

## Processing a Digital Image – Revision 03.10

### Best Practices

1. Transfer original JPEG (.jpg ) or RAW camera file to hard drive of your choice via USB or Firewire – directly from the camera or with a card reader.

2. Sort, Select and Process (if shooting RAW) within **Adobe Bridge**

3. Open JPEGs requiring adjustment in **Adobe Photoshop**.

3a. Duplicate background layer

3b. Apply all corrections/modifications as “adjustment layers”

Luminance – Levels

Color – Curves

Grayscale – Channel Mixer

Sharpening – Unsharp Mask applied to Duplicate Background Layer

4. Saving Working copy of file as Photoshop File Format (.PSD) or .TIFF (without compression, or maintaining layers)

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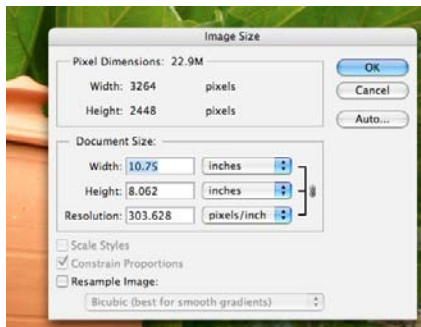
### Preparing the working copy for Print

Color working space should be configured to **Adobe RGB 1998 / Pro Photo RGB (?)** prior to opening files for print.

(Select North American Prepress 2 under Color Settings.)

1. Open working copy of the file and apply any adjustments required prior to scaling resolution to appropriate dimension for the final print (as described above).

2. Convert Resolution to appropriate print dimensions with **Resample OFF**  
**Photoshop Menu Item → Image → Image Size**



\* Recommended **Print Dimensions:**

*8.5X11 Sheet with Narrow Margin – 10.75 on the largest dimension/height or width*

*8.5X11 Sheet with No Margin – Borderless – 11 (requires borderless sheet)*

*feeder selection in Page Setup*

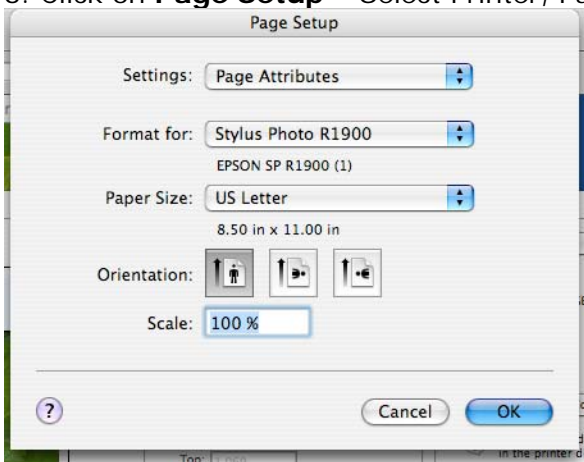
*8.5X11 Sheet with Larger Margin for Mount/Matting – 9.5 on the largest dimension*

3. Sharpening – Unsharp mask applied as final step prior to printing  
(\*Unsharp Mask applied to Duplicate Background Layer)
4. Depending on the size and complexity of the file an optional final step prior to sending to printer is to flatten all layers.

**(\*Do not overwrite your working file in the flattened state!)**

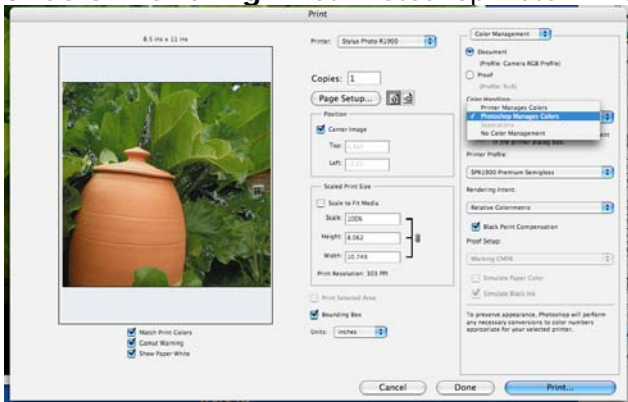
5. Adobe Photoshop File Menu - Select **Print**

