Three books on plants from China

Reviewed by Ross Ferguson

Gifts from the gardens of China
By Jane Kilpatrick
Hardback, 288 pages
Published by Frances Lincoln, London, 2007
£35.00 (available from Touchwood Books for $NZ100.00)

Hortus Veitchii
By James H. Veitch
Limited to 1000 numbered copies
£95.00 ($NZ295.00)

British naturalists in Qing China
Science, empire, and cultural encounter
By Fa-Ti Fan.
Hardback, xi + 238 pages
Published by Harvard University Press, Cambridge, Mass, 2004
ISBN 0-674-01143-0
US$52.00.

The great plant collector E. H. Wilson entitled one of his books China, mother of gardens. This was a little self-serving because Wilson had himself collected predominantly in China, but there was also an element of truth. China has an extraordinarily rich and diverse flora and it has contributed more to the temperate gardens of North America and Europe than any other equivalent area. We can understand why Wilson said “China is the country to which the gardens of all other lands are so indebted.” We need only to think of magnolias, camellias, rhododendrons, primulas, gentians, hydrangeas, ‘Japanese’ anemones, forsythias, wisterias, clematis, peonies and tiger lilies. In New Zealand with our temperate gardens we too can acknowledge the debt to China – we can also be grateful for kiwifruit.

The two best general accounts of plant collecting in China are probably Emil Bretschneider’s magisterial History of European botanical discoveries in China (first published in 1898 and subsequently reprinted), and E. H. M. Cox’s Plant hunting in China: a history of botanical exploration in China and the Tibetan Marches (first published in 1945 and subsequently reprinted). Bretschneider was physician at the Russian Legation in Peking for nearly 20 years and he had the great advantage of knowing personally many of those about whom he wrote or, at the least, had corresponded with. History of European botanical discoveries in China is a detailed and unusually accurate work and, although it stops at the end of the 19th century, it and Bretschneider’s other botanical writings are essential for anybody with a serious interest in plant collecting in China. However, Bretschneider is by no means an easy read and the excitement and challenges of plant collecting, particularly plants of horticultural merit, are more apparent in Cox’s Plant hunting in China. Cox was himself a plant collector and likewise he knew personally many of those about whom he wrote. The one serious failing of his book is that he provides no references or citations even though he is likely to be correct.

Initially, many of the Chinese plants that were introduced to Europe were those grown by the Chinese in their own gardens. Access to the interior of China was restricted and plant collectors were largely limited to visiting Chinese nurseries or gardens. Gifts from the gardens of China; the introduction of traditional Chinese garden plants to Britain 1698–1862 covers this initial period from the visit of Dr James Cunninghame in 1698 until the last of Robert Fortune’s trips in 1862. Chinese nurserymen would take advantage of the Europeans, charging exorbitant prices or substituting common plants for the rarities requested. Seed would often not germinate and it was frequently suspected that the seed had been killed. Taking the plants back to Europe was also a challenge. Dr John Livingstone, a surgeon at Canton for 20 years at the beginning of the 19th century, estimated that for every plant that survived the trip back to England, a thousand had been lost and that each plant that had been successfully introduced had cost at least £300, an astonishing cost. Kilpatrick includes delightful engravings of potted plants.
being watered on the deck of a ship and of a traveller determinedly carrying ashore his treasured plants at the end of the voyage. Perhaps it is telling that he carries only two small plants – how many had died on the way? It is impressive how quickly information became available in Europe as to which Chinese plants were worthy of collection; this is shown by the detailed ‘shopping lists’ prepared by Sir Joseph Banks and the London Horticultural Society, with an emphasis on plants that were hardy in Britain.

*Gifts from the gardens of China* is a well-written and balanced account of the early efforts of mainly British plant collectors in China, although Kirkpatrick also describes the activities of some Jesuit priests such as Incarville. It is well referenced and there are many apposite quotes. I particularly enjoyed the illustrations, especially those of Chinese flowers from painted wallpapers or porcelain and of Chinese export paintings. There are also many fine reproductions of illustrations from early botanical magazines of the plants successfully introduced. This book is beautifully produced and is a most useful reference source.

