

Creative Image maker Magazine

MACRO PHOTOGRAPHY IN NATURE PART ONE: YOUR SUBJECT AND GEAR

By Edwin Brosens

Macro photography is a special technique that I will go on to explain through a three-part series of articles.

When I was a child, insects and butterflies were all that got my attention. This small world full of colors, patterns and behavior hides itself from the attention of most people. At the age of twenty I bought my first camera, a Minolta 5000i. With slide film loaded I got into the field and searched for a subject to photograph. But soon I discovered that it was not so easy to find something. Disappointed with fewer photographs, I came to the conclusion that you also need to be familiar with the biodiversity of our natural world you wish to interpret in your photography. Soon I was going to bookstores and libraries to search all I could find about insects, flowers and everything else that lives in the 'macro-world'. I recommend going every time to the same area to familiarize yourself with and to learn the location of your subjects; such as flowers and lichen, and also what time of the day and year yields the best light.

The internet is a great source for finding information, including many forums such as www.photomacrography2.net

The first book I purchased concerning macro photography was 'Macro Fotografie' (Macro Photography). It was written by John Pootjes and is a very technically written book. It has pushed me far forward into photography. The photos have made me aware that this was the way to show people the beautiful world of macro photography by which I was inspired as a child. The force of a photo is that we can freeze a moment forever. The technical part is a process that takes time to learn.

How to find your subject:



Photo: Nature reserve Doode Bemde

Minolta 9 + 20/1.8 + ND Filter Singh-Ray f/13 1/10 sec. Velvia 50.

This was taken at one of my favorite locations, the Doode Bemde Nature Reserve. It is located at Neerijse, Belgium, and I have visited this site many times to find insects, plants other interesting things to photograph. This is what you yourself need to do as well. Find a location near your home and visit as many times as possible to learn the vegetation and at what time of the year you can make the best photograph. Familiarizing yourself with your subject requires a commitment in time in order to learn how best to portray your subject. The preceding photograph was taken at 6:00 AM. Notice the foggy air over the field. The moment is very great. And you won't find many moments like this at midday. This is why we must visit our subject area over and over.



Photo: The Red Champion flower

Minolta 9 + 20/1.8 EX DG Velvia 100F F/8 1/60 sec.

When photographing in nature, consider the use a wide-angle lens to photograph your subject to show your viewer the relationship between your subject and location / landscape. This gives the viewer a better understanding of the subject. However, to get a better understanding of the colors and structure of the flower you can create a macro photograph. It is then that we can see the detail in the stamens and beautiful leaves. This we can't see in the earlier photo because we are too far from the subject to capture the fine detail that can be rendered in a macro photograph



Photo: The Red Champion flower

Minolta 9 + 180/3.5 APO macro + Canon 500D diopter Velvia 100F



Photo: Mating Craneflies

Minolta 9 and 180/3.5 APO macro and Flash Film - Velvia 100F Exposure - F/8 1/30 sec.

SELECT YOUR GEAR:

There are many tools to use when starting out in the macro world. In this part we will look closer at the equipment you may need.

Macro lens:

The first macro lens that I bought was and still in use: Tamron 90/2.8 macro. It delivers a life size ratio of 1:1 this means that the subject of 1 cm will be project as 1 cm on the slide or film. Macro lenses have a special group of lens elements to correct the distortion of colors and sharpness encounter in macro photography. The bright quality of these lenses gives you the best result.



Tamron 90 mm /2.8 Macro

Tripod:

A large problem regarding sharp photographs in macro photography is long shutter speeds. This can result in a blurred photograph due to movement. Even the movement when the mirror folds up can cause enough movement to blur the subject. This problem can be resolved to using a tripod and cable release. Some cameras even have a mirror lock up function that holds the mirror up and out of the way until after the shutter is engaged and resets when the film is wound on.

When I give workshops people always ask: “Edwin what kind of tripod is the best to use?” Well use a tripod around 1.5 kg`s, or 3.5 lbs, with a three-axis adjustable tripod head to finely adjust the position of your camera. Every small movement gives a big result.



Manfrotto 144B + 141 RC head

Close-up Lenses/Filters:

Close-up lenses are essentially magnifying filters that you place onto the front of your regular lens. There are some interesting positive reasons to use close-up lenses above the macro lenses:

1. They are inexpensive.
2. They do not require long shutter speeds.
3. They are small and light, so they are easy to carry with you.

But there are also some negatives to the use of close-up lenses:

1. The sharpness will be only good at f/16 or higher, thus reducing your ability to isolate your subject from the background.
2. Close-up lenses above +5 gives reduces DOI in the corners of your subject area.

How do these work? We will use a +4 close-up lens as an example. When the distance to the near edge of your depth of focus is 20 cm than you calculate $20 / 4 = 5$ cm and this will be your shortest distance where your subject will be in reasonable focus. You can also stack close-up lenses, which means using a combination of more than one close-up lens. Please note that the lens that provides the least magnification must be screwed on to the front of your lens first.



B & W + 4 Close -up lens

Macro Bellows:

Bellows are the most flexible and versatile of all the ultra close up accessories, but they're also the most bulky, cumbersome and fiddly to use. To increase magnification you extend the bellows. This will either adjust by unlocking the rail and manually sliding it to the necessary

extension or by a rack and pinion method. The latter is the more precise type. Both usually have a fine focus control to ensure the sharpest results. When the bellows are extended you really need a TTL meter or you will have to manually compensate for the loss of light reaching the film. The further you extend the lens from the film the more loss of light. Most bellows manufacturers will include a way to calculate necessary adjustments when using their products in the absence of TTL metering.

The Novoflex bellows have an additional focus rail that lets you swiftly move the whole camera/bellows position closer to the subject so you don't have to continually adjust the tripod position.



Minolta Dynax 9 body with Novoflex Bellow and Tamron 90/2.8 Macro lens

Links equipment stores:

<http://www.bhphotovideo.com/>

<http://www.speedgraphic.co.uk/>

SOME EXAMPLES OF MY MACRO WORK.



Photo: Butterfly catch at sundew

Minolta 9 + bellows + 90/2.8 macro + flash F/5.6 0.4 sec. Velvia 50



Photo: Dark Nettle

Minolta 9 + bellow + 90/2.8 macro + flash F/6.7 1 sec. Velvia 100F



Photo: Wrinkler Crust

Minolta 9 + 90/2.8 macro + flash F/13 2.4 sec. Velvia 100F

In Part Two next month, we will cover light and lighting.

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