In this lesson, we'll be taking a look at **Macro Photography.** 

Estimated Completion Time: 11 minutes.

Macro photography is the art of getting close - really close - to your subject.

Not all cameras are capable of true macro photography, although most compacts these days have some sort of macro mode. How close you can get to a subject depends on your camera. SLR cameras (with removable lenses) generally require a specific macro lens to take macro shots.

In this lesson, we'll look at some tips to help you get better close-up shots. Many of the examples and tips strictly speaking are not true macro - but we are using this term a little loosely to describe close up photography.

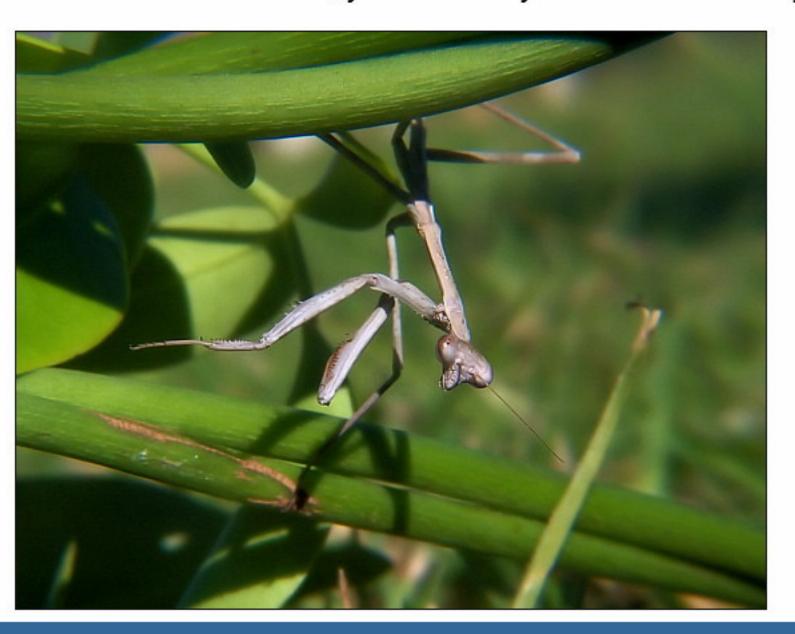


First thing to determine - how close can you get? With or without an actual macro facility on your camera, you can only get so close to a subject and keep it in focus.

To work out what this is, you may need to move in close, and try and get a focus. If you can focus, move in a little closer and try again. If you can't, move out and try again. In both cases, you'll soon see just how close you can get.



The first tip for macro photography is to use a tripod. When a camera is in macro mode, the depth of field is generally very small - which means it will only focus on one narrow part of the subject. And if the camera moves at all, you are likely to lose the focus you are after.





The narrow depth of field when taking macro shots is well illustrated here.

Lighting can also be tricky for macro shots. Using a standard flash is not an option - the camera is too close to the subject, and the flash will highlight the wrong areas, produce shadows, or overexpose the image.



Getting too close with a standard flash will produce results something like this...

There are specialised flashes, called *ring*, or *macro* flashes (they can surround the lens like a ring) that can be used for close-up photography.



Getting too close with a standard flash will produce results something like this...

This means you must use either natural lighting, or set up your own lighting. For professional looking close-ups, you may want to have a look at some inexpensive studio lighting setups - these provide a series of lights, show you how to set them up, and even diffuse the light to give much smoother results.



Ambient lighting was used to get this shot.

