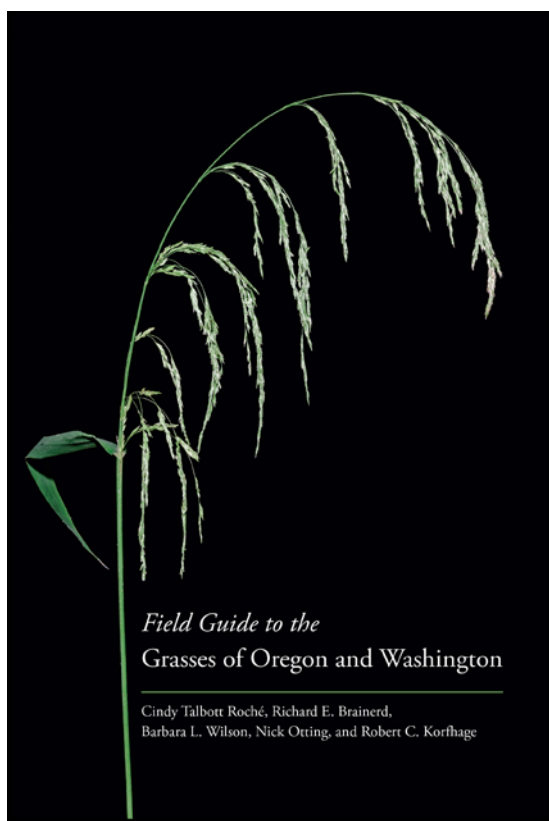


## 2020 CBHL Annual Literature Award Winners

Council on Botanical and Horticultural Libraries' Annual Literature Awards Committee announced winners of the literature awards on October 16, 2020. Thirty-eight titles were considered this year, and our 2020 winners represent the best new books in botany and horticulture.



### Annual Literature Award

For a work that makes a significant contribution to the literature of botany or horticulture

*Field Guide to the Grasses of Oregon and Washington*  
by Cindy Talbott Roché, Richard E. Brainerd, Barbara L. Wilson, Nick Otting and Robert C. Korfhage

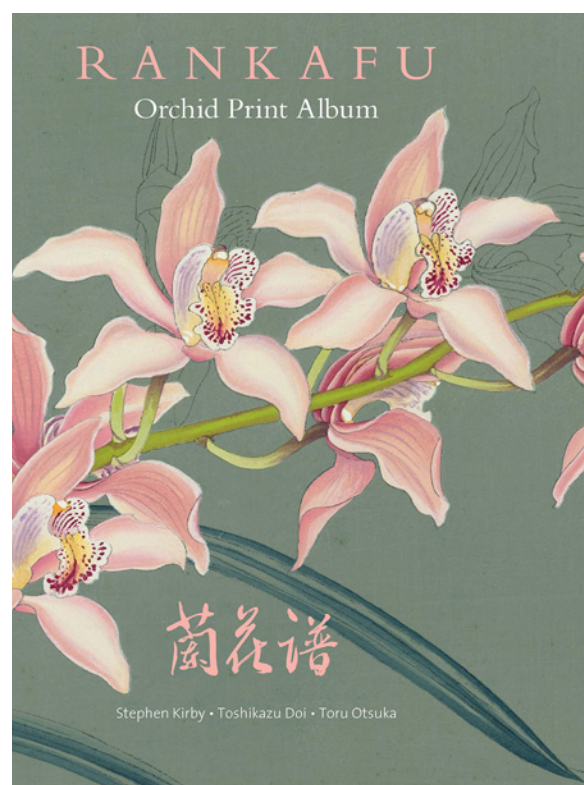
Oregon State University Press, 2019. 488 p.  
ISBN | 9780870719592

### Award of Excellence in Botanical Art and Illustration

*Rankafu: Orchid Print Album*  
by Stephen Kirby, Toshikazu Doi and Toru Otsuka

Kew Publishing, 2018. 296 p.  
ISBN | 9781842466681

(continued on page 3)



## From the President

Brandy Kuhl  
Library Director,  
Helen Crocker Russell Library of Horticulture  
San Francisco Botanical Garden at Strybing Arboretum

Dear CBHL,

First, many thanks to the Annual Literature Award Committee for hosting an interesting and engaging virtual award ceremony! The list of 2020 winners is now available at: <http://www.cbhl.net/award-winners>.

The Board held a productive mid-year meeting on October 27.

We were excited to hear an update on the 2021 virtual annual meeting from Robin Everly and Barbara Ferry from the Smithsonian Library and Archives. Planning is going very well, and I think it's going to be an excellent meeting. Please save the date! May 5-7, 2021.

Allaina Wallace gave an update on the 2022 annual meeting to be hosted by the Denver Botanic Gardens' Helen Fowler Library. We are hoping to be able to meet in person but are also planning for the possibility of a virtual or hybrid meeting. And I just realized that I neglected to welcome Allaina to the CBHL board in the last president's column. My apologies. Please join me in welcoming Allaina Wallace as 2nd Vice President!

The Board is happy to present a balanced budget for 2021, which will be finalized by the end of the 2020. Many thanks to former CBHL president David Sleasman for leading the charge in creating an annual budget.

And last but not least, please renew your CBHL membership by February 28, 2021! The CBHL Board and Membership Committee are grateful for your support and friendship as we move forward together. We appreciate your suggestions and inspiration and hope that CBHL is a positive and community-building resource during this difficult time.

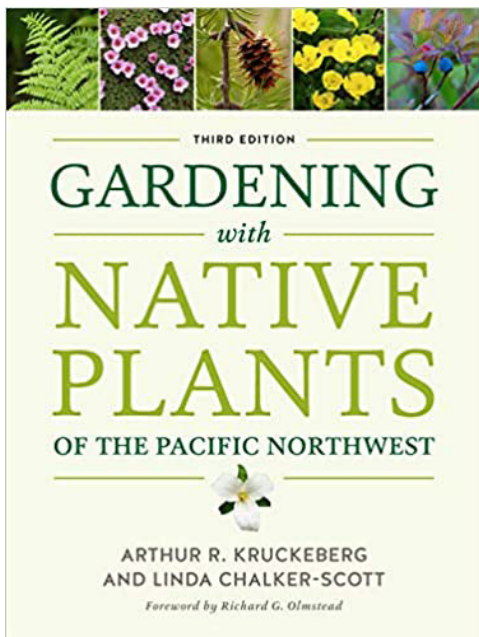
Take care everyone, happy holidays,

Brandy

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## Award of Excellence in Gardening and Gardens

*Gardening with Native Plants of the Pacific Northwest, 3rd. ed.*

by Arthur R. Kruckeberg and Linda Chalker-Scott

University of Washington Press, 2019. 432 p.  
ISBN | 9780295744155

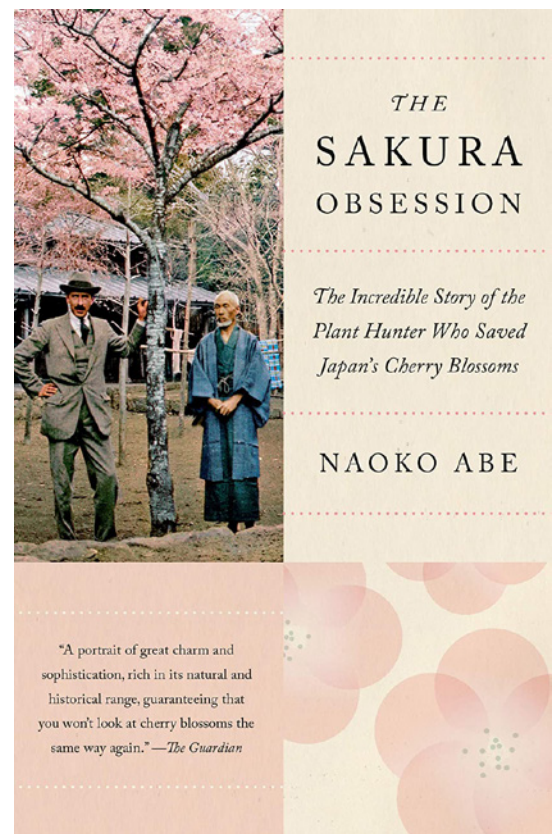
## Award of Excellence in History

*The Sakura Obsession: The Incredible Story of the Plant Hunter Who Saved Japan's Cherry Blossoms*

by Naoko Abe

Alfred A. Knopf, 2019. 416 p.  
ISBN | 9780525435389

Read a review of *The Sakura Obsession* in the June 2019 issue of the CBHL Newsletter!



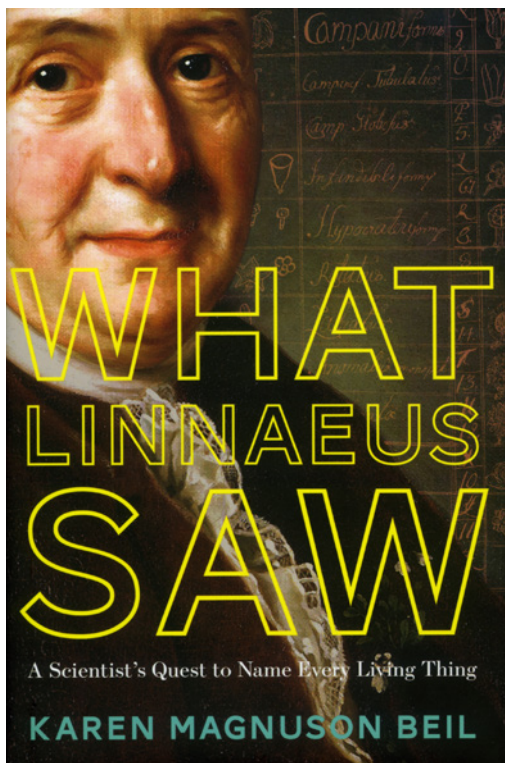
## Award of Excellence in Children and Young Adult Literature

*What Linnaeus Saw: A Scientist's Quest to Name Every Living Thing*

by Karen Magnuson Beil

Norton Young Readers, an imprint of W. W. Norton & Company, 2019. 256 p.  
ISBN | 9781324004684

Read a review of *What Linnaeus Saw* in the September 2020 issue of the CBHL Newsletter!








