



From the Camera to Black & White

My Black and White Digital Photo Process by John Aydelotte

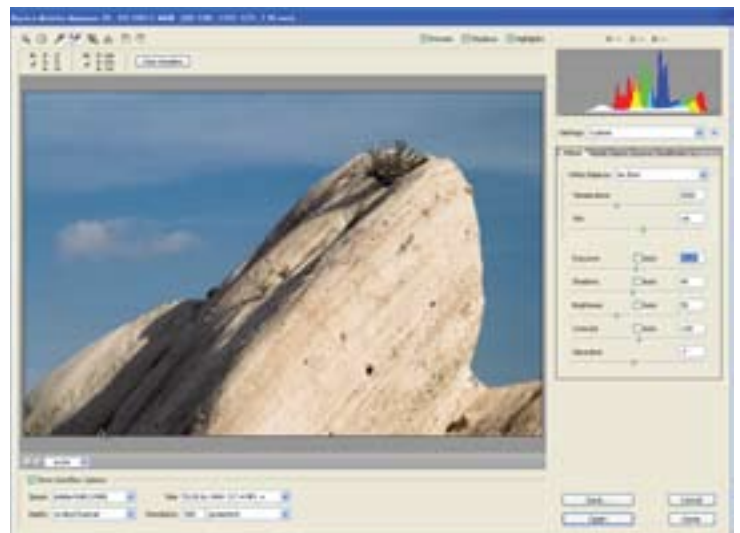
The photographic process that I use today for black and white has evolved over several years. It all starts before I even push the shutter. The process for me begins as a search for something that peaks my interest. Once that is found I explore my own self as to what it is that is important about the image. Once I have an understanding what it is before me that attracted me I look for what will make it stronger. During this time I previsualize the image forming a vision as to how it will look as a black and white print. This sometimes happens in a matter of seconds and some times takes a long time. I use the camera viewfinder as an aid to composition during this process. I often make a decision not to shoot and return at another time feeling that the image could be stronger with different light or sky.

One can not separate the equipment even though the equipment is really an individual choose it is involved in the exploration of the subject. My choice for digital capture is a digital SLR (please note I used a very simple point and shoot for a long time before the SLR), a wide angle zoom lens, a mid range zoom lens, a long zoom lens and most important a solid tripod. I use the 16 bit raw setting on the camera and always try to place my whites as high as I can to retain as much shadow detail as possible. I often shoot in aperture priority with a small aperture and a long exposure thus the tripod is most important. You may make other choices as equipment is personal

After capture the image is opened in 16 bit raw (in CS2 all auto controls are turned off). At this point because of the way I expose the image is nothing like my visualization but with a few adjustments I



