

# THE CHANGING FACE OF MACRO

The digital revolution has brought major technological changes to macro photography. **Robert Thompson** appraises their significance and the challenges that lie ahead...

**M**acro has evolved considerably since the 1980s. From a natural history perspective it was deemed by many in the past to be a niche, practised by those with an interest primarily in insects, plants and to a lesser extent marine fauna. Most of the photographers then were widely acknowledged as specialists in their respective fields. Some came from a natural history background, their photographic careers in most cases evolved from their particular fields of interest. This is also true to a point in my case, having had specialist knowledge of insects, in particular, dragonflies, butterflies and moths. I grew up on a large parkland estate where my fascination with nature led to the development of my photographic career and other natural history fields.

Many photographers also believed that close-up photography was challenging; magnification ratios, manual flash exposures and largely working to very precise procedures was off-putting for some. The majority of macro lenses then had built-in helicoid extension tubes, which expanded as the magnification increased, making them more awkward to

use above life-size, since they required additional extension. Reversing rings, standard and wide angle lenses reversed on bellows, double cable releases, were all part of the macro photographer's kit during that time. TTL ('through the lens') flash was available in some cameras but in a rudimentary form. Shooting active subjects at magnifications beyond life-size in the field was challenging and restricted to the studio. We were all running on Fuji Velvia, which was the standard transparency film, both in the amateur and professional sectors – an amazing product, but like all transparency films totally unforgiving if you got the exposure wrong.

## Digital benefits

Like many photographers, I eventually embraced the digital revolution, but not quickly. As a user of medium format I held back for some time, not willing to part too soon with my Mamiyas and Fuji Velvia. I tested the water with the Kodak Pro SLRn, but didn't commit until I felt digital could achieve results close to what was possible with medium format. By mid-2005 I was investing in Nikon again, using a pair of D2X bodies,

but running both film and digital.

Digital technology brought some changes to way we shoot close-ups, and improvements in equipment design progressed rapidly. The majority of macro lenses became lighter, helicoid tubes were exchanged for floating elements, and higher magnifications were possible with very little extension. Modern converters now deliver excellent results when used on medium telephoto macros, and magnifications well beyond life-size are possible with relative ease. Bellows have become virtually redundant. Vibration Reduction (VR) was added to Nikon's 105mm Micro Nikkor in 2006, which proved to be a real advantage in the field. Other independent macros now have their own equivalent.

One major benefit with digital is the fact that you no longer need additional bodies with different films. Having variable ISO capability during shooting is such a big advantage as you can photograph with natural light more often rather than resorting to flash. Digital TTL flash is also more accurate, and reliable advances in software mean that it is now possible to combine images to extend depth of field. Subjects can >

Common wasp  
(*Vespula vulgaris*)  
Photographing insects  
in flight is much more  
straightforward now with  
digital. Very acceptable  
results are possible with  
the modern smart flash  
units. I always prefer a little  
movement in the wings –  
it gives a sense of motion



now be photographed in ways that simply were not possible with film.

Despite all the advantages of digital technology, inevitably there are casualties. Agency stock photography was perhaps the biggest. We all felt the hit. In the good old days of film, stock photography was pretty lucrative and well worth the effort in terms of travel and supply. Orchids, both British and European, along with butterflies and moths, were extremely popular subjects. The stock photography market has never really recovered to its former days and most professional photographers had to consider other options to supplement their income. Tuition in the form of workshops became the in-thing and, as their popularity grew, travel companies began cashing in on the concept. Many are genuine, but others have limited experience in terms of tuition and technique.

### **Publishing your work**

While photography was undergoing its own revolution, so was the publishing world, which was a major source of revenue for all professional photographers. The financial returns on travel were rarely cost effective and the outlay was often more than the gain. Magazines and book publishers are now inundated with images from around the globe. Some areas within macro are still reasonably profitable, largely because there are fewer photographers specialising in this discipline at any serious level. There has also been a downturn in book publishing. Hence, it is much harder for photographers to get published. Many of the smaller photographic publishing houses are gone or taken over by larger conglomerates.

When I started, the aspiration of most photographers was to get their images published in a magazine or book. Today, it hardly warrants a conversation. It has certainly >

“Having variable ISO capability during shooting is such a big advantage as you can photograph with natural light more often”



Purple emperor (*Apatura iris*)  
A scanned image from medium format shot on Fuji Velvia

Micro moth (*Dioryctria abietella*)  
Producing images above life-size  
is less tedious than in the past.  
This moth is only a centimetre  
in length. Nikon's 105mm macro  
with VR, plus a 2X converter, is  
capable of producing extremely  
good results in the field



“The question to ask yourself is how much of what we achieve today is down to technology, or individual skill and ingenuity?”

than in the past. The most obvious change is access to a plethora of workshops. Photographers are taken specifically to a location to photograph their subjects, or in controlled conditions where it has already been setup to a point. The downside is they acquire little to no experience of researching their subject or doing their own fieldwork. Does the result merit the same accolade as someone who has done all of the work himself?