## Award of Excellence in Children and Young Adult Literature

*The Night Flower: The Blooming of the Saguaro Cactus*

by Lara Hawthorne

Big Picture Press, an imprint of Candlewick Press, 2019. 32 p.

ISBN | 9781536206166

See past years' CBHL Annual Literature Award winners online at <http://www.cbhl.net/award-winners> 

## CBHL Conference Collaboration Grant Program

During the 2010 mid-winter CBHL Board Meeting, the Board established a grant program to encourage CBHL members' participation in other like-minded organizations' conferences. Currently, there is already a wonderful reciprocal relationship with the European Botanical and Horticultural Libraries Group (EBHL). To expand collaboration, this "CBHL Conference Collaboration Grant" will pay up to \$500 towards conference fees (not including accommodations, travel expenses, or meals) for a CBHL member to go to the conferences of GardenComm (formerly Garden Writers Association), American Public Gardens Association, Special Libraries Association, Internet Librarian, or similar organizations.

The grantee would receive the funds before the meeting (up to \$500) with the agreement the participant would present a report to CBHL (either through the CBHL Newsletter or as a presentation at the Annual Meeting). The report should include useful aspects of the conference that will help other CBHL members. The report is intended as continuing education for the CBHL members. The grantee is also intended to serve as a CBHL ambassador to the conference and is required to register as the CBHL representative.

To receive the grant, the prospective grantee needs to submit a letter addressed to the CBHL Secretary including:

- Name of conference
- Date of conference
- Amount of grant request
- URL of the conference website
- Reason for choosing the conference, including the benefit to CBHL
- The date when you will submit your report about the conference to either the CBHL Newsletter or as a talk at the CBHL Annual Meeting

Please give the Board one month prior to the conference registration deadline to make a decision about the grant. Funding will be awarded based on the amount of funds made available by the Board during that particular fiscal year.

Submission address and/or email: CBHL Secretary, Esther Jackson, ([contact email available through LibGuides](#))

# CBHL Members' West News

Compiled by Beth Brand  
Head Librarian, Schilling Library  
Desert Botanical Garden

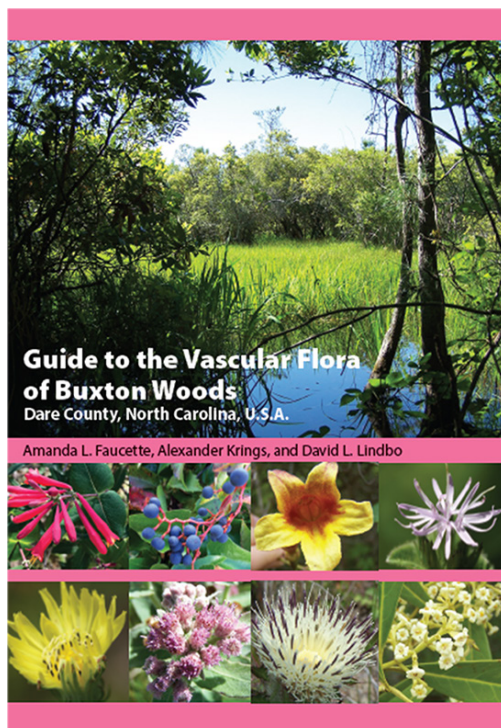
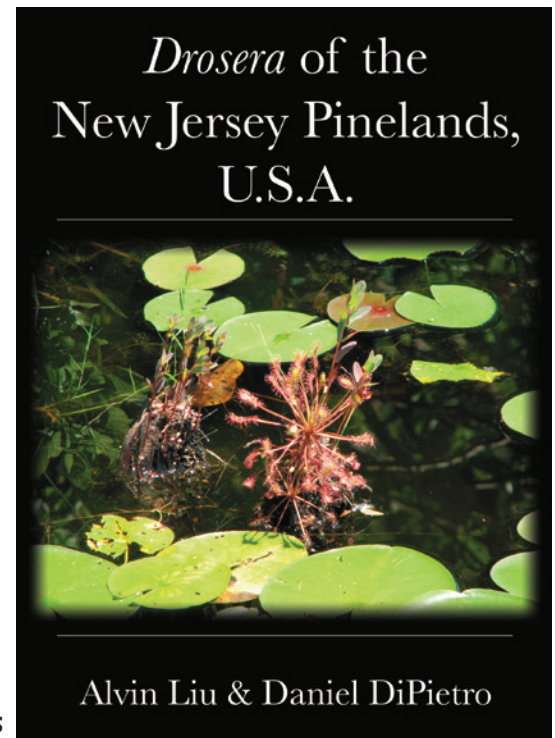
## Two New Publications from BRIT Press

Barney Lipscomb  
Leonhardt Chair of Texas Botany  
Botanical Research Institute of Texas

*Drosera of the New Jersey Pinelands, U.S.A.*  
By Alvin Liu and Daniel DiPietro

*Drosera of the New Jersey Pinelands, U.S.A.* is a full-color, natural history monograph that offers an in-depth, consolidated analysis of the carnivorous plant genus *Drosera* that inhabits nutrient-poor bogs and wetlands of the New Jersey Pinelands. The Pinelands host some of the densest concentrations of carnivorous plants in the United States and, as such, are enormously important to the study of native carnivorous plants. This work is the first to discuss unique morphs and habits of *Drosera* that are common to, and in some cases only known from, the NJ Pinelands.

6.14" x 9.21" | 170 pages | color photos throughout | paperback | ISBN 978-1889878-56-0 | 11 Sep 2020 | Bot. Misc. No. 53 | \$35.00 | <https://shop.brit.org/Drosera-of-the-New-Jersey-Pinelands>



*Guide to the Vascular Flora of Buxton Woods, Dare County, North Carolina, U.S.A.*

By Amanda L. Faucette, Alexander Krings, and David L. Lindbo

Buxton Woods Coastal Reserve is a Significant Natural Heritage Area (R1 C1)<sup>1</sup> located on Hatteras Island, Dare County, North Carolina. The site spans about a third of the largest remaining tract of Maritime Evergreen Forest (Mid-Atlantic subtype) and contains the only occurrence of the Maritime Shrub Swamp (Dogwood subtype) community in the world. The illustrated guide treats 476 species in 98 families, providing keys to all voucherized or reported species and genera, with 30 color plates and nearly 400 line drawings. Habitat, nativity status, flowering and fruiting phenology, and abundance are also incorporated, as well as relevant voucher information.

7" x 10" | 236 pages | 30 color plates | 400 line illustrations | paperback | ISBN 978-1-889878-60-7 | 26 Oct 2020 | Bot. Misc. No. 54 | \$35.00 | <https://shop.brit.org/Buxton-Woods> 

1 Editor's Note: The North Carolina Natural Heritage Program assesses the conservation priority of natural areas by assigning Representation Ratings and Collective Value Ratings, measures of how each natural area supports populations of rare species and rare or high-quality natural communities. See <https://www.ncnhp.org/documents/files/procedures-rating-significant-natural-areas/open> for the methodology.

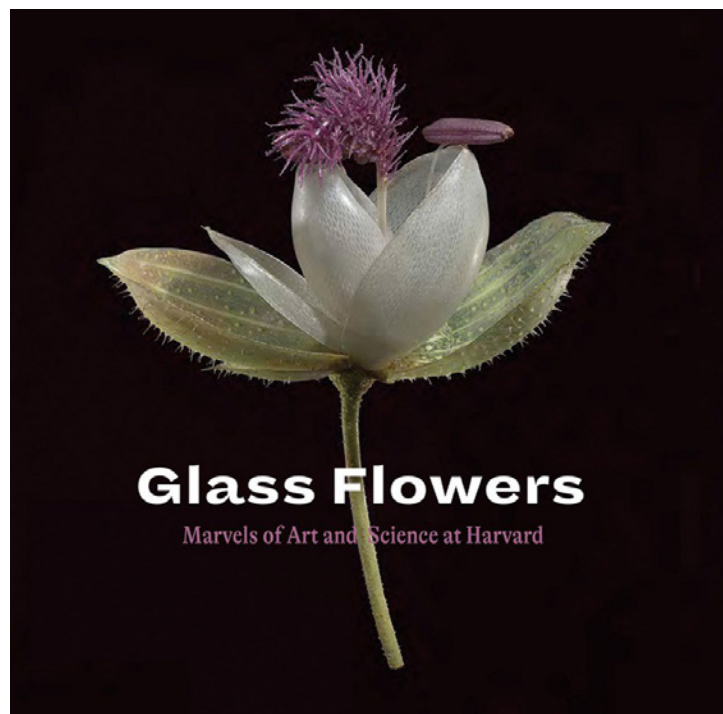
# CBHL Members' East News

Compiled by Shelly Kilroy  
Librarian, Peter M. Wege Library  
Frederik Meijer Gardens & Sculpture Park

## Glass Flowers Book Now Available... And an Announcement

Judith A. Warnement  
Director  
Botany Libraries, Harvard University Herbaria

The highly anticipated new Glass Flowers book is here! In collaboration with Jennifer Brown, Collection Manager for the Glass Flowers, Scott E. Fulton, Conservator for the Glass Flowers, and Donald H. Pfister, Asa Gray Professor of Systematic Botany and Curator of the Farlow Library and Herbarium of Cryptogamic Botany, Photographer Natalja Kent captures the stunning beauty of the Ware Collection of Blaschka Glass Models of Plants in *Glass Flowers: Marvels of Art and Science at Harvard*.



