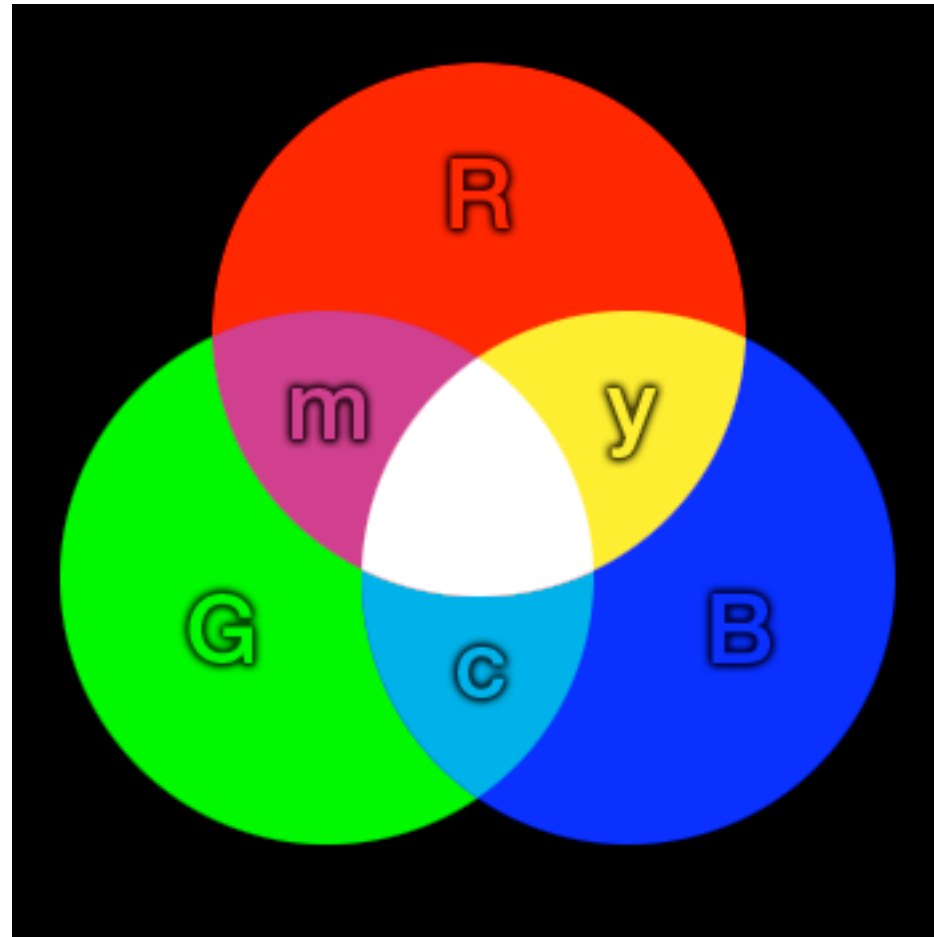


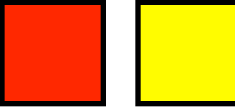

# Converting Color Images to Black-and-White

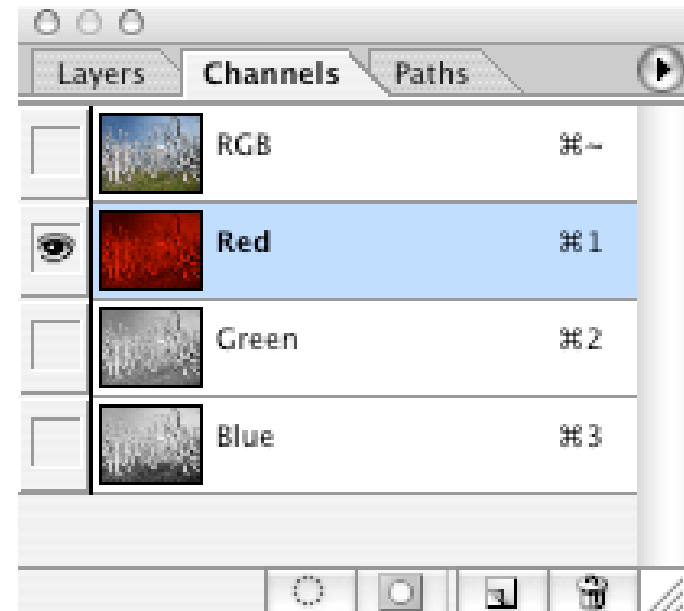
MACNJ PSIG June 17, 2004

# Channels and Colors

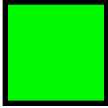



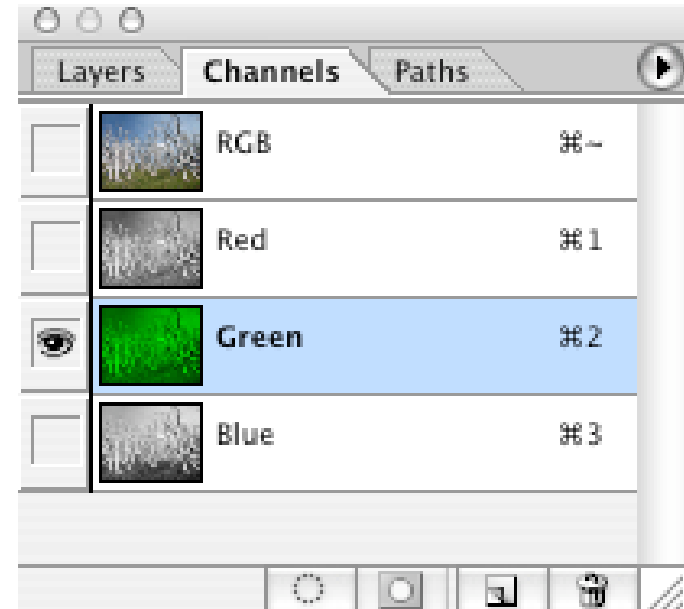
# Red Channel

- lightens reds + yellows 
- darkens blues 
- good for smoothing skin tones
- adds contrast to skies, water
- helps separate sand and sea, trails from the forest



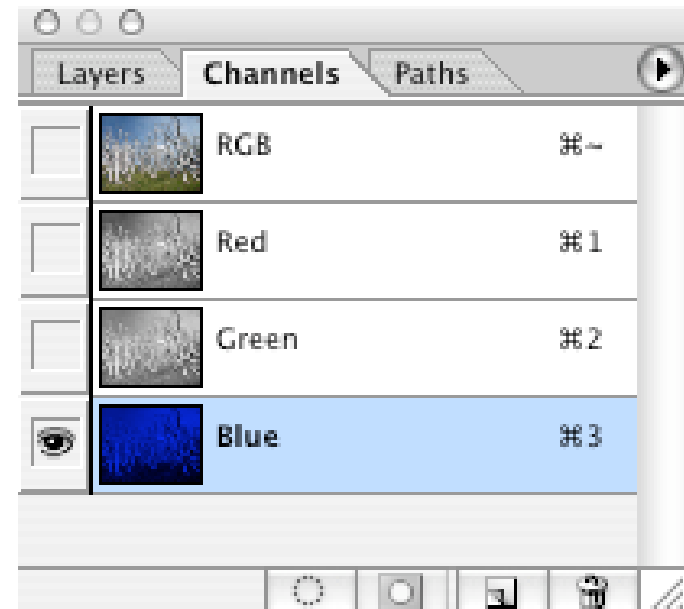
# Green Channel

- lightens greens + yellows  
- darkens reds 
- good for bringing out tonal variations in foliage
- makes skin appear tan, accentuates lips



# Blue Channel

- lightens blues 
- darkens greens and yellows  
 
- good for highlighting objects against water or sky
- ideal for architectural images
- not usually the best choice for people



# I. Auto Mode Change

- Image > Mode > Grayscale (same as Image > Adjust > Desaturate)
- discards color, leaving brightness value for each pixel
- quick and easy, but no control

## 2. Remove Saturation

- Hue/Saturation, set “Saturation” to -100
- quick and easy
- can exist as an Adjustment Layer
- often produces loss of tonal distinction between reds, yellows, and greens

# 3. Single Channel Method

- select an individual Channel
- Image > Mode > Grayscale will throw out other two Channels
- good starting point
- further refine with levels and/or curves

# 4. Lab Mode

- change Image > Mode to “Lab”
- delete the “a” and “b” Channels, keeping the Lightness Channel
- better range than RGB > Grayscale, but overall image may appear too light

# 5. Channel Mixer

- allows mixing of Channels in Monochrome mode for high-level of control
- can be done as Adjustment Layer
- amounts should add up to 100 or you may see a shift in the image's lightness

# 6. “Film and Filter” Method

- two Adjustment Layers over image
- top: “Film” Layer, H/S set to -100
- middle: “Filter” Layer, blend set to “Color”
- bottom: original image
- make changes to Hue on Filter layer to alter both Hue and Saturation of image