Introduction to Close Up Photography

Inexpensive Tools
for
Macro Photography

What is “Macro” Photography

- Make big images of small things
- Get closer than with existing lens allows
- Life size – the image is the same size as the object (only applies to film)
- Most “macro” lenses don’t get close enough for life size image capture

“Life Size” Reference

- Flower – 3/8 inch
- 100mm macro lens
- Closest focus - 6”

The Facts

- Many zoom lenses have “macro” focus
  Usually means 1/4 or 1/3 life size

- True macro lenses are costly

	Canon/Nikon	Sigma/Tokina/Tamron
60mm	$ 380-400	$260-480
100mm	$ 490-760	$400-450
180mm	$1300-1400	$660-900

The Alternatives

- Extension Tubes
  - Increases distance from lens to sensor/film
  - Decreases distance from lens to subject
- Supplementary Lenses
  - Changes the optical formula of the lens
  - Decreases disgance from lens to subject
- Both — Limited range of focus

Extension Tubes

- PROs
  - Fits all lenses
  - Meter coupled
  - No loss of quality
- CONs
  - Loss of light

Supplementary Lenses

- PROs
  - No loss of light
  - Can be used on zooms
  - Low cost

- CONs
  - Limited sizes
  - Potential loss of quality if single element lens

18-55mm

- Focus at 5 inches

50mm f1.8

- Focus at 13 inches

50mm f1.8

No extension 13”

36mm extension 2½”

20mm extension 4½”

56mm extension 2”

24 -105mm f4 at 105mm

24 -105mm f4

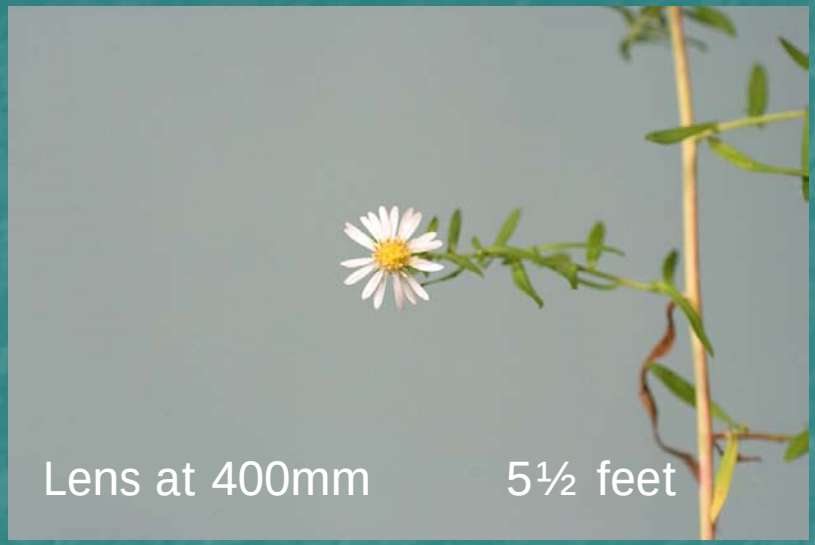
24mm + 20mm extension
touching

105mm + 20mm extension 3”

50mm + 20mm extension 1”

105mm + 20mm ext + 1.4X 3”

100 - 400mm f4 with 500D



100mm Macro

What's It Cost?

- Extension Tubes (meter coupled)

	Canon	Other
12mm	$ 85	$ 59
25mm	$ 140	$ 90
12/20/36mm	N/A	$ 170

- Supplemental Lenses
  - Canon 250D (for lenses 50 to 135mm)
    - 52mm 58mm ($90)
  - Canon 500D (for lenses 70mm and longer)
    - 52mm, 58mm, 72mm 77mm ($150)
  - Filter Kits (+1, +2, +4)
    - Hoya Multicoated 52mm ($57), 62mm ($82), 67mm ($85)
    - Hoya 77mm ($90) not multicoated
    - Tiffen 77mm ($105)