Typical raw file with no corrections applied

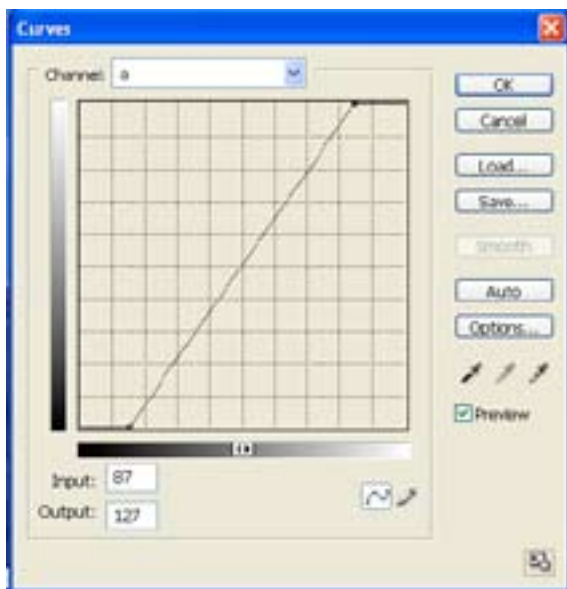


Typical Raw Settings

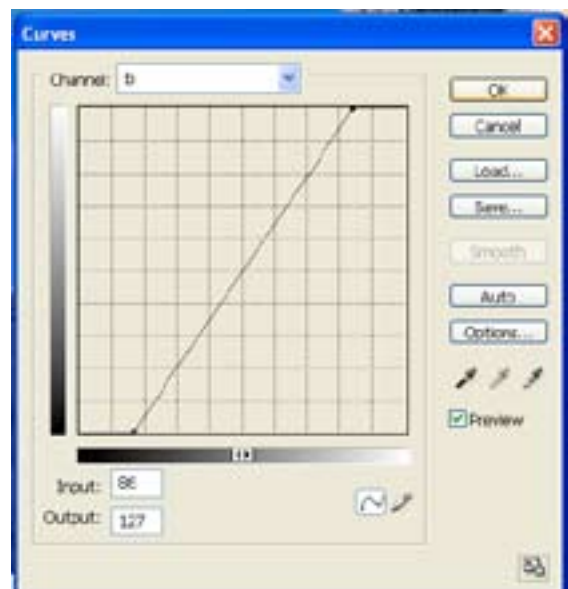
will get a good-looking color image, still nothing like the black and white image that I have in my head. A word a caution about Raw the controls are very powerful and should be used only for gross corrections. I do not use the brightness or contrast control to open up the mid range nor do I ever use the saturation control to do anything but lower the saturation. I do use curves to achieve the same effects as the contrast and brightness sliders Curves are a much less destructive control. During these adjustments I locate my last white with detail and my dark but not totally black area and place an eyedropper sample point on each. For one who is familiar with the zone system these points would be zone II and zone VIII. My targets for these points are 243 for the highs and 15 for the darks. (Note: You will have 3 colors that you are dealing with so some interpolations and averaging will need to occur.) Once satisfied with the image I open the Image in Photoshop.

Once the image is in Photoshop I go to the Image menu then the mode sub menu and then click on Lab. Next I place an eyedropper sample point on each of the places I used in Raw. My targets for these points as I make my adjustments will be 95 for the highs and 5 for the darks. Now I click on the half black and half white circle on the bottom of the layers pallet and select curves. I adjust the lightness curve until I achieve the best tonal balance for the image at hand. I like to adjust in lightness, as it has no effect on the images color. Now for the color,

lab is very powerful but not used very often. Color saturation control just turns up the intensity of the color but in lab we can change the steepness of the red green and the yellow blue curve. This in effect drives the colors further apart and creates detail by separating the colors. It is easy to go to far and end up looking over saturated. So with that as a warning here is the most basic of lab corrections. In curves select “a” from the drop down box. The “a” (channel) curve affects the reds and greens. The very center is neutral (any value from white to black as determined from the lightness channel) as long as this point remains in the center of the graph your grays will be gray and white will be white. Watching the image move the top end of the graph line to the left a small amount and the bottom to the right until the curve goes back through the center of the graph. Now do the same for the “b” channel. Keep doing this until you reach the color levels you desire and then click on OK. I usually make the most colorful image as I can as this allows me the most information for making my black and white print. After making my color adjustments in lab I go to the channels pallet. I select lightness and I make further adjustments to my image in this channel as any adjustments made here only effect the lightness and not the color. Typical adjustments are burn, dodge and to open up the darkest areas try the shadow and highlight control as it works wonders in the lightness channel of lab. Next I resize my image to the final size the in the lightness channel I use unsharp mask. My starting



Typical A Channel Adjustments



Typical B Channel Adjustments

settings for unsharp mask are, amount 300, radius 0.3 and threshold 0. My next step is to change the mode to RGB and make a print for viewing and planning. At this time I examine my original visualation for a day or two. Sometimes I go back and redo the process if I feel I am not getting the information I need for my black and white print. Other times something new even stronger and more compelling then my original vision comes about. It is as this time I decide to crop or not as I study things like textures, contrasts, shadows and highlights.



