

## Macro and Close-Up Photography

**MACRO** is used loosely to describe any photographic situation where the photographer gets very close to the subject. The best results occur when there is a short distance between the lens and the subject. The closer you are to the subject the more interesting an image can be. Enlargements of **true macro** shots can be spectacular.

**True Macro** is when the ratio is **1:1 [life size] up to 10:1** meaning **10 times life size**...after that you are stepping into the realm of true photomicrography and you really need to attach your camera to a microscope, and that requires a special adaptor.

**CLOSE-UP** could be **1:2 [½ life size] up to 1:10 [1/10 life size]**

**Zoom** lenses with a macro setting usually render **close-ups** rather than **macro**.

A **tripod** is almost **mandatory**, and **flash** assists, however it must be used carefully or **dark shadows** may spoil the image. Ring flash units can flatten the light on an image so slave flash units may be the go.

To reduce shadows, a reflector, such as a piece of white paper or a sheet of silver foil, can be positioned to reflect ambient light on the shadow areas of the subject.

There are **several ways** of taking macro and close-up shots:

- The **best** is a specific macro lens. There are several different focal lengths available. You would need to speak to a knowledgeable supplier for advice on the lens most suitable for your camera.
- A zoom lens with macro setting
- A close up lens which can be attached to the front of another lens
- Extension tubes
- Most expensively you could use bellows.

### Close-up.

When using a zoom macro setting be aware that depth of field must be taken into consideration, or your subject might be **out of focus** or, even worse, **everything** in your image, including a disturbing background, might be **in focus**.

A 4" x 6" print for example, made from an image taken with a Zoom lens on a macro setting, will be enlarged many times by the printing; however the **subject** of your shot will still be in the **same ratio** on the print as it is on your digital card. That is, if it takes up 1/3 of the image on your card, it will take up 1/3 of the image on your print. Cropping the image then printing an enlargement of that cropped image could be an option, but the image would need to be **extremely** sharp or it could be blurred when enlarged. The greater the enlargement, the greater the loss of sharpness, and potentially, the greater the pixelation. Tripod use reduces camera shake [and photographer shake!] and assists with image sharpness.

### Macrophotography.

True macro is when you record an image life-size or greater than life-size using a **specific** macro lens. Using this type of lens it is possible to get very close to the subject and by using a very shallow depth of field, which is usually a feature of macro lenses, the viewer's eyes will be focused directly on the subject and distracting backgrounds will not be in focus. Even with a maximum depth of field, the background will most likely not be completely in focus with this type of lens. The degree of "closeness" depends on the focal length of your macro lens.

**Close Up** Daffodil



**Macro** Centre of Poppy Flower