From orchids to bananas, rhododendrons to lilies, Leopold and Rudolf Blaschka created a stunning array of glass models of plants from around the world. Working exclusively for Harvard University in the late 19th and early 20th centuries, the Blaschkas applied their artistic expertise and botanical knowledge to craft an extraordinary collection for Harvard students, researchers, and the public. The precise shaping and delicate coloring of the models renders life-like details that fool the eye. Such detail is captured in dazzling new photographs of models that inspire wonder and blur the line between the real and the man-made. The unique and astonishing Ware Collection of Blaschka Glass Models of Plants demonstrates the majesty of plants and the artistry and scientific acumen of this father and son team.

\$24.95 plus tax and shipping (available from the museum at <https://hmn.harvard.edu/glass-flowers> or Amazon).

And lastly, I will be retiring on December 31 as Librarian of the Harvard University Herbaria Botany Libraries after thirty-one years of service. I greatly value the privilege of curating a remarkable collection with a talented team of Harvard librarians and botanists, and the friendships and support shared by members of CBHL and EBHL. I am most proud that the Botany Libraries is a founding member of the Biodiversity Heritage Library that has created open access to biodiversity knowledge and connected valuable archival collections. Visiting members' libraries and gardens in many parts of the world for annual meetings has created unforgettable memories and I hope to continue making them in the future.

## Pennsylvania Horticultural Society McLean Library Update

Janet Evans  
Associate Library Director  
McLean Library, Pennsylvania Horticultural Society

On the COVID front, library staff and most of the rest of our staff continue to work at home with no immediate plans to return to our headquarters. All PHS events are being held virtually through December, at the earliest. This includes our book discussions, which are held monthly via Zoom. See our reading list





Lantern Slide of 'Laverock Hill' garden, photographed by Mattie Edwards Hewitt, circa 1925, PHS McLean Library & Archives.

at <https://pennhort.libguides.com/McLeanLibraryBookGroup> (and btw, I was truly flattered when Kathy Crosby from Brooklyn Botanic Garden joined one of our book discussions via Zoom – thanks, Kathy! And this is, of course, an open invitation for any CBHLer who'd like to join the discussion!)

Our progress with our National Endowment for the Humanities (NEH) CARES grant continues. With this funding, we are contextualizing 2,000 digitized items by creating metadata for them. We are also finishing up our "Philadelphia Garden Photographs: 1900 - 1940" digitization project. We are grateful to the Pennsylvania Historical and Museum Commission for the Historical and Archival Records Care (HARC) grant for funding the digitiza-

tion portion of this project. Our digitized material is being uploaded into the PA Photos and Documents digital repository, a state-wide initiative powered by Islandora. Learn more about our digital collections here: <https://pennhort.libguides.com/DigitalCollections>.

## When Collections Come to Life

Kristine Paulus

Plant Records Manager

The New York Botanical Garden

For many collections managers, the thought of organisms living in their collections sends them right into IPM emergency mode. But what if living organisms are part of the collections? Botanical gardens employ records managers to document the plant collections and maintain their records, both current and historical, much as they do for book, manuscript and archival collections. Although many plant records staff, like at the New York Botanical Garden, report to the Horticulture department, rather than the Library, they often work closely together.



Page from 1896 accession log. Accession # 733, *Ceridiphyllum japonicum*, is currently the oldest living accession on the Garden's grounds. Photo by Marlon Co.

At the New York Botanical Garden, the plant records department formed shortly after the organization's inception in 1891 and began keeping records of the living collections very early on. The very first accession, a willow, was assigned accession number 1 and subsequent accessions were given sequential numbers. That system was used until 1940, when a new numbering system was adapted, incorporating the year into a two-part accession number, similar to registrarial methods used for museum collections.

Initially, new collection plants were recorded in handwritten leather-bound field notebooks and a cor-  
December 2020





Accession tag attached with a screw to the trunk of an eastern red-cedar, accession # 39934, received in 1914 from nursery Bobbink and Atkins. Photo by Ivo Vermeulen.

challenge that greatly differs from print collections: plants lose their labels more easily! Whether it's a large tree with a tag attached directly to its trunk or a small herbaceous plant with a tag staked in the soil, these labels are subject to outdoor elements, animals and even the plants themselves as tree bark will eventually outgrow and swallow the label. Some labels may fall victim to lawnmowers and weedwhackers.

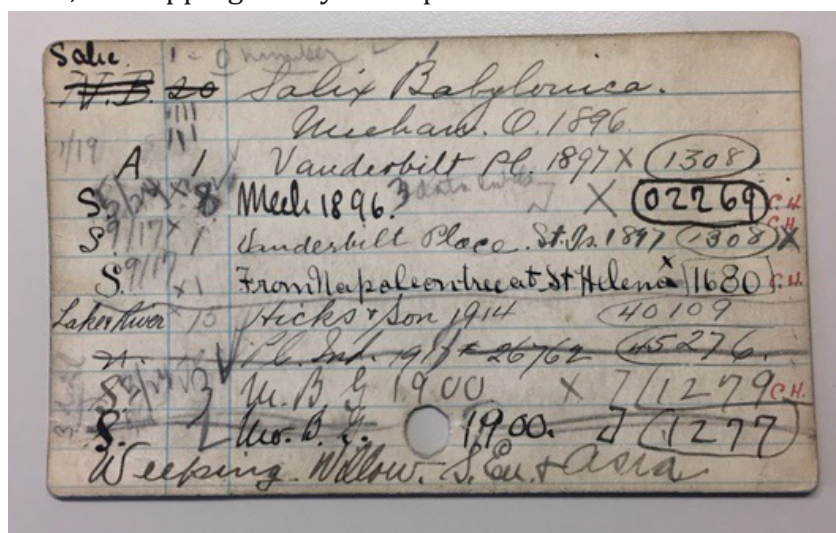
Plant recorders track collection plants throughout their lives, recording cause of death and other reasons for deaccessioning. Occasionally, records are resurrected if a plant comes back to life! Plant records staff also update records to follow the movements of plants, re-mapping if they are replanted in a new location. Addi-

responding card catalog, but today, they are cataloged in collections management databases customized for living collections. The New York Botanical Garden's living collections can be searched in the online public access catalog, Garden Navigator. The plants are cataloged in a collections management program called BG-Base and mapped in a GIS program called BG-Map, which also powers Garden Navigator.

After plants are accessioned and cataloged, a tag and public display label are made and placed with the plant. The tag includes the plant's name, its unique accession number (tied to the database record) and might include a QR code or barcode. Although each garden uses slightly different labeling methods, they are based on the same principles. One



Public display label for a Himalayan pine accessioned in 1987. Photo by Ivo Vermeulen.




Catalog card for *Salix babylonica*. The early card catalog was organized by taxon. This card lists multiple accessions, including number 1680, a cutting allegedly taken from a tree at Napoleon's grave in 1900. Photo by Kristine Paulus.

tional data collected might include reproduction or seasonal phenological phases such as flowering and fruiting.

Like librarians, plant recorders answer reference questions and assist researchers using the collections. Sometimes we ship germplasm (leaf cuttings, flower parts, pollen, seeds, etc.) for DNA sequencing or for propagation for the conservation of a rare species. At NYBG, the plant records are eventually turned over to the library's archives, where they are used by researchers studying historical collections and also by curatorial staff looking for provenance information that might have eluded the database.

At New York Botanical Garden we're mak-



ing an effort to link plant records to related collections in the LuEsther T. Mertz Library and the William & Lynda Steere Herbarium. However, due to differences in metadata standards and authority control, we currently maintain three separate primary databases. Collections may also be described or digitized in online exhibitions, research guides such as LibGuides, blogs and other pages, including the Herbarium's *Hand Lens*. Whenever possible, referring hyperlinks are embedded in the records. Do any CBHL members have integrated systems for maintaining very different types of collections records? We'd love to hear from you! 

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### Questions?

Contact CBHL Membership Manager  
Janis Shearer, [janisjshearer@gmail.com](mailto:janisjshearer@gmail.com)

Student.....\$50  
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[betsy@lloydlibrary.org](mailto:betsy@lloydlibrary.org)

# Preservation: Understanding Bookbindings

Kathy Crosby

Head Librarian, Brooklyn Botanic Garden  
and

Charlotte A. Tancin

Librarian, Hunt Institute for Botanical  
Documentation

Carnegie Mellon University



Figure 1: Brunfels herbal seen from an angle showing front cover.

I have often felt a lack of ability to quickly and naturally reach for good and contextual descriptive terminology to describe bindings in a historical framework when cataloging, giving rare book room talks, or speaking to a conservator. There are the questions one prepares for and then the questions put to one; learning is generally all in the follow up to those user and visitor questions. This exchange between Chuck and I is meant to help me move along in the right direction, and I look forward to more input, as usual, from CBHL readers.

In addition, in so many cases over the years, bindings that were deteriorating were removed from books by owners, curators or librarians, and with that process, to some extent, the individual history of the book, and perhaps its printer or publisher has been lost.<sup>1,2</sup> There are even some early paper bindings that are even made from earlier original manuscripts. That too is part of a fascinating story, and so often I would like to follow the trail of the experience of a book in hand. Not possible, I am sure!

To this end, I asked Chuck to take some pictures of interesting bindings and I took some in our collection as well. We each shared a half dozen or so, and in this article we're just looking at two or three of them.

**Kathy Crosby:** Thank you for sending me this image of the wonderful Brunfels cover, Chuck. I saw part of the date stamped on the cover—a special decorative cover that was created after its initial printing almost certainly at the request of the owner or institution. At point of sale, books were often purchased in simpler formats—in detachable wrappers or covered with pasteboard or leather drawn over boards, etc., but might be later rebound in more ornate ways. These inspired, or imposed covers have a personality that speaks to the owner's reverence of the author, content, knowledge, pride, etc.

