In this rather technical follow-up article to my original photography article, I will discuss how I use Photoshop CS5 after taking photos of flow blue or mulberry ironstone to adjust curves. Please remember that I am writing about only what I know, and I’m sure others might approach processing their photos in a different manner. This article will give you a general idea regarding basic information on adjusting curves (called that because you create a curve while adjusting lights/darks/mid tones of a photo, in the Photoshop curve dialog box). I will also discuss readying a photograph for print (magazines, catalogs, brochures, etc.). I rely on printers, or “web professionals” to provide me with size/pixel information as to what they need for their use. At the end of the article I will include examples of items shot with the same technique to illustrate problems, as well as a better end product images.

The images to the right are screenshots from my computer to clarify what each step is. It looks like a lot of steps but when you become proficient in doing this, it is a relatively quick procedure. If a person is working with a lot of photos, there is also a batching process you can use in Photoshop. Many photos can have the same effects quickly applied to all of them. For example, if you want to convert RGB images to CMYK you can set up a batching process to do that. Photoshop will run through your many images, converting them very quickly for you. That one step then, is something you don’t have to think about doing. This has been real helpful for me in processing 600 or more images for a project I might be working on.

After taking photos I import them into my computer. These images are large (how large depends upon your camera setting for that initial photo capture). They are also in RGB format. RGB is red, green, blue, which is an additive color model in which those colors of light are added together to reproduce a broad array of color. Typical RGB input devices are TV and video cameras, video games or digital cameras. If your photos are being used on the web, they should remain in RGB format. I would resample the image size to 300dpi by whatever pixel dimension requested by whomever I am preparing it for. If I am working on a print project, I would know the dimensions from what I’ve designed, and adjust the raw photo according to what final size I needed in my print piece.

Image #1 illustrates the original image size. At 72dpi it measures 3456x2304 pixels, or 48”x32”. That’s big — 22.8 MB (megabytes) big.

1. Raw photo capture —72dpi, 48”x32” or 3456 pixel x 2304 pixels

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Adjusting Photographs for Print or Web Use

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To “resample” or — change the image size — in image #2 you’ll see at the top, under image, you select Image Size. This opens up the image dialog box shown in image #3. You can change the image to 300dpi (used for print). When you change 72dpi to 300 you would next enter into to the pixel size area the original capture which was 3456 (seen in image #1 in the Width: 3456 pixel box), then you can adjust the inch x inch size to whatever inch size needed, as long as you don’t make it larger than the original image size. After doing this, and after importing the resampled image into your page layout application, you can enlarge this image up to 150% without losing quality. That is the standard rule as given to me by a printer a few years ago. For this example, I chose 6”x4”. You would want to check constrain your proportions box as well. This keeps your proportions the same as in your orginal image, not distorting it. You’ll see the image size is now reduced to 6.18 MB and originally it was 22.8 MB which was very large.
Image #4 shows the image > mode > color model box. This image shows the raw, resampled image as an RGB image which was discussed earlier. If using this image for print, you want to select CMYK just beneath RGB shown in image #5. Some people leave it in RGB mode to work on curves which is a matter of personal preference. There are also variants of adjusting curves (using the same curve box). If you Google “adjusting photoshop curves” on the internet you can find different approaches.

Image #6 shows the steps to find the curve dialog box. Go to Image > Adjustments > Curves. This is the beginning of adjusting the curves, or adjusting the values in your image, and setting your light and dark values for print.

4. RGB Mode shown

5. Change to CMYK

6. Curve dialog box
Image #7 shows the base curve dialog box, showing CMYK mode towards the top of the box, just under Default.

For your information:
CMYK stands for cyan, magenta, yellow and black (k) used in printing. Each CMYK plate used in printing contains only dots of that particular color (Cyan for instance for C, Magenta for M, etc.). Each color plate is printed separately. Upon magnification you see only cyan dots, if it happens to be the cyan plate. The rest of the plates are printed separately on the paper. The dots appear in a rotated pattern, your eye seeing the dots combined, will then see the spectrum of colors we see. If you view a printed piece with a magnifying glass you will see these colors in that rosette pattern.

7. Base curve dialog box with unadjusted photo

8. Setting the light point

Image #8 deals with “setting” the light point, or lightest area in the image. You select the eyedropper at the far right located near the bottom of the dialog box. It has a box around it after being selected, shown in this image. You would take the eyedropper and touch/click/select the lightest area in your photo. I chose the white paper in this case since of course it should be very light, almost white.
Image #9 deals with "setting" the dark point, or darkest area of the image. The step is the same as in #7, but in this case you select the dark eyedropper to the far left at the bottom of the curves dialog box. After clicking/setting the dark point, I then adjusted by touching/dragging the light setting "point" to the right a bit, in this case keeping the output at 4. This could have been 3, or even 0, if you want no color tone at all in the light area. The light point is near the output and input near the lower left part of the dialog box. There isn’t any order mandate in adjusting your curve line dots/points. You could adjust the dark, light, or mid points in whatever order you want.