6. Click on **Page Setup** – Select Printer, Paper Size and Orientation – Select Ok



7. Return to Preview Mode

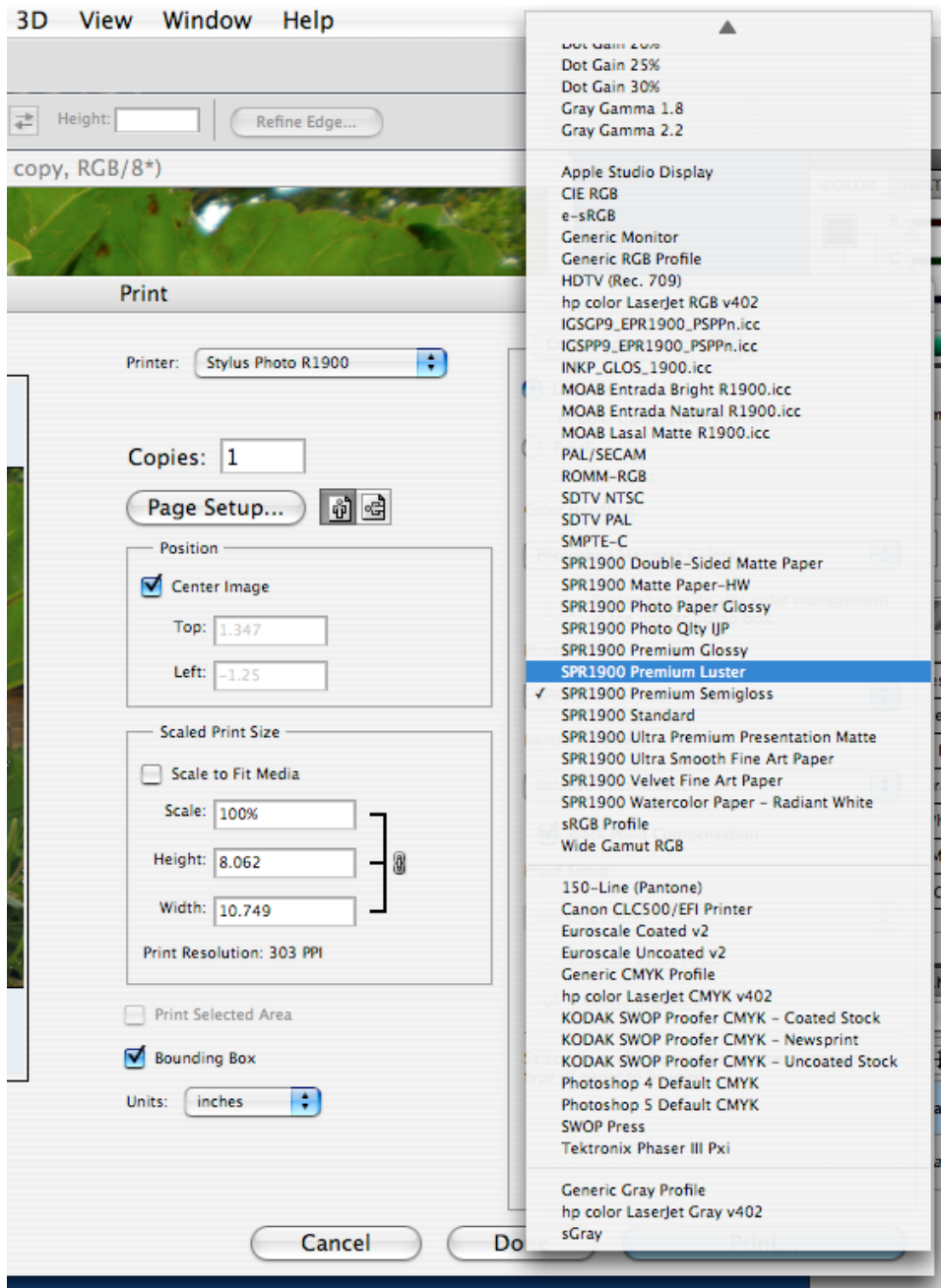
8. **Color Handling** – Let Photoshop Determine Colors



9. **Printer Profile Selection**– choose Profile for specific printer and paper.

The primary difference with regard to an Epson print using a printer profile is the selection, installation and application of a paper profile specific to the paper and printer combination.

In the initial color management menu under Print with Preview – Select the Printer Profile provided by the manufacturer of the paper you have chosen for this specific printer. All other color management options will be turned off in a later menu.



## 10. Rendering Intent – Relative Colorimetric, Black point compensation – checked

A **rendering intent** determines how a color management system handles color conversion from one color space to another. Different rendering intents use different rules to determine how the source colors are adjusted; for example, colors that fall inside the destination gamut may remain unchanged, or they may be adjusted to preserve the original range of visual relationships when translated to a smaller destination gamut. The result of choosing a rendering intent depends on the graphical content of documents and on the profiles used to specify color spaces. Some profiles produce identical results for different rendering intents.

