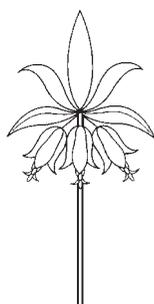


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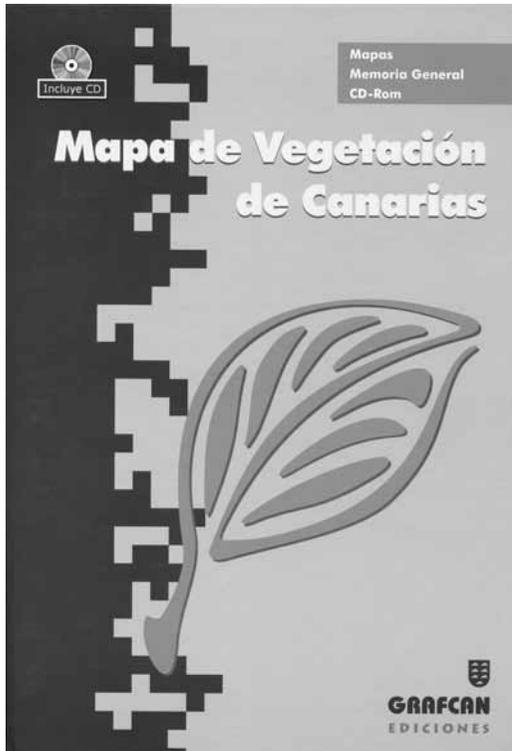
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Book Reviews and Announcements

Arco Aguilar, M[arcelino]. J. del, ed. *Mapa de Vegetación de Canarias*. La Laguna, Tenerife: GRAFCAN Ed., 2006. 550 p., col. ill., maps (packaged with 7 folded maps and 1 CD-ROM). Price unknown. ISBN 978-84-611-3811-1 (paperback, in case). In Spanish.

GRAFCAN (Cartográfica de Canarias, S.A.) is the public company of the Government of the Canary Islands responsible for dissemination and maintenance of geographic and territorial information concerning the Canary Islands. In conjunction with the Consejería de Medio Ambiente y Ordenación Territorial and the Departamento de Biología Vegetal (Botánica) de la Universidad de La Laguna, GRAFCAN has published an intensive and interactive multimedia collection of phytosociological distribution maps of the Canary Islands, including actual present-day maps, as well as “potential” maps (i.e., maps of what the vegetation would have been



like if left undisturbed). Included are large-format folding paper maps (one for each of the seven islands), a hefty monographic report of the project and a CD-ROM, which holds an interactive system of maps, the installation packages of the software needed to negotiate the maps, as well as a backup of all of the paper-based information in PDF files.

The Canary Islands possess a rich diversity in vascular vegetation with a distinctively high proportion of endemism. Combining aerial digital photography, GPS and undoubtedly countless hours on the ground, this work is a massive and outstanding cartographical and phytosociological achievement. The GRAFCAN Web site (<http://www.grafcan.com>) has a great deal of additional resources and information.

—Donald W. Brown, Bibliographer

Bradley, Jyll. *Mr Roscoe's Garden*. Liverpool: Liverpool University Press; distributed by University of Chicago Press, 2008. [240] p., ill. (chiefly col.). \$49.95 (U.S.). ISBN 978-1-84631-166-6 (hardback).

The Liverpool Botanical Garden was the first botanical garden to be created by public subscription. It was founded by William Roscoe (1753–1831) and opened its doors in 1803. In 1836 the garden had outgrown its space and escaped the growing city and its smoke to a more rural location called Wavertree. The garden was purchased by the city (1841), parts were

transferred to the City Museum and Library (1908), and it was bombed (1941) and rebuilt (1951–1964). Amidst public outcry, the garden ultimately failed over labor disputes in 1984, its history and plants already repeatedly interrupted. Bradley's anecdotes convey the frustrations that accompany this circuitous history. Bradley's book

is intended to act as a personal visit to these gardens—a virtual visit that crosses time, space and place. The first part is a sequence of images; a personal repartee between pictures that I have



taken, found or been lent. It's purely a visual journey. . . . An essay follows, a "garden guide," exploring the story and what feels meaningful to me about it. A catalogue of images and a short chronology concludes (n.p.).

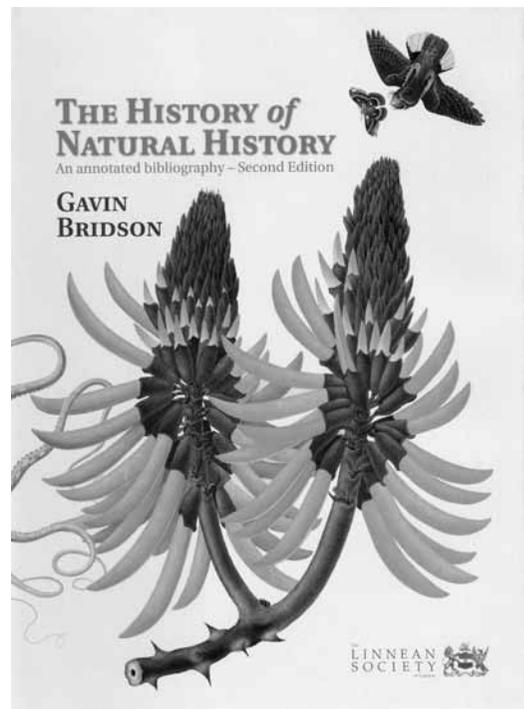
Bradley put together a beautiful visual journey in fact. Perusing the book is somewhat like walking through an art gallery—beautiful and sometimes haunting. The book is important to my archival work for Bradley's wonderful contemporary portraits, which have all been noted in our biographical files, but the book alas is frustrating, too: there are no page numbers, no captions, no index. It is difficult to reconcile the photos with the text and figure out who is who. Bradley's concise timeline of a complex history, interviews with plants folk and garden activists and her evocative photography save the work, and I recommend finding a copy. Bradley was artist in residence for the Fragrant Liverpool Project, an international conceptual art project, and this book is the culmination of her research.

—Angela Todd, Archivist

Bridson, Gavin. *The History of Natural History: An Annotated Bibliography.* A guide to sources of information: Histories, bibliographies, biographies, library resources, etc. Second edition. London: The Linnean Society of London, 2008. xxxii, 1032 p., 40 col. pl. £65.00 plus shipping. ISBN 978-0-9506207-8-7 (hardback).

This exceptional reference work by our late bibliographer Gavin Bridson deserves mention in *Huntia*. The first edition of *The History of Natural History* was published by Garland in 1994. In this greatly expanded and enhanced second edition, Bridson has produced a superior research tool for working taxonomists and researchers in all aspects of the history of natural history. Subjects covered in this comprehensive work include collected biographies of naturalists and natural history artists; important library resources and catalogues; core bibliographies for the history of natural history, exploration, voyages and travel; resources for the history of botany and zoology; and references for natural history illustrations, cabinets and museums.

Bridson was steeped in natural history literature throughout his professional life, having worked at Quaritch's Rare Books and Manuscripts, the British Museum (Natural History), the Linnean Society of London, and here at the Hunt Institute for Botanical Documentation. His deep knowledge and his passion for



bibliography and the history of natural history shine in this work that will become an essential tool for scientists and scholars, enabling them to broaden their searches and deepen their research. The authoritativeness of the information, depth of coverage and overall organization and utility of the bibliography are all superb. In addition to the text there are 40 color plates, illustrating various parts of the bibliography with well-chosen highlights from the Linnean Society's collections. Three indexes are provided to subjects, places and names. As was his typical practice, he provided two tables of contents, one given in brief outline and the other in more detail, providing the user with clear paths into the bibliography. An introduction acquaints the reader with the organization of the work so as to increase the likelihood that he or she will make the most successful searches possible. There literally was no better person to tackle this project, and the resulting book is a testimony to Bridson's vast experience and expertise in this field.

This bibliography will be useful to botanists, zoologists, collectors, history of science scholars,

gardeners and horticulturists, and bibliographers and should be available in all good libraries catering to such users. As more and more information becomes available online, there is a danger that researchers will look only there and not delve further. However, one of the many things that librarians and bibliographers do is to steer researchers toward appropriate resources. *The History of Natural History* is organized for maximum usability to reduce the likelihood that researchers will miss relevant works. Consulting Bridson's comprehensive bibliography can give researchers citations to use in searching for digital copies of published works online and can also take those researchers beyond the Internet and point them toward the vast holdings of libraries and archives. Such is the power of a comprehensive subject bibliography. Thanks to the Linnean Society for working with Bridson on this project and then continuing the work after his death to bring this fine work to publication. (A version of this review also appeared in *Newslett. Council Bot. Hort. Libr.*, 2009, 112: 4–5.)

—Charlotte A. Tancin, Librarian

Emmett, Peter and Tony Kanellos, eds. *MEB: Santos Museum of Economic Botany*. Adelaide, South Australia: Botanic Gardens of Adelaide, 2010. 186 p., ill. (chiefly col.), port., plans, map. \$39.99 (Australian). ISBN 978-0-9775608-9-9 (paperback). Available from Tony Kanellos (tony.kanellos@sa.gov.au or www.botanicgardens.sa.gov.au).

The Museum of Economic Botany (MEB) at the Adelaide Botanic Garden first opened in May 1881, although its roots go back to an earlier “rustic temple” constructed in 1863 for the garden's first director, George William Francis (1800–1865), who was inspired by the economic botany museum that was opened at the Royal Botanic Gardens, Kew, in 1847. However, Moritz Richard Schomburgk (1811–1891), the garden's second director, was the heart, soul and driving force of the museum, using his considerable global network of professional contacts, including the directors of Kew, to solicit items for the collection. He also installed the original objects and labels for what now forms the core of the collection. In 2009, under current director Stephen Forbes, a major renovation of the museum was done, restoring some original features and bringing others up to modern museum standards. One of the funding sources for this project was the Santos gas company, and the museum is now called the Santos Museum of

Economic Botany, or MEB for short. This book gives the history of the museum, then opens the door for a virtual visit with documentation of the renovation, essays on several big-picture issues in economic botany, descriptions of the current museum collection, and 17 essays on particular objects and themes from the exhibits. Thirty-three contributors have provided this wide array of writings, which are supported by an intensive assortment of carefully chosen illustrations. The images are so diverse and so artfully presented that they are guaranteed to pull the reader into the text. As noted in the foreword, “This book offers diverse and surprising rewards to the botanically and culturally curious” (p. 9). The book is referred to on the title page as a “souvenir” of the museum, but there is so much between its covers that the word hardly does it justice.