The question to ask yourself is how much of what we achieve today is down to technology, or individual skill and ingenuity? I think there is more ambiguity now between both. Making your mark in the photographic world is more challenging than ever, the bar is continually rising. Of course, you need to study and learn from other experienced photographers, but it's important to develop your own style and aim beyond what has already been achieved! The process of creating successful images, irrespective of where your photographic interest lies, is the result of research, technical know-how, a creative mind and above all patience. Light, composition, lens selection and an interesting subject form the core of a great photograph, even for the most accomplished photographers. Getting all of these elements into a single image is challenging, but the ability to amalgamate artistic vision with technical competency is the key that separates them from the rest. >

become more difficult to publish books and the reality is that very few photographers become authors; the rejection rate is high. It's even becoming more challenging for existing authors to get additional books published. Consequently, self-publishing is more popular than ever and E-book publications are very much in vogue at present, a trend that is likely to continue in future. The potential audience is

the worldwide web and the cost is insignificant compared to hard copy. Printing is also in decline. We all print less than we did in the past. Although most photographers offer a print service on their websites few make a substantial income from on-line print sales, the exception being those few who own a print gallery in a busy tourist area. If you consider the number of images you take in a year, realistically how

many of these do you actually print? Probably very few.

### Questions for the future

The photographic world is in a continual state of flux. Technology is moving so quickly it's sometimes hard to keep abreast. The future of photography as a business is challenging, but also exciting. Macro photography in the past may have been seen as specialist field

with limited interest, but that's no longer the case. Its popularity has grown immensely in recent years. Digital is certainly the reason, and the latest improvements in camera phone technology will drive that interest even further. The largest publisher of images is now the Web; it provides a platform for all photographers (irrespective of skill level) from around the world to share and exhibit their images

with fellow photographers. Social media is also big player in the photographic world and marketing oneself is an extremely important part of the business. It does not, however, define your skill or ability as a photographer, but being in the public domain remains one of the most important parts of your business. The way photographers experience nature photography, be it macro or wildlife, is also different

# THE PIONEERS OF MACRO

During the late 1980s the macro maestros were Paul Harcourt Davies, Stephen Dalton and Heather Angel. They were the front-runners, producing outstanding imagery with only moderate equipment and accessories.

**Paul Harcourt Davies** is the doyen of the macro world, a prolific writer and inventor of all manner of equipment to overcome just about every problem you could encounter. An accomplished author of 19 publications, among numerous articles in the photographic press, I first became aware of his work both as a botanist and photographer in 1987 when I bought his splendid book on European orchids, published in 1983. It was the catalyst that sparked my enthusiasm for orchids and the desire to travel to many of the destinations so delightfully described in his book.

**Stephen Dalton** is a legend in the world of high-speed flash photography, who turned his life-long passion of the natural world into a highly successful career. Insects, reptiles, birds and mammals have all been immortalised at 1/30,000sec under his custom-designed flash units, which he still uses today. Dalton is a perfectionist and meticulous about detail, which is evident in his superb depiction of insects and other subjects. Despite the advances in camera technology today, much of his earlier work has never been bettered. A highly successful author of 15 books, he ran his own picture library NHPA (Natural History Photographic Agency), which represented some of the world's finest nature photographers. His images have even been displayed in the Tate Britain gallery.

**Heather Angel**, a marine biologist by profession, is also a successful author and highly accomplished nature photographer with a particular passion for macro. A Fellow of the Royal Photographic Society, she can combine scientific accuracy with pictorial beauty, something not always easy to achieve in close-up photography. Many of her publications contain valuable information both of the life history and ecology of her subjects along with the photographic techniques necessary to achieve successful images. This is an approach that is seldom encountered in many current macro publications.

In my opinion, I have not seen anyone in the macro world at present who is their equal. Will three such veterans arise from the digital era? The significant point is that they each came to photography with a natural history background, whereas today in many cases the opposite is true. The digital revolution has produced photographers with an interest in macro but much of their natural history skills have yet to be learnt. I frequently witness this first hand at some of my workshops: photographers who love macro yet have little knowledge of what they are photographing, but they are willing to learn.



**Robert Thompson** is an accomplished freelance natural history photographer, writer and naturalist, living in Ireland. He is an acclaimed macro specialist and author of a number of books on natural history and photography. His work is widely published in the UK, Ireland and internationally.

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Purple emperor (*Apatura iris*)  
A scanned image from medium format shot on Fuji Velvia