**Chuck Tancin:** Kath, this is Otto Brunfels' *Herbarum Vivae Eicones* (Argentorati/Strasbourg, 1532-1539), one of our most elaborate historical bindings and a really interesting example of state-of-the-art blind stamping for the time, I think. This Brunfels' herbal was published in three volumes and an appendix, and ours was bound in 1574 in pigskin over wooden boards, blind-stamped in a panel design. Was it bound to commemorate a special occasion? If the initials B O H are the initials of the owner for whom it was bound, I wonder who that was? Brunfels himself was a theologian in addition to being a botanist, and somehow I feel that the Protestant symbolism on this cover is likely related to Brunfels' own position on religion. The men pictured in medallion portraits on the cover were important to the Protestant Reforma-

1 Julia Miller, *Books Will Speak Plain : a Handbook for Identifying and Describing Historical Bindings* (Legacy Press, 2010).

2 Randy Silverman, "Can't Judge a Book Without Its Binding", *Libraries & the Cultural Record* 42, no. 3 (2007): p291-307.



tion: Erasmus of Rotterdam, Philip Melanchthon, Martin Luther and Jan Hus. The center front image is a crucifixion, signed MV; the center back has a portrait of Philip Melanchthon signed H B in monogram, with another three lines of lettering stamped below the portrait. It's described in the Hunt Botanical Library exhibition catalog *The Tradition of Fine Bookbinding* (Pittsburgh, 1979): "The sixteenth century monogramists MV and HB, whose panel stamps are frequently found together, were probably engravers rather than bookbinders." There is a lot going on with this book cover! (See figure 1.)

**KC:** Another line of research for our spare time? Famous "stampmen," perhaps even some "stampwomen." I read last night that Erasmus and Brunfels had some initial friendly correspondence, but that later Brunfels' change of position with regard to Catholicism and then the Protestant Reformation led to some fireworks for a period of time. Erasmus seemed to appreciate the direction of this change; I would have much more reading to do on this subject to get even a toehold in this conversation.

**CT:** In this period in Europe, Protestants were pitted against Catholics, resulting in enormous upheaval as religious wars and persecutions sometimes necessitated migrations from an unfriendly country to a friendly one, depending on who was in power and what their religion was. There was so much intellectual ferment and intensity of feeling – so this binding evokes that for me, beyond the book being one of the great herbals.

**KC:** Pigskin is said to "have distinctive triangular follicle patterns of bristle holes in groups of three."<sup>3</sup> Too much information? I have to confess I want to look at the cover with a loupe or magnifying glass. Book-binding-wise I haven't worked with leathers, but still find it interesting enough to want to try a little for the experience of it. Vellum has an allure for me. I will probably largely stick with paper—right now I am thinking about making books with my paper recyclables.

**CT:** Yes, there are distinctive markings of the skins of different kinds of animals. Difficult for a vegetarian to contemplate, but on the other hand these tough covers certainly helped to protect the books and extend their lifespans.

**KC:** Would you agree that the Brunfels is largely gothic in style?

**CT:** Agreed. And as we've talked about, it also evokes those 16th-century title pages that have an architectural sort of design and often show one or more images of ancient or contemporary authorities, suggesting an implicit endorsement of the text.

**KC:** And contemporary.

**CT:** The portrait medallions are interesting – they look like coins. You mentioned that Miller has a great phrase, "classical heads." Medallions do convey the impression that they elevate the people portrayed by presenting them as though classical and historic. (See figure 2.)

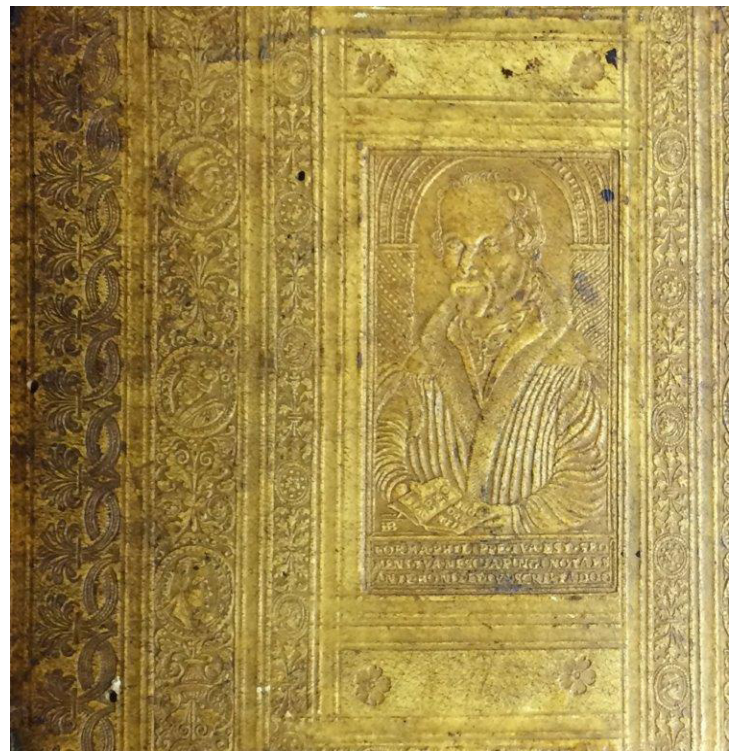


Figure 2: Brunfels back cover. Philip Melanchthon is pictured in center panel, with additional portrait medallions.

3 Miller, *Books Will Speak Plain*, 457.

**KC:** The advent of printing along with advances in paper making make this early printing period interesting in terms of how craftsmen approached the mechanics of the book; some applied their traditional gothic style binding skills, some not, and both had an impact on the tension of how the different parts of a book worked together –or not! Paper took iron gall ink better than vellum and books with paper text blocks did not necessarily need wooden boards, raised supports, or clasps to maintain their shape—reducing the cost of production.<sup>4</sup>

**CT:** So that’s an interesting thing about these 16C herbals – what you’re saying is true in general about books then. In the case of the herbals, though, as more and more kinds of information was being added to them they got thicker and thicker, really needing those wooden boards. Then a reverse process began to happen, where some types of information were not being included in new herbals and instead were published in other, newer genres of plant literature (floras, florilegia, books about garden plants), so new herbals began to be slimmer.

I agree that it seems like a volume with paper pages would be easier to manage in the face of humidity changes than one of vellum/parchment pages. Just look at the way vellum covers react to humidity changes. But I’d also say that even with paper, the more massive the text block was, or even the thicker the paper sheets were, the better an argument could be made for the wooden boards and clasps, thinking of the way that paper reacts to humidity over time, swelling and sometimes warping the binding constraints.

**KC:** Even though this book seems to have traditional double supports laced into the boards with some kind of vegetable fiber cord or skin or leather thong and clasps as normal for vellum, I’m guessing this book is printed on paper. Looking at the books in the BBG collection, there are a lot of sizable pieces printed on paper with wooden boards and at least parts of their original clasps—so I’m in agreement with your thoughts on giant text blocks!

The printer probably beveled all edges of the boards and created a path into the boards for lacing the supports in through the edge of the board parallel to the spine. The path would involve holes in the board and cutting away a channel of sorts but there are other methods; pulling in the supports rounded the spine. Also, I think there is an earlier style of binding that creates a concave spine—not sure if there are any pieces like this in the BBG collection. If I were to round the spine of a book I made today, I would use a backing hammer; I’m still not very good at it.<sup>5</sup>

**CT:** Kath, your description of the process sounds like it matches this book. The paper is beautiful rag paper, and it took the ink really well, obvious in the text pages but especially in the illustrations, which are crisp and clear.

**KC:** I think the decoration of the cover was created by blind stamping, a large intricate metal stamp the size of a cover in this case, perhaps created by a clay cast? The lines of the cover look continuous—not broken as they might if done by hand, what do you think Chuck? Like earlier woodblocks, printers had access to libraries of these stamps, but previous to the development of these large stamps, a lot of decorative work was done by hand tooling with small hand stamps. The design itself seems to have a center panel with a series of frames.<sup>6,7</sup>

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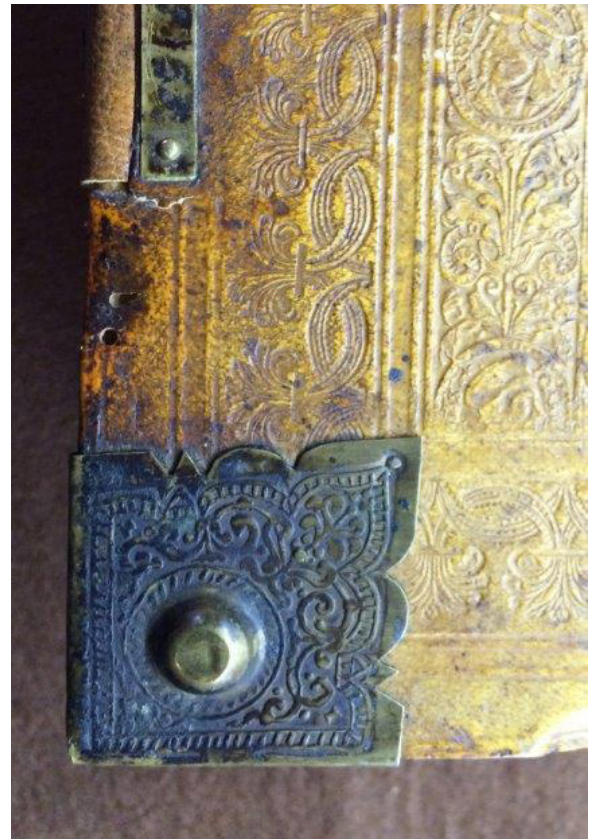
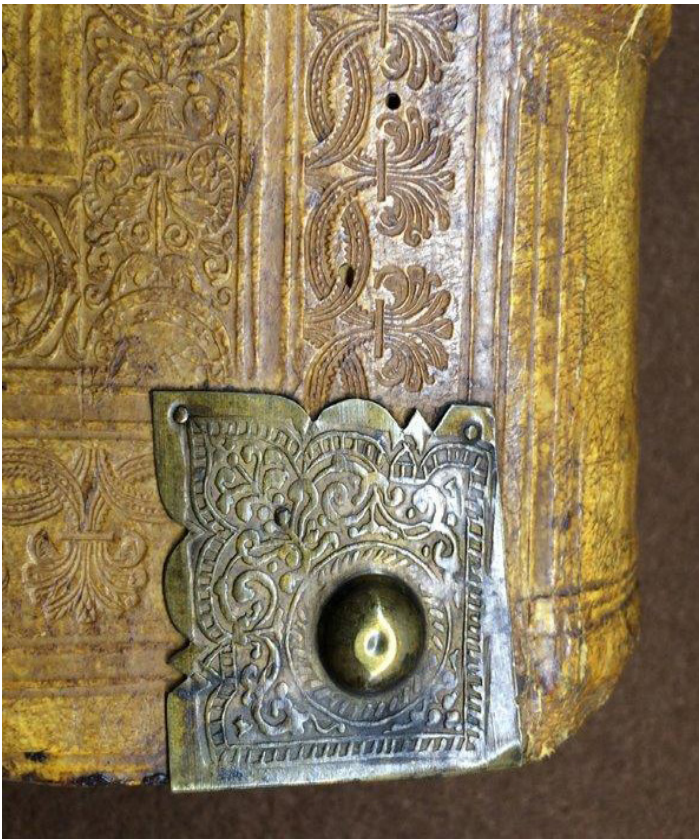
4 Miller, p88-89.