The book begins with views of the refurbished west wing, showing an inviting and well-filled space containing numerous standing, flat and hanging cases of specimens and artifacts collected between 1865 and the present. The first part of the book outlines the history of the museum. Forbes writes about the meaning and importance of economic botany, noting that it “underpins the economic, environmental, social and cultural fabric of all societies” (p. 13). Briefly considering its history from the writings of Pliny the Elder (23–79) to



pioneering work by Swedish naturalist Carolus Linnaeus (1707–1778), Forbes cites Linnaeus’ belief that nature’s economy must be the basis for human economy and points out that tenets developed by Linnaeus were still strongly held at the time of the founding of the MEB. He also outlines a larger picture, reminding us that economic botany is also about the exploitation of natural resources, trade, the economic aspirations of nations, imperialism and colonization and the establishment of botanic gardens in European colonies reflecting “both the reach of European nations and the colonial economic ambitions for the domestication of indigenous crops or the introduction of new crops” (p. 15). He notes that the development of museums of economic botany in colonial botanic gardens was “designed to link crop selection, development and production to industry and public education” (p. 16).

Peter Emmett’s historical essay is about how the objects in the museum reflect the many kinds of people and uses that brought about their creation. His essay, written on the day anthropologist and ethnologist Claude Lévi-Strauss (1908–2009) died at age 100, quotes Lévi-Strauss and references his landmark study *The Raw and the Cooked*, the raw referring to the realm of nature as humans find it and the cooked referring to the realm of culture as transformed nature, and how knowledge comes from studying not just things but also their embodiment in culture and myth. Emmett notes that by the time the museum was founded, the dominance of Linnaeus and Sir Joseph Banks (1743–1820) in the age of botanical discovery had given way to new global realities:

What distinguished this “new imperialism” was the way the state unleashed its power over management of the materials and skills of the world, including its own citizens. Science and administration converged in an enterprise of development. It

became the duty of the state to integrate the “undeveloped estates” into the world economy of exchange even if against their will (p. 19).

Furthermore, this new imperialism was based on new models of knowledge and skill emphasizing the transformation, distribution and use of the world’s raw materials, knowledge and labor in a manner and on a scale not seen before. With all this in mind, visitors to the MEB are encouraged to approach its collection with an awareness of “British imperial, Australian colonial and indigenous forms of knowledge” (p. 19) in order to fully appreciate the cultural diversity that is so central to its mission and collection. While the focus is on the human use of plants, this geopolitical/economic context not only underlies the presentation but is made explicit in many ways. These essays reflect the fact that the MEB

was created as a colonial museum and is in fact the last remaining colonial museum of economic botany.

Tony Kanellos's "potted history" of MEB quickly covers 146 years, from Francis' initial idea through the development of the collection and building by Schomburgk, then on to the MEB's shifting fortunes under another five directors and up to its recent restoration and renovation under Forbes. Other historical essays discuss the architecture of the building; the work of agricultural journalist Albert Molineux in documenting the museum through a series of descriptive articles published in 1881 and quoted in the book, giving a virtual walk-through of the museum when it was first opened; a list of "selected sources" of the collection during its greatest period of growth from 1865 to 1891; the special role played by Schomburgk in the establishment of the museum and its collections; and modern recollections and comments by several museum staff.

The next section, "Issues," pulls us through history and into the present and the future, also showing how history in the form of traditional plant knowledge is a necessary part of the present (and, hopefully, the future), with four thoughtful essays on plant knowledge and plant use in particular contexts. In "Economic botanists, ethnobotany and Aboriginal plant use," Philip Clarke discusses the ways that Europeans used Aboriginal plant knowledge to support the lives of colonists unused to the harsh conditions of Australia. "Curious chemistry and strange biomimicry" by Steve Meredith writes about how biomimicry uses plants "as models for things with similar properties, such as Velcro and lotusan paint." In "GM crops—meeting the growing need," Mark Tester and Christina Morris write about the quest to address the global food shortage through development of genetically modified food plants. "Food and the future—biotech nightmare or ecological dream?" by Fran Baum discusses the importance of traditional agricultural knowledge in developing sustainable sources of food and medicines today, using two imagined scenarios for the year 2040 to make her point.

Returning the focus to the MEB, the recent renovation is documented in a section called "Process," with photographs and commentary on painting, lighting, configuring exhibition spaces and more by people who worked on the renovation from inside and outside the organization. Essays on two art and video installations are particularly interesting. Australian artist Fiona Hall writes about a piece that she created for the MEB, a sort of cabinet that includes moving images, leaves made of inlaid wood, and an upside-down "forest" of wooden figurines that extend downward from the ceiling of the cabinet interior like an inverted chess set. Dual video screens show a series of still photos of Sri Lankans making boards from timber using traditional techniques. Part of her motivation in creating this piece was a response to

the rampaging and accelerating destruction of wilderness and our loss of understanding of our deep connection to the plant world. Gary Warner, another artist who also runs a digital media company for cultural institutions and independent artists, was commissioned to collect photos of people from many places and times using and interacting with plants to create a series of vignettes, each based on a botanical theme of the MEB collections. He mined the Internet for images and writes about the contrast he sees in them between traditional plant uses and techniques in the "developing" world and modern ones in the "developed" world, and of the need for small-scale, local, indigenous and traditional uses to be reevaluated in the quest for sustainability.

Another section of the book, "Collection," gives readers a vicarious museum experience as parts of the collections are discussed and photographically displayed. There are almost 3,000 objects from all over the world on display at the MEB today, constituting nearly the entire collection, with approximately two-thirds of it coming from the original material collected by Schomburgk in 1865–1891. Related to this is the next section, "Objects speak." Here a number of citizens of Adelaide have been invited to select an object from the collection and write about "whatever the object speaks to you." As the editors say, "Each has responded in their own way, often not from their own 'expertise' but as a curious and intelligent member of the public—with eloquence, wit and wisdom" (p. 158). Each essay is one to several pages in length and is accompanied by one or more photographs of the objects being discussed. The essays emphasize by example the variety of the collections through the range of economic, cultural, scientific and environmental associations that these commentators make as they contemplate their chosen objects. For example, James Bennett, curator of Asian art at the Art Gallery of South Australia, writes about the wood of the jackfruit, *Artocarpus integrifolia*, based on two collection objects: a small block of jackfruit wood and a jackfruit-wood portrait sculpture in the form of a small statue of a man that would have been used in a mortuary ceremony, representing the deceased by being stored with the body prior to burial and then placed in a high cliff cave to guard over the fields. Such sculptures were produced according to strictly proscribed rituals and believed to be imbued with the generative powers of the ancestors. In another essay, chef, food writer and culinary thinker Gay Bilson writes about a collection of some 350 fruit models, most of them of hand-painted papier-mâché, made in Germany between 1866 and 1890. For Bilson they evoke lost or rare fruit species, Lutheran settlers who introduced exotic plants to Australia, and the "poignant discontinued narrative of the skill of the makers" (p. 164), noting that the models were made to realistically reproduce the fruit varieties that they represent, for

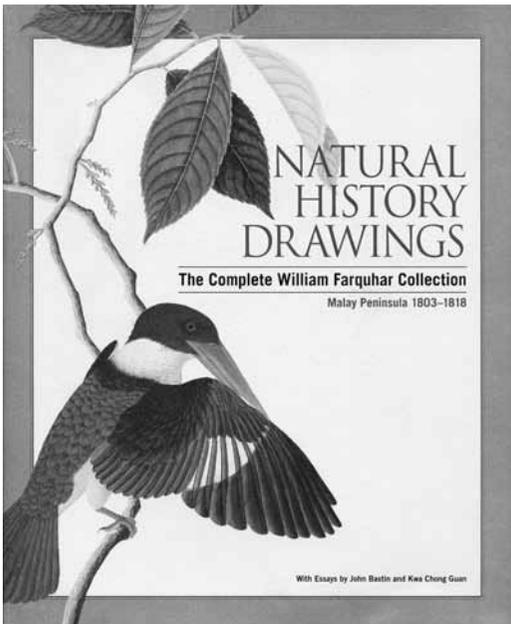
purposes of education and the preservation of knowledge through three-dimensional copying. The final essay in this section is an excerpt from Lévi-Strauss' *Tristes Tropiques* (Paris, 1955, as translated in 1973 by J. and D. Weightman), titled "In an Indian market." In it, Lévi-Strauss fondly remembers markets he visited in different areas of India, reminiscing descriptively about the wide variety of foods and other goods to be found there. The excerpt is evocative and celebratory and provides an interesting closing meditation on one aspect of the human use of plants.

The people who contributed to this book understand what Warner referred to as "the sheer magnitude of human reliance on botanical output" (p. 106). They do their best, in the MEB and in this book, to share that understanding. As it says on the inside cover of the book,

Schomburgk's Museum is more relevant to our plight in the twenty-first century than he could ever have imagined. Never before have environment and economy been so entwined—the need for sustainability through avoidance of waste, crop diversity to redress soil depletion, the collaboration of western science with ethnobotanical knowledge, cultural diversity and global networking. This was Schomburgk's passion—and this is why his Museum still speaks to us today (p. 106).

MEB: Santos Museum of Economic Botany provides an affordable substitute for an actual visit to the MEB, along with much food for thought.

—Charlotte A. Tancin, Librarian



Farquhar, William. *Natural History Drawings, Malay Peninsula, 1803–1818: The Complete William Farquhar Collection.* With essays by John Bastin and Kwa Chong Guan and captions by Hassan Ibrahim and Morten Strange. Singapore: Editions Didier Millet and National Museum of Singapore, 2010. 335, [1] p., col. ill., port. \$45.00 (U.S.). ISBN 978-981-4217-69-9 (hardback). Available from Editions Didier Millet (<http://www.edmbooks.com>).

While British Resident and Commandant of Melaka in Singapore (1803–1818), William Farquhar (1774–1839) commissioned a group of Chinese artists to draw the local plants and animals in watercolor: "Combining traditional Chinese painting methods with European style, this remarkable collection of natural history drawings provides a unique glimpse into the history of British settlement in the Malay Peninsula during the early 19th century" (p. 7). All 477 paintings from his collection were reproduced with informative captions by Hassan Ibrahim (plants) and Morten Strange (birds, fish, mammals, reptiles and invertebrates) and two essays: "William Farquhar, First Resident and Commandant of Singapore," by John Bastin, and "Drawing nature in the East Indies: Framing Farquhar's natural history drawings," by Kwa Chong Guan. A bibliography and index are included.

—Charlotte A. Tancin, Librarian

Finlay, Mark R. *Growing American Rubber: Strategic Plants and the Politics of National Security.* (Studies in Modern Science, Technology, and the Environment.) New Brunswick, New Jersey: Rutgers University Press, 2009. xiii, 317 p., ill., port. \$49.95 (U.S.). ISBN 978-0-8135-4483-0 (hardback).

