

# Photoshop CS6

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*With Steven Burger*



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## **WEEK ONE**

### **SOME BACKGROUND**

My name is Steven Burger. Making great photographic prints has been a passion of mine for the last 40 years. I started out by opening a custom lab and rental darkroom facility in Phoenix Arizona in 1974. Customers would come in and process their film and then rent the darkroom to make their prints. Photography classes were taught at night. I loved making custom prints for my customers. They appreciated how great the prints looked and how they couldn't make the same print from their original that I had made. Ansel Adams used to think of his negative as a musical score. It was something that could easily be read. He called the printing of the negative, the performance of the musical score. Some days in the darkroom yielded better results than others. Photoshop is the darkroom of today. Think of the performance as adjusting the tones in the image to bring out the original thought or feeling in the taking of the image. Many times this is done with lightening or darkening specific tones in the image, so the viewer looks at the image the way you intended. I took many workshops from the great print makers of the day. The first thing I would notice is how they weren't doing anything really different than me in the darkroom. It was all about the feel of their adjustments. Think of it like a painter that mixes colors with feel. It might just be a little red and yellow mixed together. The issue is how much of each. That's the feel I'm talking about. Feel is not easily taught; it has to come from practice. Great printmaking is a lot of value judgments. Some days are better than others. I teach Photoshop from this perspective. Ansel used to say "I can teach you how to make a print in the darkroom in half an hour, then you can take the rest of your life learning how to make great prints". Today I do this with an inkjet printer and Photoshop. I'm currently using the Epson 3880, but that changes every two years or so.

The goal of this book is not to teach every new bell and whistle of Photoshop. I feel it's much more important to know how to prep your digital file to get the most out of what your camera captured. Remember it's all about the performance in Photoshop. This book will create a workflow or

sequence of steps when working on your file. Think of this workflow like learning how to make a print in the darkroom in a half of hour. Then it's all about getting the feel of the adjustments. Making prints is the end product of your performance. Whether you make your own prints or you have a lab make them for you, it's the best way to see how well you have performed. It won't take long and you will have the same passion to make great prints that I do!

## **PDI PHOTOSHOP CLASS**

The book download contains two folders. One has the textbook for you to print out or use on your computer. The other folder contains the images used in the textbook. With Photoshop instruction it's all about being able to remember the techniques taught in class. The lessons in the book use specific images. When you are at home and want to practice what was taught in class, bring up the same image that was used in class and try and do the lesson. Once you have the technique down, open one of your images and do the lesson again.

This text is not intended to be the definitive Photoshop book. I have put together a series of lesson's that will hopefully give you techniques that you will use everyday, as well as teach you how the program works. Photoshop has so many adjustments that can be made to the file. This text also hopes to sort out all the adjustments that can be made, and put it into a workflow or sequence. I love to make great prints. With digital files it's not enough to properly expose the file. You need to learn how to massage the digital file in Photoshop to make it print great. So think of Photoshop as the darkroom of today. So it's about practicing the techniques until they become second nature. That way you will have a large bag of techniques to draw from when you are deciding what you want to do to a specific file.

This class also comes with support. My phone number is at the bottom of every page. I don't live in India and never will. Sometimes you are stuck and just need a quick answer. I have some students from 7 years ago who still call for a quick answer. Feel free to call when you are stuck. If you miss getting a hold of me leave a message and I'll return the call.

If you want to have as much fun as me, get yourself a good inkjet printer and start making killer prints!

A hard copy of the book will be available on the first night of class. You can use the book during the course and then just return it. If you want to purchase the hard copy, the cost will be \$30.00.

So let's get started. Open up Photoshop. Choose the Images folder and then open up the image called Calibration File.



This file should look good on your screen. It is a perfect file. It has no colorcasts and the neutral tones (grays from black to white) are clean. So it should look good on your monitor. I like to look at the four babies at the bottom of the file. If this file looks good, your monitor doesn't need any calibration. The sole job of a calibrated monitor is to reflect the file accurately, so your adjustments will be accurate. If this file looks too dark or light, or has a colorcast, you will need to calibrate your monitor.

There are several systems out there that can calibrate a monitor. These systems take all the guesswork out of the process. I like the I1 Display Pro from X-rite. You can find it at [www.xrite.com](http://www.xrite.com). So if this file looks good on your screen you don't have to worry. Remember, the job of a calibrated monitor is to represent the file accurately. If a person is wearing a gray shirt, it should look gray on the monitor.

Tip: Mac users have a monitor calibration wizard built into the operating system. It is in: System Preferences/Displays/Color/Calibrate. Have this calibration file open for a reference point before starting the wizard. If the file doesn't look good after calibrating, you probably will need the I1 Display Pro from X-Rite or equivalent from another maker.

I do recommend buying some monitor calibration software. All of your adjustments in Photoshop are based on what you see on the screen! Look at the calibration file often. It will let you know that your monitor is still

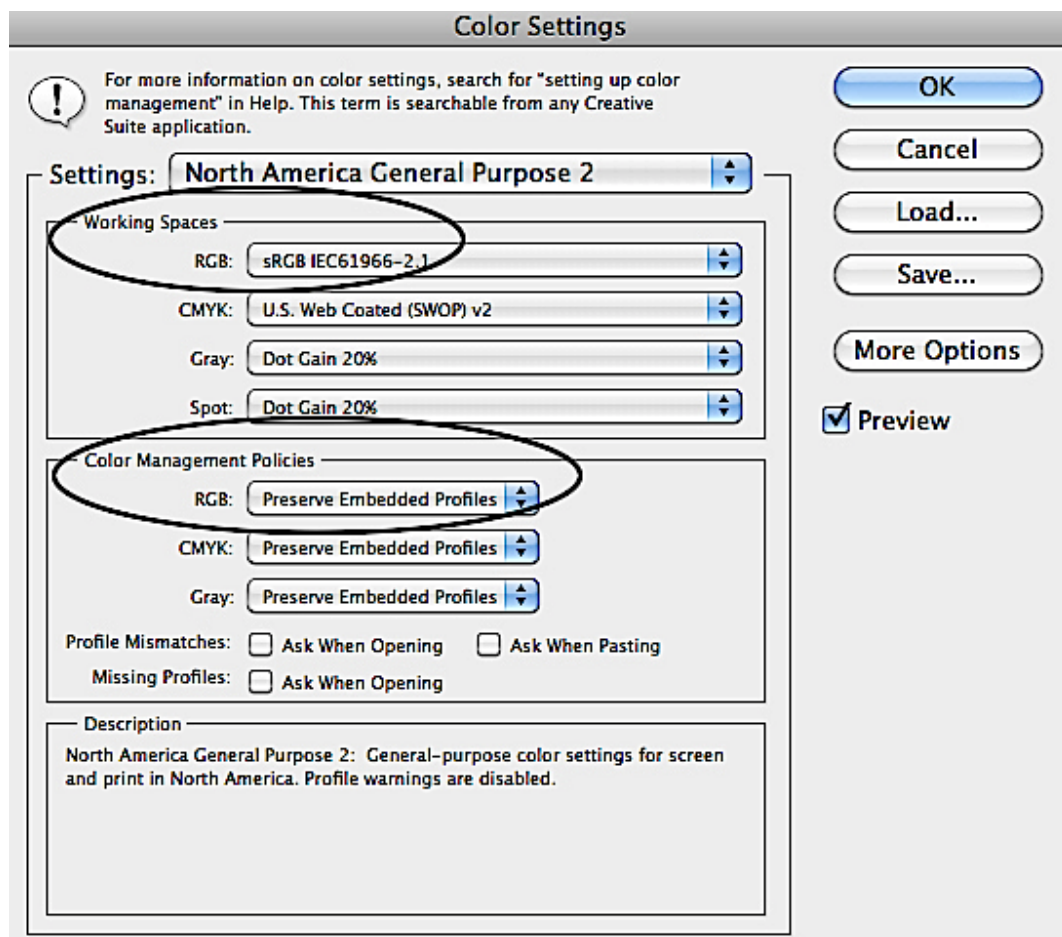
calibrated. I like to look at the 4 babies at the bottom and the grayscale gradient on the right hand side. The middle babies let me judge the brightness of the monitor. The lighter baby should be very light, but not washed out. The darker baby then should look good, dark but not too dark. The grayscale gradient assures me the monitor color is clean. When a monitor can produce gray, the other colors will be accurately represented.

## PHOTOSHOP'S COLOR SETTINGS

Let's start out by putting in some color settings and preferences to the program.

Open Photoshop and choose: Edit/Color Settings

There are many ways to configure Photoshop's color settings box. Choosing an RGB working space is like choosing a film. Each one of the choices will render the colors a little different. Some have a larger gamut (range of colors) than others. As photographers we are concerned with the RGB working spaces and RGB color management policies.

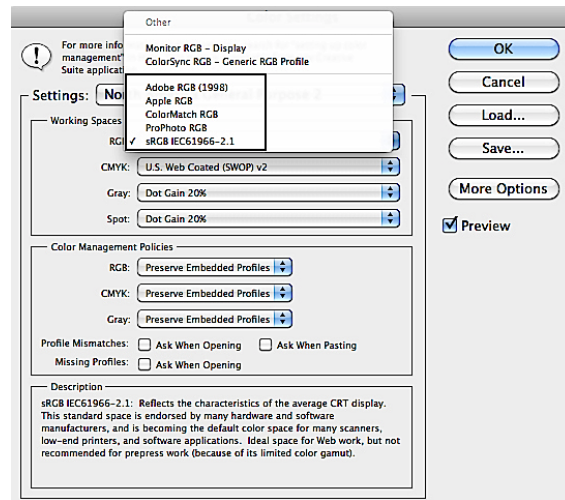


As a photographer I would choose different types of film for a specific look. For portraits I would use a portrait film (lower contrast), for landscapes I would choose a film that was much more saturated.

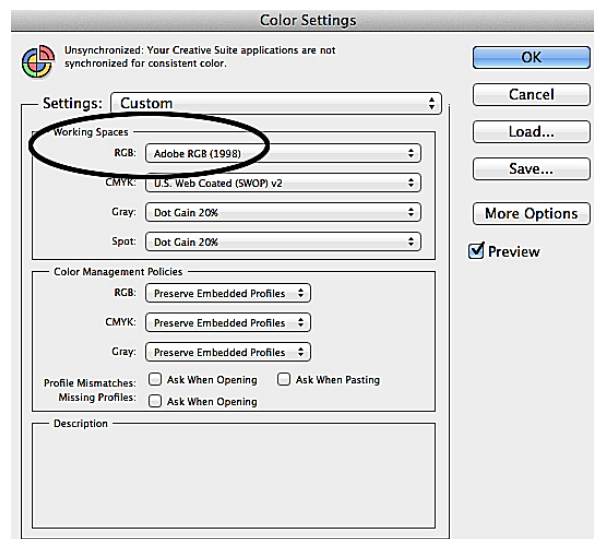


## PhotoShop CS6 Class - Week One - Photoshop's Color Settings

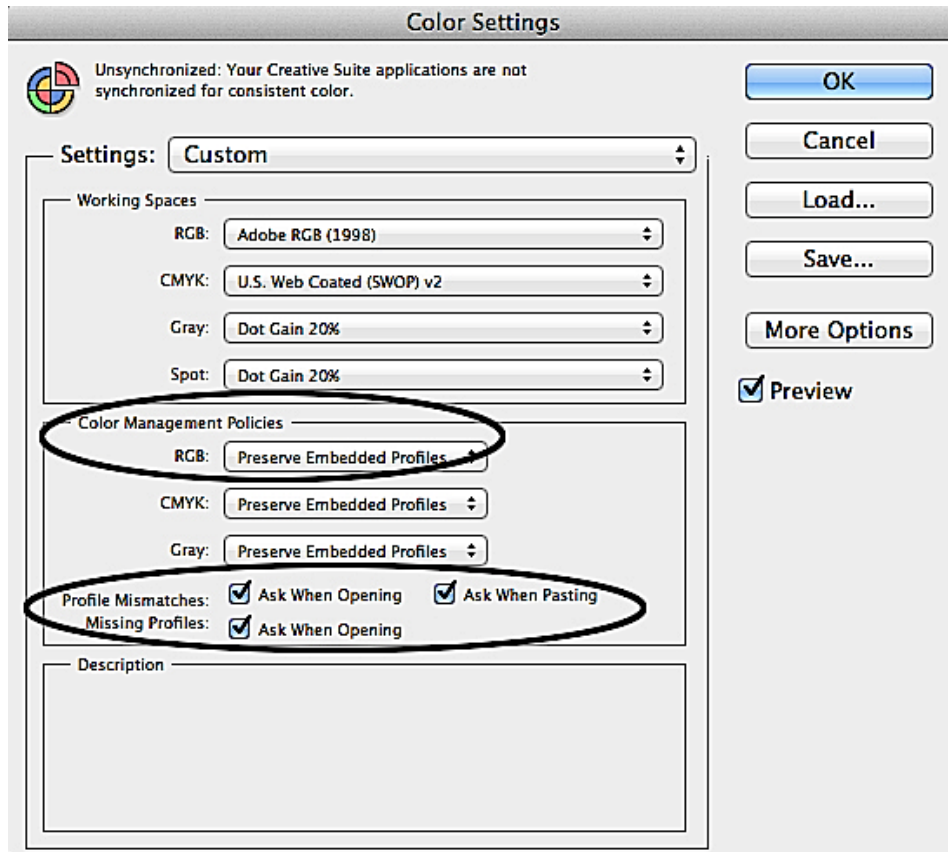
Think of these RGB spaces like different film choices.



Change the default sRGB working space to Adobe RGB 1998. This space will be our everyday working space. It is a great color space for inkjet printing, high-end lab prints and off set four color printing (Magazines). Srgb is the best color space for images on the web as it is the default color space of the monitor. You can convert back and forth between different RGB working spaces depending on the end usage. We're going to work in the Adobe RGB 1998 color space and then convert a version to sRGB and save that version to be used on the web or in emails. This will be a last step in our workflow. For now, just make sure you are in the Adobe RGB 1998 color space.



## SET COLOR MANAGEMENT POLICY RGB TO: PRESERVE EMBEDDED PROFILES.



Put a check mark in:

Profile mismatches: Ask when opening and Ask when pasting.

Missing Profiles: Ask when pasting.

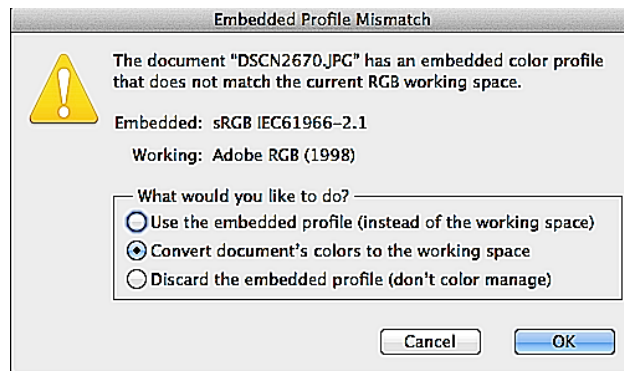
Now every time an image opens in Photoshop, It will give you the option to convert the image to an Adobe RGB 1998 document if it is not.

You also will have the ability to preserve the existing profile and open the image in the sRGB color space. We'll go over this in more detail later on in the book. The two most common color spaces are Adobe 1998 and sRGB.

## PhotoShop CS6 Class - Week One - Set Color Management Policy RGB To: Preserve Embedded Profiles.

Adobe 1998 is the best space for making your own inkjet prints and sRGB is the best color space for images to be viewed on a monitor or the web. sRGB is also the best space for many online labs. This setup will let us choose the best color space for each file upon the opening of the file.

Most cameras on default create an sRGB document. The very first time you open an Image in Photoshop, this box will come up:

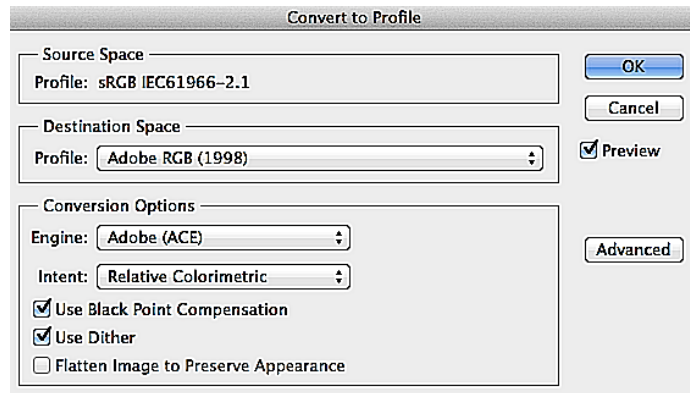


In this example I have chosen to convert the file to my working space. So the image will be converted to Adobe 1998 upon opening in Photoshop. I convert all of my images to Adobe 1998 that I plan on printing with my inkjet printer.

The trick is to know the color space where the image will end up and make sure it has that color space. Some online labs recommend that you send them the file in the sRGB color space. If all of my work in Photoshop was for the web or an online color lab, I would keep my color space as sRGB all of the time.

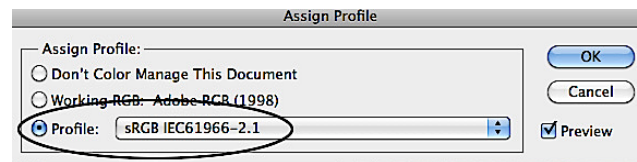
## PhotoShop CS6 Class - Week One - Set Color Management Policy RGB To: Preserve Embedded Profiles.

An image can also be converted to a different color space after is opened in Photoshop. With the image open in Photoshop, choose Edit/Convert to profile.

