

Fungi Macro Photography



Common Bonnet

Equipment

Camera

Macro Lens

Tripod

Remote Trigger

Flash

Ring Flash

Manfrotto LED's

Gorillapod

Macro Rail

Typical Camera setup



Wireless Remote



LED Flash Ring



Matt uses a couple of Manfrotto LED lights on a small Gorillapod. Flash is much too unpredictable – unwanted reflections etc. The Gorillapods are brilliant – you can wrap them around nearby branches etc, or just use them as a tripod.



Manual & Automated focusing rails

Not something i use in the field as it's not only an extra bit of kit, but quite heavy too



The Helicon Tube

The Helicon Tube is a specialized extension tube that enables your camera to perform automated and software-controlled stacks. Conveniently, it's brought to you by **Helicon**, one of the leading focus stacking software producers in the industry.

This is an ideal solution, that unfortunately only works for electronically controlled lenses.



So now we have all the Kit sorted, we're now ready to shoot some Fungi

Shoot down low

Fungi like the floor which we know isn't the most comfortable angle to work from but it does mean viewers of your images will be drawn into the fungi's world much more successfully if you shoot from low down. The fungi will also have a three-dimensional feel to them as they'll have more height, plus you'll be able to capture shots of the underbelly, too.

Think about your composition

As mentioned in the previous point, once you've got your position on the ground, you'll be able to not only photograph the top of the Fungi dome but the underneath of it too. This gives you the chance to capture some of the textures and colour the fungi has to offer as well as exaggerate the height of it. Try to capture Fungi in a group, as a variety of sizes will add interest of the piece. Odd groups are more pleasing to the eye than pairs but if you have one particular good specimen, don't overlook shooting it standing on its own. If you include the background and how much distance you put between you and the fungi will change every time so do take some time to assess the scene before hitting the shutter button.

Multiple Images for stacking

Shaggy Parasol 41 Images Stacked





Field Mushroom

Meadow Mushroom





Amethyst Deceiver



Conifer Tuft



Cluster Bonnet



Morel

Fly Agaric





Yellow Stagshorn



Giant Puffball

So what is Focus Stacking

As the name suggests, focus stacking is a technique where you take multiple photos of the same subject, but at slightly different focal distances, and “stack” them. When we merge these images in post processing, we produce one overall sharp image where the whole frame is in focus. Many landscape photographers like using this method to get both their foreground and far background in focus, Roger showed us this method awhile back, but it’s especially useful for macro photography.

So how do we achieve this

1. Manually Shifting Focus
2. Automated Stacking In Camera
3. Handheld Stacking.

Manually shifting focus

This works best in live-view at full zoom or with focus peaking enabled. The advantage of this technique is that you won't need any additional equipment besides your camera and a tripod, so this is perfect if you are just starting out and want to get a feel for it. The downside of this technique is that, depending on your lens, it can require a good amount of cropping. Some lenses change their focal length as you shift focus (called focus breathing) and your final image can only be as large as the smallest image in the stack:

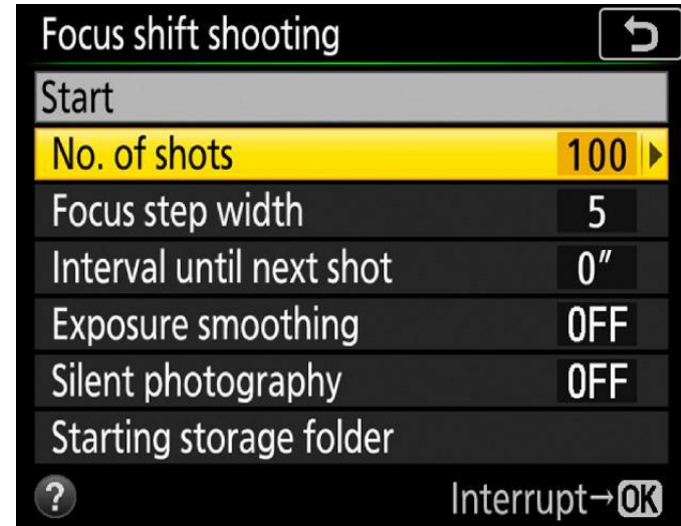
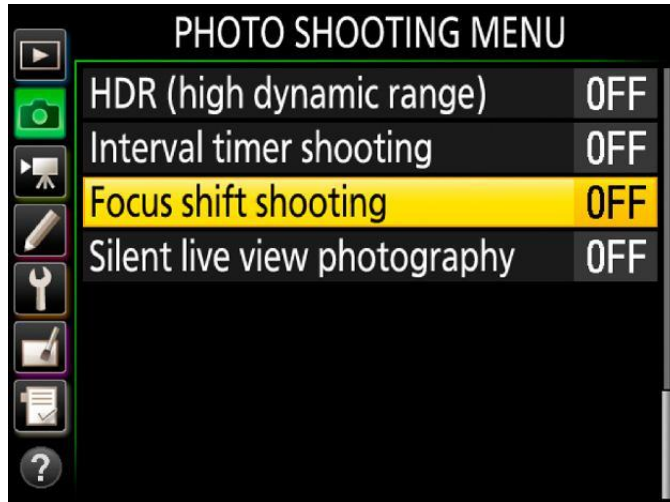


Automated stacking in-camera

Some cameras come with an internal focus stacking function, which allows you to define the start and end point of your stack, and the number of images you want it to take. Many Olympus cameras have this feature and most Canon DSLRs can obtain it by installing the third party **Magic Lantern** firmware (at your own risk).

In-camera focus stacking is a brilliant feature, as it allows to precisely control the step size between frames and doesn't require any additional equipment. Unfortunately, this only works for electronically controlled lenses.

Nikon D850



Handheld stacking

Handheld focus stacking is another way to create stacks without additional equipment. It takes a fair bit of practice and post-production, but it rewards you with a maximum of flexibility and images you wouldn't be able to take otherwise.

Unlike all of the other methods mentioned Previously, this one does *not* require a tripod, which makes it ideal for insects that won't stand still for long,

We now have our Images, so how do we stack the images.

I personally use Lightroom to do the Basic Adjustments, then load them into Photoshop in layers.

There are other Programs to use

Combine ZP - Free

Zerene Stacker

Helicon Focus

Picolay

Affinity

So let's get started !!