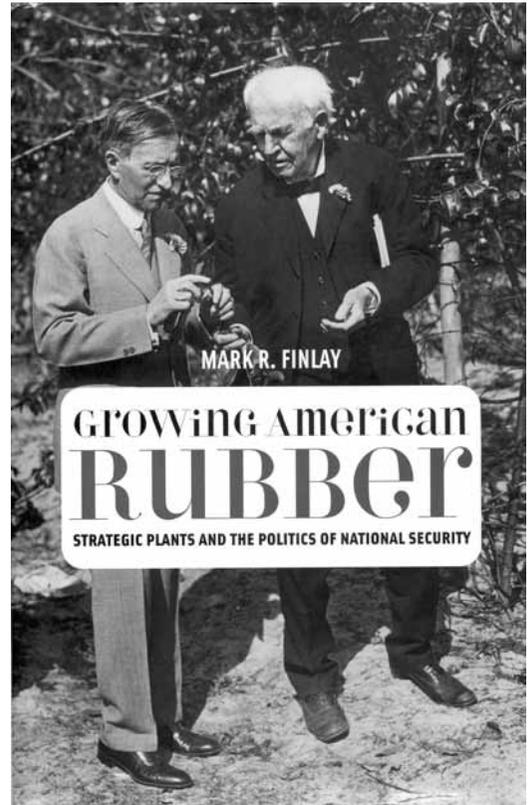
Mr. Finlay has produced an outstandingly well-documented and thoroughly researched narrative of the

history of the modest rubber plant, which during the first half of the 20th century became the central protagonist in quite a complex, yet too familiar, story of America's dependence upon a primarily foreign strategic natural resource and the struggle to find a domestic solution. It bears mentioning forthwith that the author has a wonderfully authoritative command of the topic and is a notably fine writer.

The primary and best source of natural rubber is *Hevea brasiliensis*, a tree native to the jungles of the upper Amazon basin. Harvesting latex from the trees remains a manual procedure—workers score the bark and collect the latex in containers, the tree heals and the process repeats. Between the middle of the 18th and the following century, Brazil realized extraordinary wealth through its stranglehold on rubber production; but by the middle of the 19th century, corruption, disease, avarice and lack of general oversight combined to drive up prices in such a manner as to compel the Western market to seek alternatives. In 1876, in a brazen episode of botanical larceny, the Englishman Henry Wickham deluded Brazilian customs officers and made his way out of the country with enough *Hevea* seeds to write the final chapter on Brazil's rubber ascendancy. By 1907 Britain could boast some ten million rubber trees; no longer wild plants scattered through the jungle but rather highly efficient agricultural production farms set up on large plantations in the British occupied East Indies.

The author states that “[the] efforts to control strategically important plants have been at the core of imperial power since the very origins of Western dominance” (p. 8), and at no time has that been more indubitably conspicuous than during the keen exigency that proceeds and continues into wartime. *Hevea* can only be grown in tropical climates near the equator. The emergence of the United States in the 20th century as an industrial and military force came with the necessity for a ready supply of strategic raw materials. By the onset of World War I, it was apparent that rubber was a critical component to the modern industrial military, and concurrently it was realized that the United States held no certain purchase on its availability. Wherefore began the manifold endeavors into allaying the dependence upon foreign natural rubber, and in the stead either producing a domestic rubber crop from some alternative plant source or finding synthetic alternatives. This work elucidates those many attempts: the formation of the Intercontinental Rubber Company (IRC); the work of Thomas Edison, Harvey Monroe Hall, Herbert Hoover, Harvey Firestone and Henry Ford; the creation of Edison's EBRC (Edison Botanic Research Corporation); and the 1942 formation of the Emergency Rubber Project (ERP) (which Mr. Finlay posits as having an equivalent bearing as the Manhattan Project); all the while detailing the various provisional biological candidates—from guayule, *cryptostegia*, goldenrod and kok-sagyz to synthetic rubber made from petroleum.

As the title would indicate, the book predominately covers the necessity for rubber engendered by the United States in regards to military preparedness, but relative to that it illustrates a myriad of complicated



relationships between the disparate, yet overlapping, industries of science, technology, agriculture, botany, foreign relations, international trade and environmental sustainability. It also reveals the emergence of botanists and agriculturalists into a quasi-governmental sphere of influence; and reciprocally marks the increasing interposition of the state into the research of economic botany.

It is difficult to imagine a more palatable and broadly considerate evaluation of the many-faceted story of rubber as it regards the American experience. The author was expressly thorough in his documentation and has included some 70 pages of notes, as well as an index and some choice illustrations. I should think that this work would appeal to a plethora of readers—plant science scholars, economic botanists, history enthusiasts (especially those interested in American military history) and general readers.

—Donald W. Brown, Bibliographer

de Koning, Jan, Gerda van Uffelen, Alicja Zemanek and Bogdan Zemanek, eds. *Drawn after Nature: The Complete Botanical Watercolours of the 16th-Century Libri Picturati*. Zeist: KNNV Publishing, 2008. 368 p., col. ill., map, port. €69.95. ISBN 978-90-5011-238-3 (hardback). Available from KNNV (<http://www.knnvuitgeverij.nl/EN>).

This volume reproduces all 1,429 botanical drawings from the Libri Picturati collection at the Jagiellonian Library in Kraków, Poland. The pictures were made in the second half of the 16th century in the southern Low Countries, and the present volume marks the first time that they have all been presented in one volume along with their annotations and identifications for the edification of the world at large. The collection is a treasure trove of visual and verbal information about plant knowledge in the late 16th century, and *Drawn after Nature* is a corresponding treasure trove of description and analysis by experts who are able to explicate and speculate to “unpack” the images and annotations for the modern reader.

The collection of watercolors was held by the Preußische Staatsbibliothek in Berlin for more than three centuries, but during World War II many of the important special collections of the Staatsbibliothek were dispersed and hidden. Afterward this collection of botanical watercolors was considered lost until they resurfaced at the Biblioteka Jagiellonska in Kraków, Poland, in the 1970s. Since then the collection has been the object of intensive study, some of the results now published here.

The first 149 pages contain detailed historical studies of the collection, the circumstances of its creation, persons known to be involved in the making and ownership of the images, technical descriptions of paper and bindings, and a short history of the Hortus Botanicus in Leiden as part of the context for the creation of the drawings. A discussion of botanical illustration in early modern Europe is given. Additional chapters cover



several types of plants depicted (algae, lichens, mosses, liverworts, ferns and lycophytes; flowering plants; food plants; medicinal plants, drugs and kitchen herbs; fodder plants; technical plants; ornamental plants; and fungi), as well as morphology; phytogeography, synanthropic plants and plant introductions; beginnings of ecological thought; plants of the *Flora Iberica*; common names in various languages; and animals depicted in the collection.

Originally the drawings were thought to have been created or partly created by botanist Charles de l'Écluse (also Carolus Clusius, 1526–1609). New research suggests that Charles de Saint Omer (1533–1569), a patron of Clusius, was critically involved in the creation of the collection and that Clusius' role was

less central. Other research points to Dutch apothecary and botanist Dirck Cluyt (also Theodorus Clutius, 1546–1598) as the collector of many of the drawings in the collection. Research results are inconclusive, and it is also unknown whether the drawings were made as one collection or formed several collections later brought together. It is also not known who made them and for what purpose. Hypotheses and new research questions are abundant in the text. After the death of Saint Omer, the watercolors were acquired by Flemish plant enthusiast and collector Charles de Ligne, Count of Arenberg (1550–1616), who arranged them according to the method of Jacques Daléchamps (1513–1588) and commissioned new drawings by Raphaël Van Coxcie (1540–1616) for the collection. The subsequent chain of possession of the paintings is outlined, ending with their coming under the care of the Jagiellonian Library in October 1947.

The paintings are bound into sixteen vellum-covered volumes (two of animal pictures, the rest plants), and most of the paintings were done on paper. Most of the drawings are also annotated by various hands.

The core of the book contains reproductions of all of the plates of the plant volumes (A18–30), along with transcriptions of the annotations. Versos are shown when they contain illustrations. In this section, the page numbering is accompanied by numbers indicating in which volume of drawings those shown are contained. On a typical set of facing pages, there will be approximately sixteen small reproductions and one or two somewhat larger reproductions. Some drawings are reproduced as full-page plates, and there are large reproductions on the endpapers as well. These inevitably make one wish that every one of the 1,429 drawings was reproduced that way. Such a book would be too expensive for many, so we must be content with the current presentation, and indeed readers will be grateful to have the full suite reproduced in a single volume, albeit with many at a small size. The small images are clearly reproduced and easy to see; the full-page images are also shown small to indicate where they fall in sequence. Truly, all are luscious. My personal favorites include one showing lichens and mosses (opposite p. 72), a nymphaea with a lovely frog (opposite p. 91), another of berries shown with a snail (opposite p. 145), another of an angelica (opposite p. 319).

What is written about the organization of the drawings is a bit confusing. In several places of the text it is asserted that the drawings were reorganized according to the method of Daléchamps by Charles de Ligne and then bound in the current volumes. Alternatively, in Appendix 1 it says that when the Libri Picturati were bound into their present volumes, they were arranged

according to the Pinax by Caspar Bauhin (1560–1624). Whatever the case may be, Appendix 1 lists these Bauhin names as they appear in the first and second plant volumes. A second appendix gives current scientific names, followed by names in English and Dutch when available. Transcriptions of common names in Italian, French, German and Dutch are added when part of the original annotations. An additional general index and bibliography are also provided. The bibliography includes references to other works published about the Libri Picturati collection.

The scholars who contributed to this volume are, in alphabetical order, Florike Egmond, Lipke B. Holthuis, Piotr Hordyński, Jan de Koning, Tomasz Majewski, Luís Ramón-Laca, Renate Schipke, Andrew Ubrizsy Savoia, Gerda van Uffelen, Alicja Zemanek, and Bogdan Zemanek. H. Walter Lack played a central role in bringing this team of botanists, historians and art historians together from Poland, Germany, the Netherlands, Spain and Italy to study and write about the collection. *Drawn from Nature* thus contains the work of many modern experts while reproducing that of the 17th-century artists who created the beautiful, true-to-life drawings of the Libri Picturati. The book will be of interest to botanists, gardeners, artists, historians and anyone with an interest in plants and history. I highly recommend the book and am delighted to include it in our Library.

—Charlotte A. Tancin, Librarian

Lack, H. Walter. *Alexander von Humboldt and the Botanical Exploration of the Americas*. Munich, Berlin, London, New York: Prestel, 2009. 278, [2] p., ill. (chiefly col.), port., plans, charts. \$185.00 (U.S.). ISBN 978-3-7913-4142-2 (hardback, in slipcase).

