Great Astronomy Books

Every once-in-a-while I start thinking (sometimes a worrisome activity) and lately I've noted there are different ways to observe objects in the sky. One common approach is to just check off objects on a listing after looking at them, while another is to read about these heavenly sights and how others describe their observations of them, either before or during one's own observing sessions. Books have been the primary resource for this latter approach (although software is making progress), so here are some ideas to consider.

For Messier objects, there are several books to peruse:

As a quick in-the-field read, with charts and other information, there's "The Year-Round Messier Marathon Field Guide" by Harvard Pennington (c) 1997.

For more discussion of each Messier object, try the "Atlas of the Messier Objects" by Ronald Stoyan (c) 2008, or perhaps "Deep-Sky Companions: The Messier Objects" by Stephen James O'Meara, Second Edition (c) 2014.

Not specific to just Messier objects, there are other books:

"Celestial Harvest" by James Mullaney (c) 2013, tabulates over 400 showpiece objects (by constellation), including many, many observational descriptions by other sky gazers, giving fantastic ideas of why these objects are considered showpieces.

"The Deep Sky: An Introduction" by Phillip S. Harrington (c) 2007, supplements a seasonal organization and observing instructions/directions for over 300 objects, with varied and interesting details. A simpler version of this approach is found in "Celestial Sampler" by Sue French (c) 2007, a compilation of the first 60 columns written by her for "Sky and Telescope" magazine starting July 1999.

"The Herschel Objects and How to Observe Them" by James Mullaney (c) 2007, provides intriguing descriptions of 125 Herschel showpieces (organized by Herschel's descriptive "type" of object) and tabulates 615 Herschel objects as one of the precursors to the Herschel 400 listing. And then there's "The Complete Guide to the Herschel Objects" by Mark Bratton (c) 2011, which covers all 2435 objects in constellation then NGC order. Each object has identifier and positional information, observational and some historical information, and perhaps images or personal sketches. There is an extensive explanatory introduction of almost 40 pages before addressing the objects themselves.

"Deep-Sky Wonders" by Walter Scott Houston and edited by Stephen James O'Meara (c) 1998, provides an almost 300-page month-by-month anthology summarizing the 550 columns written by Mr. Houston for "Sky & Telescope" magazine from 1946 to 1994. These discussions are a very different approach to describing objects, exclusively using words and stories, which may be of interest to enhance observing sessions.

"Burnham's Celestial Handbook" by Robert J. Burnham, Jr. (c) 1966/1978, is a classic, three-volume compilation of celestial sights, organized by constellation and written in a way not likely to be duplicated ever again. Be aware that the celestial coordinates are over 50 years old (epoch 1950), more variable and double/multiple stars are tabulated than deep-sky objects, the images are not as picturesque as those on the Internet today, and the science described is often not what is currently accepted. Nevertheless, these volumes can provide hours of enjoyable reading to augment object observations.

For **beyond the Messier objects**, there are:

"Deep-Sky Companions: Hidden Treasures" by Stephen James O'Meara (c) 2007, and "Deep-Sky Companions: The Secret Deep" by Stephen James O'Meara (c) 2011, each book addressing over 100 different (non-Messier, non-Caldwell) objects with comprehensive descriptions as well as useful charts and finding instructions.

For observers who focus primarily on **double stars**, there's "Double Stars for Small Telescopes" by Sissy Haas (c) 2007. This book tabulates more than 2100 stellar gems by constellation, many of which can be observed using a simple telescope, and she provides colorful, descriptive comments on each (but only a name and coordinates -- no charts or finding directions). One of the better books on observing physical double/multiple star systems is "The Cambridge Double Star Atlas" second edition by Bruce MacEvoy and Wil Tirion (c) 2016. It has 30 excellent 2-page charts, almost 80 pages of double star details (magnitude, separation, position angle, spectral type, and often orbit details), and excellent explanatory information.

And for observers preferring to use **binoculars**, there's "Binocular Astronomy" by Craig Crossen (c) 2008, organized by season with extensive historical background on each of the many binocular sights in the sky. Some figures and pictures are included, and Wil Tirion's "Bright Star Atlas 2000.0" is provided in the back. A later publication, "Sky Vistas" by Craig Crossen and Gerald Rhemann (c) 2012, expands upon Craig's "Binocular Astronomy" with more scientific (and less historical) descriptions and many, many beautiful photographs that replace the figures and atlas charts; however, a quality (non-print-on-demand) edition of this publication is very hard to locate.

Lunatics (i.e., observers of **our Moon**) may enjoy "What's Hot on the Moon Tonight" by Andrew Planck (c) 2016, and its day-by-day discussion of interesting lunar features to observe (but no charts), with space for writing observing notes throughout. An older book with a similar but more verbose and detailed approach is "Exploring the Moon Through Binoculars and Small Telescopes" by Ernest H. Cherrington, Jr. (c) 2013, which includes labeled and unlabeled photographs of different moon phases and surface details in place of space for notes. "The Modern Moon: a Personal View" by Charles A. Wood (c) 2007, divides up our Moon geographically and discusses the physical processes that probably resulted in the varied lunar features observed (and pictured throughout).

Those who enjoy astronomizing by reading more about what is being observed, instead of just looking at something, have many publication choices, as described above.

Source: Jim Kaminski, December 2017. Updated & edited by Jim Fordice, April 2023