows users to retrieve records of Auckland's notable trees. Mention of this useful resource is also lacking in the Notable Trees section (Chapter 15) and I hope that the authors' full lists of individual and groups of notable trees (Tables 11–12) will in time be loaded into the online NTNZ resource.

This book is a tremendous achievement. I really like the concept of celebrating trees and other plants of urban Auckland, providing area surveys to assist in their conservation, and treating native and exotic plants in an even-handed way.

## References

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**Available from Manaaki Whenua Press.**

<sup>1</sup> Note that the full name of this New Zealand selection should correctly be *Leptospermum morrisonii* 'Copper Sheen' and not *L. morrisonii* 'Burgundy' as stated in *Auckland's remarkable urban forest*. In my article I managed to track down the separate origins of these cultivars that are of a similar appearance.

## Latin for gardeners: Over 3,000 plant names explained and explored

By Lorraine Harrison

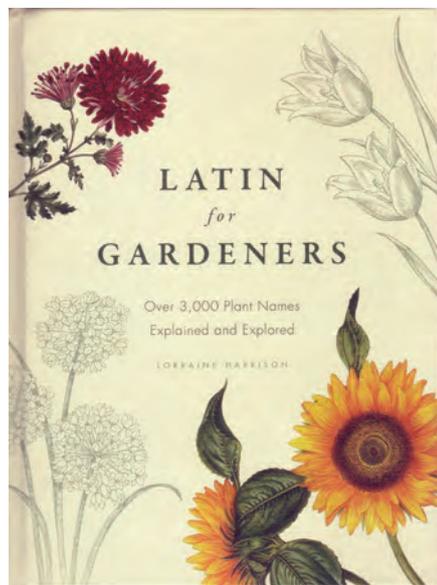
Published by Crows Nest Books (an imprint of Allen & Unwin), Australia, 2012

Hardback, colour illustrations, 224 pages, 173 × 235 mm

ISBN 978-1-74331-275-9

\$NZ40.00

Reviewed by Murray Dawson



You would expect this dictionary-like book of botanical Latin to be about as appealing as reading a phone book. However, author Lorraine Harrison has exceeded these expectations and crafted a beautifully presented and engaging work. There are nice touches throughout, starting from the textured and durable hardcover with a nostalgic design that invites the reader in. Within the covers there is a bookmark ribbon, excellent and clear layout, muted colour tones and liberal use of botanical paintings.

The introductory pages (Preface, How to use this book, A short history of botanical Latin, Botanical Latin for beginners, An introduction to the A–Z listings; pp. 6–13) are brief and well-pitched at the target audience of gardeners and horticulturists. The writing is at this level rather than that of a botanical textbook. However, as a career botanist, I too found plenty of interest.

As the title indicates, more than 3,000 Latinised plant names are listed in alphabetic order (from *abbreviatus* to *zonatus*; pp. 14–221), along with their

pronunciation spelt out phonetically, gender variants, meaning, an example of a binomial that uses that name and any variations in spellings.

Botanical illustrations are captioned with their scientific and common names and intermingled throughout. Narrative on these illustrations appears in a box entitled 'Latin in action'. Botanical illustrations are appropriately placed near to their Latin names (usually the species epithet) in the A–Z listing. Most of the examples named and illustrated have a Euro-centric bias as this book was written and released in the UK under the title *RHS Latin for gardeners*. Nevertheless, most of the species mentioned are also to be found in Australasia, as garden subjects or as weeds.

To maintain the reader's interest, there are tales of botanists and plants interspersed with the A–Z definitions of botanical Latin. These special interest features are presented on pastel green pages to set them apart from the alphabetic listings that are on a cream background. They include plant profile pages (20 featured plants, from *Acanthus* to *Vaccinium*), plant hunter pages (summary biographies of the travels and discoveries of 15 botanical collectors, including Alexander von Humboldt, Sir Joseph Banks, Carl Linnaeus and Sir Joseph Hooker) and plant themes (7 themes: Where Plants Come From; Plants: Their Shape and Form; The Colour of Plants; The Qualities of Plants; Plants: Their Fragrance and Taste; Numbers and Plants; Plants and Animals). The plant profiles and themes explore the meanings of the Latinised names that may allude to the plant origins and characters.

The book off-repeats the important message that much can be learned of a plant by understanding the meaning of the Latin names applied to it. It was good to also read a few cautions on inferring too much from plant names. For example, the orchid *Dendrobium anosmum* has a strong fragrance despite the name 'anosmum' meaning to lack scent (p. 144). Because of enlarged circumscriptions, synonymy and taxonomic vagaries, the meaning

of Latinised names used in a binomial can be misleading and may not always be an accurate reflection of the characters of a species to which they seem applied. I think that this warning could have been made up-front in the introductory pages.

*Latin for gardeners* concludes with a short glossary (of just 34 terms; p. 222), a well chosen (albeit UK-weighted) bibliography (p. 223) and image credits (p. 224). We are told that illustrations are sourced mainly from the RHS Lindley Library but I would have liked to have seen the original botanical artists credited here if known.

This book is certainly more lightweight compared to William Stearn's authoritative *Botanical Latin*, or of more direct relevance *Stearn's dictionary of plant names for gardeners* which gives the meaning and origin of some 6,000 botanical names encountered by gardeners and horticulturists. *Latin for gardeners* is not intended to be as heavy-duty as Stearn's reference works and succeeds admirably in providing a concise and approachable primer that should meet most people's needs.

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