*Hortus Veitchii* is also beautifully produced, with great care taken to ensure the appropriate paper and binding, even if the page size is somewhat reduced. The subtitle of *Hortus Veitchii* is *A history of the rise and progress of the nurseries of Messrs. James Veitch and Sons, together with an account of the botanical collectors and hybridists employed by them and a list of the most remarkable of their introductions.* The title just about says it all and this must be the most sumptuous of any vanity publication prepared by a nursery firm. Veitch and Sons were for many years the greatest of all British nursery firms and *Hortus Veitchii* is an exhaustive and extravagantly prepared description of their many achievements. It is particularly interesting for the accounts of their travellers in China, Charles Maries (1877–1879) and E. H. Wilson (1899–1905). Plant collectors were no longer limited simply to acquiring plants from nurseries close to the ports; travel was now possible into the interior of China and a great wealth of new plants was becoming accessible. *Hortus Veitchii* describes the plants collected by Maries and Wilson, although at the time of publication most of Wilson’s plants had not yet to prove themselves. The original edition of *Hortus Veitchii* was not for sale but complimentary copies were sent to universities, libraries, eminent botanists and good customers. Copies come on the market only very occasionally and now fetch high prices. This facsimile edition is therefore most welcome and makes an important reference work much more accessible. The nomenclature is now often outdated, but Caradoc Doy is intending to prepare a supplement listing name changes and indicating the status of the plants in the wild.

*British naturalists in Qing China* emphasises just how dependent European plant collectors and naturalists were on the Chinese. The Europeans’ knowledge of desirable plants to collect was mainly based initially on export paintings by Chinese artists working in a different tradition, intending to please aesthetically, not to be ‘scientifically accurate’ as understood by western botanists. It is not surprising that the Horticultural Society in London hesitantly instructed Robert Fortune on his first voyage in 1843 to enquire about “peonies with blue flowers, the existence of which is, however, doubtful” or “camellias with yellow flowers, if such exist”. The information available was at best patchy but the paintings (and the porcelain) did, however, indicate the wonderful and enticing range of plants that might be available, if only the problems of transport could be overcome. *British naturalists in Qing China* again emphasises how dependent the Europeans initially were on Chinese nurseries at the ports. Once travel to the interior became possible after the Opium Wars, naturalists, who generally had other responsibilities, were still dependent on Chinese workers to collect specimens. Augustine Henry relied on his Chinese workers to collect his many thousands of herbarium specimens; E. H. Wilson travelled with a large entourage of workers and collectors. There is also the distinction between naturalists and plant collectors. Henry collected thousands of plant specimens but introduced very few plants into cultivation; Wilson was a plant collector with clear commercial goals.

I found *British naturalists in Qing China* a most rewarding book. It is clear and well written. It is the best account I have read of 19th century British naturalists in China and supplements the information available in other works with their greater emphasis on natural history. My only regret is that Fan restricted himself to British naturalists and did not also consider the great French collectors as it would be interesting to compare the activities of these priests, such as David, Delavay and Farges, often living for years in the interior of China, with the British collectors, normally associated with trade or the Chinese Maritime Customs. There is a wonderful reference list which will provide reading for several years and the use of Chinese sources adds greatly to its value. This is one of those rare stimulating books providing many new ideas.

Each of these very different books should be in any comprehensive horticultural library.
Good Gardens with Less Water
By Kevin Handreck
CSIRO Publishing
Paperback, 166 pages, 190 x 240mm, Australia, 2008
ISBN 9780643094703
$NZ40.00
Reviewed by Andrew Maloy

I started reading this book back in August 2008 when many parts of New Zealand were experiencing their heaviest rainfall for years, so it seemed incongruous to be learning about ways to garden with less water when we’d just finished cleaning up a flood in our basement and water flowing through the vegetable garden had become a common occurrence. But memories of last summer’s record drought and the problems it caused throughout the country were still clear in my mind, so a lot of what this book is about made good sense.

