

Geraint Radford

Macro Photography Techniques

It's a big, small world.

Before we begin, a little bit about me...

- 8 years of photography experience
- Love for nature and wildlife
- Specialist in macro photography and hand held focus stacking
- Subjects are never moved, harmed or trapped
- Highly commended awards in Outdoor Photographer of the Year (2016 and 2017), images used by the BBC and various photographic magazines.
- Cake addict.

Macro Photo Gear

- Olympus OMD EM1 MK2
- Olympus 60mm macro
- Olympus STF-8 Macro Flash
- Venus Optics KX800 Flash
- Extension Tubes



Single Frame Macro



1/125 Shutter Speed

F/3.5 (F/7 full frame equivalent)

ISO 400

Hand Held



1:1 Magnification

1/80 Shutter
Speed

F/6.3 (F/12.6 full
frame equivalent)

ISO 640

Macro Flash
System

Hand Held



2.5x:1
magnification

1/160 Shutter
Speed

F/6.3 (F/12.6 full
frame
equivalent)

ISO 400

Hand Held

Macro flash

Extension Tubes



1/50 Shutter
Speed

F/2.8 (F/5.6 full
frame
equivalent)

ISO 200

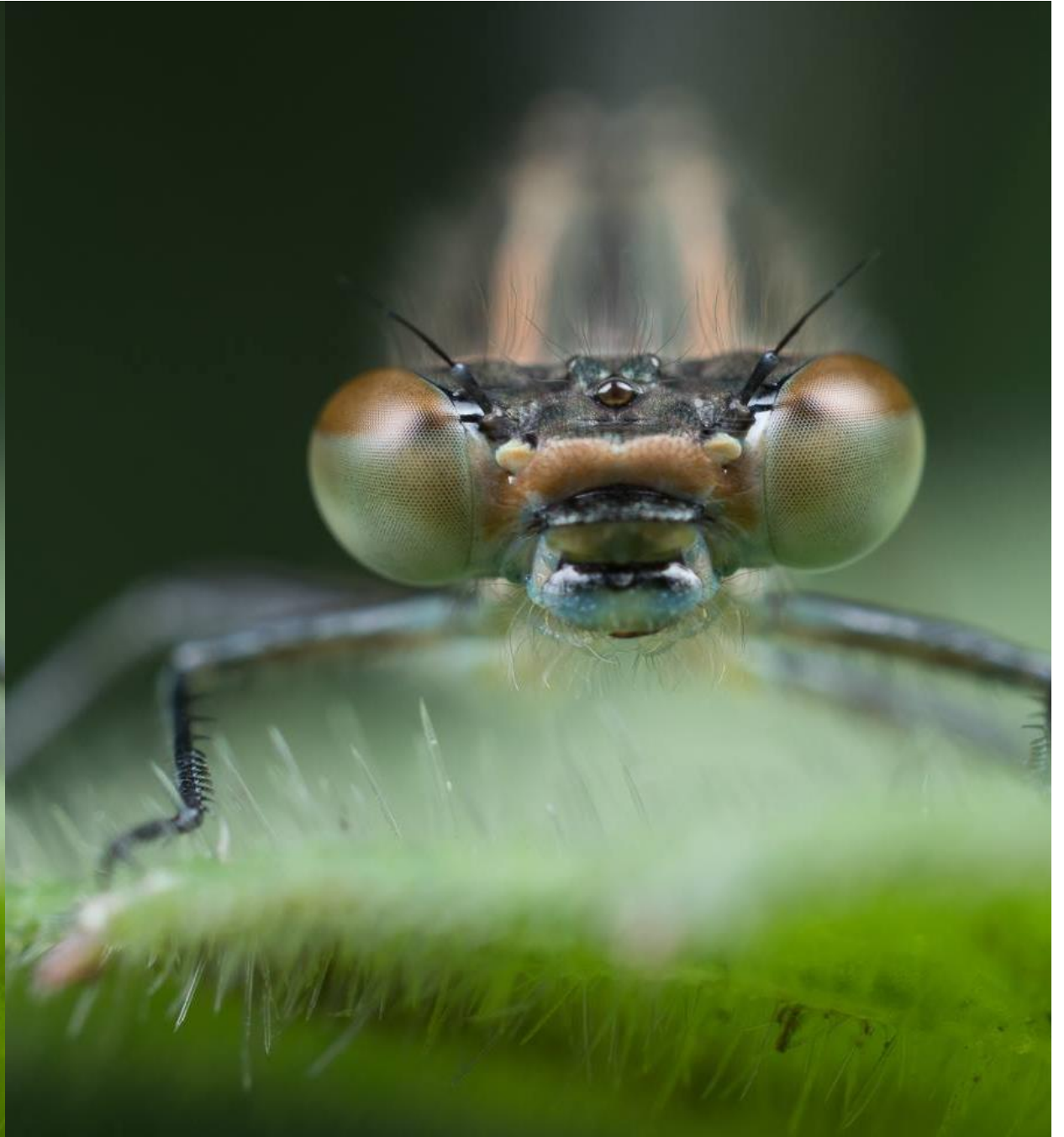
Hand Held

Macro flash to
illuminate the
underside of the
mushroom

Focus stacking.

- Blending multiple images at different focus distances to increase the depth of field in the final image.
- Can be done by focusing the lens or moving the camera closer to the subject.
- Images can be blended in Adobe photoshop or dedicated software.









Common Blue Damselfly

10 Frames

F5.6

Full frame camera

Reversed 24mm
lens

Two sets of
extension tubes

Flash



Common Frog

8 Frames

F2.8

M43 Camera

60mm macro
(120mm FF
equivalent)

Flash



Horsefly

2 Frames

F5.6

M43 Camera

60mm macro
(120mm FF
equivalent)

Flash



Small Skipper Butterfly

6 Frames

F4

M43 Camera

60mm macro
(120mm FF
equivalent)

Extension Tubes

Flash



Crab Spider

5 Frames

F4

M43 Camera

60mm macro
(120mm FF
equivalent)

Extension Tubes

Flash

Getting Creative



Double Exposure

In camera double exposure consisting of one frame that is in focus and the second is de-focused.

This, added with the soft backlight of the setting sun, gives a dream like atmosphere to the image.



Backgrounds play a vital role in most photographic genres.

In this image the highlights created by the setting sun breaking through the trees offer some nice colours.

Using a wide aperture (f2.8 in this case) diffuses the background and creates some nice shapes.

This is a focus stack of 8 images.



Abstracting the subject can give an interesting view on a common subject.

This is the wing of a cabbage white butterfly under very high magnification (5:1)

Two sets of extension tubes were added to increase the magnification.



Long exposures
can offer some
creative and
interesting effects.

A combination of
continuous
lighting, flash and
camera movement
was used to
achieve this effect.



Toad

1 Frame

F2.8

M43 Camera

60mm macro
(120mm FF
equivalent)

Mobile phone
torch.

A few tips.

- Mornings and Evenings are best for insects, they are generally colder and less active.
- When photographing in woodland, look for clear backgrounds and patches of light.
- Diffuse flash for soft lighting, insects often have reflective exoskeletons.
- Shoot often.

HAVE FUN!