Typical Photoshop Grayscale Conversion OK but not the Best

My early methods of making black and white images from digital had very mixed results. Things that would of printed from film just didn't seem to work in digital. This led me to the realization that digital is different. Once I came to this understanding I became much more experimental with my methods and paid more attention to making a good print to stand on its own rather than trying to emulate silver printing. At first I felt as if I had very few tools to use in digital conversion to black and white. I tried most

of the traditional Photoshop conversion tools with mixed results. The best seemed to be the channel mixer with the monochrome box checked. This worked fairly well but there were the little things that I knew could be done to complete my vision but I just couldn't make them happen no matter how hard I tried. Well it was time that I tied the last method, the one that seemed the most complicated



Typical file with Photoshop corrections applied

and hardest to understand. Much to my surprise the method is not complicated and it gave me the control over my image far surpassing any that I had tried to date. The method is using channels as layers. This gives a full range of Photoshop tools to explore my personal vision and the ability achieve the image that I previsualized.

Conversion starts in RGB with an examination of Red, Green and Blue channels. I look for elements such as details in textures, shadows and highlight all the time thinking of the black and white image. Next I change modes to CMYK and look at the black channel as a possible use for masking or adding a little punch to my image if needed. Next I convert to Lab and go to the lightness channel. This channel is most often used as my base channel as it contains the full range of the image. I have used another channel if it made a better image then the lightness channel. Once I have decided on my base channel I make a copy of the image in color and name it with the same name as the original adding _BW to the file name. This keeps any alpha channels, if any, I have made in the process of making the color image. Now I return to the original image and select the channel that I want as my base by clicking on the channel in the channels pallet. I select all (ctrl a on PC) then copy (ctrl c on PC) and then I go to the black and white image layers pallet and paste (Ctrl v on PC). Next I double click on the layer name and rename it the channel color name. From this point on I go back and forth using the same procedure for each channel most important first so that the least important is the top layer in the black and white file. This creates a very large file so if my computer is slowing I go to



Green channel good overall detail and later used to boot sky



Blue channel best detail in rock



Red channel looked good for sky but later not used as noise was very strong in the sky



Lightness channel from Lab my base channel of the stack (Bottom Layer)

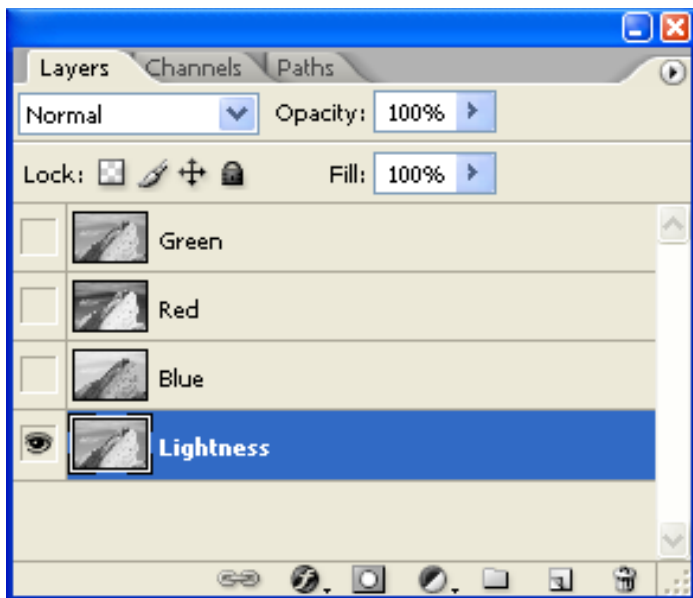
the bottom layer, the original color, and drag it to the trash at the bottom of the layers pallet this makes the image smaller with no loss as all the information is still available from the color image.

Now the fun begins. First I click on all the eye symbols turning off all layers but the very bottom layer, which I give a very close visual inspection. Next I click the eye on the layer above, and then I highlight the normal blending mode and push the down key and watch what happens. I don't worry about how strong the effect is, just what the effect is. If I see something that I like I stop and adjust the opacity until the image looks right. During this time I do not worry much about the highlights and shadows but I always keep in mind that in the end I need them to be printable. Now if I have an area the blending mode works good for and another that is degrades the image it is not a problem because I have full Photoshop controls at my disposal. I can make a mask for any layer of the stack and block out the effect on any part of the image or I can apply a curve or effect. I have full control over the image.

