

# On the lens filters

5 main types

- Skylight filters
  - Polarising filters
  - Neutral Density filters
  - Variable Neutral Density Filters
  - Graduated filters
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- Round screw fit or square frame slide in
  - Screw fit limited to fit of lens. (adapters available)
  - Beware of vignetting
  - Square fit one size fits all lenses with correct adapter ring
  - Beware of glare on both types

# Skylight filter (UV Filter)

- Usually screw on (permanently on)
  - Protects front lens element from scratches
  - Helps reduce haze from distant objects
    - Modern lenses have UV filtration built in
    - Digital sensors seem to be less affected by haze than film cameras were/are
- Photoshop has a de-haze filter function built in

# Polarising Filter

- **Circular or Linear**

- Must be circular polariser filter for auto-focus cameras

Don't confuse circular polariser with round screw in

- Rotating the filter will reduce reflections from objects at an obtuse angle
- Polarising filters will enhance colour saturation
- Will probably increase exposure by about 2 stops
- Can be square or screw-fit



# Graduated Filters

- Usually Square
  - Density Varies top to bottom
  - Square filter usually bigger than the lens diameter  
Allows density area to be altered.
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- Useful for high contrast subjects such as sky/horizon/foreground
  - Useful if HDR is not an option
  - Take meter reading from foreground, set camera to manual
  - Photoshop has a graduated filter function but heavily over exposed areas may be problematic

Graduated from the top

Slide the filter up and down in frame to get the effect you want

Take care not to encroach on main subject area

Handholding is difficult

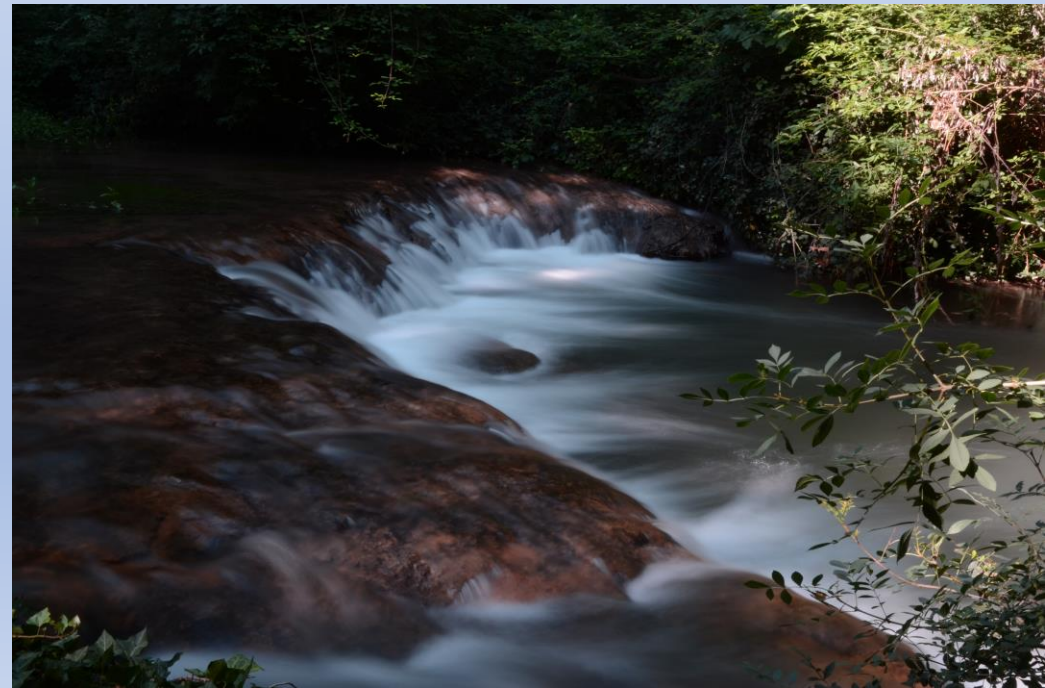
Use a tripod if possible  
(or Pat's shoulder)





# Neutral Density Filters

- Allow longer exposure times (Modern sensors usually have minimum 100 ISO)
- Can be screw-fit or square
- Need to be optically correct, no imperfections
- Usually have a geometric progression in values, 2,4,8,16,32
- Can be added together to reduce exposure times even more
- Many filters added together can affect colour balance
- Gives a great cotton wool effect to moving water



1/3 second  
f22



2.5 seconds  
F22  
Approx +4  
stops





## Colour Balance Corrected in Photoshop





# Variable ND Filter

- Same points as ND Filters
- Screw-fit continuously variable ND
- Appear to have higher ND values available