

Appendix

B

Resources

A wide variety of resources are available to all types of beekeepers. We narrowed down the options, selecting the best books and discussion groups we think we will be most helpful to you.

First and foremost, we have built a website specifically for readers of this book:

www.TheCompleteIdiotsGuideToBeekeeping.com

This is a portal to all manner of information, updates, clarifications, videos, and an interactive forum. We hope to see you there!

Books

We have a few favorite newer books, but much of what we have learned about bees comes from older beekeeping books. You can find many older beekeeping books online for a few dollars plus shipping. Abebooks.com and Amazon.com are both very good resources.

Beekeeping

Aebi, Ormond and Harry. *The Art and Adventure of Beekeeping*. Santa Cruz: Unity Press, 1975.

———. *Mastering the Art of Beekeeping (Volumes 1 and 2)*. Santa Cruz: Unity Press, 1979.

The Aebi's were a father/son beekeeping team from Santa Cruz, California. Charming and down-to-earth, full of anecdotes, tricks, tips, and wonderful illustrations, these books are must-haves for every beekeeper. Even a nonbeekeeper would find them fascinating. If you are just beginning with bees, start off with *The Art and Adventure of Beekeeping*.

Bonney, Richard E. *Hive Management—A Seasonal Guide for Beekeepers*. North Adams, MA: Storey Books, 1990.

Written just before varroa mites became prevalent, this book is an excellent and detailed guide to managing established hives. Beginning in winter and moving forward through fall, Bonney discusses hive management as an integrated activity, showing whenever possible how activities relate from season to season. Dick Bonney was a Massachusetts beekeeper, and much of the book is geared toward northern climates, but all beekeepers can benefit from this book.

Dadant, C.P. *First Lessons in Beekeeping*. Hamilton, IL: American Bee Journal, 1924.

Many editions of this book are available, including some free downloads online. The newer versions have been revised extensively and, in our opinion, don't offer the sound, classic beekeeping advice found in the earlier volumes.

Hutchinson, W.Z. *Advanced Bee Culture*. Medina, OH: The A.I. Root Company, 1918.

This is a “beekeeping as a business” book, and the general advice offered is, “More Bees!” One topic covered by this volume that we've never seen addressed in any other book is the use of both foundation and foundationless comb and specific situations where one might be preferable over another. Most beekeeping books stopped advocating foundationless comb when foundation became widely available, but Hutchinson makes a good case for foundationless frames for rapid honey storage; contrary to what one might expect, foundation does not speed up the process of drawing comb.

Langstroth, L.L. *The Hive and the Honeybee*. Philadelphia: J.B. Lippincott & Co., 1884.

This book has been updated regularly since it was first published in 1884, and the more recent editions are more comprehensive beekeeping reference books. We owe Langstroth a great debt—his application of the bee space concept so perfectly balances the needs of the bees and the beekeeper that the vast majority of beekeepers in the Western world use his design today with only minor variations on the theme. No improvements in hive design since have come close to matching the revolutionary success that Langstroth enjoyed. We don't own a version more contemporary than the 1884 edition, but the modern versions come highly recommended by the experts.

Miller, C.C. *Fifty Years Among the Bees*. Mineola, NY: Dover Publications, 2006.

Reprinted from the original 1910 edition, C.C. Miller writes extensively about his business producing comb honey. His attention to detail, specific references to annual yields, and the reasons for the variations offer a near complete insight into his operation over the long-term. Not everything in this book will be of use to a modern beekeeper (overwintering hives in the basement is no longer considered an effective strategy, for instance), but it is a wonderful read offering plenty of insights.

Morse, Roger A. *The Complete Guide to Beekeeping*. New York: E.P. Dutton and Co., Inc., 1972.

An almost modern classic. Written before the varroa mite was introduced to the United States, Roger Morse presents a very “nuts and bolts” method for keeping bees. The author spent most of his career on the faculty of Cornell University and is universally recognized as an authority on beekeeper education.