“Alexander von Humboldt again?” (p. 6), Walter Lack poses in his foreword and then articulates his motivations for writing this book. Friedrich Heinrich Alexander von Humboldt (1769–1857) was Prussia’s most eminent and multifaceted scientist, and although his focus later shifted away from plants to other scientific concerns, during the period discussed here he made a massive and significant contribution to botany. He brought together a small team to process and publish the results of the expedition, and he located the project in Paris rather than his home city of Berlin because of the excellent conditions and resources that could be brought to bear on his project. Humboldt’s methodology was “pioneering and astonishingly modern” (p. 6). The privately funded expedition and published results became a model for many subsequent undertakings by others, in part for their flexible execution and steadfast adherence to the

aim of publishing the findings. The botanical reports, published as *Voyage de Humboldt et Bonpland*, 6. partie, *Botanique*, were highly influential in their time and remain important today as they described, named and illustrated hundreds of northern Andean, Cuban and Mexican plants new to science. Finally, the observations made during the expedition provided an early model for a new sub-discipline of botany, i.e., plant geography or phytogeography. Lack carefully documents and elucidates how Humboldt’s vision and the combined efforts of the team led to the successful conclusion of organizing and sharing the results of this important expedition, expanding our knowledge of the plant diversity of Latin America and providing a collaborative working model for future scientists.

This assessment is well thought out, taking into account the studies that came before it, and yet is able to say something new. Lack considers how much of a contribution Humboldt and his associates made to recording the diversity of the plant kingdom, what that contribution entailed and how it was enacted. Rather than focusing on the actual expedition by Humboldt and

Aimé Jacques-Alexandre Goujaud Bonpland (1773–1858) to New Granada, Peru and New Spain (currently Venezuela, Cuba, Colombia, Ecuador, Peru and Mexico), Lack discusses what came afterward and how that work effectively consummated the expedition. Although many people were involved, this consummation through publication came primarily from the joint effort of Humboldt, Bonpland and a third collaborator, Carl Sigmund Kunth (1788–1850), whose names will be forever associated with the botanical exploration of Latin America.

Humboldt and Bonpland traveled in Latin America from 1799 to 1804. They came together from quite different backgrounds. Humboldt was born in Berlin and studied at the mining academy, but “remarkably, it was the cryptogams that intrigued him when he first went down in the pit” (p. 15). An early investigator in cave botany, he published *Florae Fribergensis Specimen* (Berlin, 1793) during his tenure as a mine inspector. The deaths of his parents left him wealthy enough by 1798 to consider funding an expedition. Bonpland was born in La Rochelle, France, and studied under Jardin du Roi botanists Antoine Laurent de Jussieu (1748–1836) and René-Louiche Desfontaines (1750–1833). Humboldt invited Bonpland to go along on a trip to the North African coast, but a series

of circumstances made that trip impossible and instead presented them with an opportunity to travel to Spanish colonies in the New World. The expressed purpose of the expedition was not only to observe and collect plants and animals but also to study the geology and topography of the places they would visit. On this voyage they initiated an early example of phytogeography.

The travelers sent many plant specimens to Berlin and Paris during their trip, and when they returned to Paris they brought diaries, field notes (a seven-volume *Journal Botanique*, written mostly by Bonpland, containing

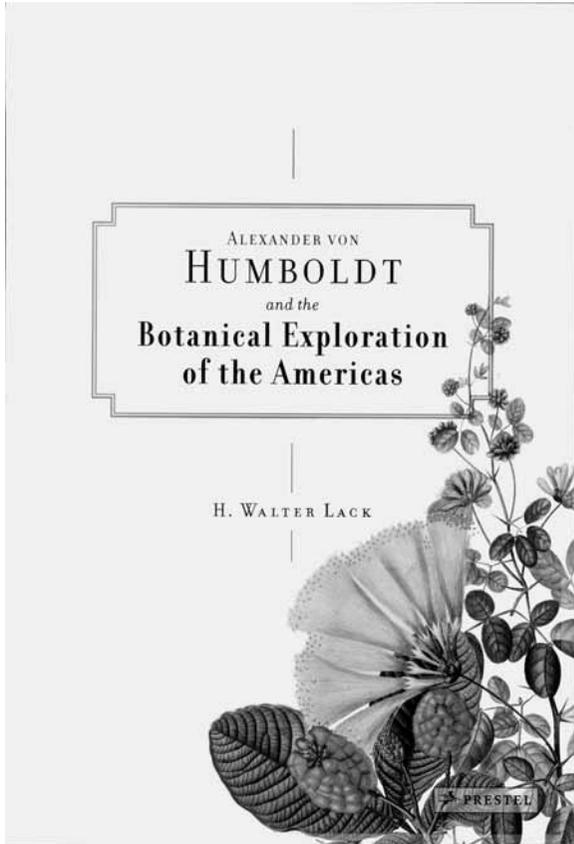
numbered entries, interim identifications, descriptions and location information), dried specimens, drawings, nature prints, seeds and living plants. Humboldt later wrote of Bonpland, “He possesses splendid qualities for a travelling naturalist. He has dried the plants—including more than 12,000 duplicates—on his own” (p. 27). The *Journal Botanique*, now held at the library of the *Muséum Nationale d’Histoire Naturelle* in Paris, contains entries on 4,582 species, but the number of specimens, including duplicates, that were actually collected and either

shipped or brought to Europe remains unknown. The *Journal Botanique* also contains many small, simple sketches, as no illustrator accompanied the two men on their travels.

In the course of processing the specimens and documentation after the expedition, more persons were brought into the project. One of these was the French botanical artist Pierre-Jean-François Turpin (1775–1840), whom Humboldt commissioned to produce drawings from which copperplate engravings were made. It is believed that Turpin based his drawings not only on the dried specimens but also sometimes on sketches from the field notebooks. Lack’s book contains reproductions of more than 80 plates selected from among those produced for the published reports.

Another critically important addition to the team was Kunth, replacing his teacher Karl Ludwig

Willdenow (1765–1812), who had been drafted to the project by Humboldt but whose involvement was brief. Kunth’s involvement, on the other hand, was prolonged and substantial. Lack’s assessment of his contributions is expressed in his postscript: “Every scientific undertaking can be seen as a ratio between the input, i.e. of time and money, and output, i.e. advances in knowledge. The same applies to the individuals involved” (p. 102). Lack explains that in the field, Bonpland did most of the work in documenting the plants they found. In Paris his involvement faded, and Humboldt wrote his *Essai*



sur la Géographie des Plantes (Paris, 1807) and organized, supported and drove the project to process and publish the expedition results. Kunth worked for 16 years on the text of the report, describing, classifying and naming plants based largely on the specimens as well as on nature prints, other specimens in other herbaria and the contents of the all-important *Journal Botanique*. Although a few other botanists made smaller contributions to the text, the lion's share of the work done to process the data from the voyage and write thousands of plant descriptions was borne by Kunth. Lack emphasizes that Kunth's appreciation of, and modified use of, the new wave of taxonomic botanical analysis in Paris made the report one of timely and contemporary interest. If he had instead used the by then outmoded Linnaean system, the impact of the work would have been diminished.

Others involved included Michel Felix Dunal (1789–1856), Carl Adolf Agardh (1785–1859) and William Jackson Hooker (1785–1865), each consulted based on his special expertise. Dunal's revised dissertation on *Solanum* in 1816 described 42 specimens from the nightshade family collected by Humboldt and Bonpland. Agardh described the algae collected or documented on the expedition, and Hooker described the mosses, fungi and lichens. When Kunth published his work on grasses from the expedition, he employed another artist, Eulalia Delile (fl. 1825–1840), to illustrate it.

Given the many individuals involved, what Lack has done is to tell the story of how the expedition was initially documented, how the collections and documentation were brought back to Paris, what Humboldt's plan was for processing it all, and how this work was actually done and, against all odds, completed. There are lessons here for modern scientists, insights for librarians, archivists and bibliographers whose collections include some of this or similar documentation, and a very interesting story for all who enjoy reading about the history of science.

Reviewer Angela Todd was struck by the way Lack quickly and concisely conveys scientific information:

The triad of specimen, printed description and printed illustration, plus supplementary annotations such as the location where a specimen is found, is to this day regarded as the ideal standard because it provides a comprehensive notion of the plant in question. This is the model employed by Humboldt in the botanical section of his South American account although, in keeping with the custom of the day, only a fraction of the plants described was also illustrated (p. 11).

The reader, even the non-botanist, understands the criteria, standards and stakes with ease.

Reviewer Charlotte Tancin most appreciated the skillful manner in which Lack organized the various parts of this story for an impressively detailed and thoroughly readable account of an important and difficult scientific endeavor. As so often seems to happen, particularly in past centuries when the communications and data processing capabilities that we enjoy today did not exist, processing the results of a scientific expedition involves many people and substantial amounts of time and money, and the principals almost always encounter unanticipated obstacles that stall or totally stop the work. Lack successfully communicates the various obstacles that emerged and were overcome, and he shows how well Humboldt stayed the course, adding personnel as needed and keeping the progress going. Humboldt had the vision and determination not only to get the results published but also to ensure the long-term preservation of the collections on which the publications were based.

Lack's book is lavishly illustrated with color reproductions of landscape oil paintings, portraits (including a two-page reproduction of Humboldt and Bonpland in a landscape setting and another of Humboldt in his library), and plant illustrations, as well as reproductions of archival sources, quotes from diaries and reproductions of title pages, historic illustrations and plant specimens. The greatest portion of the book is dedicated to a selection of 82 plates—still just a fraction of Humboldt's documentation—in chronological sequence of their publication, including lovely reproductions of colored copperplate engravings with original publication citations and acknowledgement of each one's current museum or library home. All of this visual presentation is thoroughly considered and well-placed in the book to support the author's thesis:

The volume is richly illustrated both to highlight the value Humboldt and his collaborators placed on the additional documentary importance of images and to reveal the remarkable achievements of artists working—unbelievably—largely from pressed, dried plants, yet were still able to depict a selection of the colourful wealth of forms found in the flora of Latin America (p. 7).

A bibliography and indexes of places, proper names and plant names are also included, along with a map showing the routes traveled by Humboldt and Bonpland and a chart illustrating the order of publication of parts 5 and 6 of the published reports to clarify their bibliographic complexity. This book is a highly detailed scientific, bibliographic and biographical tale in an inviting, coffee-table-style format.

