

# WIDEANGLE MACRO

Laowa 15mm f/4 Wideangle 1:1 Macro



## INTRODUCTION

Wideangle or environmental macro as it is sometimes called is a lesser known genre of conventional macro photography, but one that is gaining popularity among photographers. The concept is to show the subject in close-up and in context with its natural habitat, unlike the traditional approach where the focus is on the subject rather than its surrounding environment. I would define my own photography as being more conventional, shooting the vast majority of my work in the customary close-up style. However, I do, when the opportunity arises like to deviate from convention and illustrate some of my subjects in their natural habitat setting. The technique is probably more often applied to plants and fungi rather than creatures with a pulse for obvious reasons. Having a passion for orchids means I frequently use ultra wideangle lenses, to shoot in-situ images especially when the backdrop is interesting. Illustrating subjects in this way often adds an extra dimension to photographs while at the same time providing information about the surrounding vegetation where they grow.



I was about to head off to the Var in the south of France to do a workshop when I received a package from UK Optics, who are the distributors for the Laowa 15mm f/4 wideangle 1:1 macro lens manufactured by Venus Optics who are based in China. As far as I know, it's the only 1:1 full frame wideangle lens currently produced. The timing could not have been better as I'm currently working on a project at the moment where this technique is quite relevant. I don't intend this article to be an in-depth review of this lens as it has been so thoroughly tested and reviewed in an earlier issue of WPPM (No 25 November 2015) by Paul Harcourt Davies, a renowned veteran in the field of macro and a long-time exponent of the wideangle macro technique. What I did want to evaluate from my own point of view was its usefulness in achieving consistently acceptable photographs of insects among other subjects in the field and how challenging this might be.

## WHAT'S IN THE BOX

On opening the box, I was surprised at how small the lens was, I expected it to be larger, but that's no disadvantage as my shoulders continually ache under the weight of my current backpack. It comes with a lens hood which is fine for regular photography but in close-up every millimetre counts since the lens-to-subject distance at higher magnifications is down to millimetres. I should point out that this is an 'all manual' lens in every sense of the word. There is no automatic coupling to the meter, therefore, aperture selection, metering and focusing have to be carried out manually. Those of you that are not accustomed to lens reversal and stop-down metering; a technique used in the days of film to obtain higher magnifications, might find themselves a little out of their comfort zone with this lens. However, with a little practice it quickly passes, and I had no problem adapting to it at all. The lens is entirely metal, solid in its construction and nicely finished. Focusing is extremely smooth and precise. I still prefer to use the viewfinder in most situations for focusing; I guess old habits die hard but Live View works equally as well especially when the lens is stopped down. Connection to the camera is exact with no play.

## WORKING THE LENS

Unlike the vast majority of modern lenses when connected to a body are fully automated and ready to shoot, this lens requires a little thought before you push the shutter button. The easiest way to work it is to set the approximate magnification first and move the camera and lens assembly in and out until focus is achieved. An easier method is to mount the entire assembly on a focusing rail, which is attached to a tripod; this makes the process much easier. If you are working on a tripod, without a rail, then it's a bit more awkward initially, you have to move the tripod and camera/lens assembly in and out, but once in position, you can fine-tune the focus on the lens again.



Orange tip *Anthocharis cardamines*

*I found this female resting among the bluebells. It was quite late on in the afternoon and it was quite happy to rest there in the shade.*

When I need to work at ground level, I simply use a beanbag rather than a tripod. I position the lens where I think it needs to be and adjust focus. An added feature when operating the lens in a normal wideangle scene is the 6 millimetres of shift both up and down to correct converging verticals; a moving lever achieves this on the side of the lens. I have not used this feature yet, so I can't comment on its effectiveness.

## IN THE FIELD

I was keen to get a dry run with this lens before I left for France the following day. I don't like talking any new piece of equipment away without having tried it out first. I had the afternoon before my departure to familiarise myself with its workings. I went to a nearby river glen where the woodland was at its flowering peak with bluebells, early purple orchids and wild garlic in profusion. It is also a favourite spot for butterflies, especially orange tips. The first thing that struck me about this lens was its optical quality which is impressive throughout the aperture range. The images are sharp with excellent contrast and colour reproduction. Diffraction at small apertures seems well controlled with no discernable loss of contrast or any sign of softness. I was surprised just how quickly I adapted to the technique of using the lens in the field, although with any piece of new equipment there are always a few issues to overcome. The most obvious of these is the lens-to-subject distance which is, for the most part, extremely close; millimetres at the higher magnifications. No ultra wideangle can match this lens in terms of reproduction ratio; this is what sets it apart from the rest. My initial tests at home before my departure were at lower magnifications, but even then the lens to subject distance was close.