Root, A.I. *ABC of Bee Culture*. Medina, OH: The A.I. Root Company, 1888.

We have the 1888 edition in our library, although earlier editions are available online. The most up-to-date version is the forty-first edition, titled *The ABC and XYZ of Bee Culture*. All editions are excellent resources and offer expert opinion on many beekeeping-related subjects.

The value of these older volumes cannot be overstated, as often what today's experts tell us was the case “back then” proves false when one reads books published at the time in question. For instance, today's experts tell us that beekeepers have always used 5.4-mm large cell foundation, but historical monographs such as this not only prove such claims false but describe plans to enlarge the cell size of foundation to sizes that are common today.

The contrast in philosophy and technique between these vintage works and the more modern editions (especially since the near-universal use of chemicals in the hive) gives the reader a unique perspective on what has gone wrong with beekeeping. These older versions are often available for next to nothing, as most see them as containing obsolete information. We think they should be read by every beekeeper. It is useful to have an older and more recent copy on the shelves to compare and contrast.

Sammataro, Diana and Alphonse Avitabile. *The Beekeeper's Handbook*. Ithaca: Cornell University Press, 1998.

This is the best conventional beekeeping book in print. The management practices, illustrations, and common-sense beekeeping information is spot on. We do feel, however, that the content offered with regard to feeding and treating is ill-advised. If one ignores the treatments, modifies the feeding, and puts the bees on small cell comb, this book is an excellent guide.

Honey Bee Biology and Behavior

Gould, James L. and Carol Grant Gould. *The Honey Bee*. New York: Scientific American Library, 1998.

This book is less of a “how to” guide and more of a detailed description of honeybee history and behavior. Most importantly, it describes and illustrates the experiments that led the authors to draw the conclusions they offer. It has beautiful pictures, is detailed, and well-written.

Hauk, Gunther. *Toward Saving the Honeybee*. San Francisco: The BIO-dynamic Farming and Gardening Association, 2002.

Gunther Hauk wrote this book with the goal of raising awareness about how all aspects of beekeeping relate to honeybee health and to encourage harmonious, healthful ways of keeping bees. Presenting a perspective rarely seen in beekeeping books—that of the ultimate interconnectedness of everything—this book provides a unique view of bees and their behaviors. The chapter on wax is particularly interesting; it explores the idea of wax production by the bees as a parallel to the forming of our bones out of our bloodstream. *Toward Saving the Honeybee* appears to be out of print and copies are being sold at a premium online. This is a good candidate to have your bee club purchase for the library.

Hoyt, Murray. *The World of Bees*. New York: Bonanza Books, 1965.

The World of Bees was the first beekeeping book we read, and within seven months of reading it we had our first bees. The author has a delightful way of pulling the reader into the amazing world of the bees and their hives. A wonderful introduction to bees and beekeeping, this book is less technical than *The Dancing Bees* and provides a great foundation for other beekeeping books.

Morse, Roger A. and Ted Hooper, Eds. *The Illustrated Encyclopedia of Beekeeping*. New York: E.P. Dutton, Inc., 1985.

More pricey than many of the older books, this book is still an extremely valuable addition to your library. Almost every aspect of bee behavior, biology, and beekeeping known in 1985 is covered; it is comprehensive yet easy-to-understand. As the title suggests, it comes complete with great photos and illustrations.

Tautz, Jürgen. *The Buzz about Bees—Biology of a Superorganism*. Berlin: Springer Verlag, 2008.

Written more recently than most of the other books we recommend, *The Buzz About Bees* is a surprisingly easy read for an academic book. The photos are wonderful (comb is produced without foundation), and some of the behaviors and techniques detailed in this book are not available in any other volume that we know of. We don't necessarily feel that every one of Tautz's conclusions are well-founded (the conspicuous absence of the roles that microbes play is troubling), but overall this is an incredible book.

von Frisch, Karl. *The Dancing Bees—An Account of the Life and Senses of the Honey Bee*. New York: Harvest Books, 1953.