5 Miller, p51-68.

6 Miller, various comments and in the glossary, p455.

7 Janet Scinto, “The Panel Stamp in Early Modern Bindings”, *Library Quarterly* 85, no.1 (2015), p106-111.





Figures 3 and 4: Two bosses on Brunfels binding, one next to spine (left) and one on outer corner (right).

**CT:** Right, agreed, a continuous and very carefully crafted presentation of patterns and images, custom made for this job by someone really, really good at it.

**KC:** I'm guessing the mounts or corner bosses helped to protect the book when stored in a horizontal position and when opened; the practice of shelving books was, I think, initially flat. Do you think this was due to weight and awareness of what that weight would do to a binding if the book were stored vertically? I wish we had the space nowadays for more flat storage.<sup>8,9</sup>

**CT:** I love the hardware on some of these books. The more massive the books, the more necessary the hardware, perhaps. Your thought about horizontal storage sounds good to me (I too wish we had more such shelving), although hardware would have also been helpful for vertical storage – think of the wear and tear on the corners and edges of the covers in the course of use, reshelving, moving the books around on the shelves. And surely occasionally someone dropped one of these big books; clasps would be extra protection.

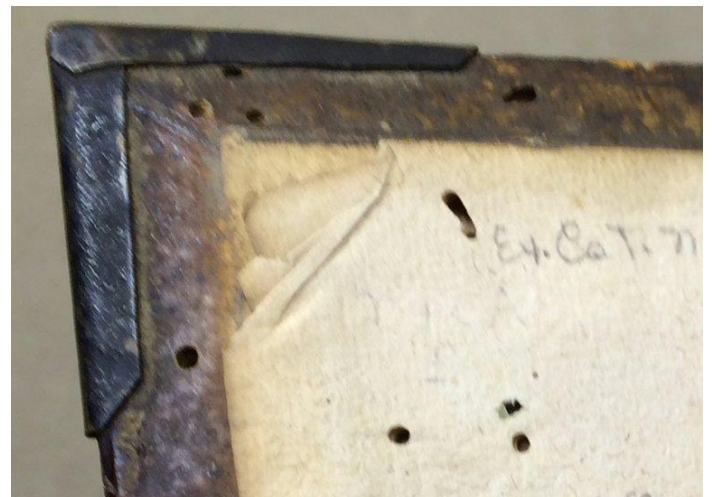
**KC:** This kind of metal work is sometimes referred to as book furniture; as time went on, even the bosses came to be beautifully decorated. They also often had “knobs” as a further protective measure against friction created by contact with surfaces. Maybe the chronology is not so straightforward as I think. Do the “knobs” also serve as a method of reinforcing the attachment of the bosses? For reasons of efficiency, use of knobs only in and of themselves was common. (See figures 3 and 4.)

**CT:** We do have some felt-covered “boards” that we stand on the shelf on either side of books with this

8 Miller, *Books Speak Plain*, p64-55.

9 W. Baumer, I. Scnor, et al. “Bookbinding and Fancy Leather Goods”, *The Workshop* 1, no. 4 (1868) p49-51.





Figures 5, 6, and 7: Boss and close up of clasp fastened to board (left), upper clasp (top right) , boss on inside cover. (bottom right).

kind of hardware, to protect the other books from the aggressive self-protection of these volumes.

**KC:** The endbands may have been made on or off the book, the former likely being stronger, but more labor intensive.

**CT:** We know that this book had “single natural linen endbands; four raised bands.” Everything about this binding says to me “high end, no expense spared.”

**KC:** Probably on the book then, I like that. The clasps may catch at the top of the book or bottom; sometimes there is a local pattern to this kind of work. Are all the parts of the clasp on the Brunfels metal? Or would there have been some kind of strap?

**CT:** The clasps are fastened onto leather straps, and the clasps themselves are decorated (high end!).

**KC:** These are so beautiful. (See figures 5, 6, and 7).

Getting back to the trend of selling a book without a cover or with a simple, inexpensive cover, this copy of Pehr Kalm’s *En resa til Norra America* (Stockholm, 1753-1761) from two centuries later is probably a good example. Here the idea is simply to have access to the content, the kind of book a student would

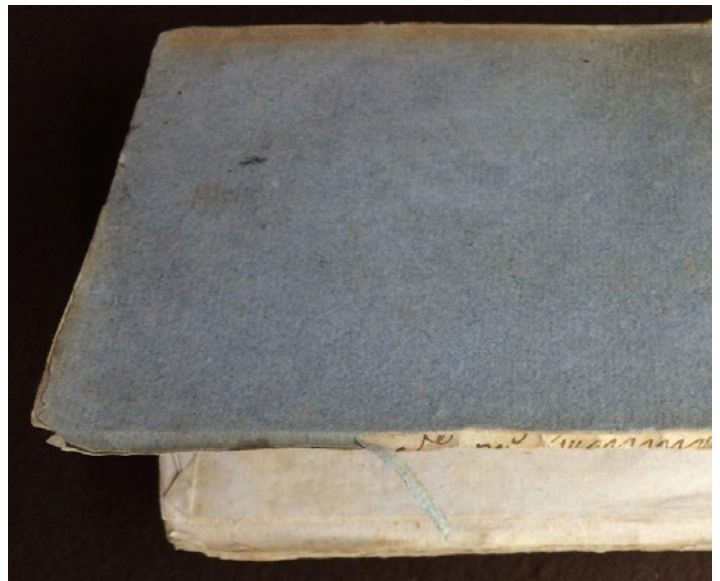
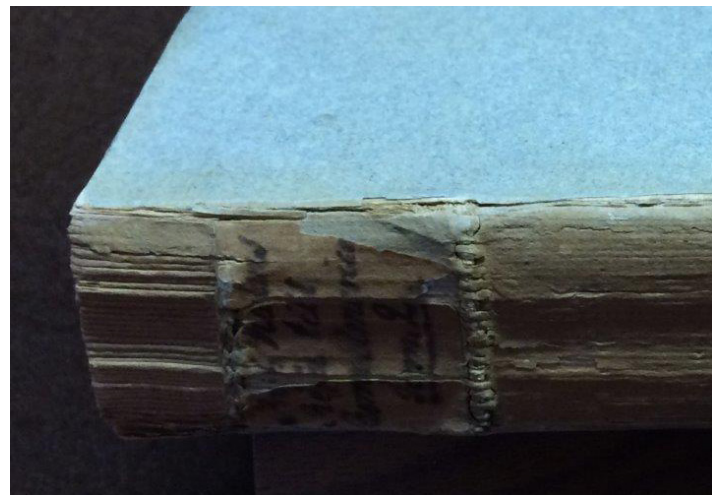
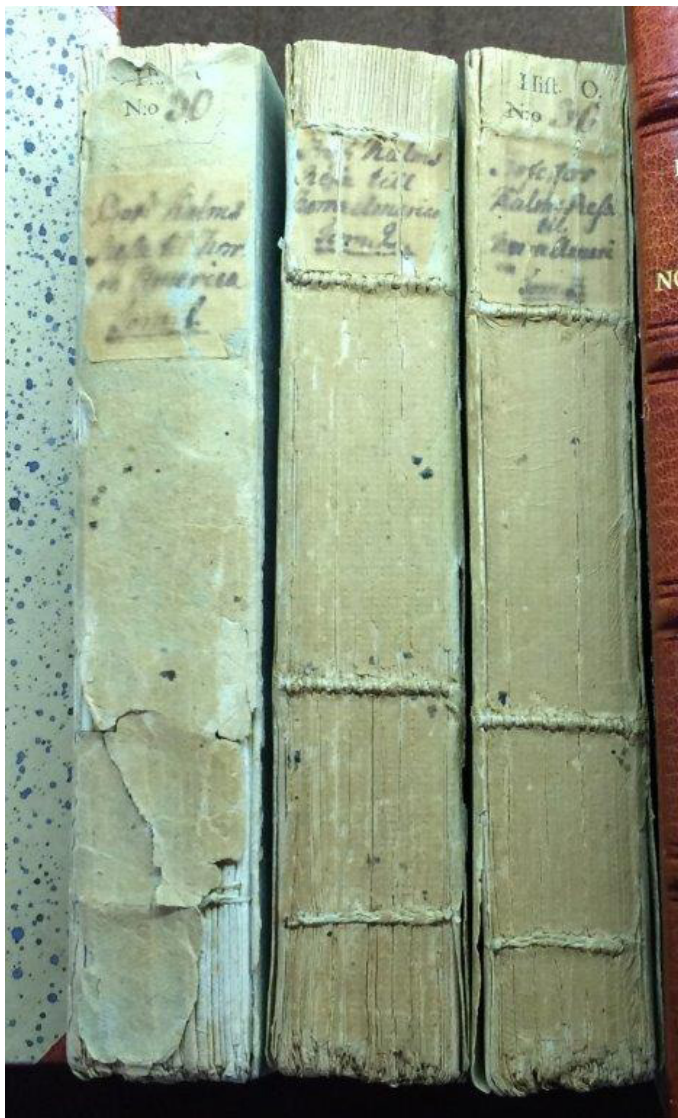


need. A person doing research. Or even a general reader.