Input and Output boxes will show when you start adjusting/dragging the light/dark set points. These show in the lower left part of the box in image #10. Input is the reading in the current photo, output is what you want the end percentage to be.

As a side note . . . you’ll notice in the dialog box too, the “graph shapes” in the background. This is called a histogram. You can also adjust contrast/lights/darks using this histogram. I don’t use this technique but it is useful in seeing the levels of values within the photographic image. You can google histogram if you would like more information regarding that.

Image #10 shows the photo after adjusting the curve to achieve the look you want. For printing, according to printers I’ve worked with, the dark point should be set at 97%. The process is the same as adjusting the light point, you drag the dark upper right point to 97 output (seen in under the Output box, lower left, with the Input being 100 in the Input box, which of course stands for 100%). Setting the darks at 97% allows for a bit of what is called “dot gain”. If it were kept at 100% images would likely print too dark because of oversaturation of ink. That’s the reason the curve is adjusted as well, to avoid the middle tones in an image from printing way too dark because of dot gain. If you see a dark image, it will print darker. I’m sure we’ve all seen this happen. Paper, and the quality thereof, is another variable in the printing process. If it is newsprint, or an absorbent type paper, you get the most dot gain. High quality magazine paper stock, or coated paper stock, will have less dot gain.
#11 deals with sharpening your image. If you feel it is out of focus or a bit too blurry you can adjust this by using Filter > Sharpen > Unsharp Mask. This will bring up a dialog box and you can adjust the sharpness by a little, to a lot. Sharpening an image too much can cause hard item edges within your photo and you should avoid doing that.

11. Sharpen — Unsharp Mask — if needed

#12 shows the format options for saving your file in. If you are saving for print, you would want to save as a TIFF. To save for internet use you would want JPEG, or Photoshop PDF files (in RGB format, not CMYK as the image currently is in now). I generally use Photoshop format only if I’m saving a layered file that I’m still working on. Personally I don’t use any of the other formats listed here. I’ve just never encountered a need for using them.

12. Save as Tiff Option for Print
#13 is basically the same step at #12, but in this case you rename your file to what you want to call it for easy identification. I don’t know about you, but IMG_3687 (the camera named file) isn’t that useful to me if I’m searching in the future for an Oregon Compote on my computer.

#14 shows an extra option you can implement if you want to. There are just a few minor glare spots on this piece. You can retouch those out. I use a rubber stamp tool to do this. It is the fifth tool down on the left side of your Photoshop Tools seen in image #14. Some people use the healing tool, or you can even copy some nearby image area, paste that over the offending glare, and merge down if you want to approach it that way. I’ve used mostly the rubber stamp and copy/paste tool while using Photoshop.

13. Final name and save as tiff

14. Retouching glare spots
I hope this article helps you pick up some tips to use in your own photo editing programs. I think there should be similarities to Photoshop, but I’m not familiar with all of the programs. My cell phone has editing tools on it for photographs. You can adjust contrast and value using it, as well as adjust color.

Remember you can watch videos of this “curve” process on your computer by googling “adjusting photoshop curves”.

15. Final retouched image
As an afterthought . . .

I’ve recently seen photos taken on a gradient background. I don’t know if that background is commercially available or not, but it would be a nice alternative to use instead of a white background, such as what I use. Other colored backgrounds could be used as a variant too, depending on the flow blue or mulberry you are photographing.

The Seaweed sugar bowl accompanying this article could have been shot on a gray background for an improved look. I’ve left the background with a bit of tone in it for contrast between the sugar bowl and the background.

And for fun . . .

Photoshop is also useful for creating RARITIES. You can make anything you want to impress your friends. We’ve all seen what tabloids can create while we wait in supermarket lines. Attached is a very “rare” mug in the Morning Glory pattern. This piece was created using an Oregon teaspout and the base Morning Glory Mug. Because of competition for the “Best Of The Best” . . . I’ve also created rare and very expensive “rainbow colored glass” using clear glass from my collection to impress glass collecting friends. My collection is growing. This rainbow bowl is huge in this image . . . but in reality it is only 7 inches in diameter. “glass collector friends” and dealers too, were envious. It is a short term joke of course, but I had fun doing it at the time.
Curved Background — No Flash

Curved Background — No flash with glare

Background Seam — Flash - Harsh Shadow

Background Seam — Flash — Some Glare
Curved Background — No Flash
Background tone left for contrast

Curved Background — Flash — Harsh Shadow

Background Seam — No Flash

Background Seam — Flash - Harsh Shadow
Curved Background — No Flash

Curved Background — No Flash

Background Seam — Flash - Harsh Shadow

Background Seam — Flash - Harsh Shadow