Karl von Frisch is credited with deciphering the dance language of the honey bee. In this book von Frisch relates not only how the bees communicate, but how they see, smell, navigate, and experience time, among other things. Written from the author's desire to share the joy he experienced working with honey bees, this book communicates the science of bees in a lively, conversational tone. We highly recommend this classic.

Honeybee History

Crane, Eva. *The World History of Beekeeping and Honey Hunting*. London: Gerald Duckworth and Company, Ltd., 1999.

A scientist and director of the International Bee Research Association for 35 years, Eva Crane traveled to some 60 countries, gathering first-hand knowledge of traditional and modern beekeeping practices. This book explores in detail the world history of man's use of bees from prehistoric times to the present day. Complete with photographs, reproductions of artwork, charts, diagrams, and a mind-boggling array of information, *The World History of Beekeeping and Honey Hunting* is a big fat book, out of print, and available for about \$150. There is no substitute for it. Ask for this one as a special gift (or give it to yourself), try to access it through inter-library loan, or get your bee club to purchase it for the library. It's a book to savor and return to again and again.

Microbes

Debre, Patrice. *Louis Pasteur*. Baltimore and London: The Johns Hopkins University Press, 1998.

Today, Louis Pasteur is considered the father of microbiology and a hero. In his own time things weren't so simple. This fascinating biography explores Pasteur's complicated and often tempestuous relationship with the established scientific community of his day and the influence of politics on science. Of particular interest to the beekeeper is the chapter titled, "The Microscope and the Silkworm."

Katz, Sandor Ellix. *Wild Fermentation: The Flavor, Nutrition, and Craft of Live-Culture Foods*. White River Junction, VT: Chelsea Green, 2003.

We discovered *Wild Fermentation* months after studying, writing, and speaking about the importance of microbes for honeybee nutrition and overall health and well-being. While this book is focused on humans, it parallels what we have learned about bees, their associated microbes, and what happens to nutrition when natural microbial cultures are altered. A must read!

Zimmer, Carl. *Microcosm: E.coli and the New Science of Life*. New York: Random House, Inc., 2008.

We've been reading this mind-bending book while writing the book you're now reading. What we've been able to grasp supports and eloquently illustrates the incredible complexity and power of the microbial world. Of particular interest is Chapter 4, "The E. coli Watcher's Field Guide," which explores the social lives of the E. coli microbes. Another must read!

Beekeeping Books Available Online

Many older bee books are available online for free, as they have passed into the public domain.

Michael Bush has a number of classic and still relevant books on queen rearing available for download on his site. <http://bushfarms.com/beesoldbooks.htm>

The Hive and the Honeybee—Selections from the E.F. Phillips Beekeeping Collection at Mann Library <http://bees.library.cornell.edu/>

The Everett F. Phillips' Beekeeping Collection at Cornell's Albert R. Mann Library is one of the largest and most complete beekeeping libraries in the world. The library has made a number of important books in its collection available for free online under the name of "The Hive and the Honeybee" (not to be confused with the actual Langstroth book of the same name). Issues of the *American Bee Journal* from 1861 to 1900 are available for download as well as well.

Audio files of Langstroth's seminal work, *The Hive and the Honeybee* are available for download at LibriVox: <http://librivox.org/langstroth-on-the-hive-and-the-honey-bee-by-l-l-langstroth/>

Penn state and the Mid-Atlantic Apiculture Research and Extension Consortium offers an online-only beekeeping guide at: <http://pubs.cas.psu.edu/FreePubs/pdfs/agrs93.pdf>

Beesource.com is a large and valuable beekeeping site. In addition to its popular forums, the site has collected an incredible array of articles, plans for building your own equipment, and other valuable beekeeping-related information that spans a wide range of approaches, methods, and opinions.