Good Gardens with Less Water is written for Australian conditions. The examples of plants, materials, equipment, bye-laws and regulations are largely Australian specific. Nevertheless a lot of the information in this book can be equally applied to gardens in New Zealand and elsewhere — and this book contains a wealth of useful information. It is much more than just about how to have a good garden with less water. This book provides all gardeners, novice or experienced, with an insight into how to garden both successfully and sustainably into the future. Written in an easy to follow style the author works through every aspect of water use in the garden that I can think of, often referring to recent research findings, pointing out both the pros and cons of many products and the myths of some traditional gardening habits, as well as offering practical solutions and tips for anyone who wishes to reduce water use in their garden.

Beginning with a short chapter on the causes of water shortages the author discusses such topics as changing weather patterns, increasing populations and lack of political vision as contributors to the problem. But he also points to some areas for hope and says gardens are part of the cure.

The next chapter looks at how different plant types have evolved to survive the stresses of wide ranging environmental conditions, especially water availability, including three types of photosynthesis, roots and mycorrhizal fungi and the effect (not always beneficial) of fertiliser.

The following three chapters, Know Your Soil, Organic Matter and Soil, and Your Soil is a Reservoir give clear step by step instructions how to discover just what type of soil you are dealing with, how to sustain it, improve it and make the most of even the worst kind of soil.

Water salinity is not as great a problem in New Zealand as in Australia but the chapter Water Quality still contains pertinent information, particularly on the pros and cons of collecting greywater and its use in the garden. Chapters on collecting rainwater and how to make the most of it in your garden follow.

Some of the detail on how to deliver the right amount of water to your plants is rather technical at times but written in an easy to follow style with examples of calculations to help. A wide range of irrigation systems is described along with the information needed to select an appropriate one for your conditions.

One chapter covering the facts and myths about mulches, both organic and inorganic, has some surprising revelations, especially if you thought that any mulch is better than none. Throughout the book the author is not afraid to take a strong position when it comes to the effectiveness or otherwise of some commercial products and in this chapter in particular he shows examples of materials being wrongly labelled and promoted.

Tips on garden design, choosing a landscaper, selecting good quality plants at the nursery and garden centre, dealing with too much water and types of drainage follow. The chapter on lawns is one where much of the detail is very Australian-specific but the information on preparing, sowing and maintenance of a new lawn is relevant to New Zealand.

The last two chapters. Water for Plants in Pots and Testing Potting Mixes has some of the best information explaining the properties of potting mix I have seen in any popular gardening text, covering such topics as air filled porosity, water holding capacity and wettability. I’m sure many commercial growers would find this chapter useful too. If you want to have a better understanding of what is really happening around the root system of your potted plants this shows you how to go about it in step by step detail. Finally in the appendix there is a fairly extensive list of references for those who wish to delve into any topic in more detail.

Available from Touchwood Books and Manaaki Whenua Press

Plant Heritage New Zealand
Te Whakapapa o nga Rakau
Interpreting the special features of native plants
By Tony Foster
Published by Penguin Books / Raupo Publishing (NZ) Ltd
Paperback, 207 pages, 210 x 260mm, New Zealand, 2008
ISBN 9780143009795
$NZ49.95
Reviewed by Murray Dawson

Tony Foster is passionate about New Zealand’s native plants. He has taught biology and horticulture at secondary schools, developed his own native

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plant website called 'bushmans friend' (www.bushmansfriend.co.nz), and runs a business bearing the same name taking visitors on interpretive bushwalking tours in Northland.

Tony draws upon this background to write a book sharing his enthusiasm and knowledge of a wide range of native plant species found in the New Zealand bush. He showcases his superb photography and provides brief descriptions of each species that teaches us how to identify and distinguish them.

Many of the native plants covered are widely cultivated in our gardens, such as the iconic cabbage trees, flaxes, and ratas. Others are less well known, but all have stories to tell of their origins and evolution, their traditional and present day uses, and how they have inspired poems and proverbs. These stories, both European and Maori, are brought together to highlight special features of the flora, and how New Zealanders have created a cultural history around these plants.

This book sets itself apart from most other offerings. It is not a strictly botanical field-guide like Poole and Adams (1994), St George et al. (2006) and other guides. Nor is it a comprehensive treatment such as those featuring botanical artwork (Eagle, 2006), cultivars (Metcalfe, 1993), divergicating plants (Wilson and Galloway, 1993), cabbage trees (Simpson, 2000), or hebes (Bayly and Kellow, 2006).

