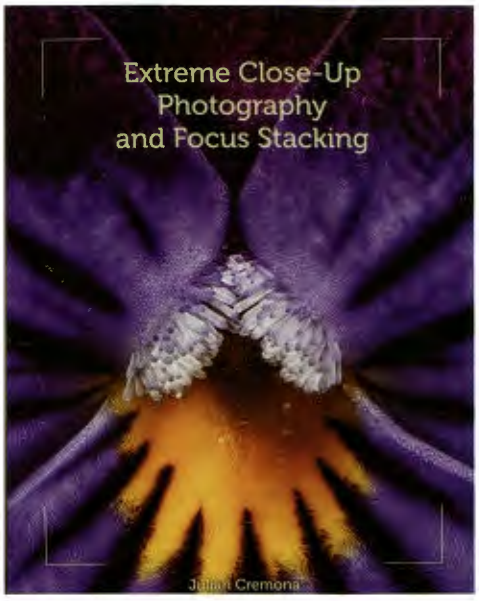
Book review: Extreme Close-Up Photography and Image Stacking

Book Review – Extreme Close-Up Photography and Image Stacking. Julian Cremona. Crowood Press, Marlborough, UK. 2014. ISBN 978 184797 719 9. 176 pp. Price £16.99 (Amazon).



The benefits of digital photography have caused surge of interest in high magnification macrophotography and photomicrography, largely driven by software applications that allow composite images to be created with previously unbelievable depth of field. Whilst every year seems to bring a plethora of new books on close-up and macrophotography, these all concentrate on low magnification photography with camera manufacturer's lens systems. Until now, guidance on true digital macro imaging has only been available through internet forums which at best can be ephemeral and at worst can be misguided. This current book is therefore to be highly welcomed, providing as it does the only published work specifically on high magnification and image stacking applications.

The author is a Quekett member and until retirement was head of centre for the Field Studies Council Dale Fort field centre on the Pembrokeshire coast; both his experience as a professional biologist and as a macrophotographer of some 50 years' experience shine through in this practical book. The first two chapters ('What is Macro' and 'What Camera is Best') provide an introduction to macrophotography and cover modern camera systems, including compact 'point and shoot' and compact system cameras, as well as DSLRs; the author's images taken on these simpler camera systems are testament to what can be achieved at low cost. Chapter 3 – 'Techniques for Getting Close-Up' considers reversed and coupled lenses, commercially available macro lenses (including the unique Canon MPE-65 with its x1 to x5 magnification range), lens extenders and bellows and microscope systems. Chapter 4 – 'Lighting and Exposure' provides guidance on incident and transmitted lighting, including flash and LED sources; the author's practical experience with different (and often difficult) macro subjects is highly evident in the advice given.

The subjects covered in these first four chapters will provide the beginner to the subject with an excellent overview of the equipment options for obtaining high magnification macro images under a variety of conditions. The next two chapters provide much-needed information on software. Chapter 5 covers image quality and sharpness; essential for good quality images but so often ignored in other books. Chapter 6 concentrates on the now *de rigeur* use of image stacking software to combine macro images at different focal planes into a single, high depth-of-field composite. Several different software systems are available for this, some free and others available at a price. The author considers the pros and cons of all of these but focuses his advice on the popular Helicon Focus product. Chapter 7 may seem out of sequence, reverting back to 'equipment' considerations on how material should be supported; it does however break up what would otherwise be three relatively heavy chapters on software. The chapter on how subjects should be supported again demonstrates the author's practical experience and is to be commended for its

consideration of the welfare of the subject and the benefits of photographing live material. Chapter 8 – 'Improving Stacked Images' looks at how stacking software and other applications such as noise-reduction programmes, can be used to improve or indeed save stacked images which show the common defects of stacked images, such as haloes, movement of limbs and background noise; despite image stacking for several years this chapter has been a revelation to this reviewer! The final chapter provides examples of how specific macro subjects should be tackled – it covers butterflies, moths, flower and ground insects through to freshwater and marine invertebrates and plankton.

The author's experience with modern camera and software systems, his advice on lenses old and new, and his tips and techniques for holding and supporting subject material, are not available in any other book. His style of writing is very easy to read and the book is profusely illustrated. Buy two copies; one to refer back to until it falls apart (the binding is robust) and the second for when that time comes. Put both alongside Brian Bracegirdle's PhotoMacrography (Bios Scientific Publishers) which also remains invaluable despite being from the pre-digital era, and your library will need no other books on this subject.

Phil Greaves