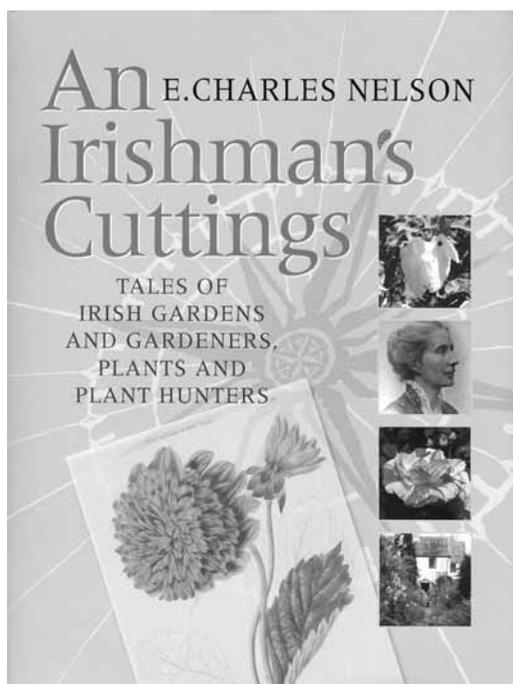
—Angela Todd, Archivist, and
Charlotte A. Tancin, Librarian

Nelson, E. Charles. *An Irishman's Cuttings: Tales of Irish Gardens and Gardeners, Plants and Plant Hunters.* Cork: The Collins Press, 2009. €29.99. ISBN 978-1-84889-005-3. Available from The Collins Press, West Link Park, Doughcloyne, Wilton, Cork, Republic of Ireland (Phone: +353 21 4347717; Fax: +353 21 4347720; Email: enquiries@collinspress.ie).

An Irishman's Cuttings is a collection of essays by E. Charles Nelson, a freelance botanist, author and editor, who for 19 years was horticultural taxonomist at the National Botanic Gardens, Glasnevin, Dublin. According to the dust jacket, "These cuttings are amusing, interesting tales of gardeners, plant hunters, plants discovered near home or in faraway places, sometimes after great hardships." All are rooted in Ireland, and they provide an educational ramble through Irish horticultural history. Nelson has organized the various articles into five sections. All 40 essays were previously published in *The Irish Garden* magazine, for which Nelson has written since 1992. As that publication may not be held in many libraries (OCLC's WorldCat notes only five holding libraries), *An Irishman's Cuttings* makes these writings accessible to a wider audience. The stories are told in Nelson's own style, sometimes circuitous, sometimes humorous, and feeling as though done in the tradition of an oral history.

Sampling a few items from each section gives a sense of Nelson's interests, which are wide-ranging and well-informed. In "The Irish garden," he writes about John K'Eogh's (1681–1754) *General Irish Herbal* of 1735, which in addition to being an herbal also contained information about what a well-stocked Irish garden attached to a large house contained in the early 1730s. He looks at Mary Delany's (1700–1788) orangerie, Ulster's pioneer plantsman John Templeton (1766–1825) and the founding of the short-lived Cork Botanic Garden (1808–1828). The section on "Home-Grown plants" includes papers on strawberry trees (*Arbutus*); on Dr. Patrick Bernard O'Kelly (fl.1890s–1920s) of Glenarra, plant hunter and nurseryman; and on efforts by David Moore (1807–1879), curator of the Royal Dublin Society's Botanic Gardens in Glasnevin, and Dublin Archbishop Richard Whately (1787–1863) to introduce mistletoe to Irish gardens.

In "The plant hunters" Nelson writes colorfully about botanical explorer Thomas Drummond (1780–1835) and *Phlox drummondii*, the Pride of Texas; about William Robinson's (1838–1935) journey across America in 1870; and about Charlotte Isabel Wheeler Cuffe (1867–1967) and the garden she created in Burma, Maymyo Botanical Garden. The section "Aristocrats of the garden" includes essays on Governor Arthur Dobbs (1689–1785) of North Carolina and the Venus fly trap that he acquired as part of the transatlantic group of plant enthusiasts that included Peter Collinson (1694–1768) and John Bartram



(1699–1777); on the formation of the Botanic Gardens at Glasnevin; and on the characteristics and collecting history of the Shan lily, *Lilium sulphureum*. Another of the stories here recounts the finding of tropical seeds on the Irish shores and Sir Hans Sloane's (1660–1753) realization of how they made their way there from their distant, sunny homes, driven by wind and ocean currents. In the final section called "Mainly about people," one may read about parasol covers made from a "botanical lace" created from stem fibers of bindweed, nasturtium, honeysuckle, nettle and other plants; about letters sent from Irish correspondents to Charles Darwin (1809–1882); and about Sheila Pim's (1909–1995) murder mysteries involving various types of garden crimes.

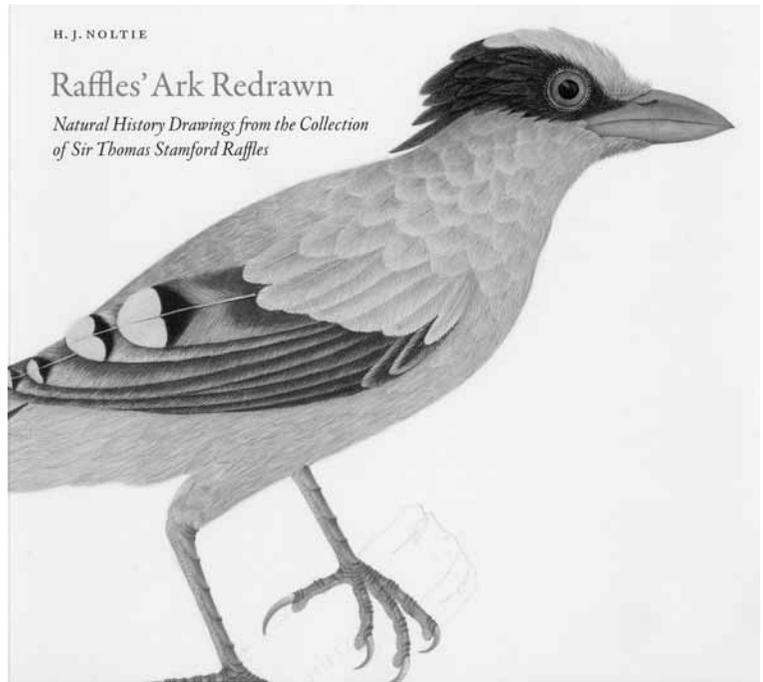
As the above sampling shows, some of the stories are specific to Ireland while others reach beyond to involve people and places far beyond those shores. Nelson's topics embrace a wide historical range, as well. Attractively produced and liberally illustrated with fine color photos, many taken by Nelson himself, the book also includes plant index, general index and source notes. *An Irishman's Cuttings* helps to document and publicize Ireland's role in the history of horticulture and botany in a book rich with images and absorbing narratives. (A version of this review also appeared in *Newslett. Council Bot. Hort. Libr.*, 2010, 117: 19.)

—Charlotte A. Tancin, Librarian,
and Angela Todd, Archivist

Noltie, H. J. *Raffles' Ark Redrawn: Natural History Drawings from the Collection of Sir Thomas Stamford Raffles*. London, England: The British Library and The Royal Botanic Gardens Edinburgh; distributed by University of Chicago Press, 2009. 180 p., ill. \$35.00 (U.S.). ISBN 978-0-7123-5084-6 (paperback).

Sir Thomas Stamford Raffles (1781–1826) is best known for the founding of Singapore and the Zoological Society in London. While a government administrator for the East India Company in Penang (1805–1810), Java (1811–1815) and Sumatra (1818–1824), Raffles became intrigued with the Malay language, culture and natural environment of Southeast Asia. His patronage of naturalist surgeons and artists to collect and to illustrate specimens enabled him to amass a natural history collection that reflected the diversity of the region. This publication, which accompanied a 2009 exhibition at Inverleigh House, Royal Botanic Gardens Edinburgh (RBGE), provides the first comprehensive documentation devoted specifically to 123 natural history drawings of mostly birds, mammals and plants that are part of the Raffles Family Collection and that were purchased in 1971 by the British Library after being on permanent loan to the Indian Office Library and subsequently the British Library for almost 40 years.

The majority of the watercolors in this collection are the only surviving drawings of specimens that were collected for Raffles during his six years in Sumatra (1818–1824). Raffles had them redrawn by a French artist and a Chinese artist within a ten-week period after a devastating fire occurred off the coast of Sumatra on the ship *Fame* that was transporting Raffles and his family and natural history collections on their final return to England in 1824. No lives were lost, but tragically 2,000–3,000 drawings, Malay manuscripts and Raffles' menagerie of domesticated animals were destroyed. The other drawings in this collection had been acquired from the sale of the effects of the EIC superintendent surgeon, William Hunter (1718–1783), who had commissioned artists to illustrate a flora of Java. Raffles had transported these drawings back to England (1816–1817) before being transferred to Sumatra, during which time he was elected to the Friends of the Royal Society (F.R.S.), published *The History of Java* and was knighted by the Prince Regent.



Henry Noltie notes that he knew little of Sir Thomas Stamford Raffles when a project was proposed to exhibit the natural history drawings in the Raffles' Family Collection. What makes this thoroughly researched publication most engaging is the author's description of his personal research journey. Noltie began with the expertise of Dr. John Bastin, a published authority on Raffles, and the preliminary catalogue notes of this collection of drawings prepared by Mildred Archer, curator of prints and drawings at the India Office Library, who had co-published with Bastin the architectural and ethnographic drawings commissioned by Raffles. From there he examined the original drawings in the Raffles' collection and compared them to herbarium specimens and drawings of Southeast Asian plants in other institutional collections, including those that were brought back by Raffles' circle of surgeon naturalists. These comparisons enabled Noltie to place the Raffles' collection of natural history drawings in their proper historical context.

The author helpfully provides a timeline of Raffles' life followed by an essay on his patronage of three surgeon naturalists, including the American Thomas Horsfield (1773–1859), who previously worked for the Dutch and then resumed his work on the flora of Java under Raffles' patronage when the latter was lieutenant governor of Java; Joseph Arnold (1795–1822), who was persuaded to join Raffles in Bercoolen, Sumatra, as the family physician, botanized for Raffles and returned to

England with living specimens for Sir Joseph Banks; and William Jack (1782–1818), who collected for Raffles in Penang, Singapore and Sumatra.

All of the 123 watercolor drawings of birds, mammals and plants in this collection are beautifully illustrated in full color and are accompanied by Noltie's detailed descriptions, including their individual origins, habitat, economic use where applicable and information relating to their discovery by western collectors or their taxonomic history. Also included are valuable descriptions of the medium, paper type, sizes and/or watermarks (with dates) and the collection location of similar paintings at the British Library, Royal Botanic Gardens, Kew, and Natural History Museum. Following these descriptions is an overview of other Raffles collection items that eventually were deposited at the British Library and the Natural History Museum. This densely informative volume also includes taxonomic and general indexes allowing the reader to reference the materials of interest more readily.