Plant Heritage New Zealand seems most allied to an earlier title by the name of Flowering plants of New Zealand (webb et al., 1990). Both books celebrate the special qualities of the New Zealand flora, are aimed at a wide public audience, and attempt to increase people's appreciation and knowledge of native plants.

Plant Heritage New Zealand is divided into two parts that contain four chapters each. Part 1, Introduction to New Zealand's remarkable plants, provides the background and natural history for the native species profiled in Part 2.

This first part outlines endemism, species diversity and distribution, forest and plant associations (Chapter 1, New Zealand plants in the landscape), biostatus (exotic/native/endemic), ancestry and elements of the flora, features of New Zealand plants (Chapter 2, The characteristics of New Zealand's flora), taxonomy and common names (Chapter 3, What's in a name? Classifying plants), and Maori genealogies and insights (Chapter 4, Maori and the plant world).

These are all 'heavy duty' topics, and to me the author seemed to struggle with the balance between presenting complex information and conveying it in a simple but accurate manner. Professional botanists and ecologists may feel that more detail is needed to properly explain some of the topics. For the less knowledgeable reader the information could have been more clearly written in places.

Part 2 is the main section of the book and reveals its real strengths, where the authors' first-hand knowledge of the 110 species that he observes and his 300 or more photographs unfold. Reading through the species profiles, I gained the distinct impression that the author was writing using much of his own keen observations, rather than rehashing information from floras and other plant books.

Most of the species chosen for this book were derived from the authors' home area of Northland. This is quite appropriate because (as he points out) much of New Zealand's species diversity is found in the upper North Island anyway.

The format of each species profiled works well, and green text boxes are used for relevant quotes and explanations from early European writings and Maori oral traditions. These are a delight to read and add much to the interest of the 'stories' surrounding each plant. Also, the meanings of the botanical names are usefully provided, and nicely relate to the photos and short descriptions.

Different plant groups are well represented — there is a selection of conifers (Chapter 5), dicotyledons (Chapter 6), monocotyledons (Chapter 7), and ferns (Chapter 8). This book does not include any native orchids, but these have already been dealt with by others (e.g., St George et al., 2006).

Within each major grouping according to chapter, the genera are arranged together in their respective families. The families themselves do not seem to follow any particular order.

The preferred botanical names and treatments used for the plants are generally current. For example, the book places Hebe in the Plantaginaceae family, where it is now considered to belong, rather than its long-standing placement in Scrophulariaceae.

However, some of the recent and generally accepted name changes have not been followed. No explanation is provided for this, which creates an impression that the author has not kept abreast of the botanical literature. Returning to the hebe example, 'Hebe hulcana' is presumably a mis-spelling of Hebe hulceana, which is generally accepted under a different genus, Heliohebe hulceana. And some botanists now include Hebe (and allied genera) all under an enlarged Veronica.

Other names are outdated in the book. Pseudotanax anomalous is referable to Raukaua anomalus, and Pseudotanax simplex is referable to Raukaua simplex. Reinstatement of the name Raukaua (Mitchell et al., 1997) has been well accepted by botanists.

At the family level, Cordyline is now accepted in the Laxmanniaceae family rather than Agavaceae, Leucopogon fasciculatus is in the Ericaceae (along with Dracophyllum, Leptecophylla and other epacrids not covered in the book), rather than Epacridaceae; Laurelia is in Atherospermataceae rather than Monimiaceae; Phormium is in Hemerocallidaceae rather than Agavaceae; Vitis is in Lamiaceae rather than Verbenaceae.

Some authors will chose not to follow these recent name changes, but they should at least mention them. Many of these changes are the result of DNA sequencing studies. Noticeably absent throughout the book is discussion of the huge impact that DNA sequencing has made on our understanding of the plants — on their names, taxonomic relationships, and evolutionary histories. These DNA and taxonomic 'stories' should also be told.
This book is not perfect in other ways – there are a considerable number of typographic errors that should have been picked up during editing. There seems to be a trend in recent years where publishers are not rigorous enough in their copy-editing. As a result, the published work lets themselves and their authors down. I do hope that there will be an improved second edition that removes these minor irritations. The most glaring problem is that much of the index lists page numbers for the main body that are incorrect – they are 1–3 pages out of kilter!