**Perceptual** Aims to preserve the visual relationship between colors so it's perceived as natural to the human eye, even though the color values themselves may change. This intent is suitable for photographic images with lots of out-of-gamut colors. This is the standard rendering intent for the Japanese printing industry.

**Saturation** Tries to produce vivid colors in an image at the expense of color accuracy. This rendering intent is suitable for business graphics like graphs or charts, where bright saturated colors are more important than the exact relationship between colors.

**Relative Colorimetric** Compares the extreme highlight of the source color space to that of the destination color space and shifts all colors accordingly. Out-of-gamut colors are shifted to the closest reproducible color in the destination color space. Relative colorimetric preserves more of the original colors in an image than Perceptual. This is the standard rendering intent for printing in North America and Europe

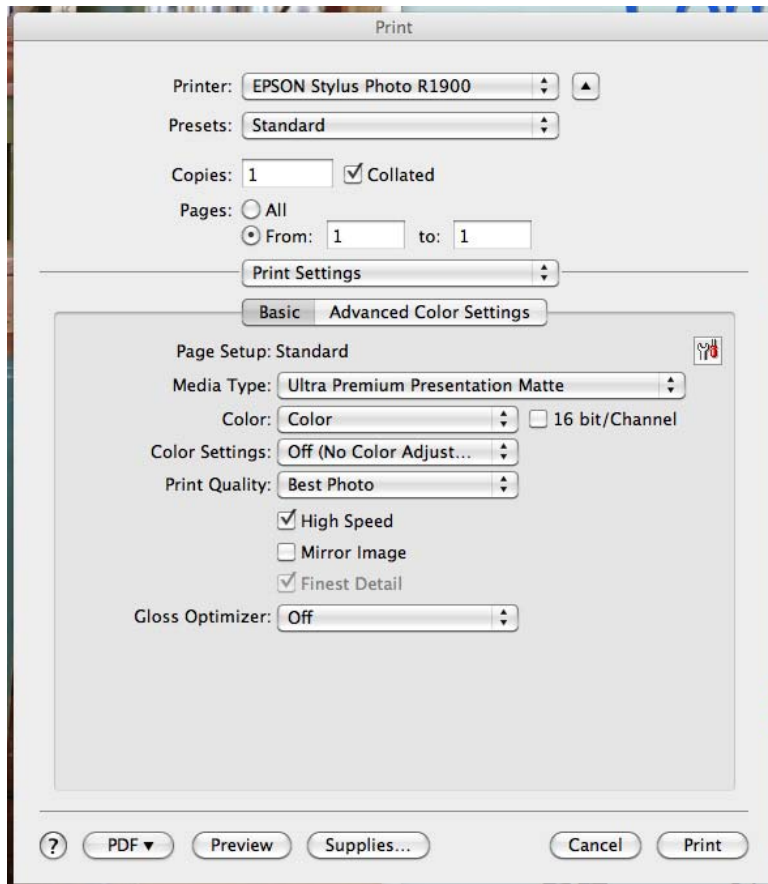
**Absolute Colorimetric** Leaves colors that fall inside the destination gamut unchanged. Out of gamut colors are clipped. No scaling of colors to destination white point is performed. This intent aims to maintain color accuracy at the expense of preserving relationships between colors and is suitable for proofing to simulate the output of a particular device. This intent is particularly useful for previewing how paper color affects printed colors.

**Black Point Compensation** Ensures that the shadow detail in the image is preserved by simulating the full dynamic range of the output device. Select this option if you plan to use black point compensation when printing (which is recommended in most situations).

**11. Select Print** – From this step forward we are working within the Epson print driver menu.

From the Print menu 3<sup>rd</sup> popup selection below the pages fields there is one menu option that is critical / all settings are consolidated to this single menu:

## 12.1 Print Settings



### 12.1 Print Settings

- **Media Type** - set the appropriate paper surface or media type.
- **Color** - Ink Use **Color** or **Black** only \*grayscale
- **Color Settings set to OFF (No Color Adjustment)**

All Color Management/calibration adjustments are contained in the ICC Profile selected from Print with Preview menu. If you are unsure of having selected the proper profile return Cancel the print and return to Print with Preview to reselect.

- **Print Quality** \*should be resolution:
  - Photo (1440x720)
  - Best Photo (1440x1440)**
  - Photo RPM (5769x1440)
- **High Speed - ON**
- **Gloss Optimizer – ON**

Finally, select **PRINT**.

You may be prompted one final time regarding **Postscript on a non-postscript printer**. Select **OK** and proceed.