Of particular interest to those reading this book (and why we include Beesource.com here in the “online books” section), is a series of articles entitled “The Way Back to Biological Beekeeping,” by Dee Lusby. The article is dense, and you may have to read it more than once to understand it, but there is nothing else like it available. In our opinion, this online book provides the foundation for the future of beekeeping. A direct link for Dee’s (and her late husband Ed’s) section on the site is: www.beesource.com/point-of-view/ed-dee-lusby/

Michael Bush’s website is one of the best, most up-to-date, and historically accurate resources available on beekeeping, and it’s free! We encourage all beekeepers to spend some time reading his site and using it as one would use a trusted reference book. We’ve never found anything on his site to be inaccurate. Although we can’t agree with every recommendation he makes (or has made in the many thousands of questions he has answered on various beekeeping forums over the years), the sheer volume of opinion he offers makes this inevitable. www.Bushfarms.com/bees.htm

Online Beekeeping Forums and Email Lists

The Internet has changed beekeeping in much the way it has changed many other industries and hobbies. Much of the nonlocal communication that used to occur between beekeepers via print journals, books, personal correspondence, and conferences has been replaced by e-mail lists and forums. No longer are we confined to free and easy communication with only those who are physically located nearby, and we can obtain research data without going to the library.

Forums and e-mail lists have become an increasingly important resource, where both good and bad advice is freely available. Here, we list those forums and email lists that we have subscribed to with some of the pros and cons of each.

Bee-L

Bee-L was the first e-mail list established for beekeepers in 1989, when those having access to the Internet were largely university and government employees. Unlike most of these early e-mail lists (listservs), Bee-L has persisted and remains the list read most by researchers and commercial beekeepers. This is a moderated list. Sometimes the moderation is a bit arbitrary, and puts some principles (like not offending researchers or speculation of the wisdom of using some commercial products) ahead of productive discussion. You won't read much of what is presented in this book on Bee-L, as it's geared more toward conventional beekeeping, but it is an excellent way to ask pertinent questions of some of the most experienced professionals around.

Reading archives online requires no registration, and more information on the archives, searching, rules, and subscriptions can be found at:

www.honeybeeworld.com/bee-l/

Beesource.com

The Beesource forums are moderated, but not heavily. Open discussion of both conventional and radical techniques and approaches is encouraged, and there is an active section of nonbeekeeping topics as well. Registration is not required to read the forum.

www.Beesource.com

Beemaster.com

We've spent less time on Beemaster than Beesource, but the two are similar, with many of the same members. Deciding between the two is more a matter of taste than anything else. Beemaster is much more than just a forum and serves as yet another valuable resource for beekeepers the world over. Forums are open for unregistered individuals to read.

www.Beemaster.com

The Organic Beekeeping Yahoo Group

Started in late 2000 as a place for discussion of beekeeping completely without treatments, this list has grown to more than 3,000 members and is the only discussion group on the Internet that has a strict no-treatments policy. Membership is required to read the archives or current posts, and new members are moderated until they have shown the willingness to stick to the topic. There is a lot of traffic on this list, and it is geared toward new beekeepers and beekeepers new to treatment-free methods. It can be time consuming to read through all the posts and get the information you want, but questions are usually responded to rather quickly.

<http://pets.groups.yahoo.com/group/Organicbeekeepers/>

Biobees

A forum and website based in the U.K. that is largely focused on top bar hives. Our experience with this list is that it includes a large number of very smart and enthusiastic beekeepers who largely favor a treatment-free approach. Unfortunately, there is an open agenda for eliminating all pesticides from use everywhere, and this goal seems to outweigh truthful reporting as well as fact- and data-based discussion. For the top bar beekeeper, this is an important resource, but take the rest with a grain of salt. Registration is required to read many (not all) sections of the forum.

www.biobees.com/forum/

Testing from USDA Bee Research Laboratory

The Beltsville, Maryland bee research lab offers free testing for bee-related diseases. They will not test for pesticides or other contaminants. If you've never sent in a sample, you should contact the lab and review the procedures before doing so. This is an invaluable resource for all beekeepers.

Contact Bart Smith by phone at 301-504-8821 or e-mail him at bart.smith@ars.usda.gov.

www.ars.usda.gov/Services/docs.htm?docid=7472