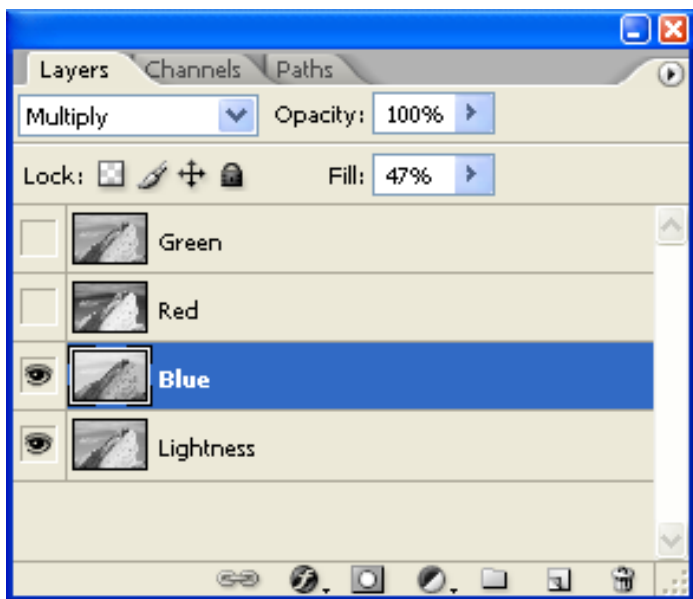
In the process of making the black and white image I will do the same to each layer in the stack until I reach the top getting closer to the image of my visualization. I often make masks, employ curves with masks, skip over channels, and restack the order of the channels all to get the final image. Sometimes the process is very simple, two or three layers, other times I will dupe layers several times and apply the dupes through masks using different blending modes and opacities for local treatments.



Blue channel makes Layer 2 (Blend Mode is set to Multiply and Fill to 47%)

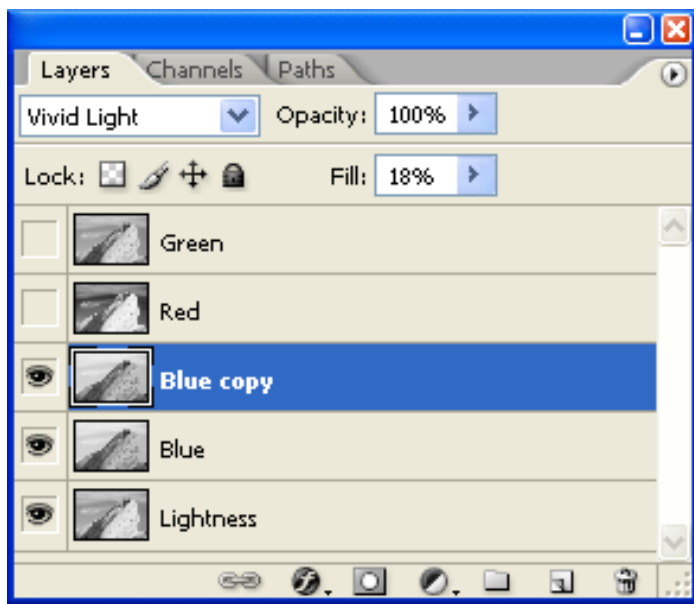


Basic stack



Layer set to Multiply and fill 47% shows improvement in Rock but more was needed so blue channel was copied.