Of additional interest is information about the artists that Raffles commissioned to illustrate his collection materials. Though unnamed in any records, Raffles had employed a Macao artist while he was in Malacca (1810–1811), five or six Chinese artists while in Bencoolen (1818–1824) and a Chinese artist while in Singapore (1822–1823). Noltie continues with what information he was able to glean about two of the artists responsible for redrawing the post-*Fame* works. First is the French artist J. Brois, who signed many of his watercolors of birds and mammals that Noltie describes as in the Straits Style (as in the Straits of Malacca), which is a blend of

the European, Chinese and Indian styles of natural history painting. The other is the Chinese artist A Kow (perhaps Gao), whom Noltie believes was employed by Raffles in Bencoolen and in Singapore. John Prince, a civil servant for the EIC, who was placed in temporary charge of Bencoolen when Raffles returned to England, also employed this artist. Noltie discovered a painting of *Strophanthus candatus* in the collection of the Royal Botanic Gardens, Kew, with the text “received from J. Prince Esq of Singapore, 1827.” It is almost identical to a painting of the same subject and in the same style in the Raffles collection, and this led Noltie to attribute many of the botanical paintings to Kow (Gao).

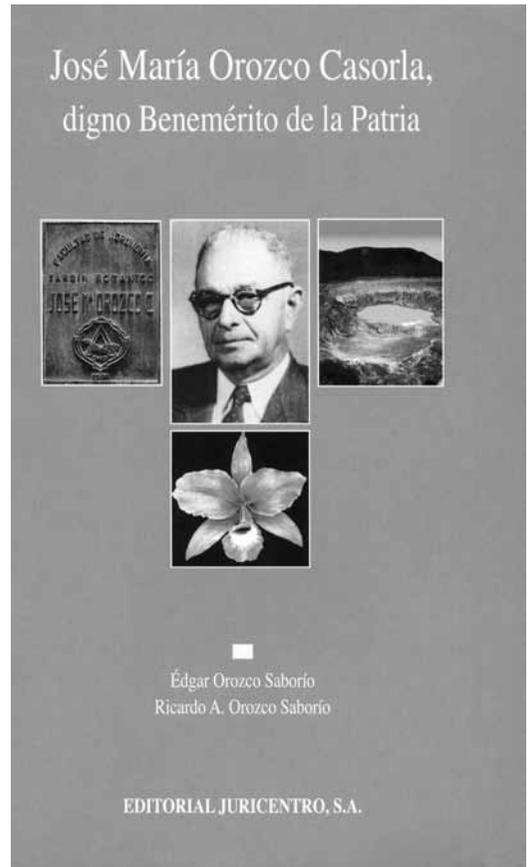
Considering how many natural history collection items were lost by fire or shipwreck throughout history, we are fortunate that a portion of the drawings commissioned by Raffles remain to be studied and placed within the larger context of botanical and zoological history. Following on the heels of his comprehensive volumes on the life of the Scottish East India Company surgeon, naturalist and collector Robert Wight (1796–1872) and the two Indian artists he employed (*Robert Wight and the Botanical Drawings of Rungiah & Giovindoo*, Edinburgh, 2007, reviewed in *Huntia* 14(1), 2009), Henry Noltie not only has contributed an important piece to the history of Sir Thomas Stamford Raffles and his collections but also has brought attention to the valuable links that exist between institutional collections that may enable a researcher to unlock the mysteries in the history of natural history documentation.

—Lugene B. Bruno, Curator of Art

Orozco Saborío, Édgar and Ricardo A. Orozco Saborío. *José María Orozco Casorla, Digno Benemérito de la Patria.* San José, Costa Rica: Editorial Juricentro, 2010. 508 p., ill., maps, port.; port. frontisp. \$50.00 (U.S.), including postage. ISBN 978-9977-31-183-8 (paperback). Available from Libreria Editorial Juricentro (libreriajuricentro@gmail.com).

This book about the life and work of Costa Rican botanist José María Orozco Casorla (1884–1971) was written by two of his sons, who wanted to ensure that the breadth and depth of his achievements would be part of the published historical record. He pioneered coeducational opportunities in secondary education in Costa Rica and taught natural sciences, first at the secondary education level and later at the National School for Agriculture. He served as Head of the Botany Section of the National Agriculture Centre and Botanical Advisor to the Ministry of Agriculture and was one of the founders of the modern University of Costa Rica, which brought together existing schools of law, agronomy, fine arts and pharmacy. He was also instrumental in the founding of the arboretum and botanical garden at the university in 1932, named in his honor the Jardín Botánico José María Orozco. In recognition of his work, especially regarding education, he was named Benefactor of the Fatherland.

His scientific, economic and educational contributions are discussed, with the inclusion of supporting documentation in some cases. A list of his writings is included, and a few are reproduced in the book, such as his 1949 “Estudios sobre las especies forestales de Costa Rica: Distribución de 114 especies por cantones.” Projects and collaborative communications are briefly described and, in some cases, partly documented through the inclusion of correspondence or transcriptions of his work, an example of the latter being an annotated list



of economic plants that he made for the Ministerio de Agricultura e Industrias in 1958.

—Charlotte A. Tancin, Librarian

Renaux, Alain. *Louis XIV's Botanical Engravings.* Burlington, Vermont: Lund Humphries, 2008. 139, [6] p., col. ill. \$60.00 (U.S.). ISBN 978-0-85331-990-0 (hardback).

The spectacular botanical gardens of Louis XIV (1638–1715), France's *Roi Soleil*, were known to be the envy of all the courts of Europe. Filled with exotic plants from numerous botanical explorations of the 17th century, they served as agronomical laboratories, providing plant specimens for botanically inclined academics, illustrators and engravers. Fascinated by his gardens, Louis XIV became increasingly passionate about the natural sciences and in 1666 founded the French Royal Academy of Sciences, whose task it was to record and disseminate contemporary plant knowledge. This

resulted in numerous publishing projects on the plant sciences, including *Histoires des Plantes*, a work intended to be a compendium of botanical knowledge when it was planned in the late 1660s.

Alain Renaux, an ethnobotanist at the Centre for Functional and Evolutionary Ecology at the Centre National de la Recherche Scientifique (CNRS) in Montpellier, reveals part of the history of the grand royal gardens in *Louis XIV's Botanical Engravings*. His book briefly explores the development of the Sun King's botanical interests, the contextual issue of collecting, the innovation of horticulture, agrarian economics and issues of cultural taste, fashion and aesthetics. It reproduces a portion of the burin engravings and etchings created for *Histoires des Plantes*, the project headed by botanist and

physician Denis Dodart (1634–1707) and that included Claude Parrault (1613–1688), Samuel Cotterau du Clos (1598–1685), Claude Bourdelin (1621–1699) and Pierre Borel (1620–1689). The illustrations were commissioned from, among others, Abraham Bosse (1604–1676), one of the most highly regarded and skilled engravers of 17th-century France, and Nicolas Robert (1610–1685), who produced watercolors of plants in Gaston d'Orléans's (1608–1660) collection. The entire collection of engravings is now preserved at the Louvre and the French National Museum of Natural History.

With his reproduction of 58 engravings, Renaux provides a varied sampling of native European plants, flowers important in the 17th-century French flower garden and rare botanical specimens imported from the Americas and other exotic locales and colonies. While such a politically-imbued topic as colonial botanizing seems to deserve attention, as indeed it garners in the discussion of plants as symbols of territorial gains in Iain Thomson Bloomsbury's *The Sun King's Garden*, Renaux instead turns his focus to less loaded concerns. The descriptions accompanying each plate variously include botanical histories of the specimens, the odd tracing of a plant's introduction into European gardens and moreover the cultural and medicinal applications of the specimen. Mythological beginnings are attributed to the plants, the origin of plant names is discussed and the folklore and legend associated with the specimen is generously explored to a near-distracting degree in many of the entries.

The reader therefore learns that the mandrake, for example, was believed to have grown under gallows, where it sprung up from the sperm of hanged men, and that the scream it emitted when picked would drive a man mad. An elaborate picking ceremony grew from these superstitions, in which the person officiating plugged his ears with wax, drew circles around the plant with a dagger before loosening it from the soil and then tied it to a dog, who was scared into running away, thus pulling the mandrake from the ground behind him.

The language roots of the anemone are dissected and related to the legend of Adonis, who was born from a myrrh tree into which his mother had been transformed in order to save her from her father. Young Adonis became the object of affection for both Aphrodite and Persephone and was ordered to split his time between the two by Zeus. He thus spent one-third of the year below ground with Persephone and two-thirds above ground with Aphrodite until he was killed by a boar sent by Artemis. The myth dictates that anemone flowers sprouted from each drop of his spilt blood.

Of the sunflower, which graces the cover of the book, the reader learns that it was introduced into Europe in 1596 but that it was not used for its oil until the 20th century when Orthodox Russians discovered the seeds to be a source of oil not forbidden during Lent. Renaux also



traces the introduction of the passion flower to Europe by way of Spanish explorers, Jesuits and other Spanish monks who saw the crown of thorns from Christ's crucifixion in the flower.

While Renaux's book often provides delightful and charming morsels of historical information, cultural associations and folk lore associated with each plant, serious scholars of botany will need to look elsewhere for a complete review of the *Histoire des Plantes* and the history of Louis XIV's gardens. The book is by no means an exhaustive examination of the world of 17th-century botany, and although it can be appreciated for the varied information provided for each plant, the lack of a systematic approach to the description of individual specimens often results in an overwhelming onslaught of random facts. The engravings themselves, which, as Renaux points out, are often colored in ways that reflect "artistic license" rather than botanical realism, are relatively ignored, barely set within an artistic context with little information provided on the artists, their styles and how, when and where each work was created. Renaux's *Louis XIV's Botanical Engravings*, an apparent misnomer given the disregard of the artworks, therefore disappoints as an academic work of art history, botany or even French history but retains an ability to charm with quaint and quirky tales of mythological importance, medicinal applications and cultural lore and legend.

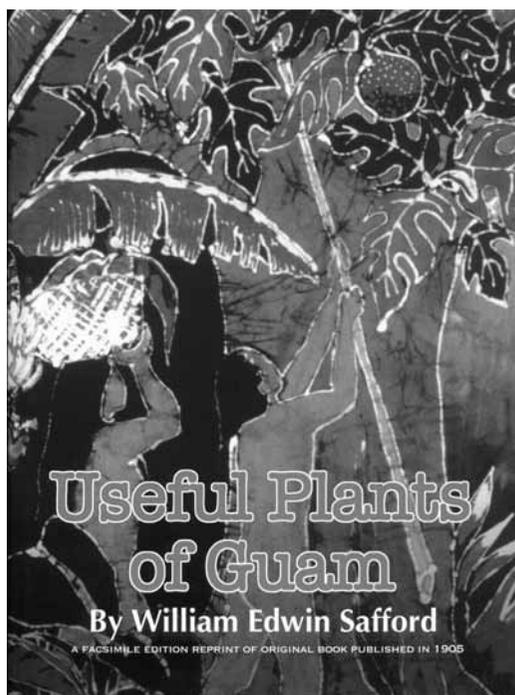
—Catherine Hammond, Curatorial Assistant

Safford, William Edwin. *Useful Plants of Guam.* Facsimile reprint of 1905 first edition. Agana Heights, Guam: Jillette Leon-Guerrero/Guamology Publishing, 2009. 416 p., 70 numbered pl., map, ill. \$60.00 (U.S.). ISBN 978-0-9823576-0-6. Available from Guamology (www.guamology.org). Originally published as: Safford, William Edwin. 1905. *The Useful Plants of the Island of Guam: With an Introductory Account of the Physical Features and Natural History of the Island, of the Character of the People, and of Their Agriculture.* Washington, D.C.: G.P.O. [Contr. U.S. Natl. Herb. 9.]

