

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

	<u>Body</u>	<u>Other</u>
■ 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 distance 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

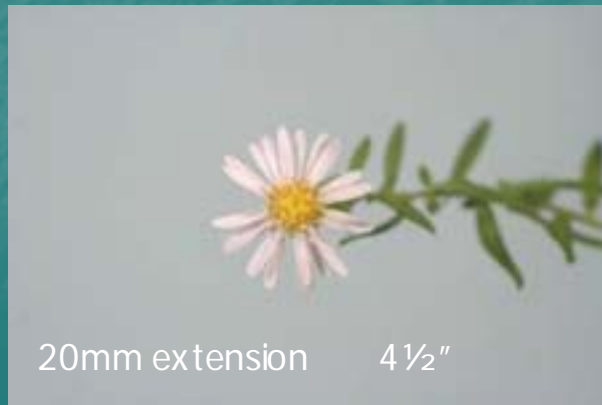
50mm f1.8

- Focus at 5 inches

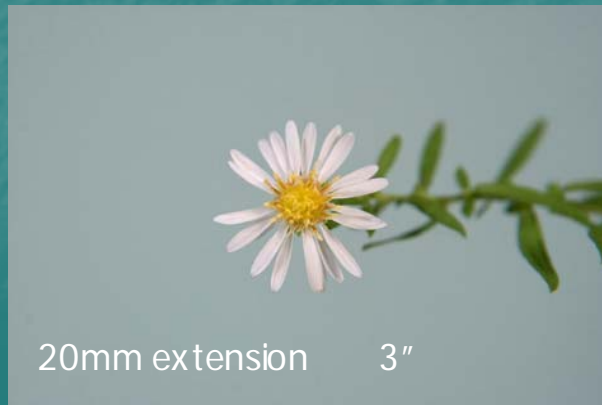
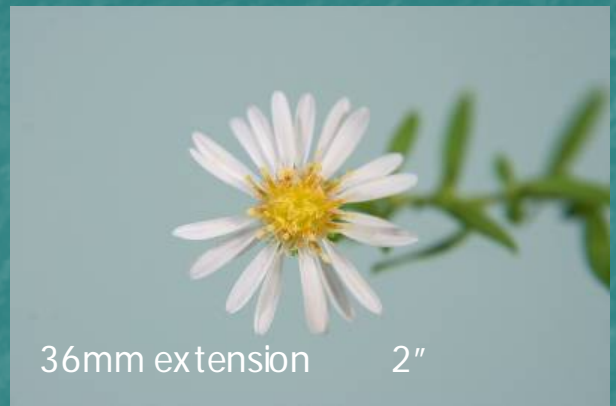
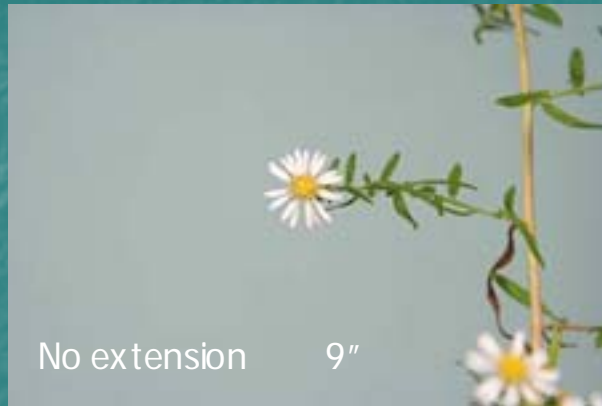
- Focus at 13 inches



50mm f1.8



24 -105mm f4 at 105mm



24 -105mm f4



24mm + 20mm extension
touching



105mm + 20mm extension 3"

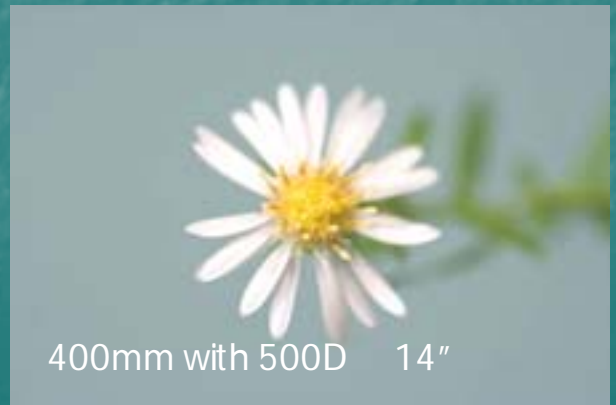
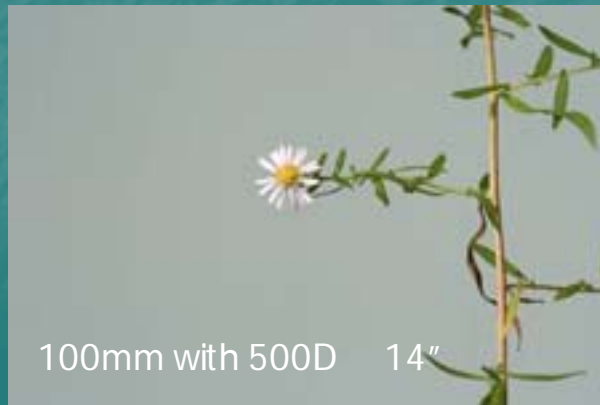
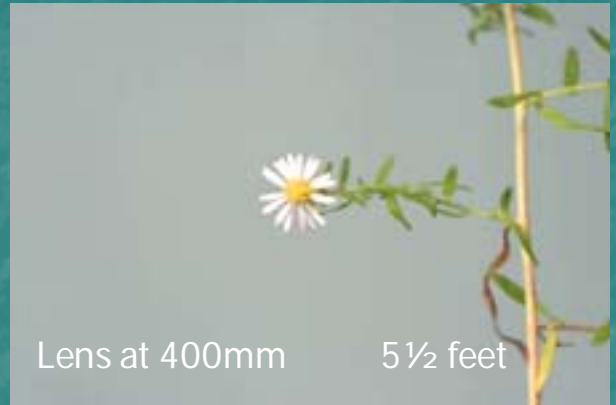
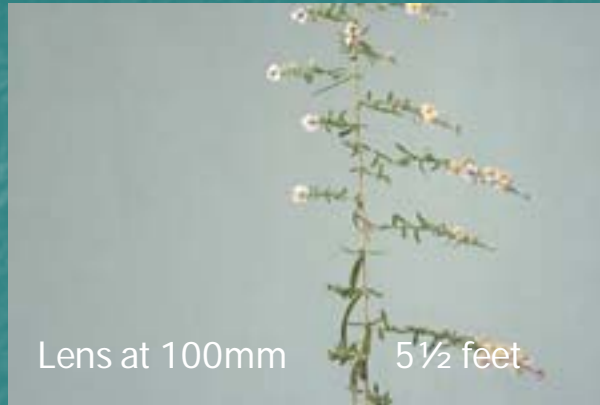


50mm + 20mm extension 1"



105mm + 20mm ext + 1.4X 3"

100 - 400mm f4 with 500D



100mm Macro



What's It Cost?

■ Extension Tubes (meter coupled)

	<u>Canon</u>	<u>Other</u>
■ 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)