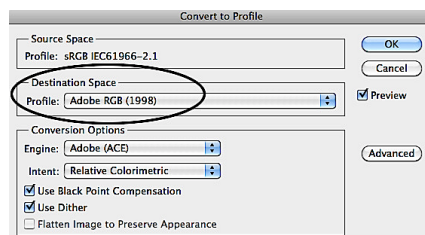


To see how the different color spaces make an image look:

Open an image and choose: Edit /Assign Profile.



If one of my portraits looks too red in Adobe 1998, I will assign Color Match or sRGB IEC61966-2.1 and the reds will tone down. This is like choosing a different film to do the job better. Find the color space that seems to be the best starting point for the file. Prep the file and then convert it back to the working space of the output device. Edit convert to profile.



Adobe RGB 1998 is a much bigger color space than sRGB or Colormatch. That means Adobe RGB 1998 can render more colors (More reds, yellows

and greens). Sometimes a portrait in the Adobe RGB 1998 color space will make the person's skin tone look too red.

Here's how to tone down the reds:

Choose: Edit / Assign profile and choose sRGB or ColorMatch to tone down the reds. Click OK. Adjust the file so the portrait looks good.

Finally choose: Edit/Convert to Profile and choose: Adobe RGB 1998.

This converts the color on the screen (sRGB or ColorMatch) back into the Adobe 1998 space. The look stays the same, but the file is back in the color space that is best for my inkjet printer.

For images that need to end up on the web, I work in Adobe 1998 and get the image looking good. Then I convert the file to sRGB (Edit/Convert to profile) and save a version for the web. Remember you always want the file to end up in the same working space as the output device<sup>1</sup>

## COLOR PROFILES

An ICC workflow uses color profiles to determine how color numbers in a document translate to actual color appearances. A profile systematically describes how color numbers map to a particular color space, usually that of a device such as a scanner, printer, or monitor. By associating, or tagging, a document with a color profile, you provide a definition of actual color appearances in the document; changing the associated profile changes the color appearances.

The best way to test your Photoshop skills is to make prints. I highly recommend getting an inkjet printer to make small prints of what you are working on in Photoshop. If you don't want to make your own prints, I recommend that you have prints made somewhere. It truly is the best way to see how you are doing with your Photoshop adjustments. Photoshop to me is like a video game until a print is made.

Prepping files in Photoshop is like cooking. Think of it like a recipe. Every technique in Photoshop is a sequence of steps. This book has many different techniques to make the image look better. Some techniques you will use everyday and some you might only use on a specific image.

Every Photographer needs to develop a workflow, or sequence for working on their images. Hopefully that is what this book will do for you. Think of it like your image/adjustment sequence. This book creates two different workflows. They are called "Image Adjustment Sequence" (week 3 & 4). Just like a recipe, you can add a touch more of this or that when needed.

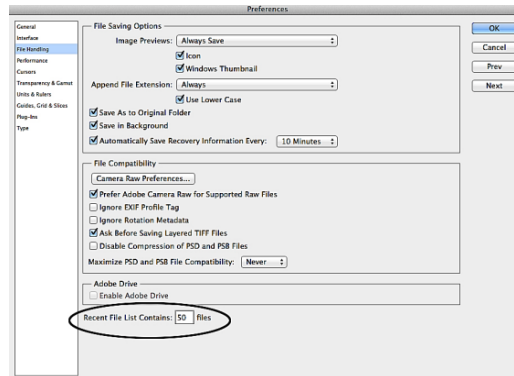
Prepping a file in Photoshop is a bunch of value judgments. Some days you will do better than others. With practice your judgments will get better and better. Make prints and it won't take long and you will get the passion to make great prints.

Before we get started, let's put in some more Photoshop preferences. From the menu at the top of the screen in Photoshop choose:

## PhotoShop CS6 Class - Week One - Color Profiles

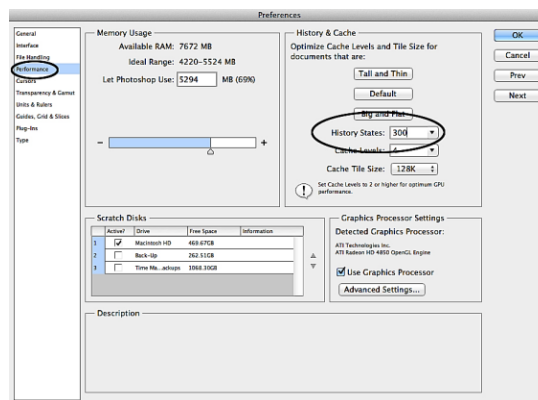
PC machines choose: Edit/Preferences/File Handling

Mac machines choose; Photoshop/Preferences/ File Handling



I like to change “Recent File List Contains” up to 30. That way anytime I’m in Photoshop, all I have to do is choose: File/Open Recent and the last 30 Images that have been worked on can easily be found. The Recent file list makes it easy to access files that have recently worked on.

Now change the left side of the box to: **Performance** and increase the History states. I set mine to 300.



While working on a file in Photoshop we often want to undo an adjustment. Increasing the History States to 300 will let us easily undo our last 300 moves in Photoshop. We will cover the History palette in detail later in the book. Increasing the number of History states over the default setting of 20 will greatly improve how we can work on our images in Photoshop.

## PhotoShop CS6 Class - Week One - Color Profiles

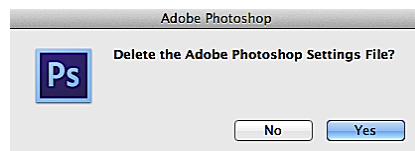
Every once in a while Photoshop can get corrupted and a tool doesn't work and Photoshop's preferences will need to be reset. Resetting the preferences of Photoshop will almost always solve the problem.

Here's how to reset the preferences of Photoshop:

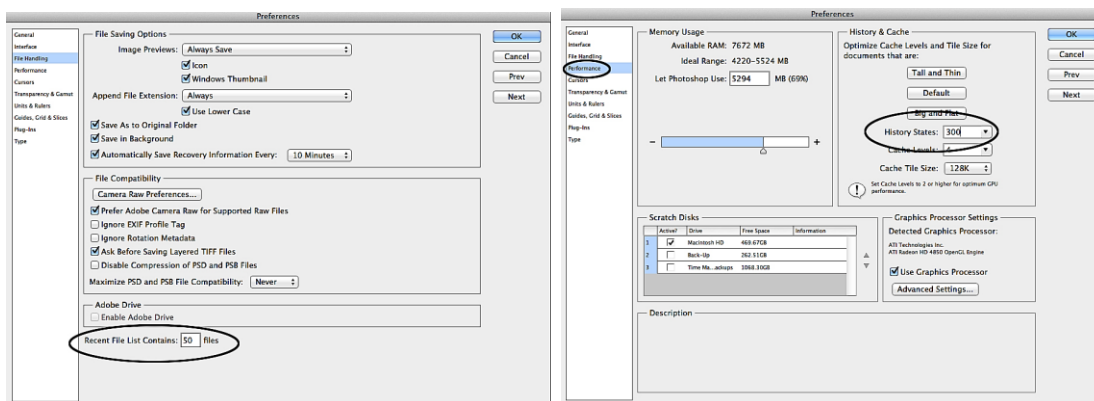
With Photoshop closed, get ready to hold down these three keys on the keyboard:

Mac: Shift/Option/Command  
PC: Shift/Alt/Control

Lightly put your fingers over the three keys without pressing down. Then start up Photoshop and instantly press down on the three keys while Photoshop keeps booting up. Let go of the three keys when you see this box:



Click "Yes" and Photoshop will finish booting up. Resetting the preferences will usually solve any Photoshop problems. You will then need to reset the preferences that we just set for File handling and the History palette.

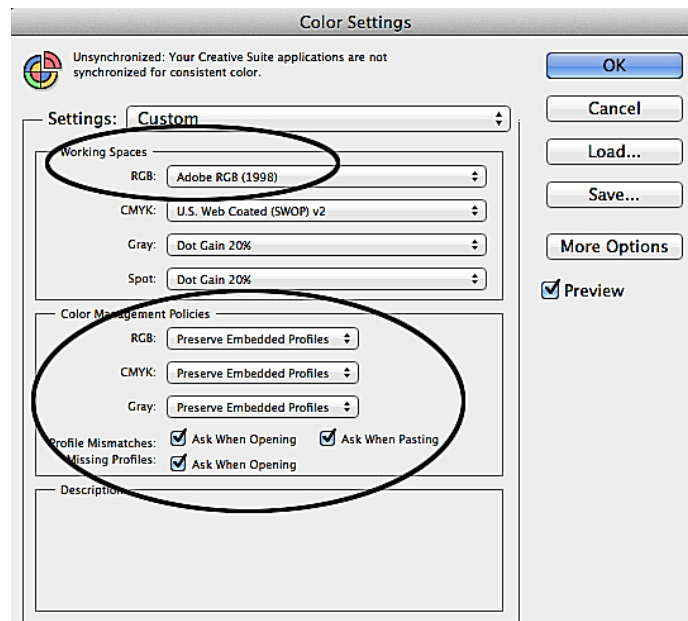


It is also a good idea to check the RGB working space. Resetting the preferences will sometimes reset the working RGB space to sRGB.



## PhotoShop CS6 Class - Week One - Color Profiles

Choose: Edit/Color Settings and reset the working RGB space and the color management policy if needed.



Preferences Review:

From the top menu

Edit/Preferences (PC)-Photoshop preferences (Mac)

Performance: change History states to 300

File Handling: change recent files to 30

Finally choose:

Edit/Color Settings and set the RGB working space to Adobe RGB 1998 and the color management policy's to Preserve Embedded profiles.

Put a check mark in all of the "Ask When Opening" boxes.

## VIEWING THE IMAGE

Let's talk about viewing the image. Photoshop work requires viewing the image at high magnification to do precise editing. Once the editing is done the whole image needs to be seen. You are constantly zooming in and then fitting the whole image back on the screen. This has nothing to do with sizing the image. All we are talking about is viewing the image. Photoshop has many different ways to magnify the image on the screen.

**Start by bringing up the Navigator. From the top menu, choose: Window/Navigator.**



It's always a good idea to have the Navigator open when zooming the image up or down.

**Select the zoom tool.** The pointer becomes a magnifying glass with a plus sign in its center. Click the area you want to magnify. Each click magnifies the image to the next preset percentage, centering the display on the point you click. When the image has reached its maximum magnification level of 1600% the magnifying glass appears empty. The zoom tool has options at the top of the screen. You can choose + to zoom up or – to zoom down in size.

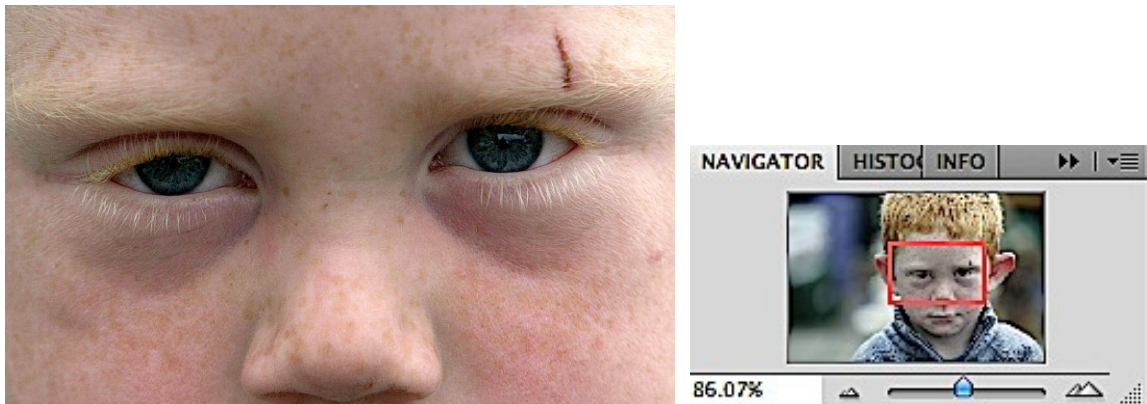
Hold down ALT (windows) or Option (MAC) to activate the zoom out tool. The pointer becomes a magnifying glass with a minus sign in its center. Click the center of the area you want to reduce. Each click reduces the view to the view to the previous preset percentage. When the file has reached its maximum reduction level so that only one pixel is visible horizontally or vertically, the magnifying glass appears empty.

Double click the Hand tool to fit the whole image back on the screen.

## PhotoShop CS6 Class - Week One - Viewing the Image

In Photoshop you are always zooming up to a specific area and then fitting the whole image back on the screen.

Here's a good example of how I like to view an image. I use the Zoom tool to drag a box around the area I want to work on (top picture). Then I look at the Navigator (bottom right) picture). The Navigator is very handy as it allows a reference of the whole image. Just click and drag inside the red box to the area of the image you want to work on.



Then when you're done, Double click the Hand tool on the toolbar to fit the whole image back on the screen.

Double click the Hand Tool, or choose View ➤ Fit on Screen. These options scale both the zoom level and the window size to fit the available screen space.

To display an Image at 100%

Double click the Zoom Tool, or choose View ➤ Actual Pixels. 100% view of an image displays it, as it will appear in a web browser.

Windows Shortcut for Zooming In Or Out

Control + to zoom in

Control – to zoom out

Macintosh Shortcut For Zooming In Or Out

Command + to zoom in

Command – to zoom out

To Navigate in a View

Once you have zoomed the image you can hold down the spacebar and it will turn into the hand tool. With the spacebar held down, drag the image into place.

Every time a tool is chosen on the toolbar, there are options for that tool on the top option bar at the top of the screen. When the zoom tool is chosen, the options are:



### Tip:

Anytime you have dialogue box open, like “Levels”, hold down the Control key and the spacebar at the same time (PC). Hold down the Command key and spacebar at the same time on a Mac. This shortcut for the zoom tool allows you click on the area you want to zoom in closer. Hold the Alt key and spacebar at the same time (PC) or Option key and spacebar at the same time on a Mac to click where you want to zoom out.

## EYEDROPPERS

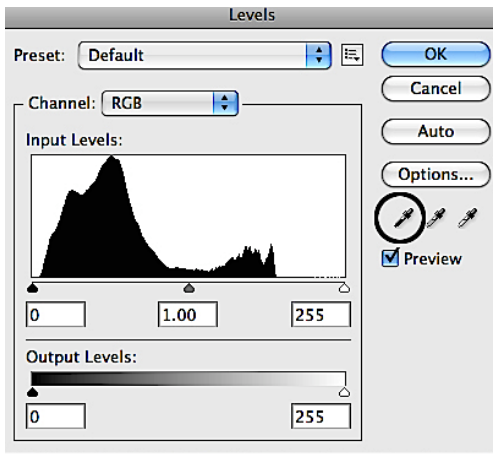
### *Image: Haden #4*

Choose: Image/Adjustments/Levels.

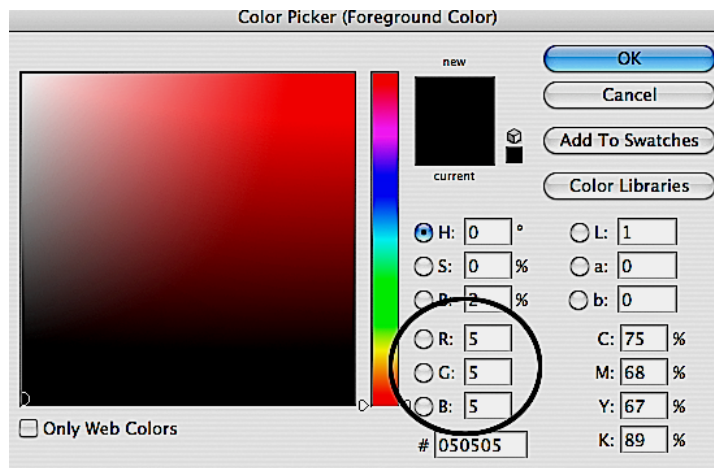
THE eyedroppers in Levels and Curves can be used to set a clean black and a clean white in the image.

Let's start by assigning some RGB values to the black eyedropper. RGB Values of 5,5,5 will yield a rich black in most outputs. We'll use these eyedroppers later on to color correct our image.

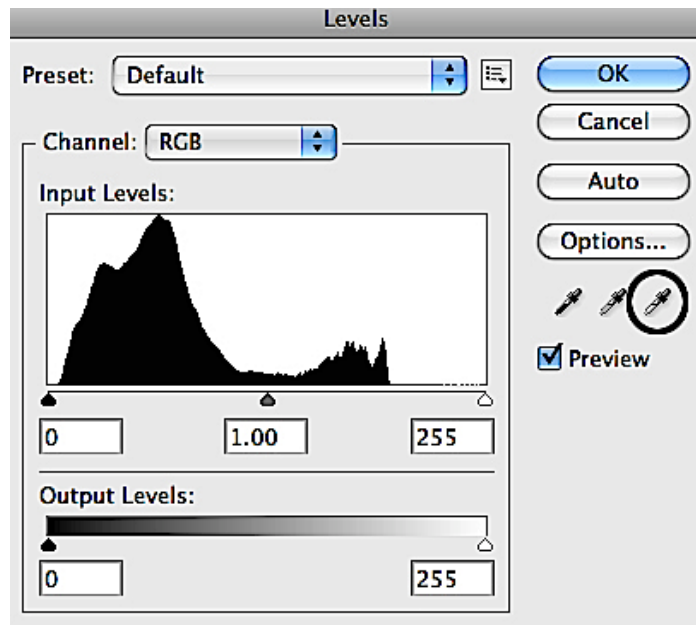
Double click the black eyedropper.



Type in RGB values of 5,5,5, and click OK.