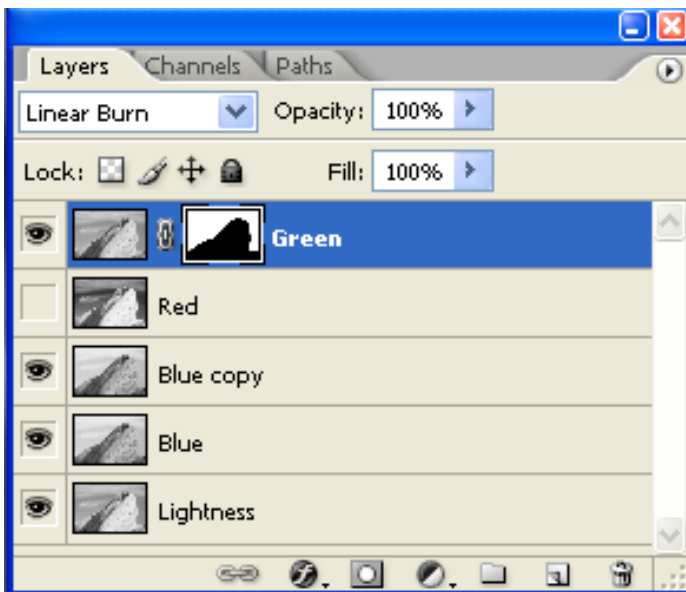
The process takes time but I have total control to make the image I want. I no longer have to accept the limitations of the other methods. I now understand the basic blending modes and love the freedom they have given me in creating black and white. Give it a try and you to will soon master this method.



Blue Channel Copied and set to Vivid Light and 18% fill has made the Rock the way I intended so next is the sky.



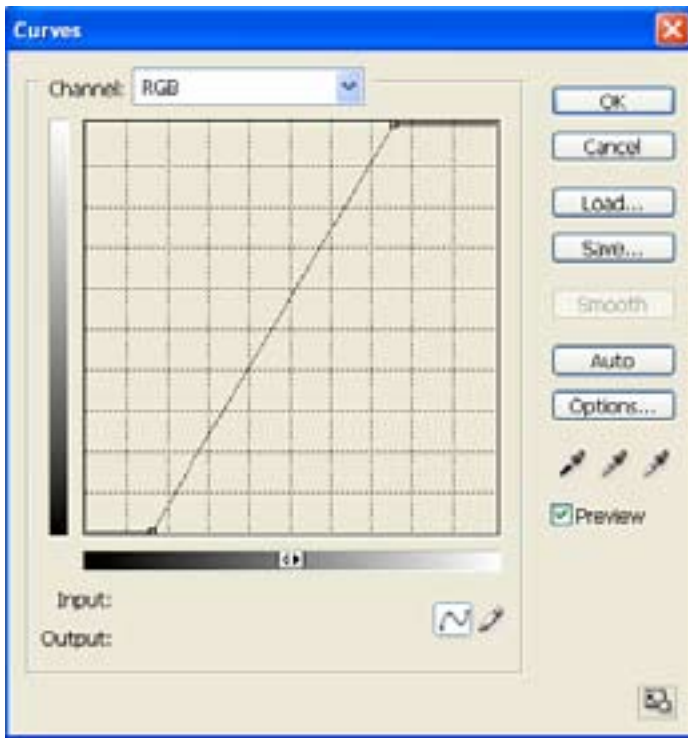
Next the Blue channel is copied for Layer 3 (Blend Mode is Vivid Light and the Fill is set to 18%) Note the Rock is good and only the Sky needs further adjustment



Red channel was tried through a Mask but I did not like the results so I moved on to the Green channel. Linear Burn at 100% through a mask looked very good



Layer 4 is made from the Green channel with a mask blocking the rock from being further adjusted. The blend mode is set to Linear Burn with the fill at 100%. One final Adjustment Layer is made and using the same mask the curve is adjusted for the sky I wanted.



The Last step I Applied a curve to the sky using the same sky mask that was made when I made the color image. That was all I needed to get the sky that I originally visualized.

Notes on Printing to a home Printer

I use a small Epson printer Copier Scanner and make acceptable prints. Higher quality can be obtained by more expensive printers but the small inexpensive ones do a very good job. Look for a 6 or more color printer. When printing use Print with Preview in Photoshop set drop down box below preview window to Color Management, in the Print area select Document. Next under options for color handling select Let Photoshop Determine Colors, under printer profile select the paper profile for your printer. After that check Black Point Compensation and select your Rendering Intent, I most often use Relative Colormetric. Click on Print and your printer driver should show up on the screen. In your print driver select only the paper you selected the profile for and tell the printer not to manage the color. This is important as only one device should do the color management. GOOD LUCK AND HAPPY PRINTING.