Large Red Damselfly *Pyrrhosoma nymphula*

*The nearby bog is an excellent site for damselflies particularly this species. The cool, late afternoon temperature was to my advantage. I would have found this extremely challenging to do with a much more active insect.*

## LIGHTING

The short working distance also raises other challenges regarding lighting. The front of the lens naturally casts a shadow on the subject which is difficult to illuminate evenly when the lens is so close. My immediate thoughts were to use one of my SB200 flash units which I could just about manoeuvre at the top of the lens, making sure that it did not go beyond the lens rim as it would appear in the field of view. Although this worked in most cases it is not a long-term solution as I had to close the diaphragm on the lens with one hand operate the shutter with the other and only after the lens was stopped down could I pick up the flash unit. It's not a major inconvenience with a static subject but is more likely to cause issues with an active insect. However, I see this as work in progress; there is equipment out there that can provide a more convenient way of dealing with the lighting problem.



Common Frog *Rana temporaria*

*Frogs are less of an issue since most are quite amenable; their larger size means you can also reduce the magnification a little.*

Another issue is the fall off in light when you stop the lens down making critical focus in all but perfect light more challenging. You can if you wish engage Live View, which works very well when the lens is stopped down, but I find it much easier just to open the diaphragm establish focus and close it down to the taking aperture. One minor modification to the lens that would, in my opinion, make a difference is a definite click between apertures. The reason being that I could close to the lens to its smallest aperture and then open counting quickly back to the right stop. Having a continual variable diaphragm means I have to check constantly that I have it set to the right stop. The writing is small and not always easy to see clearly. Younger eyes may see it differently.



Spurge Hawk-moth *Hyles euphorbiae*

*There were some opportunities in France to explore a few other subjects with this lens. A small disused quarry turned out to be quite a rich location for a wide range of insects. Finding this Spurge Hawk-moth was a real bonus giving us time to explore various approaches.*

## A FINAL WORD

The results from this lens are visually impressive and for anyone who wants to pursue this technique will find this macro a valuable addition to their kit. It is also very reasonably priced, so it doesn't break the bank. No ultra wideangle, in my opinion, can easily replicate the results produced by this lens. Whether it is possible in the field to photograph active insects at 1:1 is debatable since the working distance is literally down to millimetres. At slightly smaller magnifications it is certainly possible. Having said that, there are so many other subjects that can be photographed with this lens. The optics are



Western Club-tail *Gomphus pulchellus*

*A very early visit to a nearby stream provided several dragonfly species including this Gomphid that was resting overnight on a large boulder in the dry river bed.*

extremely sharp, and it does produce some amazing results. There is no doubt that it's defining new boundaries, and it's refreshing to see a company that is committed to producing innovative equipment that goes beyond the conventional approach adopted by virtually all of the major brands.



European Mantis *Mantis religiosa*

*We found several of these at the same quarry, this one was resting on the Red Valerian which was abundant throughout the site.*

If macro is to develop in the future, we need companies like Venus Optics that are prepared to invest and create equipment that allows us to take macro to another level. I feel in recent times, particularly post digital that most of the major brands have neglected this area of photography, producing revamped macro lenses with little attention paid to other accessories that are also important. If they want to remain active in this field, they need to listen and consult with photographers who have the relevant experience. It is simply not enough these days to tweak a lens to improve its performance and expect everyone to upgrade. It's early days for me with this lens, but I have no doubt that it will have a permanent place in my bag.

Robert Thompson is a highly accomplished freelance Natural History Photographer, author, and naturalist. He is Fellow of the Royal Photographic Society and the Irish Photographic Federation; an acclaimed macro specialist in the UK and author of a number of books on natural history and photography. His work is widely published in the UK, Ireland and internationally, with numerous photographic credits in a wide variety of publications and other media sources. He is a frequent writer and contributor to the photographic press and other natural history publications; has had several solo exhibitions and travelled widely in Europe photographing its flora and fauna with particular attention to its threatened and declining wild orchid populations.



[www.robertthompsonphotography.com](http://www.robertthompsonphotography.com)