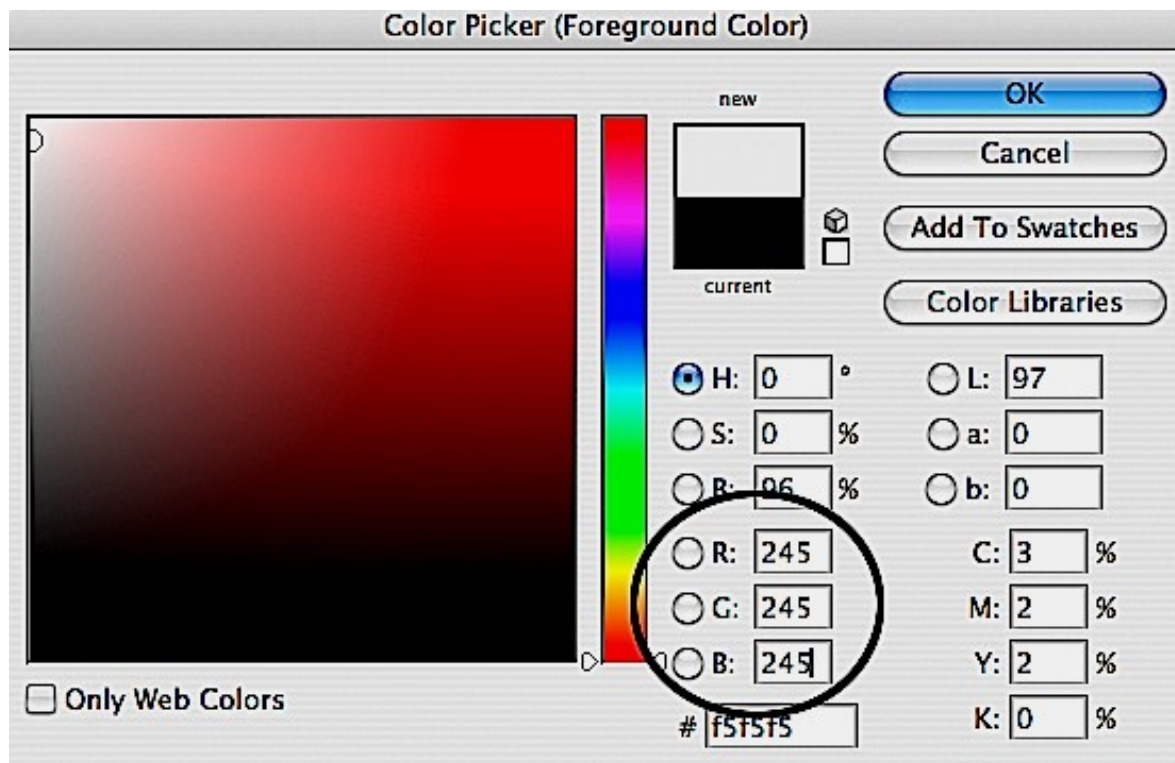


This time double click the “White” eyedropper.



Type in an RGB value of: 245,245,245, and Click OK.

RGB values of 245,245,245 are a white with detail in most outputs.





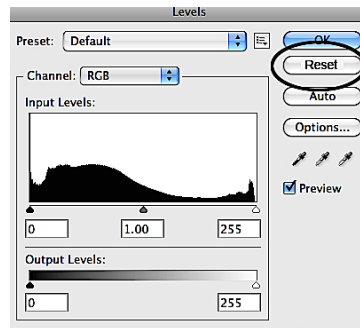
## PhotoShop CS6 Class - Week One - Eyedroppers

If you double click on the middle gray eyedropper, you will see it is set to 128,128,128. Leave these values on the middle gray eyedropper. Click OK.

The eyedroppers are now ready to set a clean black and white point in your image. First set the black point in the image. Highlight the black eyedropper and click in the image where you think the rich black should be.

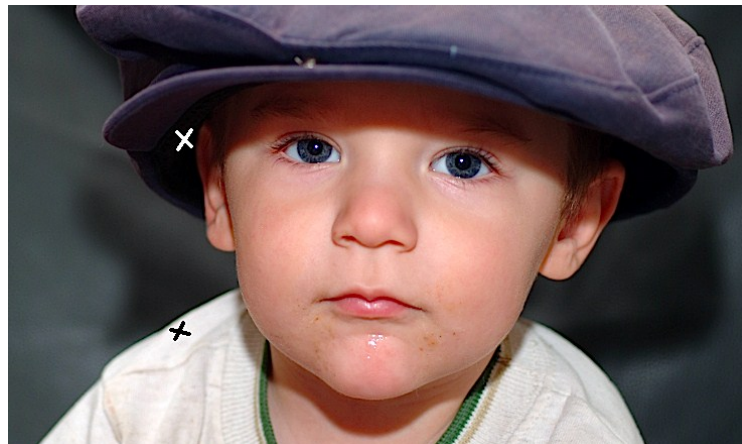
Each time you click with the back eyedropper it writes over the last click. So you can click in several spots before you decide which works best.

If you hold down the “Alt” key (PC) or “Option” key (Mac), the cancel button of the “Levels” box turns into a reset button and you can start over.

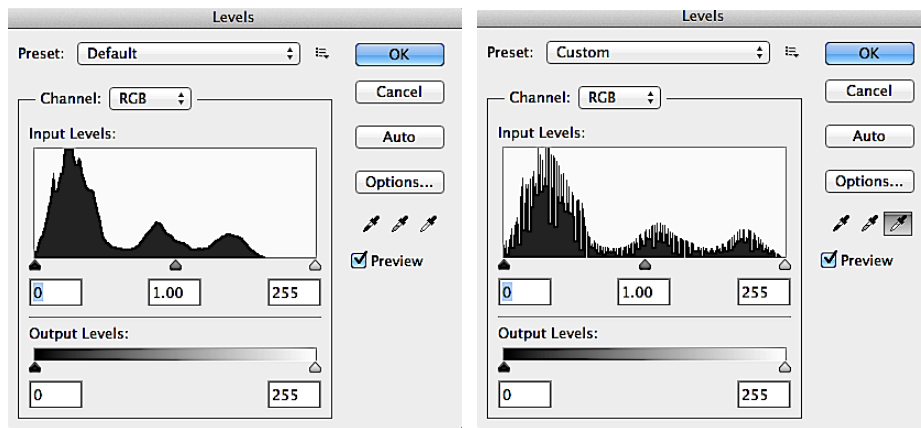


Here's where I set the black point and white point on the Haden #4 image.

The area under the hat is where the 5-5-5 was set with the black eyedropper. The X on Haden's shirt is where the 245-245-245 was set for the white with detail.

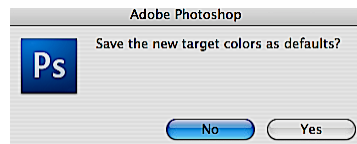


Here's the before and after Histograms:



The left Histogram was before the eyedropper correction. The right Histogram is after the eyedropper correction.

Click Ok to the Levels box and say, “**yes**” to save the new target colors as defaults.



Close the Haden #4 image

### ***Open: West Fork Bridge***

The middle grey eyedropper can also be used to color correct an image. Double click on the middle grey eyedropper, and you will see that it has RGB values of 128-128-128. Don't change these values. The Haden #4 image looked good with just the black point and white point being set. Some images need the middle tones corrected also. This West Fork Bridge is cold and blue from being taken in the shade. That means the rocks and other grey areas (neutrals) are looking too blue also.

Press Ctrl/+ (PC) or Command+ (Mac) to zoom the image up to see the rocks in the scene a little closer. With the middle grey eyedropper highlighted, click across the rocks in the scene. Each click will yield a slight different color. The eyedropper is trying to make the rocks neutral (grey).

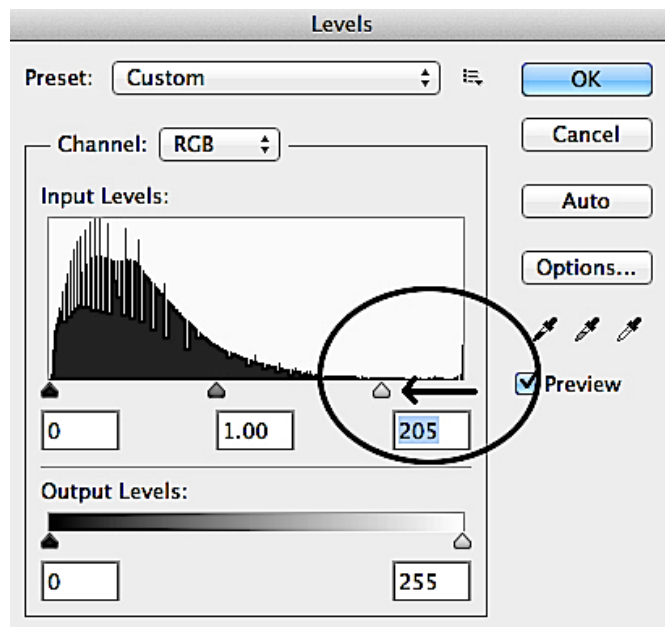


## PhotoShop CS6 Class - Week One - Eyedroppers

Each rock has a slight different blue color so each click will also yield a slightly different final color. I call this fishing for color.



Now adjust the right hand slider a little to brighten up the image.



When the neutrals (shades of grey) in the image are correct, then the colors in the image will also be correct. The eyedroppers in "Levels" will

almost always change the color of the image. Sometimes the effect is very little and sometimes it is very dramatic. If an image is off color, the eyedroppers will usually do a great job of cleaning up the color.

If the image has a warmth or coolness that looks good, the eyedroppers might be a bad choice, as they would change the color of the image. In that instance the sliders of the Levels box would be a better choice. Use the sliders when you like the color of the image.

The image is made up of Red, Green and Blue pixels in some combination.

Pixels that have equal amounts of red green and blue are neutral in color.

An RGB value of 128,128,128 would be middle gray.

RGB values of 5,5,5 (Black) work well on images to be printed at a lab or sent to an online lab. The photographic paper that most labs use requires RGB values this low to get a good rich black on the paper.

Inkjet printers don't require RGB values that low to yield a rich black. On my inkjet printer RGB Values OF 15,15,15 will yield a rich black.

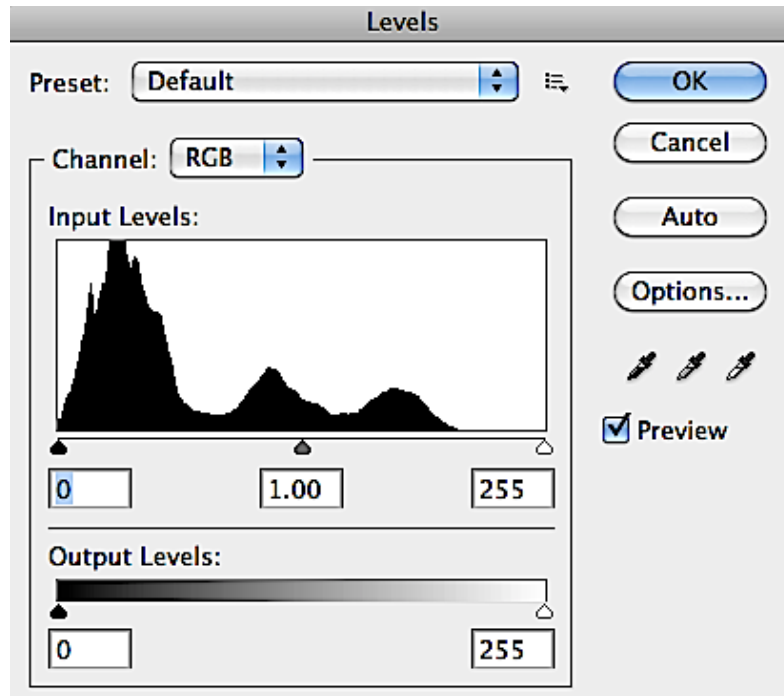
RGB white values of 245,245,245 will work well on prints from labs as well as inkjet prints.

**Choose: Image/Adjustments/Curves and put the same values on the black eyedropper (5,5,5) and white eyedropper (245,245,245).**

## UNDERSTANDING LEVELS

### *Image: Haden #4*

The Levels control in Photoshop can adjust the contrast, set a black point, and white point, and even color correct the image. Every scanned image, or file from a digital camera, can be improved with a Levels adjustment.

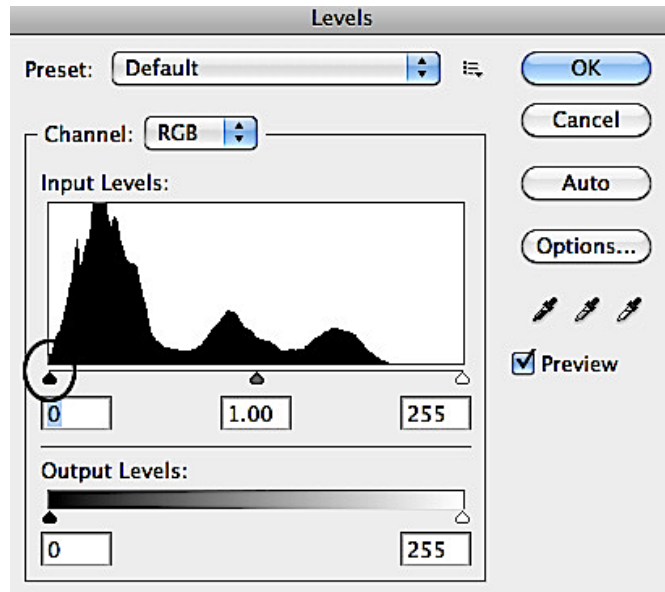


The large black area is the histogram. Each file will have a different looking Histogram. Underneath the histogram are three triangle sliders:

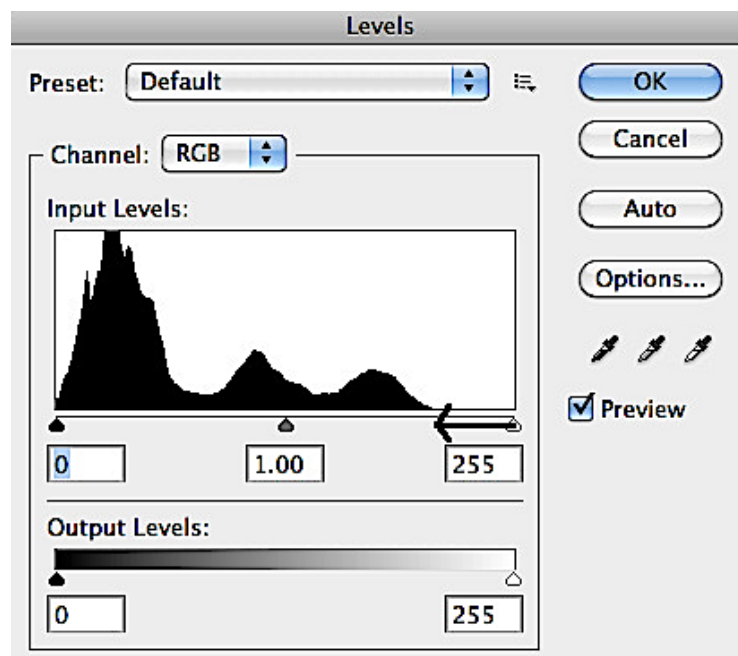
- Left slider: adjusts the darkest tones darker
- Right slider: adjusts the light tones lighter
- Middle slider: adjusts the mid-tones.

The histogram also shows how well you exposed the shot. This histogram shows the image was under-exposed as the right hand side of the histogram stops short of the right hand side of the Levels box.

First, adjust your left slider. Move it slightly to the right, to the black area of the histogram. This image doesn't need an adjustment with the left slider, as the histogram touches the left hand side of the Levels box.



Next, adjust the right slider. Move it to the left, to the first black area of the histogram.



Finally, adjust the middle slider. Move it slightly to the left and right. This adjustment is for the overall brightness of the image. The final adjustment of the mid-tones is very important.

This technique changes pixel values. Moving in the left slider makes the dark pixels darker. Moving the right slider to the left makes the light pixels lighter. Moving the middle slider to the left makes the mid-tones lighter and moving the middle slider to the right makes the mid-tones darker. The middle slider should be thought of as: How bright or dark do I want my image to be?

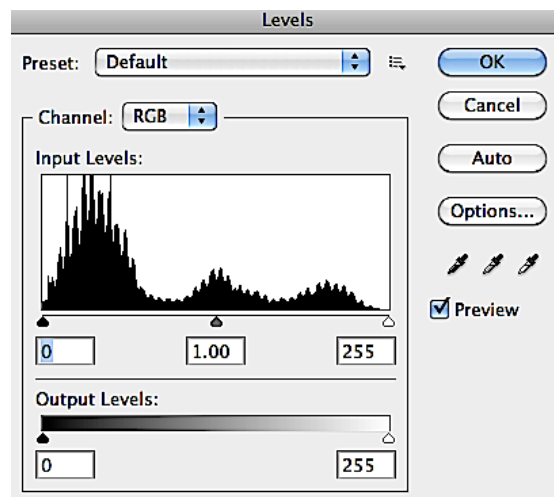
The left slider sets the blacks of the image.

The right slider sets the whites of the image.

The middle slider sets the brightness of the image.

This simple technique in “Levels” will greatly improve the image.

Want to see what that adjustment did to the file? Click OK to the levels box and then re-open the levels box: Image adjustments/Levels.



As you can see, the histogram looks better now. Think of the Levels adjustment, as the ability to fix the exposure your camera made.