Nevertheless, Plant Heritage New Zealand is a useful book that should appeal to a wide readership from secondary school students upwards. By and large, it does achieve what it sets out to do, and successfully celebrates the diversity, special features, and beauty of the New Zealand native flora.

References


Available from Touchwood Books and Manaaki Whenua Press

A selection of the best book reviews of 2007, compliments of the Weekend Gardener magazine

Encyclopedia of Hardy Plants
Annuals, bulbs, herbs, perennials, shrubs, trees, vegetables, fruits & nuts
Derek Fell
Published by David Bateman
$NZ59.99

Derek Fell, author of Great Gardens of New Zealand among other acclaimed titles, has been growing and writing about plants for 45 years.

Fell says in his introduction to this, his latest book, the first thing that people in temperate climates ask about a plant is whether it’s hardy, meaning whether it’s cold hardy. However, Fell challenges strict adherence to the hardiness zone system and encourages readers to explore their gardens’ microclimates.

He quotes a recent trip to the Shetland Islands, the UK’s most northerly outpost, where he marvelled at their beautiful wildflowers. He was also surprised to find, in one sheltered garden, pampas plumes and New Zealand flaxes growing outdoors throughout all seasons. Fell puts their success down to the influence of the Gulf Stream that peppers out among those islands.

Here is a treasure trove of more than 700 “iron-clad” plants and photographs. He covers, in separate A-Zs, annuals, perennials, bulbs, woody plants, herbs, fruits, nuts and vegetables under their botanical names. The common name for each plant is also given, as are their hardiness zones. A full description of the plants and their provenance follows, as well as discussion on growing requirements and, where applicable, propagation methods.

Hardy Plants will be an indispensable ready reference for gardeners in our more demanding climates, such as the North Island’s Central Plateau and much of the South Island.

Weekend Gardener, Issue 216, 2007, Page 32

The Plant Propagator’s Bible
A step-by-step guide to propagating every plant in your garden
Miranda Smith
Published by Cameron House
Distributed by Bookwise International
$NZ29.95

How to Propagate
Techniques and tips for over 1000 plants
John Cushnie
Published by Kyle Cathie
Distributed by New Holland
$NZ49.99

Propagation is gardening’s rediscovered art, if the number of recent books on the subject is anything to go by.
Hard on the heels of last year’s *The Complete Book of Plant Propagation* (published by Mitchell Beazley) and the *RHS Propagating Plants* are these two titles, one by American Miranda Smith and the other by Briton John Cushnie.

Cushnie’s discursive style in *How to Propagate* is a bonus, while the photography adds an authoritative, personal touch. However, the stylised illustrations in Smith’s book help to convey the basics clearly, particularly when it comes to more complex grafting techniques.

This said, both titles are comprehensive. Cushnie’s directory of plants is larger: Smith’s is slimmer, but more technically detailed. If you’re keen to graft one cactus on to another you’ll plump for Smith. On the other hand, if you want a reassuring, personal take on propagating camellias by taking leaf-bud cuttings, Cushnie fills the bill. If price is a consideration, *The Plant Propagator’s Bible* is by far the cheapest of the four titles mentioned.

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**Hydrangeas**

Glyn Church
Published by David Bateman
$NZ39.99

Hydrangeas are back, big-time, and this book, hard on the heels of their renaissance, is a timely addition to the gardening library.

Renowned Taranaki horticulturist and gardening writer Glyn Church offers reasons for the new found popularity of this durable favourite. Among them is the emergence of new, harder *H. macrophylla* cultivars, the colours now available and the realisation that hydrangeas are a fine source of long-lasting cut flowers.

No matter whether it’s macrophyllas, serratas, or the new varieties of paniculatas and quercifolias he’s discussing, Glyn’s knowledge and enthusiasm shines through.

“Hydrangeas have so many winning attributes,” he writes, “it’s hard to imagine an easier group of plants to grow or any other flowering shrubs capable of providing vibrant colour for so long a season.”

