

“A Basic Workflow Using RAW” by Norm Plummer

Processing a large number of photos for printing or competition can be a time-consuming process. Photographers shortly come to the conclusion that a standardized workflow is necessary to handle the volume. This describes the basic workflow that I have developed. Typically, this flow will do the bulk of post-processing in about twenty minutes per photo.

This workflow uses the Adobe tools (DNG Converter, RAW Processor, PhotoShop CS3) although the basic workflow principles will apply to any tools.

Note about RAW: Whenever possible, shoot in RAW mode. It will give you much more flexibility in color handling and also is non-destructive editing allowing you to go back and redo mistakes (or make changes in concept or design).

Acquire and Convert the Photo

From a Canon camera, the RAW file will typically have a .cr2 extension. The first step is to convert it to an Adobe .dng (Digital Negative) file. To do this, I will put the photos in a separate folder (i.e. "convert") and run the Adobe DNG Converter program on that directory. It will batch convert the RAW files and create the corresponding .dng files for you. I then archive off the .cr2 files to removable storage to avoid confusion and to also free disk space.

Note about DNG: RAW files are proprietary formats specific to a camera manufacturer and model of camera. There is no guarantee that these files will be readable in the future when that specific camera becomes obsolete. The DNG format is being promoted by Adobe as a standard format for RAW files that will be supported in the future (similar to the Adobe Acrobat PDF format). Adobe provides the DNG Converter program with its products and it is also available for download.

Load and Edit the Photo in RAW

Approximate 80% of the post-processing is completed using the RAW editor rather than PhotoShop due to the flexibility and non-destructive nature of the RAW processor.

Processing steps:

1. Open the new .DNG file with PhotoShop. It will automatically open in the Camera RAW processor. Verify that the color space (at the bottom of the screen) is set to ProPhotoRGB to give you more color information to use.

2. Adjust the white balance - typically I will cycle through the various "canned" white balance picks to see the effects. Sometimes one of the picks will be quite close and I can just tweak it a bit using the slider control. If not, I try the same process with the eyedropper tool. If all else fails, I will manually adjust the balance using the slider with minor moves on the tint slider. In the sample photo, the white balance as shot was 5150, I adjusted it using the cloudy preset with a little tweaking to 6500 to warm up the picture.

3. Adjust the exposure, recovery and the blacks sliders to eliminate clipping. Moving the recovery slider up will reduce highlight clipping, moving the black slider will reduce black clipping and moving the exposure will do the usual things. For this photo exposure went +.35, recovery to 16 and blacks from 5 to 2.

4. Go to the second button ("Curve") and choose the second pick ("Point"). I generally just set this to "Strong Contrast" for more pop although you can tweak the setting for more fine tuning. (Note: these buttons are under the histogram)

5. Return to the first button and increase the Clarity and Vibrance a bit (in this case, I used +13 in both).

6. Go to the third button ("Detail") and adjust the sharpening to your taste.

7. Finally, go to the Level and/or Crop tools (located above the picture). In this case, the picture is a little off level and there is some extraneous detail around the edges. With the Level tool, you draw a line on the level horizon and it will create a tilted mask to adjust for level. Also at this point you can move the corners on the mask to crop as you wish. It is a little hard to evaluate since it does not actually crop the photo but rather places a mask over it (non-destructive !). However, the leveled and cropped image is what will appear in PhotoShop.

Final Edits in PhotoShop

Click the "Open Image" button. The RAW processor will now close and the image will open in PhotoShop. Typically, the post-processing is about 80% complete at this time.

Processing steps:

1. (Optional) Make a background copy. Remember, if you make a mistake that affects the background you can always just reopen your edited RAW image (which is saved as the .DNG) and start over.

2. Open a new adjustment layer and adjust the levels, if necessary. Generally, these will be minor since most of the work was already done in the RAW processing. Also, you can do any dodge and burn operations at this time. In this photo, I just burned (darkened) a few hot spots around the edges with a soft black brush at 28% opacity.

3. Add a vignette to darken the edges. A quick method that I use is to create a layer and fill it with black (ALT BKSP). I then choose a rectangular marquee, set the feather to 170-180 for a high resolution photo and draw the rectangular marquee out to about 85% of the size of the photo. "Punch" out the center of the marquee using the DELETE key. Adjust the opacity of the vignette to your taste (generally between 8-30%, in this case 19%).

4. Save your image (which will create the Adobe .PSD file).



BEFORE



AFTER

Printing

I use an Epson Stylus R2400 printer for my prints, so some of these suggestions will be based on this printer.

Processing steps:

1. Adjust the image size in the Print dialog to the size you desire. Try to hold the print resolution to 240 PPI or more.

2. If available, select the printer profile for the printer and paper that you are using - in this case I used Photo RPM for premium glossy paper.

3. Click PRINT. In the next screen, there are a couple of settings to adjust. Print setting for paper - usually Premium Glossy.

Print quality - in this case, Photo RPM to match the printer profile selected previously.

4. Click off high-speed printing.

5. Important: if you are using a printer profile, click off Color Management.

That's it! Once you do this workflow a few times you will find that you can produce quality images in a reasonable time. Of course, you may want to spend more time on various steps for special events such as competition.