**CT:** Kath, yes, books sold without a cover (unbound, loose sheets enfolded in wrappers) or with an inexpensive cover, like this three-volume Kalm work in VERY unassuming covers, stand in strong contrast to that Brunfels binding we were discussing. I love the plain utility of these lightweight, no frills covers and the beautiful, handwritten spine labels.

**KC:** The covers might be pasteboard, like this Kalm, and the spines might be sewn or just glued; but if sewn, the sewing is less complicated. There are likely to be fewer sewing stations, less double sewing, less support. The pasteboard may have been created with layers of wastepaper--even that of a manuscript and bits and pieces of just about everything. That can be true of more recent book board as well, which is why it's so difficult to recycle as paper today. Figure 10 shows that an old manuscript was re-used to make the cover – you can see it where the edge of the blue cover paper is peeling away. (See figures 8, 9, and 10.)

I'm really intrigued by the tabs you can see through the endpaper on this title page, since the book wasn't



Figures 8, 9, and 10: Spines of Kalm volumes with hand lettering of titles and single stitch sewing stations (left), close up of one stitch stations on spine (top right), close up of layers in the pasteboard also showing a layer showing waste manuscript (bottom right)

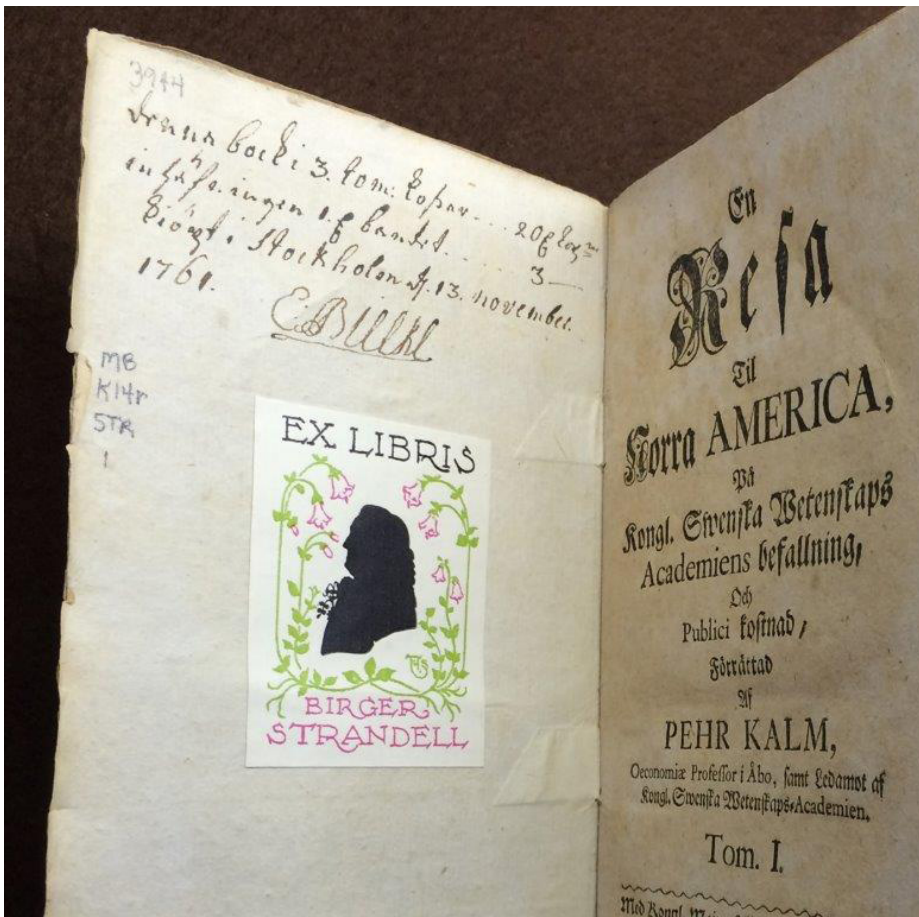


Figure 11: Kalm volume showing tabs visible through the endpaper.

sewn on tabs; I think they're acting like a hinge. I've made something like this only they run the length of the spine; I think there's a term—ah, a cloth joint. (See figure 11.)

How soft does a binding have to be to be described as limp? I've seen this term applied across a wide range of covers with non-wooden boards.

**CT:** To me that implies a flexible cover (such as vellum) that is not covering something stiff like wood or pasteboard – so I would not describe the covers of these Kalm volumes as limp. Bend one of them and you break the pasteboard. These kinds of covers are really interesting to me because they are made of such common materials – making books more accessible/affordable to more people – sometimes reusing pieces of older books (including the palimpsest phenomenon, maybe a different conversation) and using up

waste-paper, because paper was an expensive commodity and why would you use expensive, good paper to make up these cheap covers. And you're right, newer books also can have composite boards which almost counter-intuitively makes them difficult to appropriately recycle now, should you want to do that.

**KC:** The paper looks like it's wrapped completely around the cover; it's kind of a wrapper, and kind of not a wrapper.

**CT:** We need another word for what that top layer of paper is doing; although it does look like it's wrapped around the cover, I think of wrappers as sheets of cover paper, often printed with something like title page information, that were folded around loose sheets / signatures and sold that way, and the customer would have them bound up at some point, either by the seller or by another binder. Those temporary wrappers were usually thrown out, so it's always cool to find a library copy with the wrappers saved and bound in.

**KC:** What's also interesting is the grain of the paper; the grain should be parallel to the spine, but is frequently not for this period of pasteboard. I wonder if the wrappers had a horizontal "relationship" to the spines and whether that has something to do with this approach to grain. (See figure 12.)

The story of the blue paper is also interesting—it was common for the period largely because of the availability of blue rags, indigo, and even cobalt blue glass as sources. I've read some on this, but not to the depth and breadth, I would like. Very patchy information—a few sentences here and there.

**CT:** Oh yes, another interesting topic. A few years ago I wrote to several people in an effort to find out  
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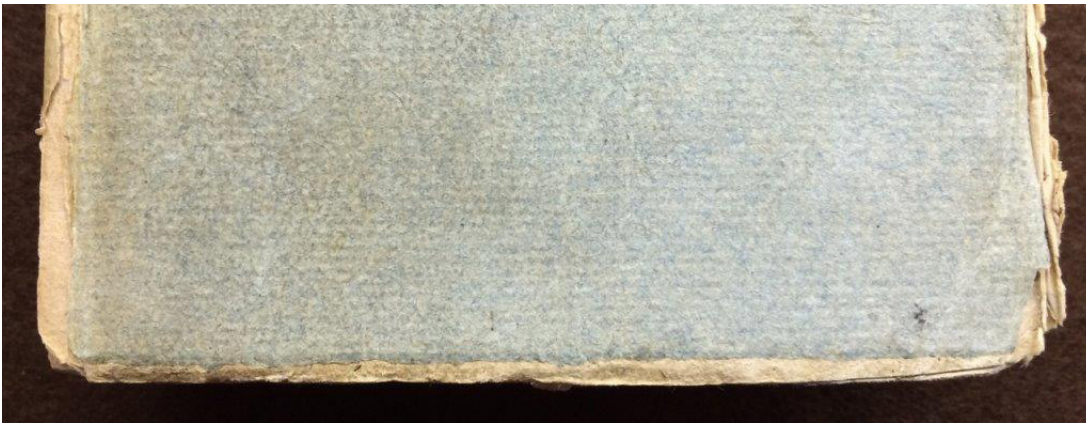


Figure 12: Close up of interesting horizontal grain on Kalm volume. In general, more recently, the grain would run vertically parallel to the spine, but not necessarily in pasteboards of this time period.

what the Curtis's Botanical Magazine wrappers were colored with, because we have a good collection of those wrappers (now scanned and accessible online). Indigo? Woad? Something else? Surprisingly difficult to find an answer to this. Later our photographer Frank Reynolds found a Christie's auction house catalog that said that these wrappers were

made from sugar paper, of the kind used for making bags to contain sugar, related to a type of paper used by English confectionery bakers from the 17th century onwards. !!! Not at all what I was thinking they were. Always something new to learn.

A different conversation for another time – on the one hand, advertising purity of the product in terms of no contamination with other substances, and on the other hand, the racialized language around purity and whiteness, plus, of course, the use of slave labor to produce products like sugar and cotton.

**KC:** Another form of limp binding is, as you noted above, a vellum binding. I am looking at the images you sent on the Gesner and am making some guesses.

**CT:** This is Konrad Gesner's *Epistolarum Medicinalium* (Tiguri Zurich, 1577), [352] pages.

**KC:** There appear to be stabs or slits for the stitching of the spine of the vellum cover to the front and back sections of the textblock in four places. The spine of the cover looks to be sitting above some lacing or stitching in an "X" pattern or other design through those areas of stitching and perhaps sections of the book, something like what a stationery binder might have done? Hard to tell through the vellum though, even, I suspect, by feel. (See figure 13.)

Slits for the ties, not overbands?

**CT:** Right, as you describe, and slits for the ties, too. The decoration of triple lines near all four edges on front and back was kind of a surprise for me, as I'm not sure any of the similar bindings here have that; the limp vellum bindings I've seen are usually very plain, undecorated. You saw that the short title is written (still partly legible) on the spine; if the author's name was also written there, it's mostly worn away. (See figure 14.)