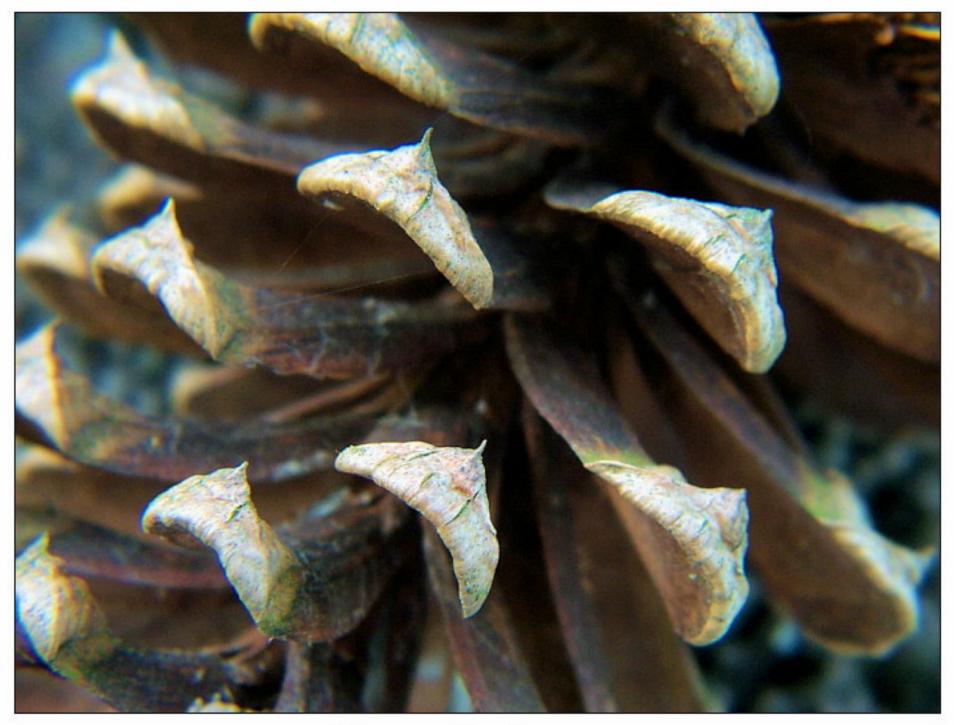


Natural outdoor lighting was used in this case. We were lucky - there was no wind - wind on a spider web makes these shots very tricky.

Generally, macro photography will give you a small depth of field. This means that ANY movement in the camera, or the subject, may well result in blurred photos, or the wrong area in focus.

Tripods, of course, and fast shutter speeds will help reduce this. Picking a time where there is no wind will also help.





Close-up of a pine cone.



Watch out - some spiders do jump! (Said from experience.)

For best results, you are probably going to have to do all your close-up photography indoors. This allows you to stop movement due to wind (wind can make macro shots impossible), but also allows you to control the light a lot more.



This shot was taken indoors...no wind, and we control the lighting.

For best results, you are probably going to have to do all your close-up photography indoors. This allows you to stop movement due to wind (wind can make macro shots impossible), but also allows you to control the light a lot more.



Taking this shot indoors was easy. Wind was never going to be a problem, but lighting, outdoors, may have been.

If you are taking shots of subjects that will remain still, and you are using a tripod, you can take more advantage of available light by slowing down the shutter speed - or increasing the camera aperture to let in more light.

Increasing the aperture will also increase the depth of field in the photo, putting more in focus.



Note the subtle difference in depth of field using the settings above. Have a look at the flowers in the background on each shot.

When photographing insects or other animals close up, remember that the focal point should be the eye. You must make sure the eye is in focus.

Because this can be such a subtle thing, once you've taken the photo, take a look at the photo - closely - in the camera. Zoom in on the photo in the camera.





On the left, we didn't quite get the eye in focus. We got it right, on the right.



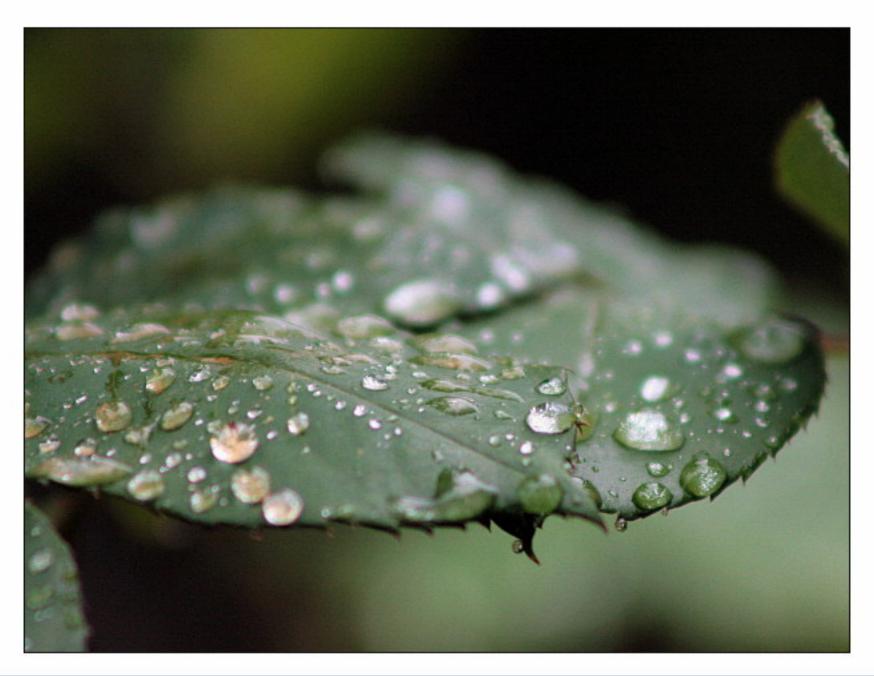
Focus on the eye...

If you don't have a macro capability, or if you want a slightly different effect, use zoom macro. Stand back, and zoom in as close as you are able to get a focus. You'll know if you are too close, or have zoomed in too far if the camera refuses to focus.





Here's another example of zoom macro - at 300mm (F/5.6), we are standing a fair way back from this leaf.



Another way to get a good macro shot - especially if you camera does not support macro photography - is to crop an image judiciously.



This was by no means a macro shot - in fact, it was taken from several meters away. But by cropping, we can create the macro effect.



On top - the original shot - below it, the new 'macro' shot.

You've now completed this lesson.

In this lesson, we took a look at Macro Photography.