There’s lots of practical stuff here, too. The different requirements of various types is spelt out, while factors, including soil conditions and climate, are mulled over. And for those who puzzle over the phenomenon, there’s also detailed explanation on how soil alkalinity and acidity teases out the blues and pinks of *H. macrophylla*.

Other chapters deal with pruning, pests and propagation, landscaping with hydrangeas, and hydrangeas in and around the house. If you garden in a cooler climate or are hunting for a variety with extra oomph, look to Glyn’s documentation of species and cultivars – you’re bound to find a plant that will flourish in your conditions.

*Hydrangeas* is the author’s second book on the subject (the first was written in 1999, when hydrangeas were on the cusp of their comeback). The delightful photographs, mostly taken by the author himself, and the lively text – underpinned by Glyn’s hands-on experience at his vibrant Woodleigh nursery – ensure an authoritative, instructive read.


**The Country Diary of an Edwardian Lady**

Edith Holden
Published by Kudos
Distributed by Bookwise
$NZ39.95

More than 3 million copies of this best-seller have been printed in 13 languages since it was first posthumously published in 1977.

Schoolteacher-turned-illustrator Edith Holden’s *Nature Notes of 1906*, the source for this book, are said to have been executed as examples for her pupils and discovered by chance.

The charming drawings, paintings, poems and month-by-month observations record the glories of her Warwickshire countryside, as well as travels throughout England and Scotland. Most of the watercolours are botanical, but there’s other subject matter: a finely painted shrew; a ploughman and draughthorses; bees and butterflies.

Much of the book’s charm lies in the unembellished writing. Here’s a sample of the entry for May, 1906:

“The hedge-rows are haunted by young fledglings, chieftly blackbirds and thrushes. I saw one precocious young robin trying to capture a worm nearly three times as long as itself.”

Tragically, the author met her death by drowning, falling into a backwater of the Thames while on one of her rambles.

Her reminder of a gentler age lives on in this edition, embossed with a gold seal to commemorate the centenary of its creation.

David Squire, as the author of more than 70 plant-related and gardening titles, takes a typically no-nonsense approach in this useful primer.

Opening chapters cover in detail the characteristics of both palms and cycads examining the habit, leaves and fruit and seed of both. There’s information on what to look for when you buy, how to plant and then how to look after your specimen including discussion on the various pests and diseases both may be prone to.

There’s a chapter on propagation, including the challenges of raising cycads from seed. There are detailed listings of various species of palms and cycads and their preferred climatic conditions.

An A-Z of 99 palms and 17 cycads reveals their nature and variation in growth with estimations of the height and spread of the specimens.

Each species is pictured and a fact file accompanies the description – giving growth rate, preferred conditions, germination time and so on.

This hardback, with its clear, large format, should prove popular, particularly with the new enthusiast seeking guidance.

*Weekend Gardener, Issue 225, 2007, Page 38*
The three Chinese reactors would likely be placed in the center of the country, at Muzaffargarh, in Punjab province, at a site now being prepared, officials said. Two other advanced 1,100-megawatt reactors from China are due to be built near the southern port of Karachi, under a $9 billion agreement completed last year. Mr. Sharif led the groundbreaking ceremony for the reactor. Hum bhi chai piyaein ge. A deal to purchase three reactors would be in addition to last year’s agreement for China to build two nuclear plants in Pakistan’s southern port of Karachi. The reactors would help plug the gap in Pakistan’s electricity supply and cement an alliance with China aimed at counteracting their mutual rival India. Then you can start reading Kindle books on your smartphone, tablet, or computer - no Kindle device required. Apple. Android. "With her probing inquiry and engaging prose, Sarah Rose paints a fresh and vivid account of life in rural 19th-century China and Fortune's fateful journey into it...if ever there was a book to read in the company of a nice cuppa, this is it." -Washington Post. "The plot for Sarah Rose's For All the Tea in China seems tailor-made for a Hollywood thriller...a story that should appeal to readers who want to be transported on a historic journey laced with suspense, science and adventure." -Associated Press. "An enthusiastic tale of how the humble leaf became a g