The Moon and how to observe it

by Peter Grego

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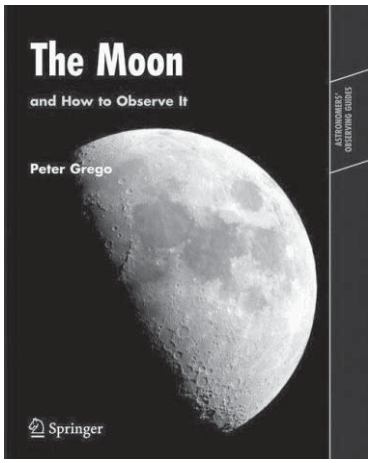
The Moon is usually the first object that newcomers to astronomy want to look at. It is easy to find and its surface shows spectacular detail in the smallest telescope. Even though there have probably been no visible changes to the Moon's surface for millennia, the nightly progression of the terminator and the ever-changing lighting conditions which result from the Moon's complex motion can surprise even the most experienced observer.



This interest in the Moon means that there is no shortage of books about our nearest celestial neighbour, so it is legitimate to ask whether we need another one. The current crop range from scholarly discourses on lunar geology to popular tours of lunar features. Grego has attempted to include all of this and more in his book, part of Springer's *Observing Guides* series, but he is stronger in some areas than others.

The book is divided into two parts. In the first part Grego discusses the origin and evolution of the Moon, its orbital dynamics and some important aspects of its geology. The discussion is generally clear but my worries started on the very first page of Chapter 1 where Grego makes the extraordinary statement that 'the Earth–Moon system has the largest amount of angular momentum in the Solar System'. A moment's thought shows just how wrong this is. Just think of the Jovian system where Io alone has twenty times more angular momentum than the entire Earth–Moon system. After this bad start things got better but there are other areas in this part of the book where things become a little muddled.

Grego is on far more solid ground in Part 2 which covers observation of the Moon and the features themselves. His description of imaging with digital cameras and webcams is generally clear but the very best part of the book, roughly one third of the total, is a comprehensive and well-illustrated survey of lunar formations. Grego does an excellent job of describing the wide range of features that are visible in moderate telescopes and he includes several interesting projects that will encourage beginners. He is clearly a keen lunar observer with a great deal of experience and this discussion of the visual treats available to naked eye, binocular and telescopic workers is very valuable.

Despite some weaknesses in Part 1 I would recommend this book on the basis of the excellent descriptions in Part 2. If they don't encourage you to go out and look at the Moon through a telescope then you must be a Deep Sky observer!

Nick James

Nick James first observed the Moon using his 50mm telescope way back in 1973 and still enjoys an occasional visual peek at its cratered surface. His lunar drawing skills however are similar to those of Galileo.