

Macro Made Easy

Three Categories of Close-ups

- Close 1:10 to 1:4
- Real Close 1:4 to 1:1
- Damn Close 1:1 and closer

Equipment List for Close 1:10 to 1:4

- Normal lens (50mm)
- Zoom lens
- Telephoto lens
- Macro lens



Equipment for Real Close 1:4 to 1:1

Macro Add-ons for “Real Close”

Close-up Lens (2 Element) - Best with longer lenses (100mm and above)

Advantages

- Loses no light when used
 - Bright viewfinder
 - Faster shutter speed
- Small and compact - fits in pocket
- Inexpensive compared to Macro Lens

Disadvantages

- Must focus camera and lens like a magnifying glass
- Does not focus at infinity

Extension Tubes - Best with short telephoto lenses (85mm to 135mm)

Advantages

- Gains some depth of field
- Inexpensive compared to Macro Lens

Disadvantages

- Loses light when used
 - Darker viewfinder
 - Slower Shutter speed
- Not practical for long lenses
- Does not focus at infinity

Teleconverters (1.4 or 2X) - Best with lenses that already focus “Real Close (1:4)”

Advantages

- Gains some depth of field
- Gains focal length
- Inexpensive compared to Macro Lens

Disadvantages

- Loses light when used
 - Darker viewfinder
 - Slower Shutter speed
- Does not focus at infinity

Macro Lenses - Best option

Advantages

- Focuses at infinity

Disadvantages

- Expensive

Equipment List for Real Close 1:4 to 1:1

- Normal (50mm) lens – extension tubes - OK
- Normal (50mm) lens – 1 element close-up lens - OK
- 85-135mm lens – extension tubes – Good
- 70-200mm Zoom – teleconverter – Good
- 70-200mm Zoom – 2 element close-up lens – Very Good
- 70-300mm Zoom - 2 element close-up lens – Better
- Macro lens – Best

Equipment for “Damn” Close Range

- Telephoto Zoom – extension tubes & teleconverter – Good
 - (make sure teleconverter is between camera & extension tubes)
- Telephoto Zoom – multi 2-element diopters – Better
- Macro lens – multi 2-element diopters – Best
- Raynox DCR-150 (4.8X) (for 150mm & above lenses) and DCR-250 (8X) - (for 100mm & below lenses)

Essential Equipment

- **Tripod—Bogen 055XB or equivalent**
 - Second in importance after lens
 - Should be able to raise to eye level and lower to ground level
- **Film/digital sensor**
 - Cameras are third in importance after lens
- **Cable release**
 - Don't leave home without it
- **Macro Flashlights**
 - The new reflector for the macro photographer
 - Enables the light to sing and dance
- **Flowerpod**
 - Macro photographers "Jack of All Trades"
- **Reflectors and diffusers**
 - Controls the light
- **Close-up Lens or extension tube for wide angle lens**
 - Wide angle macro, a very exciting concept
- **Filters—Polarizer (digital & film)**
 - Only filter needed
- **The Hook**
 - Invaluable gardening tool

- **Ultimate Photo Tool... Deliberate Practice**
 - This will instantly make you a better photographer and it is free

Other Essential Equipment

- **Computer**
 - Any brand as long as it is fast and furious
- **Software**
 - **Lightroom**
 - If you love photography...Lightroom 4 is a must!
 - **Photoshop CS4 and above**
 - Focus Stack DOF with Auto-Blend Layers
 - **PhotoShop CS3 and lower**
 - Manual Focus Stack DOF
 - **Helicon Focus - Mac and PC - CombineZP for PC only**

Macro Photography Problems and Solutions

1. Cluttered Backgrounds

- **Use longer lenses**
 - Longer lens have a smaller angle of view which means less background to have clutter
- **Shade background**
 - Shaded backgrounds are usually darker so there is less to compete with the subject
- **Garden background**
 - Gardening means physically removing clutter
- **Use shallow depth of field**
 - Shallow DOF means less of the background is in focus
- **Find better background**
 - Sometimes you just after to walk away
- **Digital—Focus Stacking**
 - Stacking and blending will allow you to shoot at a shallow DOF (f4 or f5.6) but still keep the subject in sharp focus