Figure 13: Gesner back cover and spine.



Figure 14: Gesner front cover with decoration and ties.

**KC:** Bindings similar to this are often known as stationery bindings as they were often used for accounting and other blank books.

Almost looks like the vellum turn-ins are quite large onto a heavy paper, like they would be on boards.

**CT:** Actually, the turn-ins aren't as big as you would think, and I'm not at all sure that they fold onto a heavy liner paper – it looks/feels to me like it's just the vellum and the front and back pastedowns. And as I mentioned to you, I have the impression (unconfirmed) that our binder in 1972, Thomas Patterson, might have replaced the four ties that hold the book closed. Otherwise, the cover seems as described in the Hunt Catalogue (no. 129).

**KC:** I took another look at the images and you are right about the turn-ins and pastedowns.

One of the pictures I took early on and sent to Chuck was of a much later binding that I am repairing. As I was thinking of the decorative aspects of the cover at the time, I had no clear idea of some of the early traditions that led to the ornamentation. To be continued in the next newsletter!

### Note from Kathy Crosby

While working on this article, I read a little bit about parchment and vellum and the use of the terms and decided that a discussion might add too much to our article at the present. And truthfully, I was a little confused about how people use the term vellum and knew I needed to do more reading. Based on a class I took yesterday, I learned that beyond the fact that parchment is processed animal skin from which the hair and flesh is removed as is vellum, vellum is specifically made from calfskin. The terms are often used interchangeably, but I hope this clarification helps. Chuck and I will discuss this more in our next article.

### Image Credits

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# Miss Willmott's Ghost

By Judith M. Taylor

*Originally posted on English Historical Fiction Authors (EHFA). Reprinted with permission of the author.*  
<https://englishhistoryauthors.blogspot.com/2020/04/miss-willmotts-ghost.html>

"Miss Willmott's Ghost" is the vernacular name of *Eryngium giganteum*, a large prickly ornamental thistle but by now I am afraid Miss Willmott herself has become something of a ghost too. Born the eldest of three sisters into a wealthy family she managed to spend her entire fortune on her gardens and ended up in grave financial difficulties. Not only did she inherit the family estate but her godmother left her a lot of money at her death. Ellen Willmott, 1858-1934, had no internal governor or compass, otherwise known as "common sense," nor did she employ an external one such as a financial adviser. If she did she ignored whatever advice she received.



*Portrait of Ellen Ann Willmott by Rosina Mantovani*



*Eryngium giganteum 'Miss Willmott's Ghost'*

Already the possessor of two estates with stellar gardens, one in England and one in France, in 1905 she insisted on buying a third in Italy, making the total number of gardeners she employed more than one hundred. Even Rockefeller might have thought twice about that. All her gardeners were men. She had nothing but contempt for women gardeners. The men were frightened of her as she was both autocratic and arbitrary. In old age this behavior hardened into eccentricity. For the last few years of her life she carried a revolver everywhere with her.

While still young she learned a great deal about plants and began to import new and exotic ones from all over the world. She never went on such expeditions herself but contributed to syndicates which did. Horticulture was her life and her world. This single-minded focus earned her a lot of respect in the garden community. She was the first woman to receive the Victoria Medal of Honour at the Royal Horticultural Society in the same year as Gertrude Jekyll, 1897. That was the first year the medal was awarded, an even greater honour. More than sixty plants are named for her personally or for Warley, her estate.

Ellen Willmott was particularly expert in roses, writing a well-received monograph, "The Genus Rosa," which is still useful today. The book was published in two volumes between 1910 and 1914 and dedicated to Queen Alexandra. Miss Willmott commissioned Alfred Parsons, a well-known watercolorist, to illustrate her book, and she later got him to paint many of her plants. The book came at a later phase of her life.





Warley Place

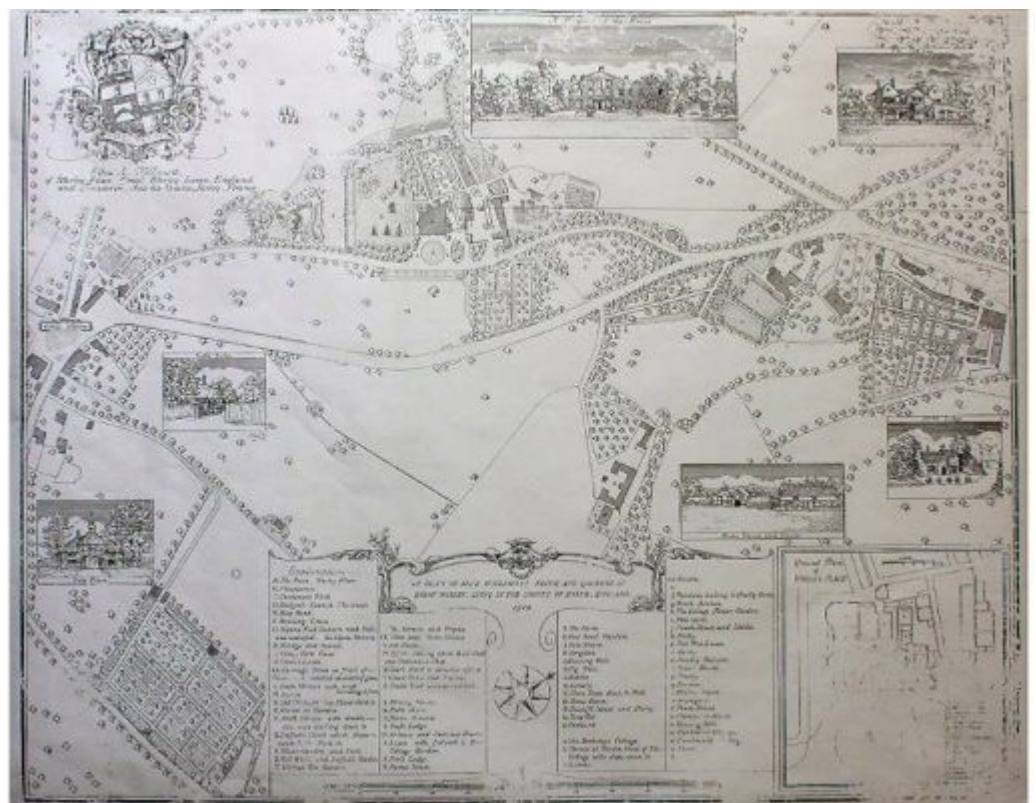
When she was younger, narcissus fascinated her. Warley Place had thirty three acres, an expanse which allowed her to experiment with dozens of species of narcissus on a very grand scale. Ancient drifts of *Narcissus pseud-onarcissus* had covered the hillsides. At first Miss Willmott added more and more species narcissus to the land offering varying hues of gold, yellow and white to occupy the eye at different times: *N. incom-parabilis*, *N. pallidoflorus*,

and *N. campernelii*, among many others. The gardeners loaded the bulbs on to wheel barrows and let their gleeful children toss handfuls of them all over the grounds. It was licensed pandemonium. The bulbs grew where they fell and then multiplied every year. She followed a similar course with crocus.

Ellen Willmott kept very careful notes, following each bed and site to see how the bulbs grew in different months. She crossed some species and once she found a hybrid she thought worthy, she handed it off to commercial nurserymen to test further. Eventually they bulked it up and offered it for sale. This skill and expertise was the reason the royal Horticultural Society elected her a fellow in 1894. She served on their bulb committee for many years. Her complete mastery of the subject impressed the members of the society.

In 1903 Miss Willmott played a big role in persuading Sir Thomas Hanbury to donate sixty acres of his property in Wisley, Surrey to the society to found an experimental site outside London. The grounds at Chiswick had become too small. RHS Wisley now flourishes in its own right and recently built new science and visitors' centres and other essential struc-

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A Plan of Miss Willmott's House & Garden at Great Warley, 1904



tures. All the trials of new flowers and vegetables are carried out on their grounds. Every year they make a very brave show.

Ellen's father, Frederick Willmott, came from a very respectable family of pharmacists but he decided to become a solicitor. Although always very genteel in his behaviour he knew exactly where he was going and what he wanted. He married a woman slightly above him on the social scale, Ellen Fell. Both families were English Catholics. His three daughters were brought up in the church, going to convent schools and spending much time in the company of religious women. The girls' godmother, Helen Tasker, was very wealthy and each year presented the children with a thousand pounds each for their birthdays. Upon her death they inherited most of her money. The youngest daughter, Ada, died of diphtheria as a child leaving only Ellen and her younger sister, Rose. It took the family a long time to recover from the shock of Ada's death.

When Frederick began to make serious money he bought a fine estate in Essex, Warley Place. At the time it was quite far into the countryside, though on the train line. Now it is subsumed into Brentwood and the property is a public nature reserve. Mrs. Willmott took the neglected garden in hand and made it handsome. She did not care for carpet bedding and used a more naturalistic style.

The family had a very active social life. Ellen played tennis very well and was also an accomplished violinist. Because she had complete access to her own money she began to buy expensive objects very early. She started by purchasing four very valuable string instruments, two violins, a viola and a violoncello, made by old Italian masters. She allowed an eleven-year-old prodigy, Lionel Tertis, to play the viola. Tertis was the first musician to be a virtuoso on the viola, an instrument so often neglected for the other strings.



*Painting Ellen and Rose Willmott, Spetchley House*

Women were discouraged from playing the violin at that time because it brought the bosom into great prominence and was thus unladylike! It says a lot for the wisdom of her parents that they did not intervene but allowed her to study the instrument.

The Willmotts travelled together on the Continent every year and enjoyed all the delights that these journeys offered. They had favourite haunts and particularly liked the countryside around Aix-en-Provence. Tresserve was a sleepy hamlet which had caught Queen Victoria's eye. The monarch wanted to buy property there but the negotiations failed leaving Miss Willmott to snap it up in 1899.