***Image: West Fork Bridge***

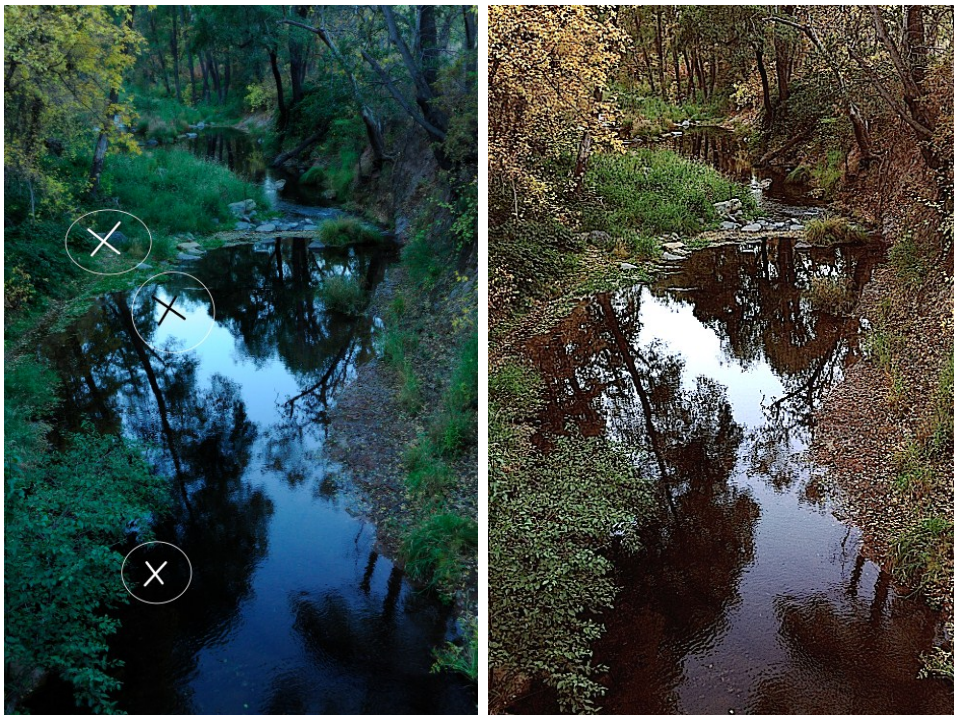
Now that we have seen what fishing for color with the middle grey eyedropper can do to this image, let's see what setting a black point, white point and middle grey point can do to this image.

Choose: Image/Adjustments/Levels

Highlight the black eyedropper and move the mouse into the image. Click in the dark shade area in the bottom left (see white X).

Highlight the white eyedropper. Move your mouse into the image and click on the whitest area in the water (See black X).

Highlight the middle grey eyedropper and click on the rock on the left side of the image (see white X). Clicking with the grey eyedropper on different rocks will yield different color. The eyedropper is trying to make the rocks neutral. Each rock has a slight different blue color so each click on a different rock will yield a slightly different final color to the image. Remember fishing for color? There is no right or wrong when fishing for color with the middle grey eyedropper, just your best value judgment that day.

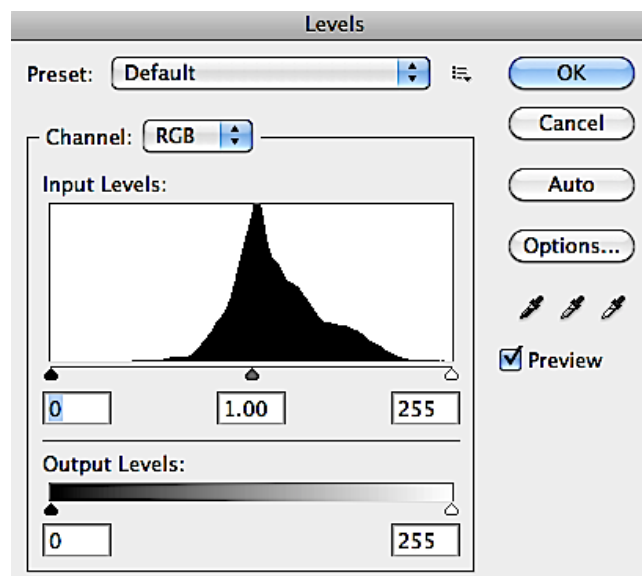


Let's use the eyedroppers on another image:

***Open the image called aerial.***

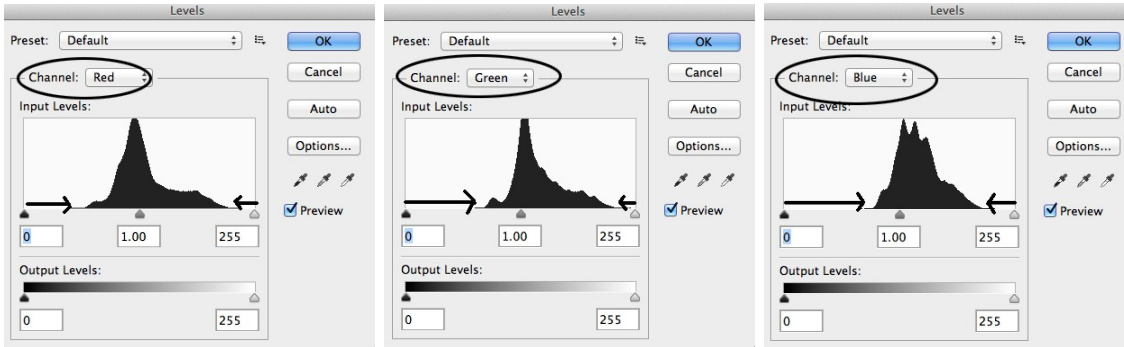


Choose: Image/Adjustments/Levels. Here's a great way to use the levels box. If the histogram doesn't make it to the left or right hand side of the Levels box.

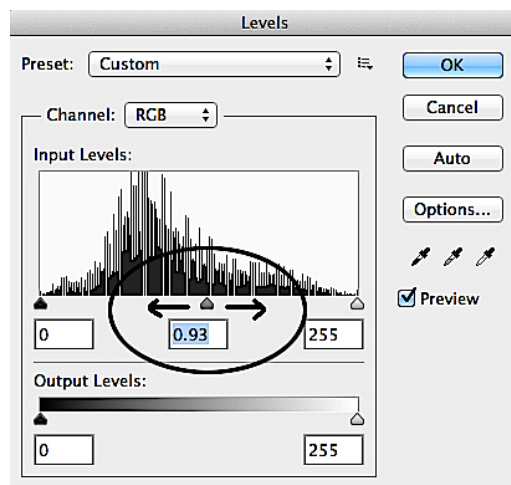


## PhotoShop CS6 Class - Week One - Understanding Levels

Change to the Red channel and bring the left and right slider into the first point of the histogram. Then do the same with the Green and Blue channel.



The image should look good after these adjustments. Now change back to the RGB channel, and drag the middle slider a little left or right to set the final brightness.



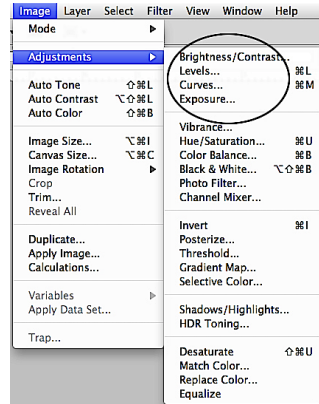
Tip: This is a great way to correct images from scans. Adjust the scanner settings to yield a histogram that has a little room on the left and right hand side of the Levels box. If you have any old color negatives to scan, this will be your best technique. Color Negatives had an orange mask that made it difficult to scan. This technique is a great way to nail the color of your color negative scans.

Try this technique anytime you have a histogram that is shy on the left and right side of the Levels box.



So far, these adjustments have been accessed from the top menu:

### Image/Adjustments



Brightness/Contrast is very easy to use, but offers the least amount of control, as it doesn't have any color correction capabilities. The "Levels" adjustment offers more control over adjusting the tones in the image. I recommend starting out with Levels. When you know how to use Levels you can make the image brighter or darker, add or take away contrast and even color correct the image.

The Curves box offers the most control over the tones in the image. With Curves you can lighten or darken, add or take away contrast and even color correct each different tone in the image. 14 different points on the curve can be adjusted.

These adjustments made from the top menu actually change the RGB pixel numbers in the file. This is called destructive editing. Most of the time you can't see the degradation unless you zoom the image way up.

Later on we'll show how to use "Levels" or "Curves" as an adjustment layer. This type of adjustment does not change the RGB pixel values in the file. The adjustment layer acts as a filter. The adjustment layer can be thrown away and the original file is left. This is called "Non Destructive Editing".

For now, practice accessing the Levels box from the top menu: Image/Adjustments/Levels. Just about any image can be made to look better with a good "Levels" adjustment.

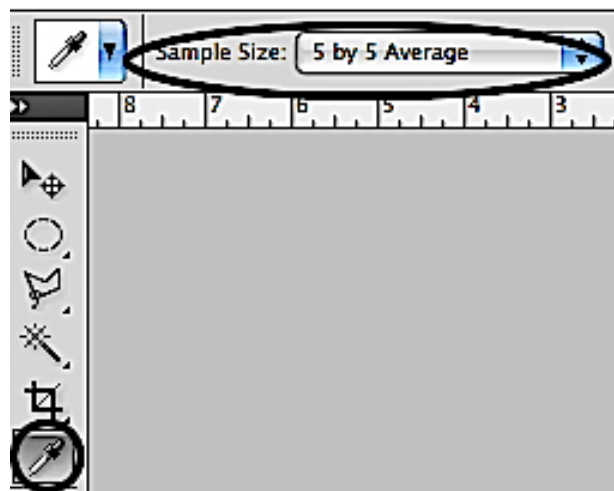
## COLOR CORRECTION TECHNIQUE WITH LEVELS

*Image: Raul & Niurka*



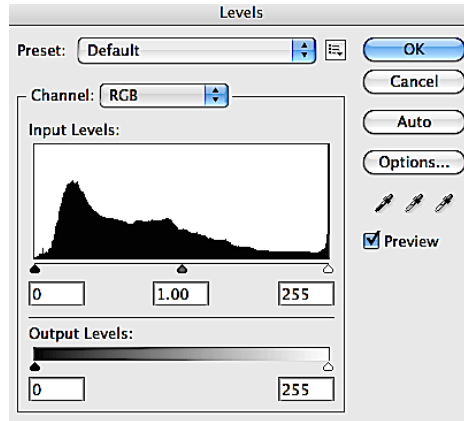
Raul & Niurka are two friends from Cuba. They both are great photographers. This shot was taken with bounced “on camera” flash and a slow shutter speed to expose some of the room lighting also. This often yields a really well lit shot, but it many times it will throw the color off slightly.

This lesson shows how to color correct the image by the RGB numbers and the eyedroppers of Levels. Start by having the “Info” palette visible. If it isn’t visible, choose: Window/Info. Next, make sure the eyedropper tool is set to **Five by Five** average. This setting will also set the sample size for the eyedroppers of the Levels box.



## PhotoShop CS6 Class - Week One - Color Correction Technique with Levels

Now that the eyedropper is set to 5x5 average, open up “Levels” (Image/Adjustments/Levels).



As you can see, the histogram looks pretty good. Even though the histogram looks good, it doesn't reflect that the image is off color, and needs to be color corrected. This is where some people have a problem. It could be a little green or maybe cyan. It's hard to tell.

The numbers don't lie, here's how it works. All neutral areas in the image will have the same RGB numbers. It might be the blacks being 5,5,5 or the mid-tone gray areas at 128,128,128 or the white areas with detail at 245,245,245. When an image is off color, the neutral areas in the image will not have the same RGB numbers. All we have to do is get the neutrals to have the same RGB numbers and the image will be color corrected.

Hold down the “Shift” key and click on Niurka's shirt. This will set a color sample point in the image and the RGB information about that point in the info palette.



## PhotoShop CS6 Class - Week One - Color Correction Technique with Levels

Now hold down the shift key and click a sample point on Raul's Shirt.



The RGB numbers for both of these sample points are shown in the Info Palette.

| NAVIGATOR | HISTOGRAM | INFO      | ▶▶   ▼≡    |
|-----------|-----------|-----------|------------|
|           |           | R :       | C :        |
|           |           | G :       | M :        |
|           |           | B :       | Y :        |
|           |           | 8-bit     | K :        |
|           |           |           | 8-bit      |
|           |           | + X :     | W :        |
|           |           | Y :       | H :        |
|           |           | #1 R : 42 | #2 R : 251 |
|           |           | G : 43    | G : 247    |
|           |           | B : 37    | B : 234    |

The number # 1 sample point shows Niurka's shirt is too yellow. It lacks some blue. The same thing is reflected in Raul's shirt. You don't really need to know that. It's just about getting the three RGB #'s the same, and the image will be color corrected.

Start with the dark sample point. (#1) Let's make all the RGB values

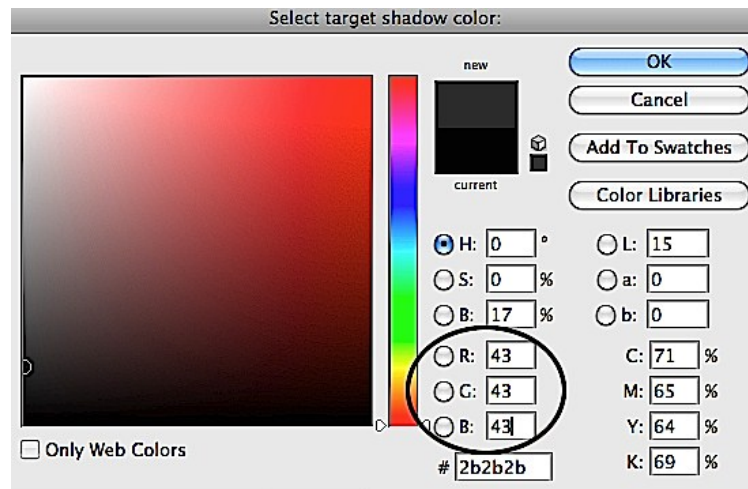
Red 43 Green 43 Blue 43

## PhotoShop CS6 Class - Week One - Color Correction Technique with Levels

Double click on the black eyedropper.



Type in RGB values: Red 43 Green 43 Blue 43

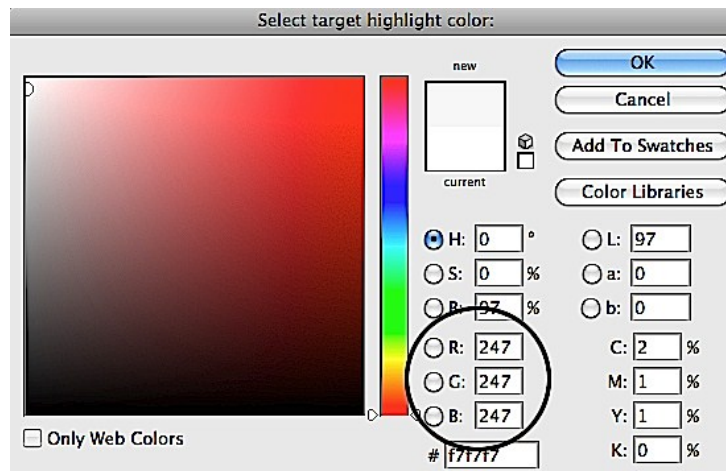


Click Ok.

Double click on the White eyedropper.



Type in RGB values: Red 247 Green 247 Blue 247



## PhotoShop CS6 Class - Week One - Color Correction Technique with Levels

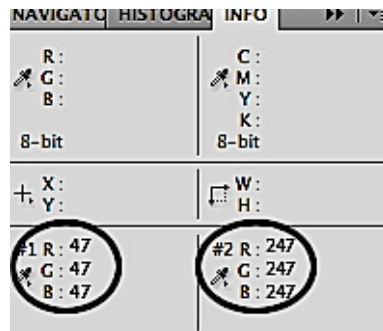
Click Ok.

Now for the fun part, click on the black eyedropper to highlight it and move your mouse over the #1 sample point on Niurka's shirt and click.

Click on the White eyedropper to highlight it and move your mouse on top of the #2 sample point on Raul's' shirt and click.

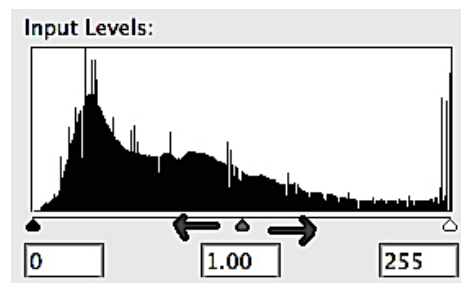
Tip: Press the Caps Lock key to get a more precise tip. Press Caps Lock again to get back to the eyedropper.

The Color Cast is removed because the RGB numbers for both of these neutral tones are the same now.



Sometimes when you click with an eyedropper, the numbers will have two numbers the same and one a point higher or lower. If you are within a point or two it will still look good. You can click again and it just writes over the last click. I find it is a little more accurate when you press the Caps Lock key for the more precise tip. The tip disappears when place exactly over the sample point.

Now that the color looks good, adjust the middle slider of Levels and adjust the image for how light or dark you want it.



## PhotoShop CS6 Class - Week One - Color Correction Technique with Levels

When you click OK to the Levels box it will ask you if you want to save the target values as defaults. Click No.



This will leave the eyedroppers values to 5,5,5 for black and 245,245,245 for white, that you set earlier.

The color sample points save with the image. They will not print in the image. The only time they show is when the eyedropper tool is chosen. I like to keep them. To remove them, have the eyedropper tool chosen and hold the shift key down, and drag them off of the image.

The next step is optional.

