

# Digital Photographic Printing

Michael Kellogg

Bella Photo Art

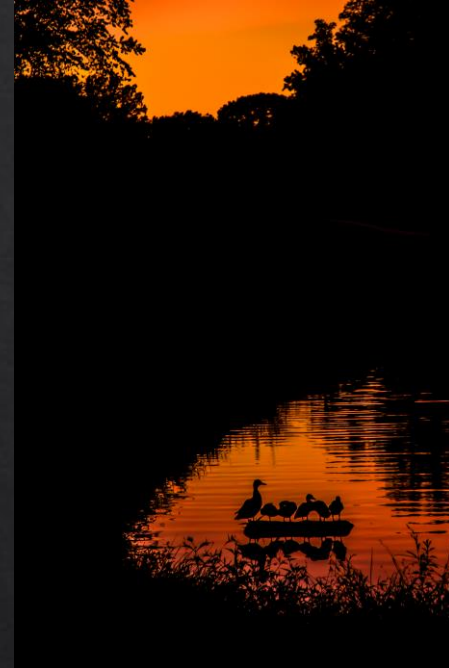


# Why am I making a print?

- ◆ To put into an album
- ◆ To put on a desk or dresser
- ◆ To give as a gift
- ◆ To hang on my wall
- ◆ To sell
- ◆ For a contest or show
- ◆ To use in a portfolio
- ◆ To use as documentation for insurance files

# Selecting an image for printing

- ◆ Does it make me think
- ◆ Do I feel emotion when looking at it
- ◆ Does it tell a story
- ◆ Will I still want to look at it 10 years from now





# Preparing an image for printing

- ◆ Make sure that your monitor is properly calibrated!!!
- ◆ Remember that the image is not ready when you push the button on the camera
- ◆ Shoot in RAW for best image quality
- ◆ Stop using cookie cutter sizes
- ◆ Crop first and then size your image to the size you want to print before editing (if it is worth printing it is worth doing right)
- ◆ 6. Spend as much time editing your image as you need to get the look you are after



# Image Management Software

- ◆ Photoshop CC
- ◆ Photoshop Lightroom
- ◆ Photoshop Elements
- ◆ Picasa
- ◆ Photo Director 7
- ◆ Cam2pc
- ◆ Fastone Image Viewer

# Selecting a printer

1. Ink jet (Canon, Epson, HP, Lexmark)
2. Ink type (Dye or Pigment)
3. Dye inks are water based, less expensive but more prone to fading
4. Pigment inks far more lightfast than dyes and are an archival product. They are more expensive but give you the best quality for displaying images over a long period of years
5. Select a printer that uses individual ink tanks for each color.
6. The more colors the printer uses the better image color you will get





# Print Media

- ◆ Make sure your media is compatible to the ink type you are using
- ◆ Paper media may not be your only choice
- ◆ Determine size, weight (thickness) and finish
- ◆ You do not need to stick with the paper made by the printer manufacturer
- ◆ Finishes may include but are not limited to Canvas, Pearl, Satin, Glossy, Semi Gloss, Semi Mat, Mat and Metal
- ◆ For longer display life choose a paper that is archival like a rag paper or one with a neutral PH value

# Paper types

- ◇ Baryta paper, a clay like chemical compound, barium sulfate is applied to the paper to make it whiter (very good for B&W images)
- ◇ Watercolor paper, a mat paper with a texture, gives images a soft feel. Works well for portraits.
- ◇ Calendared papers are paper that had passed between two heavy metal rollers to produce a very smooth surface-far smoother than non calendared papers
- ◇ Resin coated, in ink jet papers it is done to increase the glossiness of the paper
- ◇ Other types include rice paper, photo rag, bamboo, German etching, torchon and others
- ◇ Manufactures of paper include but are not limited to Innova, Hahnemule, Canon, Canson, Marrut, Epson, Ilford, Inkpress, Moab

# Color Management

- ◇ Color and calibration
- ◇ Digital color-Bits and Bytes
- ◇ Bit, the smallest unit of information used by a computer or digital camera
- ◇ Byte is equal to 8 bits
- ◇ 8 bits will see 256 levels of brightness
- ◇ Color images created by digital cameras are made up of three colors, red, green and blue.
- ◇ 8 bits sees 256 shades of each color which will be 16.7 million different color possibilities (256 shades of redX256 shades of greenX256 shades of blue)
- ◇ 16 bits sees 65,536 levels of each color, a much wider range



# Color Space

- ◇ sRGB Color, (supports 8 bit color) proposed by HP and Microsoft to approximate the gamut of most computer displays at the time
- ◇ Adobe RGB, sometimes listed as Adobe RGB 1998, supports 16 bit color and reproduces more of the visible colors. Also produces better luminance and contrast values
- ◇ Most DSLR cameras offer both which is selectable in their menus

# ICC Profiles

- ◆ In color management an ICC profile is a set of data that characterizes how a color input or output device sees color
- ◆ This applies to cameras, scanners, monitors, printers, projectors and print media
- ◆ Every device that captures or displays images can be profiled and an ICC profile produced for it
- ◆ Some manufacturers supply their ICC profiles
- ◆ Very important for printing consistency and accuracy











WHITE HOUSE













## Bella Photo Art

*2440 Shadywood Circle*

*Crofton, MD 21114*

*410-703-5277*

*[www.bellaphotoart.com](http://www.bellaphotoart.com)*

*[mkellogg@bellaphotoart.com](mailto:mkellogg@bellaphotoart.com)*