Ellen Willmott was too intelligent and uncompromising to attract the sort of man likely to marry her and remained single all her life. Her sister,

Rose, married into the Berkeley family, also Catholic but actual gentry. There were some awkward moments due to snobbery. Rose Willmott Berkeley was a good gardener and the grounds at Spetchley Park were made to resemble those at Warley Place.

When Ellen was twenty-one she told her father she was going to build a rock garden in a corner of the Warley Place garden. He was very complacent and paid very little attention to what she was spending. All he asked her to do was to build it nowhere near his study so he was not bothered by the work.

The well-known Yorkshire nursery of Backhouse laid down the rocks and planted the new grotto. The excavations led down to a small stream which supplied the necessary water. The plants have since died and the stream now runs dry but the rocks remain showing how handsome the garden must have been. Ellen had learned how to do this by careful study in her growing library. She also sought advice from many known experts. It was the opening salvo in her future career. In view of Willmott's interest in narcissus it is worth noting that Sarah Backhouse, sister-in-law of the owner, bred one of the signature new narcissi of the epoch, *N. 'Mrs R. O. Backhouse.'* It was an early pink type.


Many of the Warley hybrids were bred to championship levels. Ellen Willmott won a series of awards of merit and first class certificates at the Royal Horticultural Society shows for her narcissus. Perhaps her favourites were the 'Triandus' type, with three stamens. She named some of them for her sister and brother-in-law and one for her dead baby sister, Ada.

In 1923 Ellen's sister Rose died of cancer. Although the Willmotts were not demonstrative people, Ellen and her sister were always close and it was assumed that she, as the elder sister, would die first. The loss was very grievous and may have contributed to her psychological unravelling as time went by. Poor management and profligate behaviour led to the dwindling and eventual loss of her fortune. Very reluctantly she was forced to sell first Tresserve and then Boccanegra.

Her almost encyclopaedic knowledge of horticulture won her many more awards, even from the French and Italian organizations, but her personality was to be her downfall. In spite of many individual acts of charity she was prickly, intolerant and always had to be right, no matter how misguided her point of view was. When she absent-mindedly left a shop in London without the receipt for her purchase the store detective called a policeman.

By then she was no longer smartly dressed and was assumed to be a poor thief. Within a very short time some of her highly placed friends rallied around and pointed out the mistake. The shop was ready to apologize and close the incident. Something in her nature made her reject that face-saving measure. She insisted on going to jail for the night and being heard in court the next morning to be vindicated. This was to be a Pyrrhic victory. Foolish financial decisions had begun as early as 1907 when she bought more than even she could afford and began to borrow money.

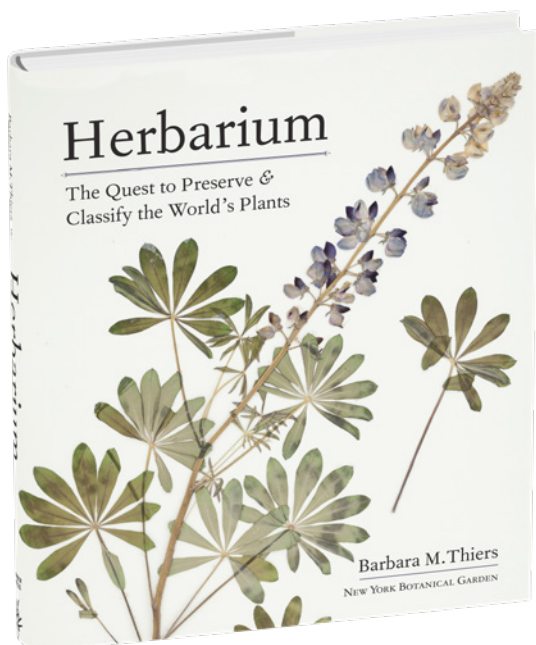
By the mid 1920s she did not have enough money left with which to pay taxes and tried to sell some of her valuable things to scrape by. There was nowhere nearly enough of value for the sums involved. In spite of all her reverses Miss Willmott still attended meetings at the Royal Horticultural Society regularly though she no longer competed in the shows.

She died very abruptly in the night on September 26, 1934, at the age of seventy six. The loyal butler who had stuck with her throughout found her in the morning. 

## Reference

Le Lievre, Audrey. *Miss Willmott of Warley Place*. London and Boston: Faber and Faber, 1980.





## Book Reviews

Compiled by Gillian Hayward

Library Manager

Library and Information Services, Longwood Gardens

*Herbarium: The Quest to Preserve and Classify the World's Plants* by Barbara M. Thiers. Portland, Oregon: Timber Press, 2020. 304 pages, color illustrations. Hardcover, \$40.00. ISBN: 9781604699302

Reviewed by Kathryn Downing

Technical Services Librarian

Helen Fowler Library, Denver Botanic Gardens

Barbara M. Thiers's book *Herbarium* aims to fill a gap in general knowledge regarding the origin, history, and development of herbaria. The author now spends her days as Director of the Steere Herbarium at the New York Botanical Garden, but her involvement with herbaria goes back to a childhood during which she would help her father glue specimens at San Francisco State University. Interestingly enough, the future of herbaria is what spurred Thiers to consider their past – she shares an anecdote in which a specimen digitization workshop leader asked participants for details about milestones in herbarium work, and most everyone was stumped. Formal training focuses on specimen collection and preparation, but according to Thiers, includes very little about the history of it.

In an incredibly well-organized manner, Thiers gives us that missing history in this heavily illustrated book. Overall, this is a highly accessible and generally informative work. It is entertaining enough to keep general history buffs engaged but should also be of interest to anyone studying or working in an institution with an herbarium. Thiers's original reason for delving into this topic of research – that those working in herbaria are trained more in current rather than past practices – could even make the book relevant to those who already have a formal background on this topic. One thing to keep in mind when reading the book is that Timber Press is not a scholarly publisher; thus some statements can be misleading given they are not in their full context.<sup>1</sup> To give everything Thiers brings together a thorough investigation, however, would result in a page count that would make the book simply unreadable!

Five parts neatly divide themselves into an overarching timeline: The Origin of Herbaria, Herbaria and the Age of Botanical Exploration, Development of Herbaria in the United States, Development of Herbaria Around the World, and The Future of Herbaria. "The Origin of Herbaria" begins in 16th-century Italy with Luca Ghini's *Simples* course in the medical program at the University of Bologna, for which he developed a "winter garden" (*Hortus Hiemalis*) or "dry garden" (*Hortus Siccus*) of plant specimens. Thiers then fol-

<sup>1</sup> See, as one example, "When science reemerged in the Renaissance, European scientists lacked a knowledge base that had been accruing century by century, forcing them to start afresh to build this knowledge" (37). For botanical knowledge at least, learning transferred east during the European Middle Ages and was kept very much alive – even developed further – by Arabic scientists. Alan Touwaide argues that Nicolao Leonicensio (1428-1524) is, for better or worse, mostly responsible for the idea that any Renaissance scholars had to "start afresh." Leonicensio promoted a return to the ancient Greek texts and insisted any developments made by others since then were mistaken readings of the ancient authors. See Touwaide, Alan. "Botany and Humanism in the Renaissance: Background, Interaction, Contradictions." *Studies in the History of Art* 69 (2008): 32-61.

lows Ghini's students as they made various advancements and adjustments to these early bound herbaria. The section ends with a short assessment of early plant texts in non-European cultures. From the start, Thiers is transparent about the Anglo-American treatment of the topic – although she does encourage readers from different parts of the world to investigate their own history of botanical documentation in order to add to this one. Nonetheless, I appreciate this brief inclusion of histories from non-Western and Indigenous cultures, as it situates European powers within the larger multi-cultural world and proves that an Anglo-American history can provide only one part of the story.

Parts two and three – “Herbaria and the Age of Botanical Exploration” and “The Development of Herbaria in the United States” – make up the true substance of the book, as science itself underwent a lightning round of funding and advancements through the 17th century and beyond. Part two opens with the publication of a work which outlines the actual specimen collection and preparation process. Thiers remarks that this methodology is largely unchanged today, an interesting statement to make about your topic less than 50 pages into a book on its history! However, remember from Thiers's anecdote of the digitization workshop that what we seek now is less the physical process and more the cultural history: explorations, expeditions, English coffee houses, and publication processes all had a hand in the cultural significance and use of herbaria that shaped them into the resources they are today. The section ends leaving you astonished by the idea that, in less than 200 years, a small number of (bound) herbaria in Europe had evolved into collections that documented most major plant groups found globally.

Part three, focusing on the United States, acknowledges that early botanical activity in the “new world” was solely for the benefit of colonial powers. As time moves towards the Revolutionary era, however, key players in the history of herbaria start to emerge in places like New York and Pennsylvania, not France and England. Later, institutions on the west coast, such as the California Academy of Sciences, emerged to compete with the authority of more established ones on the east coast. As is to be expected, the history of the New York Botanical Garden, and the origins of its herbarium, is given due treatment, but the Missouri Botanical Garden and (what was) Elgin Botanic Garden make an appearance as well. The section ends with a discussion about the more recent practice of specimen digitization.

The fourth section, “Development of Herbaria Around the World,” does exactly as its title suggests – Thiers discusses herbaria in Australia, Brazil, China, and South Africa. As mentioned previously, this book focuses primarily on Europe and America; however Thiers touches on early practices, key scientists, and modern documentation for herbaria in each of these additional places. Especially interesting to compare are the maps detailing the locations of all herbaria in a given area with colors indicating when they were founded.

The final section, “The Future of Herbaria,” is where Thiers's passion really becomes apparent; She is highly knowledgeable about the way herbaria contribute to ongoing research. Climate change assessments, DNA studies, pollution levels, biodiversity studies, phenological changes, and many more topics can benefit from the preservation and consultation of herbarium specimens. The development of new technologies and machine learning means that there is still much to be done in herbaria, and we must acknowledge those possibilities now in order to make sure the specimens are preserved and intact for future research – a familiar plea for all those who steward non-living collections. 