The middle eyedropper can also be used to color correct the image. Open Levels one more time. This time highlight the middle gray eyedropper. Take your mouse out into the image and click on any neutral shade in the image. It works best on middle to lighter than middle shades. Click on Raul's pants, as they are gray and a mid-tone. The color will change slightly. If you don't like the look of a click, just click on another neutral area. It's like fishing for a better color. Remember we already have clean color. You're looking for something different. Each click will yield a slightly different color to the image. If the middle eyedropper doesn't yield a better color, just cancel the levels box.

It's better to open up the Levels box a second time to do your fishing with the middle eyedropper. That way if you don't catch anything you still have the image looking good on the screen when you cancel the Levels box.

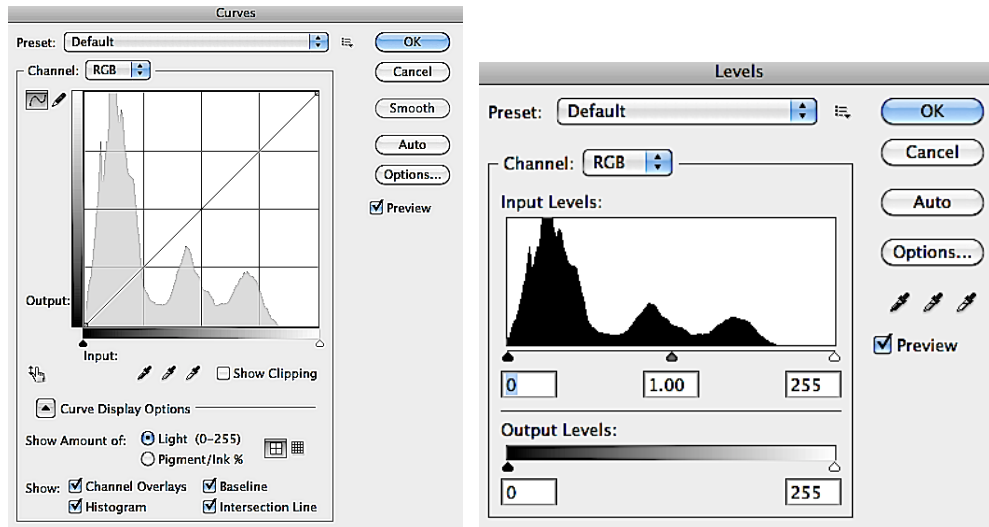
This technique will work on any image that has a neutral tone in it. All you have to do is identify it.



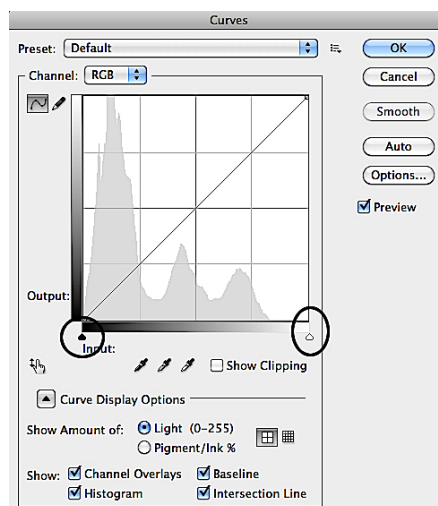
## CURVES

So let's see what Curves is all about.

Open the image called "Haden # 4" one more time and then choose: Image/Adjustments/Curves. Notice how the histogram looks the same as it did in the Levels box.



The Curves box has a black slider and a white slider like Levels.

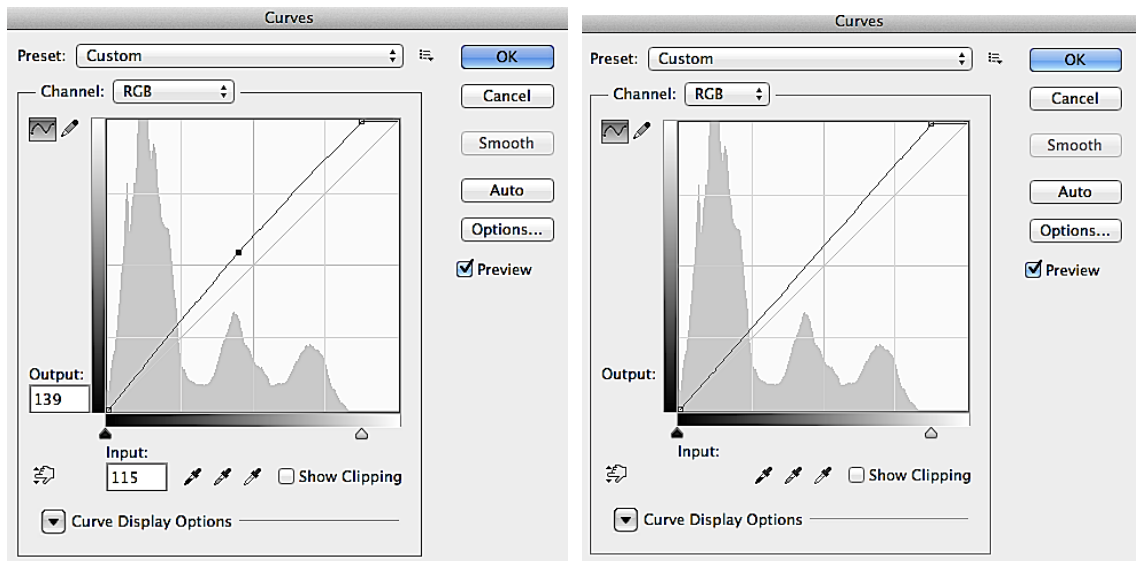


The black and white sliders are used to set the black and white points in the image. Move the left slider to force the darker tones towards black. Use the right slider to force the lighter tones towards white (Just like Levels).

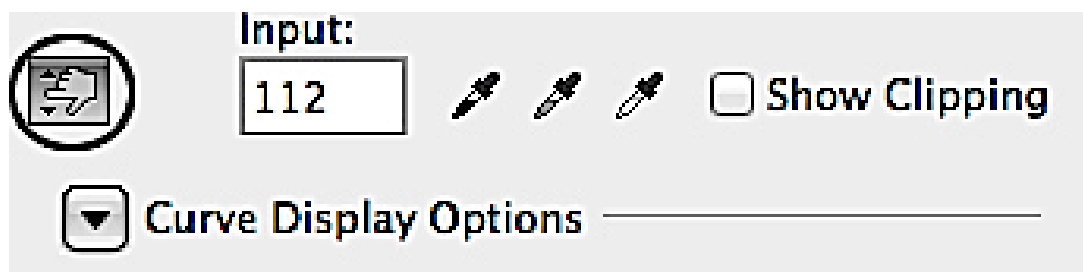


Let's adjust this file. Move the right slider in to the end of the Histogram to adjust the whites of the image. The black slider on the left side doesn't need adjusting as this image already has black tones. Finally click a point halfway up the line to set the mid-tone on the Curve and tap on the "Up" arrow key to lighten the mid-tones or tap on the "Down" arrow key to darken the mid-tones. This Curves adjustment is exactly what we could do with the Levels box, adjust the black slider, adjust the whites slider and then adjust the mid-tones.

Curves can adjust more than just the mid-tones. Any part of the image can be represented with a dot on the curve. Dots can be pulled off the curve. Put your mouse on the midpoint dot and click and drag it outside the Curves box.



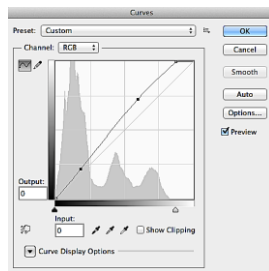
Click on the little "Hand" at the bottom left of the curves box.



Now click in the dark background part of the Haden image to set a point on the curve for that tone.

Adjust the point down a little to darken the background a little bit. Then with the little “Hand” still highlighted click on Haden’s nose to set a point on the curve for that tone. Tap on the “Up” arrow key on the keyboard to lighten the skin tone. A little goes a long way with Curves adjustments. Be subtle. Hold down the “Shift” key and tap each dot on the curve to highlight all of the dots. Tap on the “Up” arrow key to move both of the dots on the curve.

Review: The Black slider didn’t need adjustment. White slider was adjusted to the end of the Histogram. Set two points on the curve, one for the background and one for the skin tone. Background was darkened a little and the skin tone was lighted a little.



Remember the thought is to adjust the blacks in the image with the left slider if needed. With this image of Haden it wasn’t needed. Then adjust the whites via the right slider. Once the blacks and whites are there, add a point on the curve by highlighting the little “Hand” and clicking on the tone in the image you wish to adjust.

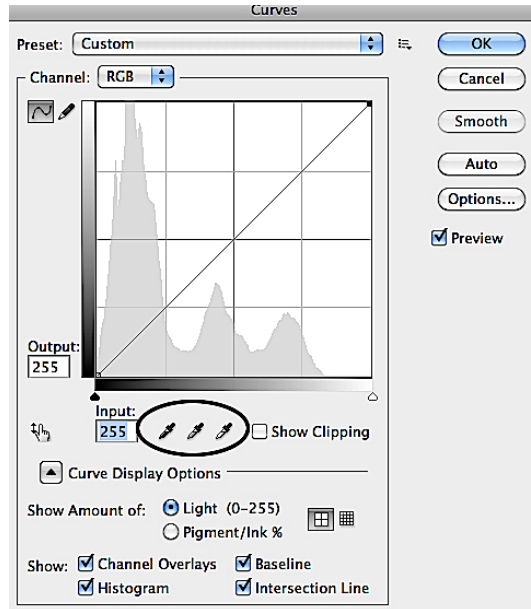
The Curves adjustment offers so much more control than just adjusting the mid-tones. You can adjust up to 14 points on the curve, each one adjusting a different tone in the image.

You will learn quickly that a little goes a long way when adjusting the points on the curve up or down. The curve line always wants to be going up so the tones of the image can go gradually from black to white. There will still be areas in the image that you will want to lighten or darken after the Curves adjustment. This will be covered in the second week of selections.

## PhotoShop CS6 Class - Week One - Curves

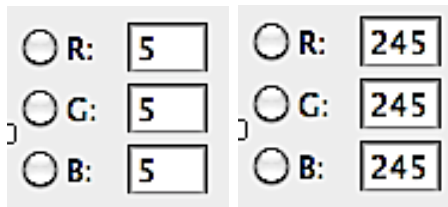
Tip: If you don't like a point on the Curve just click and drag it outside the box.

The eyedroppers are the same as in the Levels box.



Double click the black eyedropper and put in RGB values of: 5-5-5

Double click the white eyedropper and put in RGB values of: 245-245-245



Click OK and "Yes" to save the new targets as defaults.

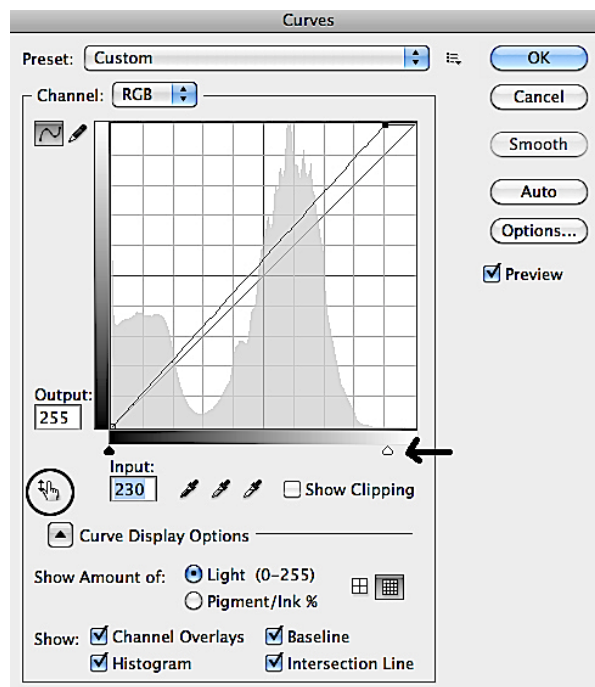


These can now be used to set the black and white point for the image. You can do it with the sliders or the eyedroppers.

***Open then image called “Storm Over Sunrise”.***



Choose: Image/Adjustments/Curves. Move the right slider in to the end of the Histogram. Then highlight the little “hand” (see black circle).



## PhotoShop CS6 Class - Week One - Curves

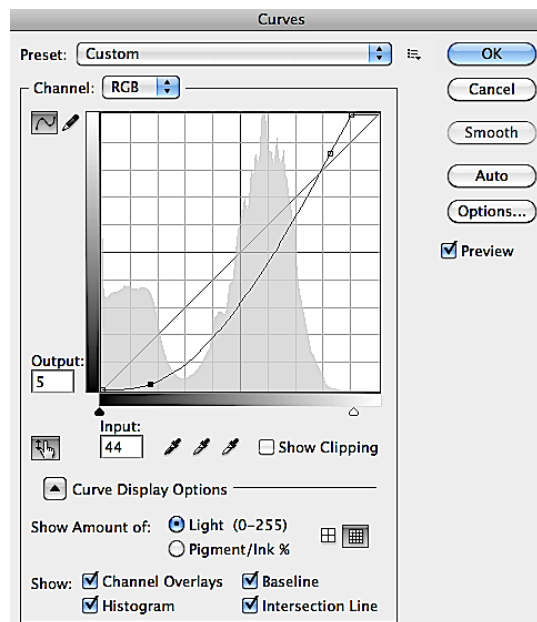
Once highlighted, move your mouse out into the sky. Click and drag on the tone in the image you want to darken or lighten. Drag up slightly to lighten the tone. Drag down slightly to darken the tone. Drag down slightly on the sky area next to the hottest part of the sky.



The foreground looks pretty bad. Let's darken it. Click on the green grass and drag down.

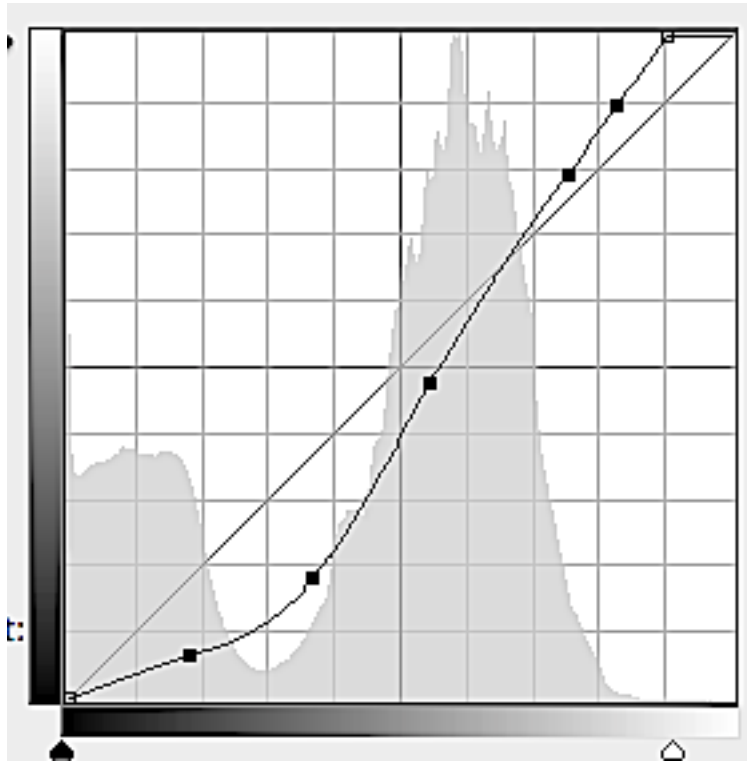


The Curve will look like this:



Then click and drag in the water to get it just right. Click and drag on the light gray sky area also. This will leave you with four points on the curve.

Hold the “Shift” key down and click on each point except for the two end points. When you are done the curve might look like this:



Now for the final adjustment, tap on the “Up” or “Down” arrow keys on the keyboard to slightly lighten or darken the Curves adjustment.

Tip: Older versions of Photoshop don't have the little hand in the Curves box. No problem, just move your mouse over the tone you want to adjust in the image and then Command/Click (Mac) or Ctrl/click (PC) to set the point on the curve. Then tap on the “Up” or “Down” arrow keys on the keyboard to slightly lighten or darken the area.

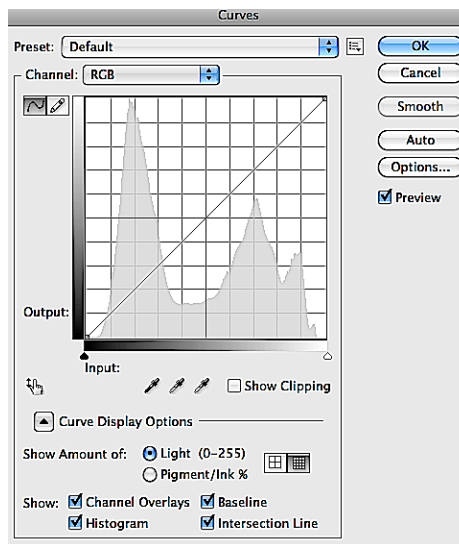
More often than not I set the black and white points and then I might have 3 or 4 points added to the curve. Don't try to get too many points on the curve to adjust every tone in the image.

Adjusting specific tones in the image works better with making selections and or layer masks. We'll get to that later on.

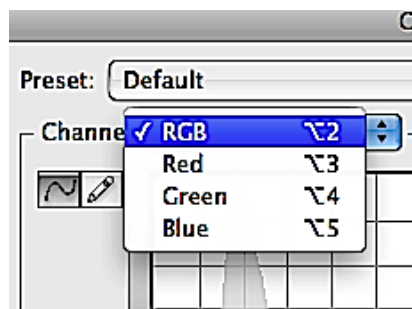
Remember a little goes a long way when moving the points around!