William Edwin Safford (1859–1926) was a botanist, ethnologist and educator who worked for the U.S. Navy and the federal government. In 1899 he was appointed deputy to Richard P. Leary (1842–1901), the first American governor of Guam, and while serving in that capacity for a year, he compiled information on Guam's plants of economic importance. In 1900 the governor's term ended, and Safford left for the U.S. Department of Agriculture (U.S.D.A.), where he was hired as assistant botanist. He published his information on economic plants of Guam in 1905 as volume 9 of Contributions from the United States National Herbarium. According to the 2009 reprint's dust jacket, 16 plant species are named in his honor.

American botanist and first U.S. National Arboretum director Frederick V. Coville (1867–1937) noted in the preface that Safford actually “includes some reference, however brief, to every plant known to occur on that island” (p. 3), not just those of economic importance. Safford discussed the principal plants used for food, fiber, oil, starch, sugar and forage in the area, giving also their common names from Guam, Philippine Islands, Samoa, Hawaii and Porto Rico. In addition to writing about how to grow and propagate these plants, Safford also discusses the preparation of products that come from them. Safford based his writings on travel accounts, archives in Guam and his own observations.

In his introduction Safford wrote that, in the course of his collecting of specimens for the United States National Museum while he was in Guam (1893–1900), he made extensive notes on “the languages and customs of the natives, their arts, medicines, food materials and the manner of preparing them, the origin of their dyes, paints, fibers for fishing nets and lines, materials for mat making and thatching, woods used in constructing their houses and canoes, and gums and resins used in calking” (p. 9). He felt the need for a book written for the average lay student “containing the common names of the more important species in various island groups, together with their descriptions and the uses to which they are applied in various parts of the world, the methods of their cultivation, and the processes of preparing the commercial staples which they yield” (p. 9). Not having such a book at hand, he set out to write



one, also incorporating his notes on the uses to which many of these plants were put. As he found that many of the plants were found on widely separated shores and that some had the same name on islands whose inhabitants have had no intercommunication with historic times, he also addressed ethnological questions about the origin and dispersal of the inhabitants of the many Pacific islands. His introduction comprises the first 169 pages of the book, covering geography, history, physical conditions, types of vegetation, plants of special interest, plant distribution, animals, people both aboriginal and modern, agriculture and plant names. His bibliography is described in five pages and extends another ten pages. An index covers everything but plant names, not included since the main part of the book is itself a descriptive catalogue of plants, alphabetically arranged and including cross references from vernacular names to main entries. All of the plates, dispersed throughout the work in the first edition, have been collected together at the end of the volume for the reprint.

The individual entries in the descriptive catalogue of plants generally include Latin names (when known), botanical descriptions, cultivation and propagation information, descriptions of preparation and uses, along with references to earlier published descriptions as well as with other footnotes. The scientific names were checked by W. F. Wight (1874–1954), who was also an assistant botanist in the U.S.D.A., and of this Coville wrote,

“The task has been a laborious one, far more laborious than the printed results suggest, but in the progress of the work its necessity has been amply demonstrated. The result is a substantial basis for the uniform designation of economic tropical plants in accordance with the system now followed by American botanists” (p. 4). Much of the information, while focused on Guam, is also applicable elsewhere in the tropics.

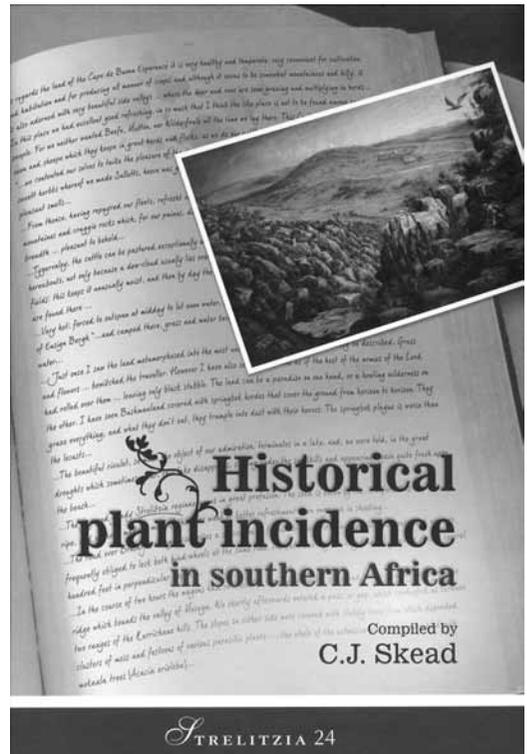
The book was an important achievement and provided a solid and extensive source of information on tropical plants as well as on many other aspects of life on Guam. The publisher’s mission is to promote knowledge about Guam’s history, society and culture, and this reprint will help to realize that goal.

—Charlotte A. Tancin, Librarian

Skead, C. J., comp.; Manning, J. C. and N. C. Anthony, eds. *Historical Plant Incidence in Southern Africa: A Collection of Early Travel Records in Southern Africa.* (Strelitzia no. 24.) Pretoria: South African National Biodiversity Institute, 2009. xii, 378 p., col. ill., port. €78.00. ISBN 978-1-919976-53-2 (hardback). Available from Koeltz Scientific Books (<http://www.koeltz.com>).

Naturalist and writer Cuthbert John Skead (1912–2006) compiled these observations of plant life in southern Africa from numerous European travelers and explorers who visited in the period 1601–1876. He had also worked on similar compilations about birds and mammals (the latter published). In his introduction Skead notes that these projects were pursued as and when the source materials came to hand, rather than being deliberately planned. Thus the coverage is not exhaustive and “much needs to be done to expand the scope of this type of investigation. More books and documents need to be consulted in the hope of finding useful material” (p. vi). Organization of the material by the editors divides it into 20 regions, within which the entries are chronological by date of visit and then alphabetical by author. The observations “record the vegetation of southern Africa prior to mechanized agriculture. Several are also of cultural interest in documenting traditional names and usages of plants” (p. vii). A bibliography and index of plant names are included.

—Charlotte A. Tancin, Librarian



Strid, Arne and Barbro Strid, eds. *Sibthorp & Smith: Flora Graeca.* Vols. 1–2, 1806–1816. Annotated re-issue. Ruggell, Liechtenstein: A. R. G. Gantner Verlag K.G., 2009. xv, 412 p., col. ill., maps. ISBN 978-3-906166-70-4 (hardback). €210.00. Available from Koeltz Scientific Books (<http://www.koeltz.com>).

Flora Graeca Sibthorpiana (London, 1806–1840), one of the great folio floras, is also one of the rarest. The elegantly produced 10-volume work included 966 hand-colored, engraved plates based on original paintings by Ferdinand Bauer (1760–1826). There were subscribers for only 25 copies in its first printing, with

40 more published using back stock of the original text and some engravings along with reprinted engravings from the original copperplates. Now A. R. G. Gantner Verlag has begun reprinting the plates in a quarto format with new text and distribution maps and will issue the original Latin text on a CD with the final volume. Thus the content of this rare work will be made widely available for the first time in a new format referred to as a “pseudo-facsimile” by the publisher.

The story of the original publication is interesting and bibliographically complex. While at Oxford John Sibthorp (1758–1796) was awarded a travel fellowship,

which he used to travel to various botanical centers in Europe and then to the eastern Mediterranean, in the latter following in the footsteps of earlier botanical travelers such as Leonard Rauwolf (1540–1596) in 1573–1576 and Joseph Pitton de Tournefort (1656–1708) in 1700–1702, all of them motivated at least in part by the wish to see, collect and draw plants described by first-century physician Dioscorides, whose work on plant medicines formed much of the basis of European herbals in the medieval and Renaissance period. There had been relatively little updated information on the Mediterranean flora produced in western Europe since then, much of it coming from the published results of Tournefort's expedition. Even Carolus Linnaeus (1707–1778) cited in *Species Plantarum* (Stockholm, 1753) few sources of plant information about the region aside from Tournefort's work.

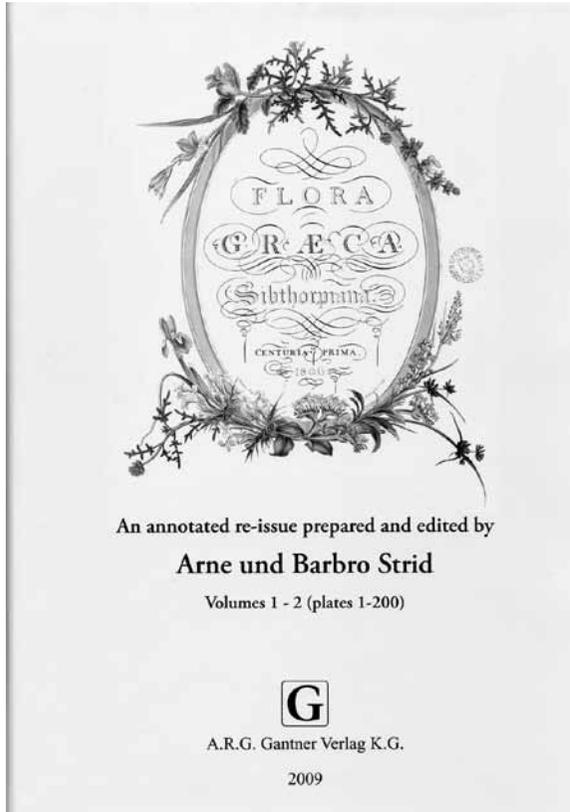
Sibthorp had done some preparation for his trip to the Mediterranean. At Oxford he had the advantage of access to William Sherard's (1659–1728) collections. Sherard had received duplicate specimens from Tournefort's travels and had also held a position in Smyrna as British Consul for some years, during which time he collected his own botanical specimens. When he died, Sherard willed his collection to Oxford. Also looking further afield, in Paris, Sibthorp consulted Tournefort's specimens, and in Vienna he consulted Dioscorides' work in the sixteenth-century manuscript Codex Vindobonensis in the Imperial Library. Arne Strid speculates that Sibthorp might well have carried copies of Tournefort's *Corollarium Institutiones Rei Herbariae* (Paris, 1703) and *Relation d'un Voyage du Levant* (Paris, 1718) with him on his travels for reference purposes, since he would be covering much of the same ground and/or seeing many of the same plants. Nikolaus von Jacquin (1727–1817) lent Sibthorp a set of engraved copies of the illustrations from the Codex Vindobonensis, which would provide

valuable references in the field and enable him to consult local citizens despite the language barrier.