2. Shallow Depth of Field

- **Subject parallel with film/digital sensor plane**
 - Consider this for all of your macro shots
- **Focus on eyes**
 - If the eyes are sharp, the mind's eye fills in the rest
- **Focus on most important part**
 - Not all of the image needs to be sharp
- **Digital—Focus Stack**
 - With stack and blend you can photograph at f32, f64 or f128 and higher

3. Motion

- **Flash is for insects**
 - Flash works great for insects but not for flowers
- **Flower holder**
 - Flowerpod allows you to take shots you had to pass up before
- **Patience**
 - Sometimes you just have to wait
- **Digital—Focus Stack**
 - Stack and blend allows you to shoot at higher shutter speeds (1/250) and still keep subject in focus

Points to Remember

- Ask yourself these five questions before you click the shutter:

What is the subject?

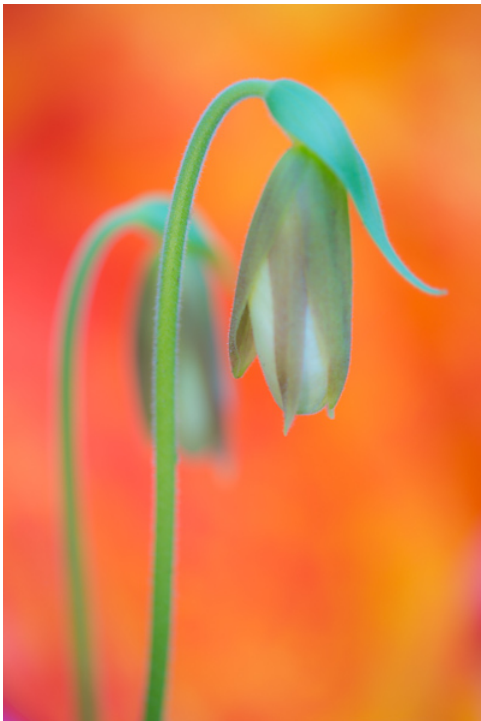
Where is the subject in the frame?

Does the light enhance the subject?

Does the background enhance the subject?

Does the foreground enhance the subject?

- Use a good tripod.
- PRACTICE every chance you get.
- Better naturalist equals better nature photographer.
- Watch those backgrounds when shooting close-ups!!
- Watch those foregrounds when shooting landscapes!!
- Watch those eyes when shooting wildlife!!



Photography is art and craft.

The craft is the doing.

The art is the seeing and feeling.

It is the seeing and feeling that makes the difference.

Resources:

One-element close-up lenses for short lenses:

B+W close-up lens: (1X, 2X, 3X, 4X, 5X, I use the 2X the most)
39mm to 77mm filter sized (for 16mm to 50mm lenses)

Two-element close-up lenses for long lenses:

Canon 250D (4X) - 52mm and 58mm (for 50mm to 130mm lenses)
Canon 500D (2X) - 52, 58, 72 and 77mm (for 70mm to 300mm lenses)

Three-element close-up lenses: <http://www.huntsphotoandvideo.com/>

Raynox DCR-150 (4.8X) - 52mm-67mm filter sized - for 150mm & longer lenses
Raynox DCR-250 (8X) - 52mm-67mm filter sized - for 100mm & shorter lenses

“Hook” - Greenlee FP3 - 3 foot Fish Pole at Lowes or Home Depot

Flowerpods - <http://www.lesaucier.com/>

Wireless Cable Release - Vello Freewave Plus - Amazon.com

Polarizers:

Polarizer review - http://lenstip.com/115.1-article-Polarizing_filters_test.html

Good filter source and information - Filter Connection: <http://www.2filter.com/>

Nature Macro Photography books:

John Shaw's Nature Photography Guide by John Shaw
Close-ups in Nature by John Shaw
How to Photograph Insects and Spiders by Larry West

Photo equipment: Hunt's Photo - Gary Faber - <http://www.huntsphotoandvideo.com/>

B&H Photo - <http://www.bhphotovideo.com>

Digital equipment: NewEgg.com—the B&H Photo of the digital world

Custom nature photography equipment:

Really Right Stuff—<http://www.reallyrightstuff.com/>

Kirk Enterprises—<http://www.kirkphoto.com/>

Macroflashlights:

Nebo Redline SE Flashlight - <http://www.lesaucier.com/>