## ADJUSTING SKIN TONES WITH CURVES

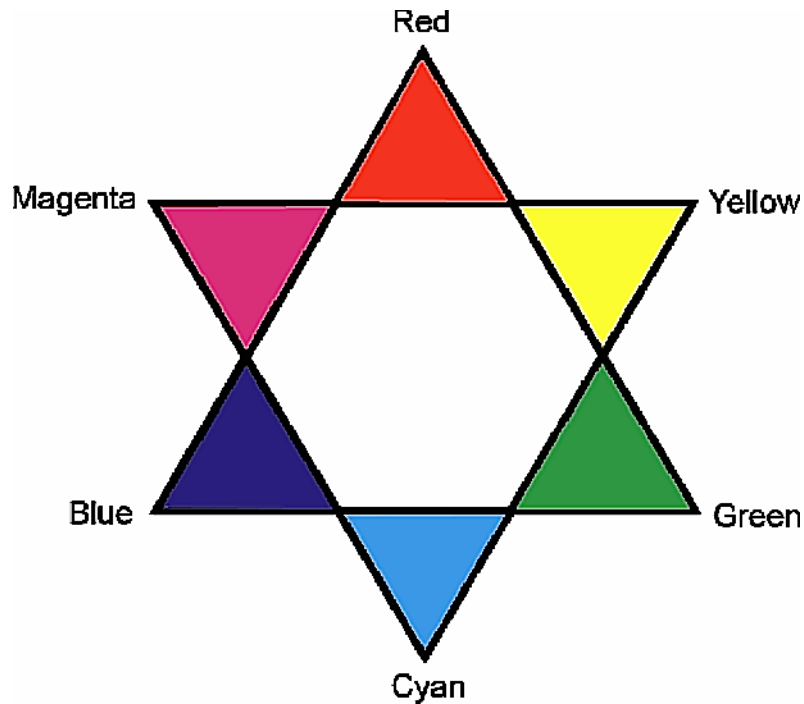
Here's one of my favorite techniques. I shoot a lot of people. Sometimes the person's skin tone doesn't look good. It might be a fair skinned person that looks ghostly white. It might be a man's face that has too much red. Sometimes no matter what you try, you just can't find the right technique to adjust the skin tone. This technique takes the color of a good skin tone (RGB numbers) and then applies them to the image with the problem skin tone. This is how I correct skin tones. With practice you will love this technique as much as me.



When the channel pop up is set to RGB, all of the channels will change equally and only the brightness (Luminance) of the image will be changed. When you choose a channel from the pop up menu, you will only change the information that is found in that specific channel.



Each channel represents a color and its opposite. In the red channel, you will be able to shift the overall color of the image towards red or away from red. When the image is less red it is more cyan, the opposite color of red. Each color has an opposite color. Here's how it works.



**Red** is equal parts of Magenta and Yellow - Red is opposite of Cyan

**Yellow** is equal parts of Red and Green- Yellow is opposite of Blue

**Green** is equal parts of Yellow and Cyan- Green is opposite of Magenta

**Cyan** is equal parts of Blue and Green- Cyan is opposite of Red

**Blue** is equal parts of Magenta and Cyan- Blue is opposite of Yellow

**Magenta** is equal parts of Red and Blue- Magenta is opposite of Green



Now that we have a little color theory down, let's color correct an image using the RGB channels in the Curves dialogue box.

***Image: Haden #4***



This image was taken with on camera flash that was bounced into the ceiling. The camera exposure was 1/60 sec at F 4. This setting allows a lot of the ambient light to get exposed also. This is how I like to use my flash for people shots. I've always liked the skin tone in this image. Remember all color is made up of some combination of Red-Green-Blue pixels. So a good skin tone has a good set of RGB numbers.

Each channel has values from 0-255.

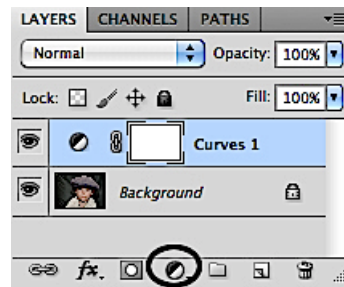
Red 0-255  
Green 0-255  
Blue 255

## PhotoShop CS6 Class - Week One - Adjusting Skin Tones With Curves

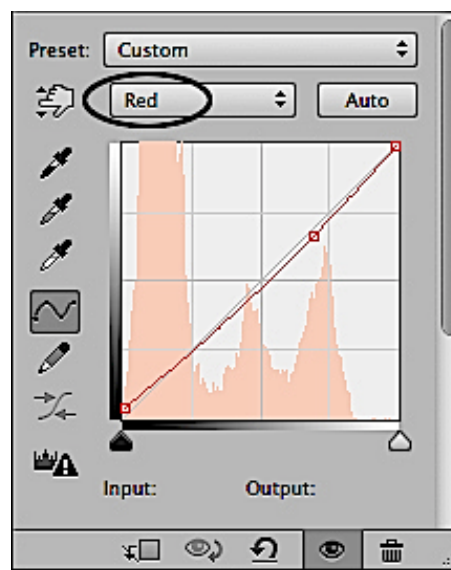
With Curves, it's about knowing the pixel value. Once the RGB value is known, the RGB value can be changed. So you always need the "Info" palette open when working with Curves. If you don't see it, choose: Window/Info. Now choose the eyedropper on the toolbar and move around the skin tone and watch the "Info" palette as the RGB numbers change.

So if a good skin tone has a good set of RGB numbers, which RGB number do you use. Overall this image has a good skin tone, but moving the eyedropper over the face yields many different RGB numbers. We'll get to that in a minute. For now let's show how the opposites colors work.

Start by making a Curves adjustment layer. Click on the black/white circle at the bottom of the layer palette and choose "Curves."



Change to the red Channel.

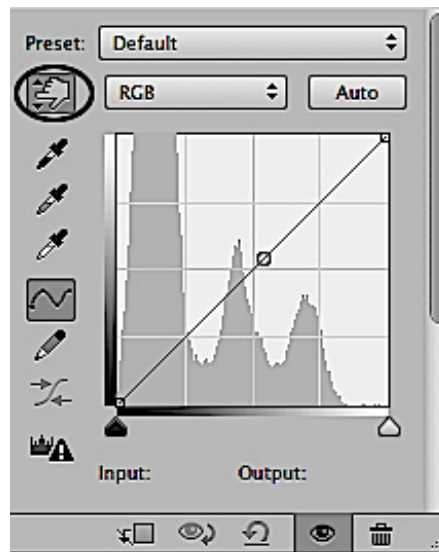


In the Red channel the image will get more Red or less Red (Cyan). Any spot on the curve can be color corrected. Click a dot on the middle of the curve and slightly drag up and down. Drag up to add red to the image. Drag down to take away red (more Cyan). Practice this visual of seeing too much in each direction, as this will be used in the final technique. Go to each channel, and click a dot in the middle and drag up and down until you find the best halfway point for color in that channel. You will notice a little goes a long way with curves.

## KILLER SKIN TONE TECHNIQUE

Here's one of my favorite techniques. I shoot a lot of people. Sometimes the person's skin tone doesn't look very good. It might be a fair skinned person that looks ghostly white or it might be a man's face that has too much red. Sometimes no matter what you try, you just can't get the color right. This technique will take the color of a good skin tone and apply it to the image with the problem skin tone.

Drag all of the dots off of the curve and set it back to the RGB channel. Click on the little hand and move your mouse out over Haden's nose. Move your mouse around until the little circle is just above the halfway point (mid-tone).

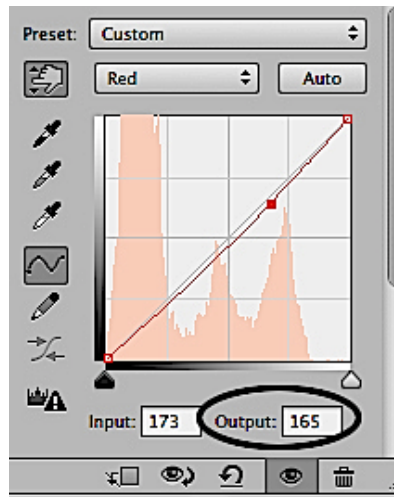


Shift/Ctrl click (PC), Shift/Command click (Mac) to set a dot on the Red, Green and Blue channels. You don't want a dot on the RGB channel.

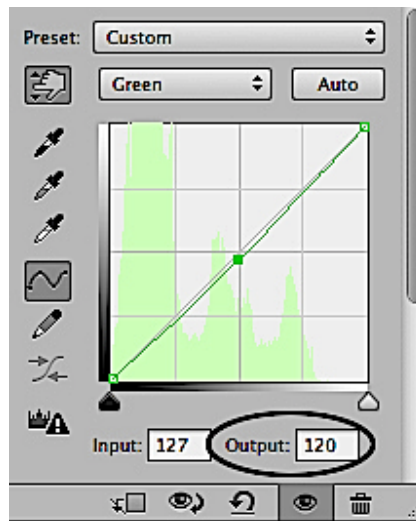
Here's the killer skin tone numbers:

Red 165  
Green 120  
Blue 100

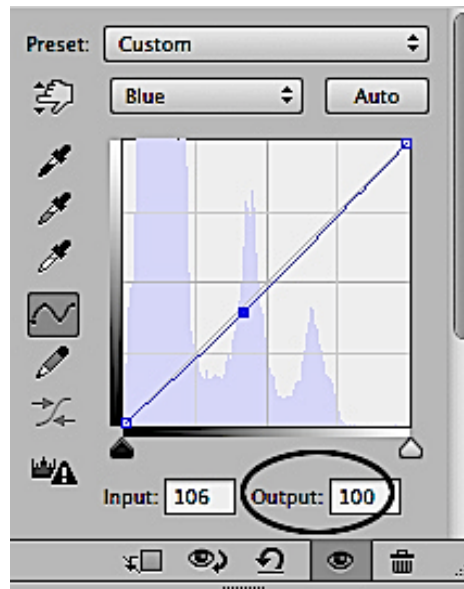
Now that we have a dot on each channel, change to the red channel. Tap on the “Down” arrow key on the keyboard until the output number is 165. If the down arrow key doesn’t work, click on the dot so it gets activated and then tap on the down arrow key until the output is 165.



Change to the Green Channel and tap on the “Down” arrow key until the output number is 120.



Change to the Blue channel and tap on the down arrow key until the output number is 120.



This is a good starting point for most skin tones.

Go to the “Red” channel and click on the dot to make sure it is activated. At this stage a little goes a long way. Usually one or two clicks will work. With the dot activated, tap on the “Up” arrow key two times and the image will have a more red. This image looks better with two or three more units of red.

Go to the “Green” channel and click on the dot to activate it. Tap the down arrow key. It looks better with a couple clicks less of green (more Magenta).

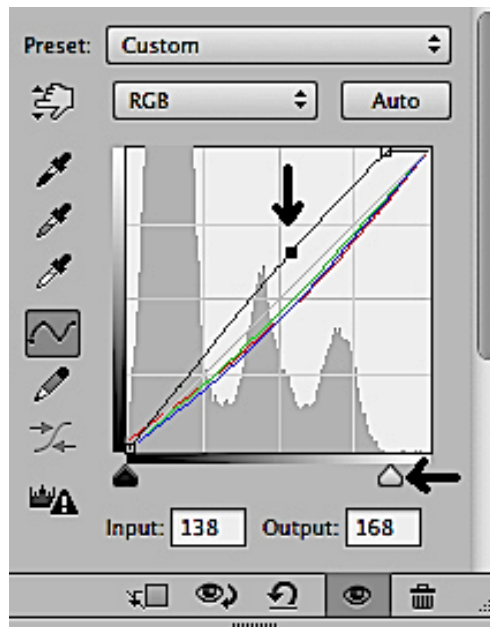
Go to the “Blue” channel and click on the dot to activate it. Tap the down arrow key a couple of taps lower and the image will have less blue and more yellow. Here’s the numbers I ended up with:

Red 161  
Green 115  
Blue 88

## PhotoShop CS6 Class - Week One - Killer Skin Tone Technique

You might come up with slightly different numbers than these.

Now that the skin tone color looks good, switch back to the RGB composite channel. Start by adjusting the right slider. Now that the whites are right, click and set a point just above the midpoint on the curve. Adjust it up a little to lighten or down a little to darken.



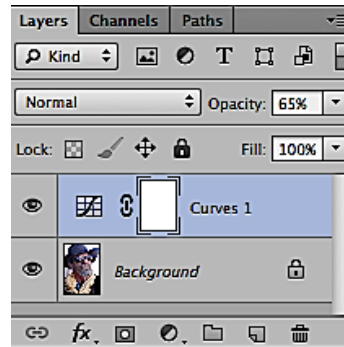
This technique will work on problem skin tones too.



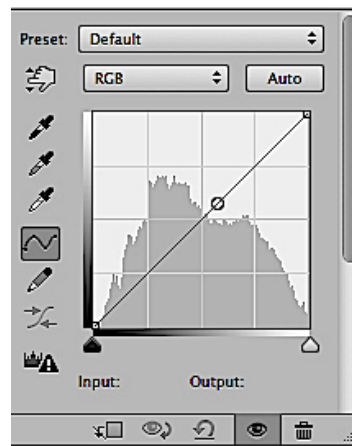


**Image: Stagecoach driver**

This image was shot in shade and is really cold and blue. Let's see how this technique will work on this skin tone. Make a Curves adjustment layer, by clicking on the little black/white circle at the bottom of the layer palette.



Click on the little hand in the Curves box. and then move your mouse over the nose. Move it around the stagecoach driver's nose until you get the circle about here:



Shift/Ctrl click (PC) or Shift/Command click (Mac) when the circle is just above the midtone. This will place a dot on the Red, Green and Blue channels.

**Tip:** Getting the dot in the right spot before the Shift/Ctrl click (PC) or the Shift/Command click (Mac) is the most important step in this technique!



## PhotoShop CS6 Class - Week One - Killer Skin Tone Technique

Remember the Killer skin tone numbers?

Red 165  
Green 120  
Blue 100

Change to the red channel and tap on the arrow keys to get to:

Output:  
165

Change to the green channel and tap on the arrow keys to get to:

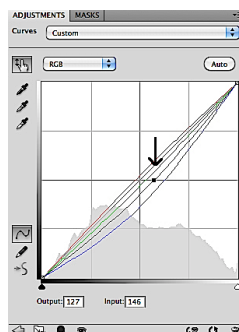
Output:  
120

Change to the Blue channel and tap on the arrow keys to get to:

Output:  
100

Tip: Sometimes the arrow keys won't work or the output box will not be visible. If that happens just click on the dot on the curve and the output box will be visible again and the arrow keys will work again.

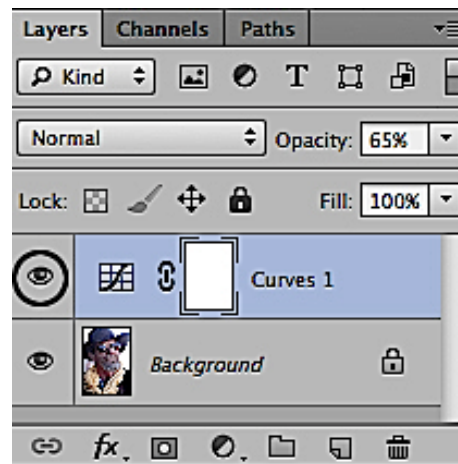
Now change back to the RGB channel to adjust the final brightness. Make sure the little hand tool is activated. Move the mouse around the skin tone until the dot is just above the mid-tone. This is where we started the process. Click a dot at that spot and tap on the arrow keys to adjust the final brightness of the image. What a nice skin tone.



Now revisit each channel. You can't be more than a couple of units of color in each channel.

I ended up with: Red 155 Green 119 Blue 97

Your numbers might be different than these as you might have started at a slightly different starting point on the curve. There is no perfect skin tone. You might like the image a little warmer or colder than someone else. Click the layer "eyeball" on and off to see the before and after of the adjustment.



There you have it, my favorite technique for skin tones. All skin tones are different, so there isn't one set of rgb numbers for everybody. These Killer Skin Tone numbers are just a great starting point. Whenever you see a great skin tone, find the spot on the curve just above the midtone and make a note of the rgb numbers. Then use this technique to apply them to your new image.

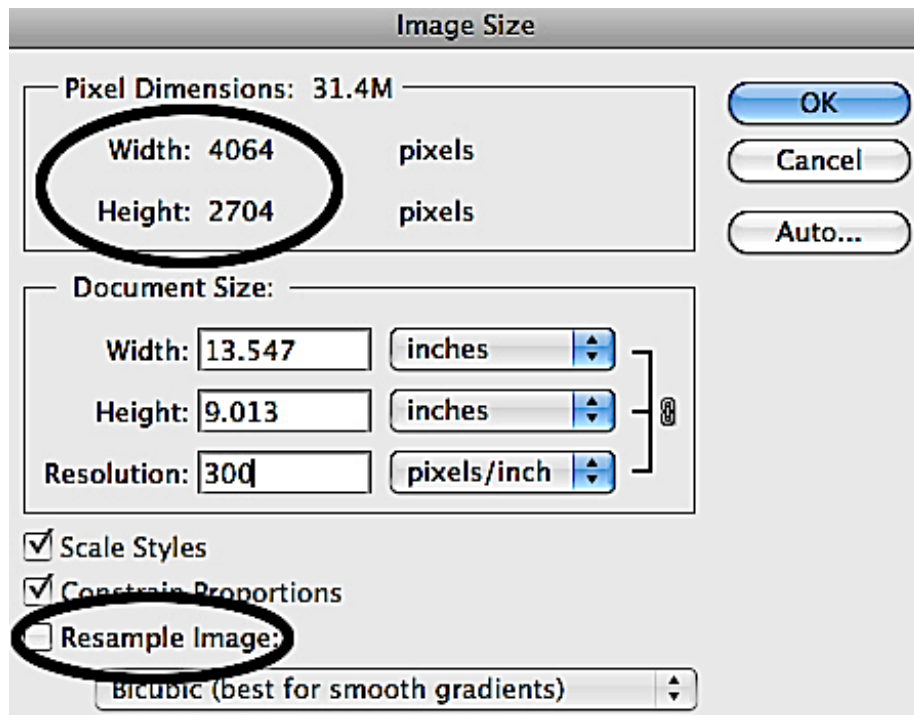
When you get this technique down, The Killer skin tone numbers will get you within a few clicks in each channel. As you practice, revisit each channel several times, Click on the dot and tap up or down to test your color eye and to get the feel for the opposite colors.