After leaving Paris, Sibthorp visited Jacquin, professor of botany and chemistry and director of the botanical gardens at the University of Vienna, who introduced a botanical artist in his employ, Ferdinand Bauer. Impressed with the quality of Bauer's work, Sibthorp hired him to be part of his expedition to the Mediterranean. They left Vienna in the spring of 1786 and headed to Italy, then on to Turkey. They were joined by Sibthorp's friend John Hawkins (1761–1841), a scholar and naturalist with a particular interest in geology, mineralogy and archaeology and who was also a frequent traveler familiar with the Mediterranean region. In fact, Hawkins would later return to the region with Sibthorp in 1793, where they would again travel together for some eight months, collecting further material for Sibthorp's planned flora of Greece.

The further into the trip that Sibthorp got, the more he became convinced that it would enable him to make a major contribution to botanical knowledge and become famous in the process. He would explore regions that were little known botanically, collect species unknown to science, assign Linnaean names to species already known, and even add to what was known of species cultivated in western

gardens but about which botanists knew little in terms of where they grew naturally. He would discover plants endemic to the areas he was visiting, and he would also expand what was known of Mediterranean plants for medical, horticultural and agricultural purposes. Dioscorides had identified many medicinal plants in his own work that were later imperfectly or incorrectly identified in western European herbals, so this too would be a motivation to correct the record on what would have been an unfamiliar flora for western Europeans seeking to apply the knowledge developed and recorded by Dioscorides.



Sibthorp collected plants throughout the trip, and Bauer sketched assiduously, using his numbered color chart to make notes on the drawings for later reference. When the trip was over, rather than returning to Vienna, Bauer went with Sibthorp to Oxford and worked there for what would turn out to be more than four years, making finished paintings from the sketches. Sibthorp had taken ill on his second trip to the Mediterranean, however, and died before even the first volume of his *Flora Graeca* could be published. Fortunately, because he had specified in his will how the publication should proceed, his and Bauer's work was not lost. The task to bring the flora to publication would require, however, a massive effort on the part of a number of talented and determined individuals, some of whom would not live to see the completion of the project. In fact, Hawkins was the only one of the original team who would live to see the work completed.

James Edward Smith (1759–1828) worked from Sibthorp's notes as well as Bauer's annotations to produce the text for the first six volumes, each of which was published with 100 plates and distributed to subscribers. Bauer wanted to do the engraving as well as the paintings, and there were disagreements about who would do the engraving and how it would be done. The situation was resolved after Bauer was recruited to serve as botanical artist on the Flinders voyage to Australia, whereupon James Sowerby (1757–1822) was chosen to make the engravings from Bauer's paintings. After Sowerby's death in 1822 his son James de Carle Sowerby (1787–1871) continued the engraving work. Meanwhile, after Smith's death in 1828, botanist Robert Brown (1773–1858) took responsibility for the production and text of volume seven. The last three volumes were then produced under the direction of John Lindley (1799–1865). All of these men were working professionals who had written books on botany and horticulture and taken active roles in learned societies and institutions, but the work of *Flora Graeca* was being added to their already very full careers. Throughout the project, Hawkins stayed involved as the ultimate overseer, checking the work as it was being produced and resolving conflicts and problems as they arose.

A related two-volume work, *Prodromus Florae Graecae* (London, 1806–1816), was being published at the same time, in which Smith, working from Sibthorp's notes and other sources, described 2,600 species. *Flora Graeca* itself would be limited to covering only 966 species, the number of illustrations produced by Bauer. The two works together significantly added to what was known of the Mediterranean flora, although it should be added that their use of the Linnaean system to classify the plants was *au courant* in 1806 when publication began but out of date by 1840 when the last volume was published.

The pseudo-facsimile will reproduce all 966 plates and 10 engraved title pages in color but in a smaller size

than the original, each illustrated plate reduced to 16 × 24 centimeters. This decision makes the facsimile volumes both more affordable and easier to handle, and the reproduction quality is sufficiently high to show details clearly, although studying the most minute diagnostic characters might require a lens. Bauer's artistry, as well as that of the engravers, shows clearly. Barbro Strid was responsible for most of the Photoshop work in converting the illustrations for the project, working from Kodachrome slides made several years ago from a privately owned copy of *Flora Graeca* that was later purchased with a grant and deposited in the Copenhagen University Library.

As noted earlier, the original Latin text will be reproduced on a CD and distributed with the final facsimile volume. Meanwhile, Arne Strid produced new text and maps to provide current information. His text contains these elements: currently accepted scientific name, with authority and place of publication; important synonyms, with authority but without place of publication; comments on taxonomic status, distribution, ecology, flowering time and other features of interest; and a brief description, emphasizing diagnostic characters. This is more and different information than was provided in the original, where an entry would include the accepted Latin binomial, with authority and place of publication; any synonyms, including Tournefort's pre-Linnaean polynomials; the Greek vernacular name when known; a reference to the tabula number in *Flora Graeca*, and sometimes also to other published illustrations; and information on habitat and place(s) where the plant was collected or observed. Diagnoses were only provided for those plants considered to be new to science, of which there were approximately 300. Also, in the original works of *Flora Graeca* and *Prodromus Florae Graecae*, the habitat and locality information was compiled from various sources and was often based on guesswork due to inadequate annotation of Sibthorp's specimens.

In addition to Strid's text, he has also provided a distribution map for each specimen, thus easily conveying at a glance the extent to which a plant is found in the area of coverage. The maps were generated from the Flora Hellenica Database and are quite specific in terms of also including, for example, recently described species that might have previously been considered the same as the species being illustrated, as with Tabula 87, *Stipa bromoides*, whose map also includes the more recently described *Achnatherum fallacinum*. No maps are supplied for those plants occurring only in areas outside the boundaries of present-day Greece.

In addition to the core text and plates, facsimile volumes 1–2 begin with a good introduction and end with an index to scientific names. I feel that the authors and publisher have done very well in finding a

compromise that would allow the reproduction of this legendary, rare and historically important botanical work in a way that preserves the information of the original while enhancing it with added text and maps and with a minimal diminution of visual information. For all

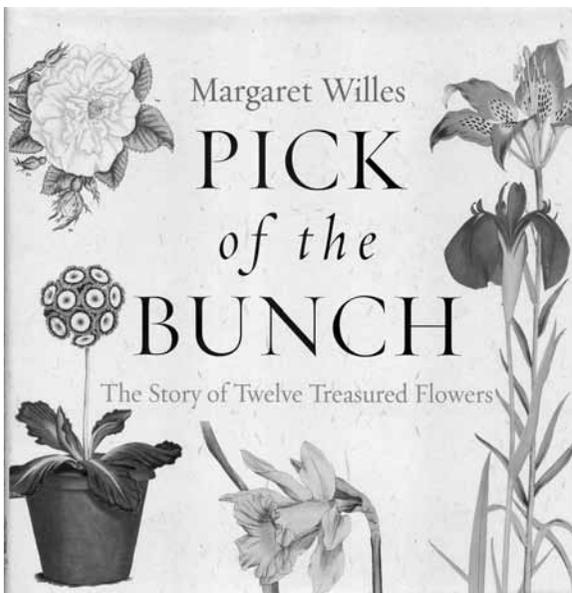
practical purposes the plates are excellent, and many people will be grateful for the opportunity to own or easily consult this *Flora Graeca* facsimile.

—Charlotte A. Tancin, Librarian

Willes, Margaret. *Pick of the Bunch: The Story of Twelve Treasured Flowers.* Oxford: Bodleian Library, University of Oxford; distributed by University of Chicago Press, 2009. 168 p., col. ill., port. \$35.00 (U.S.). ISBN 978-1-85124-303-7 (hardback).

Mrs. Willes notes in her introduction that our aesthetic tastes have not much changed in the last 400 years regarding the flowers we are inclined to favor, cultivate and portray in art. In the 17th century, flower portraiture offered one means of assuaging the cold winter months without a garden or fresh flowers in the house. These paintings were often done in a fantastical fashion, even with seasonal anachronisms, but they served a desire for year-round visual splendor and were extraordinarily popular among the burgeoning merchant class. The appreciation for flowers, and botany in general, would only deepen and broaden as ever-new and wonderful varieties of plants would arrive from all points abroad. Plant portraiture would correspondingly flourish and mature, becoming increasingly broad in intent and finding a progressively wider audience.

Of the flowers examined in this work, the author writes, "... I have taken twelve of these favorite flowers, and looked at their social history, how they acquired their names, how they arrived in our gardens, how they were portrayed by artists, how they were bought, obtained, and displayed, and who were their devotees" (p. 7). In doing so, she employs a unique organizational matrix for her selection. Ambrosius Bosschaert produced a painting titled "A Vase of Flowers" in either 1709 or 1710 in oil on copper. Of the nineteen flowers represented therein, Mrs. Willes chooses nine for her work here—the iris, daffodil and narcissus, fritillary, tulip, hyacinth, carnation,



snowdrop, violet and pansy, and rose. The other three covered here but absent in the Bosschaert are the auricula, lily, and the dahlia (though the author notes that it is thought that there is a companion piece to this work in a private collection that features the lily prominently).

It is no small accomplishment, in a work of this scope (and one so heavily illustrated), to afford the reader an opportunity to learn, while at the same time not feel encumbered, nor conversely, insufficiently challenged, by the text; yet in this capacity, Mrs.

Willes' narrative succeeds admirably. She provides a wonderfully fluent history of flowers in Europe, including their gardeners and the champions of their dissemination, as well as biographical information on important botanists and flower painters, all of which she weaves smoothly together with the description of the individual flowers. She also gives great attention to the symbolic associations these flowers have had from antiquity onwards. The bulk of the images are from the art collection in the Bodleian Library, University of Oxford, and they are, by and large, some of the more recognizable iconic images from well-known sources, including works by Fuchs, Brunfels, Parkinson, Redouté, Thornton, Blackwell, among many others. She includes recommendations for further reading and an index, though it would have been welcomed to have a bibliographical list of illustrations as well. This work would likely appeal to a wide and general audience, especially those interested in flowers, flower portraiture and the history of flower gardening in Europe.

—Donald W. Brown, Bibliographer

