

The backyard astronomer's guide (3rd edn.)

by Terence Dickinson & Alan Dyer

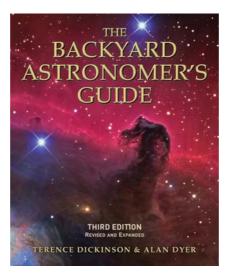
Firefly Books, 2008. ISBN 1-55407-344-8. Pp 367, £30.00 (hbk).

This book offers an excellent overview of the wide range of equipment available to to-day's amateur astronomer and what can be observed with it. The authors devote the first short chapter to defining the target audience for the book, the 'recreational amateur' who observes for pure enjoyment, as distinct from the 'armchair amateur' who rarely if ever goes out observing or the 'scientific amateur' who takes the hobby to the next level and carries out more targeted research.

The book is divided into three parts. The first is about choosing equipment for backyard astronomy, with chapters on binoculars, telescopes, eyepieces and filters, accessories and 'Using your telescope'. These chapters contain a wealth of technical information about different types of equipment, which binoculars or telescopes and eyepieces are best for different types of observing, and the authors' recommendations on which equipment to buy and, more importantly, in some cases what not to buy! The final chapter in this part of the book gives step-by-step practical guides to setting up telescopes and mountings with detailed, annotated photos for each step. This is very useful for anyone setting up their first telescope on their own.

Part two is about observing the sky and ironically, after the lengthy discussions of equipment, begins with naked eye observing in the daytime. After discussions of rainbows, halos and other atmospheric phenomena, attention turns to the night sky, including sections on planetary conjunctions, noctilucent clouds, the aurora and meteors. The authors then move outwards with chapters on the Moon, Sun, comets and planets. On leaving the solar system there is a very useful chapter on 'Finding your way around the sky', which explains 'how the sky works' and discusses star hopping and sky atlases before the last chapter in this part, on deep sky observing, which I get the impression is the authors' favourite subject.

Part three of the book is where the biggest changes have been made from the second edition. There is a lengthy chapter on digital astrophotography with DSLR cameras. Incidentally, CCDs and webcams have just a single page each in the book, probably because they are considered the domain of the 'scientific amateur' as mentioned above. The CCD page is headed: 'Advanced imaging (or how to spend lots of money!)'. The DSLR chapter covers the different cameras available, before five subsections on techniques



ranging from wide angle, tripod-mounted photography right through to prime focus deep sky imaging. Image processing is also discussed in detail.

A chapter on high tech astronomy, about computers and software packages, and an-

other useful practical chapter on polar alignment, collimation and cleaning optics concludes the main text.

The authors each have over 40 years' practical experience in amateur astronomy and this shows throughout the book. Many of the astrophotos and images of equipment are by the authors themselves. Alan Dyer has been associate editor for Astronomy magazine, is a contributing editor to Sky & Telescope and is widely recognised as an authority on commercial telescopes. As they say in their introduction 'we've really used this equipment'. Terence Dickinson has been a staff astronomer at two major planetaria and has written 14 other astronomy books. Both authors are Canadian, giving a North American feel to the book, and are lucky enough to live in dark rural locations in Ontario and Alberta.

Mike Harlow

Mike has been an amateur telescope maker for over 30 years and a deep sky and comet imager since the early 1980s. He is a member of the Orwell Astronomical Society, Ipswich, and is currently serving on the BAA Council as New Members' Coordinator.

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