All of our Curves adjustments so far have been from the top menu "Image/Adjustments. This lesson accessed Curves as an adjustment layer. It is the most powerful way to use Curves, as the adjustment layer because of the mask. We will go in depth on adjustment layers and their masks in week four.

## RESOLUTION

We just learned the one inherent characteristic of a pixel. It has color. That color is identified with an RGB number between 0-255. The Levels and Curves boxes are for changing the pixels. Once you get good with Levels or Curves your images will start to take on a new quality.

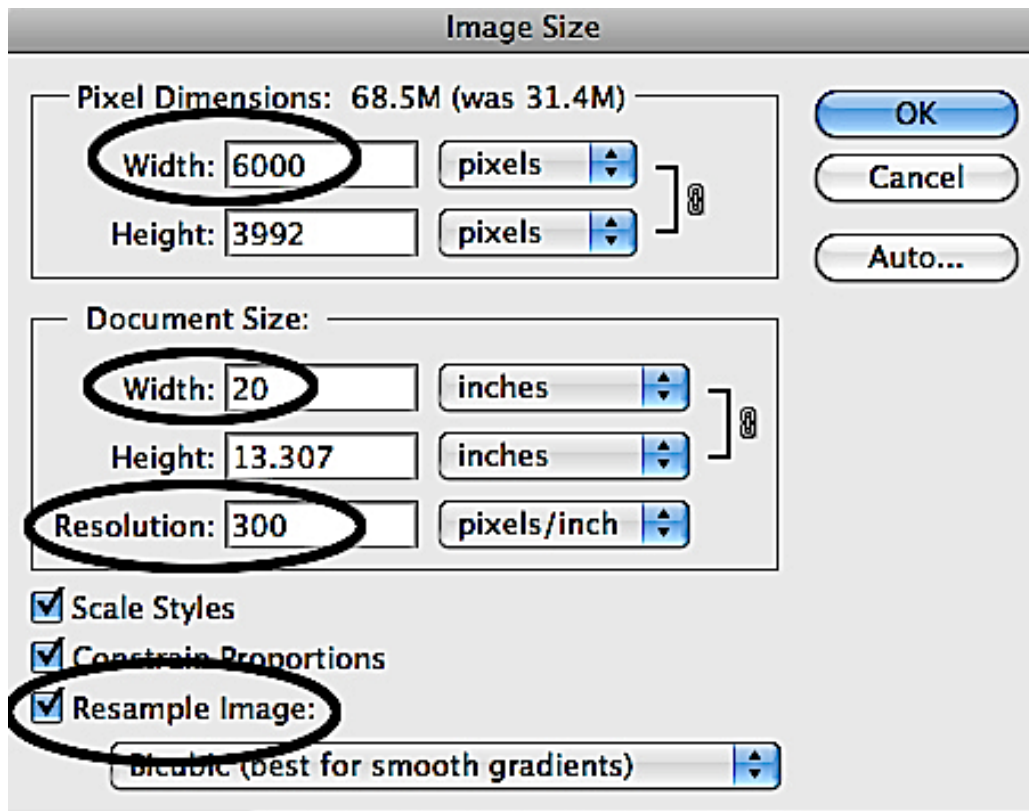
The next key concept of pixels is Resolution. Open up an image and choose Image/Image Size. Un-check the Resample box for now.



All images are made up of a number of pixels Horizontally (width) and a number of pixels vertically (height). This example has a long dimension of 4,064 pixels. Pixels in a file are kind of like money. The more you have in a file, the more you can spend. Meaning you can make the image larger. Think of Resolution as how much you have to spend to get a high quality print. In this example from my digital camera, the file can basically make a 300 PPI image that is 9.013 inches x 13.547 inches.

If I want to make a 20 inch print from the file, I will need to borrow some pixels from Photoshop. In reality, Photoshop has to make up some pixels.

This is called Re-sampling the image. The math for an image 20 inches at 300 pixels per inch means the file needs 6,000 pixels.



There is a point where Re-sampling will start to visually degrade the image.

A good rule of thumb is that you can Re-sample your original file to double its size without hurting the quality.

To know how big your camera file is at 300 pixels per inch:

Un-check the Re-sample box and type in 300 pixels per inch. That's how big your file is without Photoshop adding or throwing away any pixels.

Now check the Re-sample box and type in the size you want to make the file. Photoshop will add or Throw away pixels to get what it needs. So the reality of the image size box is that the Resample box is usually checked.

## HOW BIG IS A PIXEL?

A pixel is the smallest unit in a digital file. Digital files consist of a series of pixels running the length and width of the file, thus creating a two dimensional image. If you want to see a pixel, open up Photoshop and your favorite file, zoom in as close as you can and you will see individual pixels. Scanner and digital camera resolution is measured in pixels per inch (ppi), and output resolution is measured in dots per inch (dpi), they are not the same.

Scanners and digital cameras create pixels, not dots. However the pixels will eventually be output as dots; therefore, a dot will be created for every pixel. For example:

A 300 pixel scan, output on a printer with a 300-dpi resolution will yield a print that is one inch in size (one dot was created for each pixel).

It is better to ask the question, "How big is a dot?" For a printer capable of printing 300dpi, each dot is  $1/300$  of an inch. If you print a file that is 3000 pixels along the long axis, and the printer makes dots that are  $1/300$  inch in size, one inch of printed image will appear on the output for each group of 300 pixels in the file. The total output will be 10 inches.

If you output the same file to film, and you use a film recorder that has a resolution of 1,000 dpi, each dot is  $1/1000$  of an inch. With 3000 pixels in the file, the film recorder will produce one inch of image on the film for every group of 1000 pixels. The total output will be 3 inches. In both cases there are 3000 pixels in the file, but one output device yielded ten inches and the other produced only three inches. Therefore, the film recorder has a higher resolution than the printer, because the dots are smaller ( $1/1000$  vs.  $1/300$  inch).

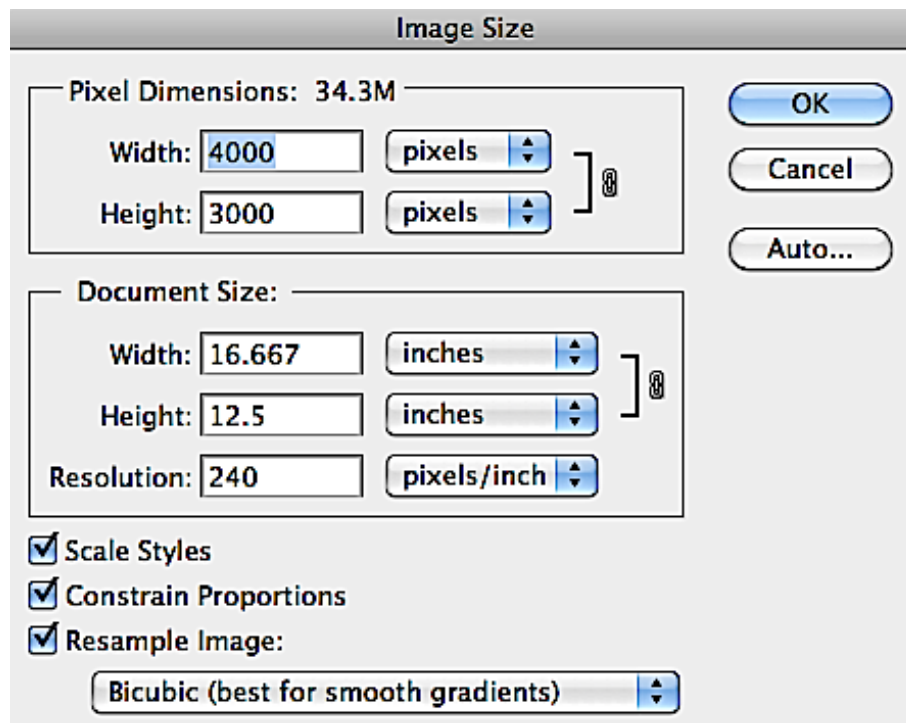
Think of resolution in another way. Digital files do not have any size other than the space they take up on a storage device. How big is an RGB file that is 2,000 by 3,000 pixels? On a hard drive it takes up about 18 megabytes. How big is it really? That is impossible to answer. It doesn't have size until those 2,000 by 3,000 pixels are output to a print. Therefore, the question is: how many dots can the printer lay down per inch.

## SIZING IMAGES

Open the “Arch & Steve” Image. This shot was taken in one of our favorite local dives in Sunnyslope Arizona. My father and I have been having a burger and betting on the horses at “Big Daddy’s” for years. I love this image. Bring a camera with you and take pictures of the people you love. Some will become priceless!

Choose: Image ➤ Image Size

Resolution is the big concept to understand. All images are made up of a number of pixels Horizontally (width) and a number of pixels vertically (height).

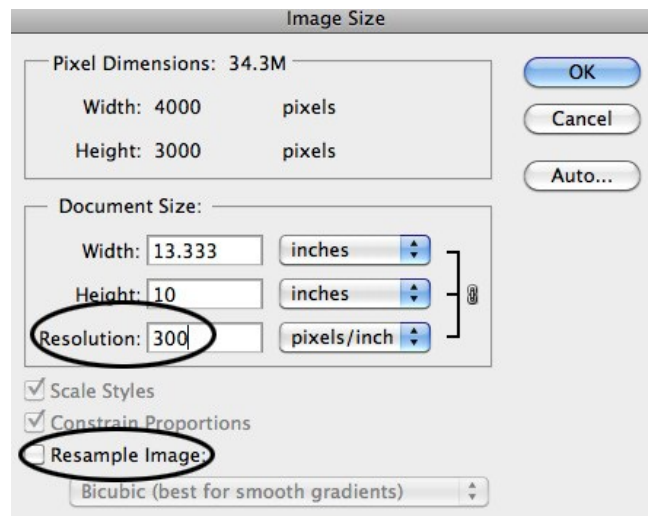


Photoshop has the ability to make up pixels for you. That’s what “Resample image” does. Constrain Proportions should always be on as this links the width with the height. Scale Styles should be checked also.

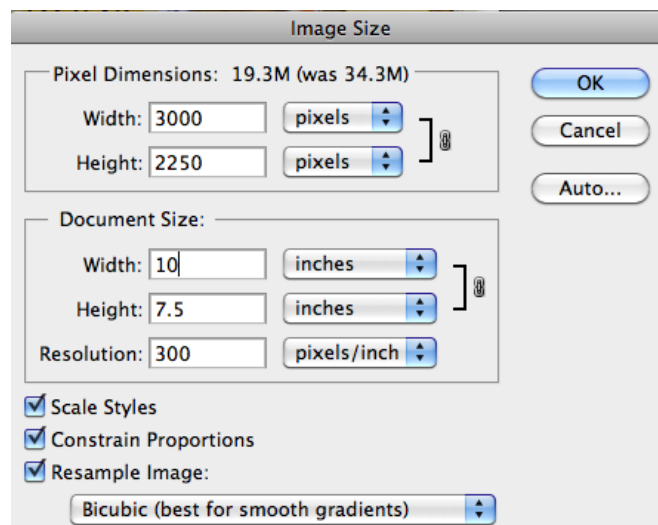
This camera shoots 3000 pixels x 4000 pixels. The default image size box that comes up puts 240 of those pixels in every inch. Thus the width ended up 16.667 inches.  $4000 \div 240 = 16.667$ .

## PhotoShop CS6 Class - Week One - Sizing Images

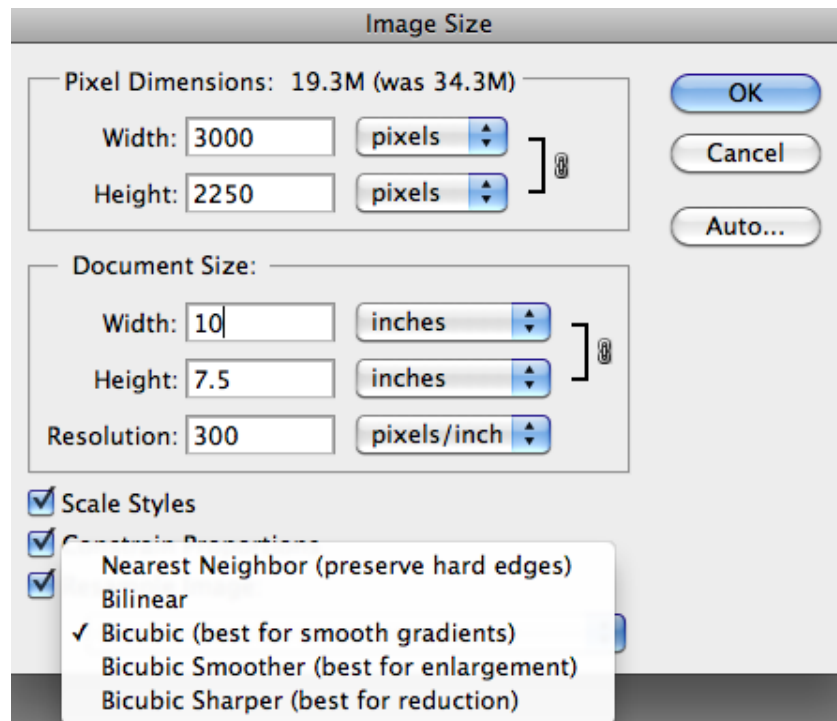
It's all about knowing the resolution number of the output device and then using that number. The 240 Resolution # is not what we will use. Remember the file has a width of 4000 pixels. Let's see how big this file is at 300 pixels per inch. Un-Check the resample box and put in a resolution of 300. So this camera can make a 13.33-inch image at 300 pixels per inch.



But what if you want a 10inch print? That would be 300 pixels per inch for 10 inches. The file will need to be 3000 pixels wide. Where will these pixels come from? Photoshop can make the extra pixels needed. It's called Re-sampling. Change the width to 10. Notice that the width in pixels is now 3000 pixels. Where did the 1000 pixels go? Photoshop re-sampled the pixels in your file and threw some away.



Re-sampling is just math. Photoshop has different Re-sampling options.



Bicubic is the default and works well on everything. I use this all of the time

Bicubic Smoother works well for sizing larger.

Bicubic Sharper works well for sizing down to web size.

Tip: Ink jet printers can resize the file as it's being sent to the printer. The quality of Re-sampling is just as good as in Photoshop or at least I can't see the difference.

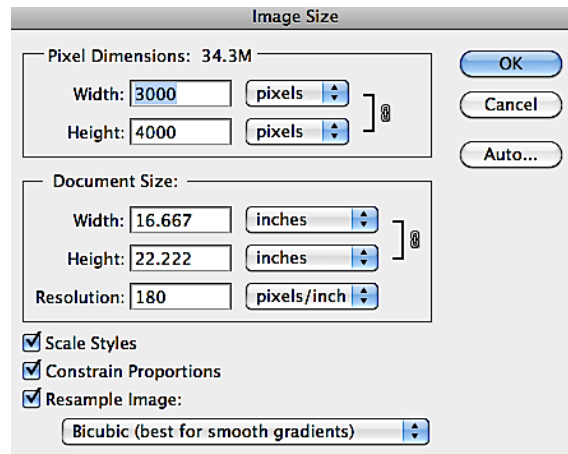
Un-check the Resample box and type in the width you want the print to be. The printer takes care of any re-sampling needed. This is a big plus because no pixels are added or taken away from the original file. The file stay smaller and makes just as good of a print as if you had re-sampled the file to a much larger size.



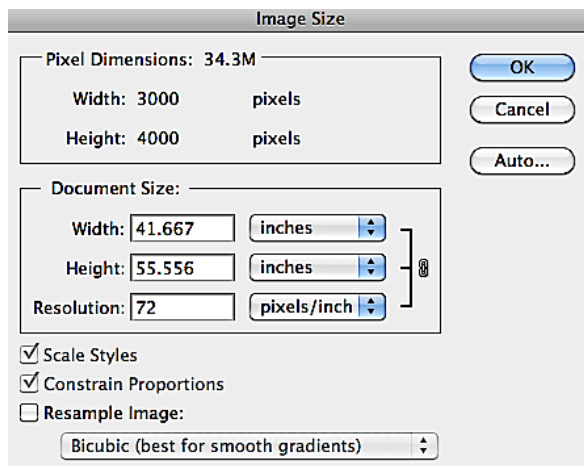
## SIZING IMAGES FOR THE WEB

***Image: Old Titleist***

Choose: Image/Image/Size

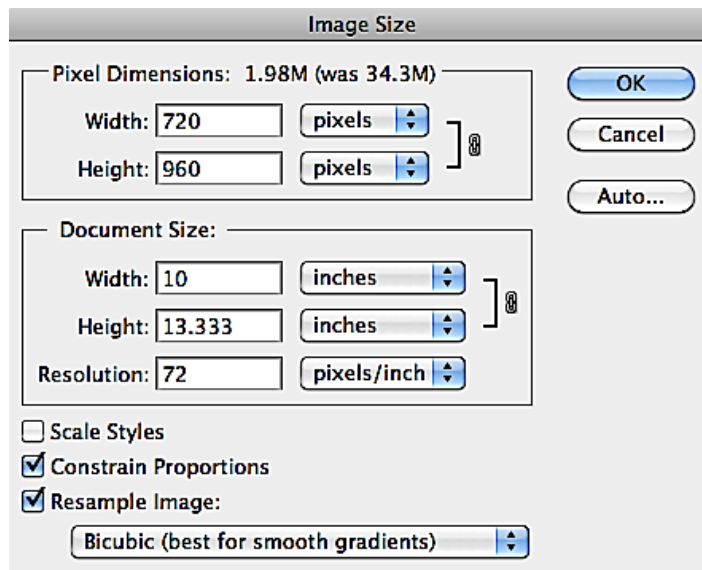


This is another 12 million pixel file (3000 x 4000) = 12 million pixels. Why this camera decides to divide those pixels into 180 pixel increments has always puzzled me. There are no output devices that use 180 resolution. The resolution for the web is 72. Let's see how big this file is at 72 pixels per inch. Uncheck the re-Sample box and type in 72.

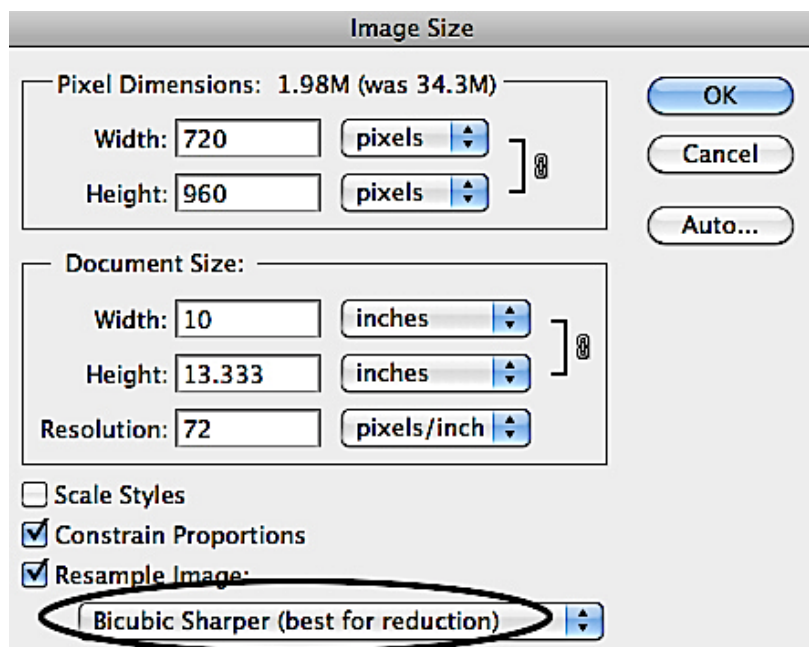


Have you ever received an email from someone and all you could see was a portion of a very large image? That is what would happen if I sent you this file.

Let's say I want to send a 10inch image. Check the Re-Sample box and put in 10 inches.



The image gets a little soft (focus) when this many pixels are thrown away. There will only be 960 pixels on the long dimension when done. That is where “Bicubic” Sharper can help. This adds a little sharpening to process.



Tip: I don't use Bicubic Sharper. I use the Default Bicubic and then sharpen the file myself. We'll cover sharpening in the Third week.

### Summary:

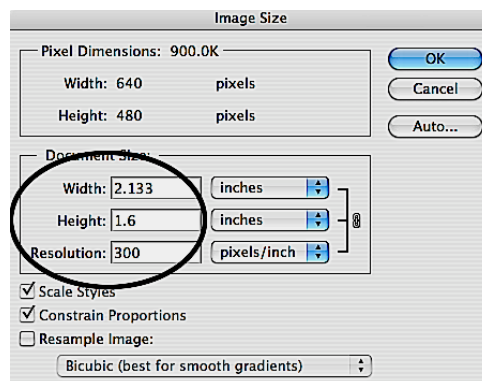
If you want to know how big your file is at a given resolution, uncheck the resample box and type in the resolution wanted. The width and height will show how big the file is at that Resolution. You can usually resample the file twice the width or height without any appreciable loss of quality.

To size a file for a lab:

Check the Resample box and put in width or height needed. You need to know the target resolution of the output device. Most labs want either 200 or 300 ppi.

If you want to crop an image to an exact width, height and resolution, use the crop tool and set the width/height and resolution on the option bar at the top of the screen.

My first digital camera had 640 pixels total in the long dimension. Here's how big the file was at 300 pixels per inch. I then could resample the file about twice the size to about 5 inches without any appreciable loss of quality.



**Tip:** Web images need to be in the sRGB color space. My working color space is Adobe 1998. So after prepping the file for the web, I choose: Edit/Convert to profile. Then choose sRGB and click OK.

## CROP TOOL

### *Image: Arch At Big Daddys*

The crop tool in CS6 has a great new feature. The original un-cropped image can be retrieved from any image that has been cropped. Many times in the past I wished I could change the crop on an image that has already been cropped and saved. This new feature allows that to happen.



Choose the crop tool from the top of the toolbar.

Then from the top menu, choose: Un-Check "Delete Cropped Pixels".



Click and drag on the side handles to crop the image.





## PhotoShop CS6 Class - Week One - Crop Tool

Press: Enter (PC) or Return (Mac) to finish the crop. Choose: File/Save As and save a version on your desktop for now. Title the file "Archie At Big Daddy's-cropped. The file will automatically be saved as a "Photoshop' file. The Photoshop file is needed to be able to bring back the original un-cropped version from this cropped version. Now that a cropped version with a new name has been saved, close up the "Archie At Big Daddys file.

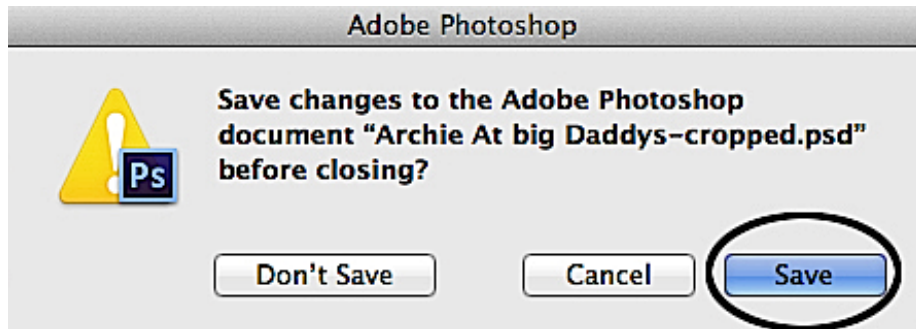
Now open the file on the desktop called: Archie At big Daddy's-cropped. Press Enter (PC) or Return (Mac) and the crop tool will be where you left it when you last cropped the image. If you want to change the crop, just drag a handle. You can even drag each corner back to get to the original un-cropped version.



Drag the handles back to the edges to get back to the un-cropped version.

**Tip:** The crop tool must be chosen when you re-open the image to be able to change the crop.

Close the image and click “Save”. That is a great new feature to Photoshop!



Let's talk some more about the crop tool.

***Image: Aiden***

In this example a black point and white point were set with the eyedroppers to get rid of the cool blue look to the file. I always like to see what I can do to a file with the eyedroppers.

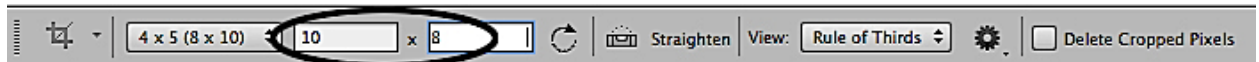


The crop tool can also be used to get standard sizes to our file. Our digital files aren't in the same proportion as the standard sizes of 5x7, 8x10, 11x14, 16x20 etc.



## PhotoShop CS6 Class - Week One - Crop Tool

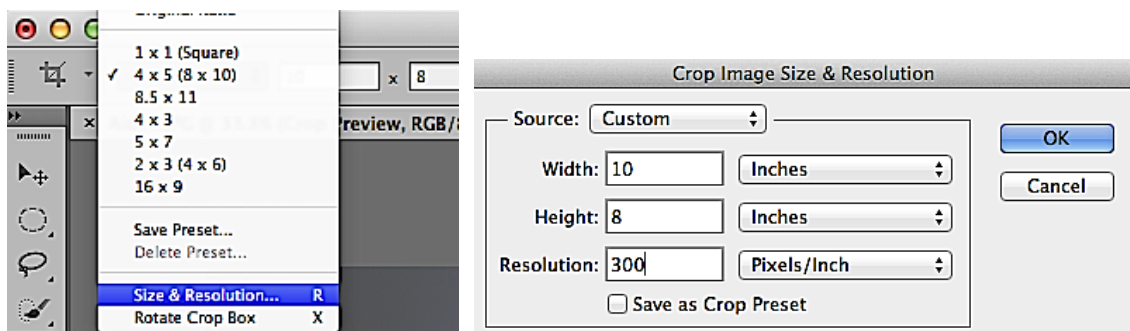
Choose the crop tool and then type in 10 x 8 from the top option bar.



The crop tool will show how much will be cropped. You can put your mouse inside the area and drag the cropped area where you need it. This shows how much area is lost when we need to crop our files to standard sizes. If you know you will need standard sizes, make sure you leave some extra room as you can see how much image is given up to achieve this 8x10 crop.



You can also set the width, height and resolution with the crop tool. Choose the “Size and Resolution” option from the top of the screen. Put in 8x10 @ 300 Resolution.



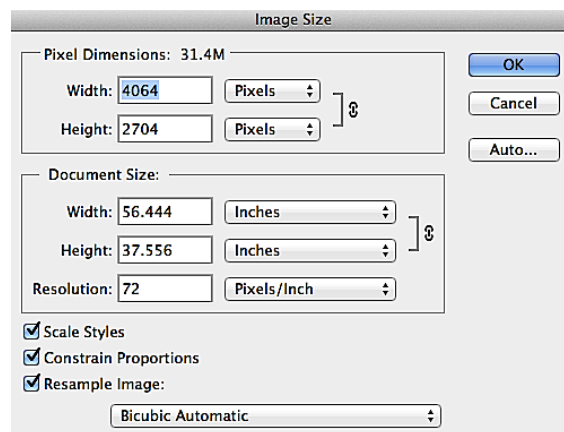
## PhotoShop CS6 Class - Week One - Crop Tool

Older versions of Photoshop had this as the standard option at the top of the screen when the crop tool was chosen.



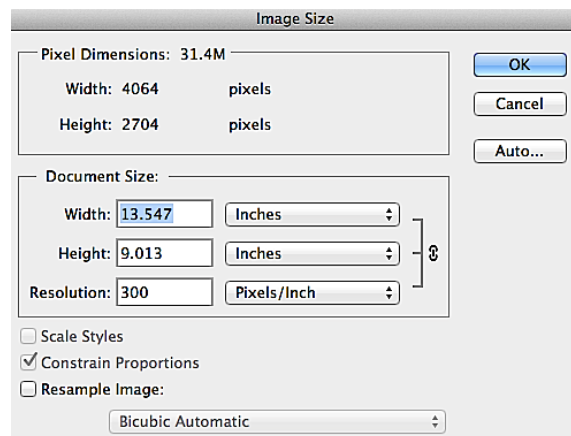
So I use the Image/Image/Size box when I don't want to crop an image and the crop tool if I need a crop.

Open the original "Aiden" image one more time and choose: Image/Image Size.



This file at 56.444 inches by 37.556 inches at 72 Resolution is never the size I want the file to be. If I sent this image to someone in an email they wouldn't see the whole image as it has a width of 56.444 inches. I always want to see how big the file is at 300 Resolution.

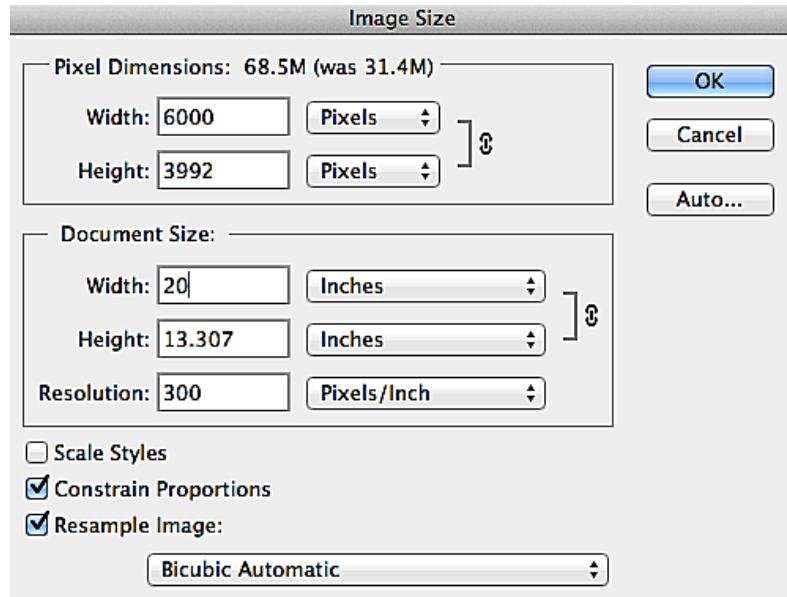
Un-check the Resample box and put in a Resolution of 300.





## PhotoShop CS6 Class - Week One - Crop Tool

So the file is 9.013 x 13.547 at 300 Resolution. I always like to have a version of my file at 300 Resolution. Remember this box is not used for cropping the image. It is used for sizing the image. Let's say I need the file to be 20 inches wide. Recheck the Resample box and put in a width of 20 inches.



The only reason we un-checked the Resample box was to see how big the file was at 300 Resolution. Once you know how big the file is at a given Resolution, recheck the Resample box. That way Photoshop can Resample the 300 Resolution file to whatever width or Height that is needed.

The terminology for this file is: 20 inch by fall at 300 Resolution. 20 inch was the width dimension that was important. The height of 13.307 was the fall.

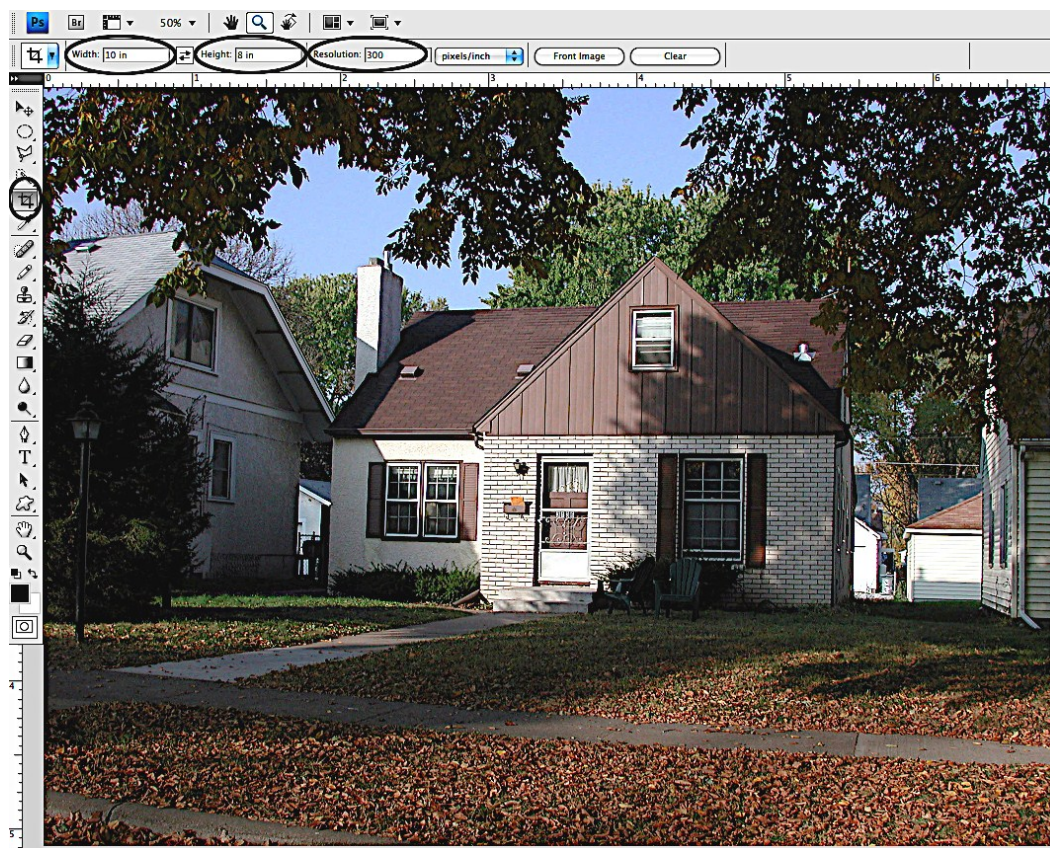
Constrain proportions should always be on. That way when you change the width, the height keeps in its proper proportion. When Constrain Proportions is un-checked the image can get stretched out of proportion.

The crop tool changed quite a bit in Photoshop CS6. Here's how the crop tool worked on older versions of Photoshop.

### ***Image: Home***

This is the house I grew up in. I took this shot a few years back shooting out of a rental car window with a little 3 Million Pixel point and shoot. I wanted to have a record shot of the house.

This lesson will show how to size and crop an image using the crop tool. To resample the image during cropping, enter a height, width, and resolution in the options bar. The Crop tool can also correct the vertical lines of the house with a perspective control feature.



Choose the Crop Tool:

Set the width to 10 inches

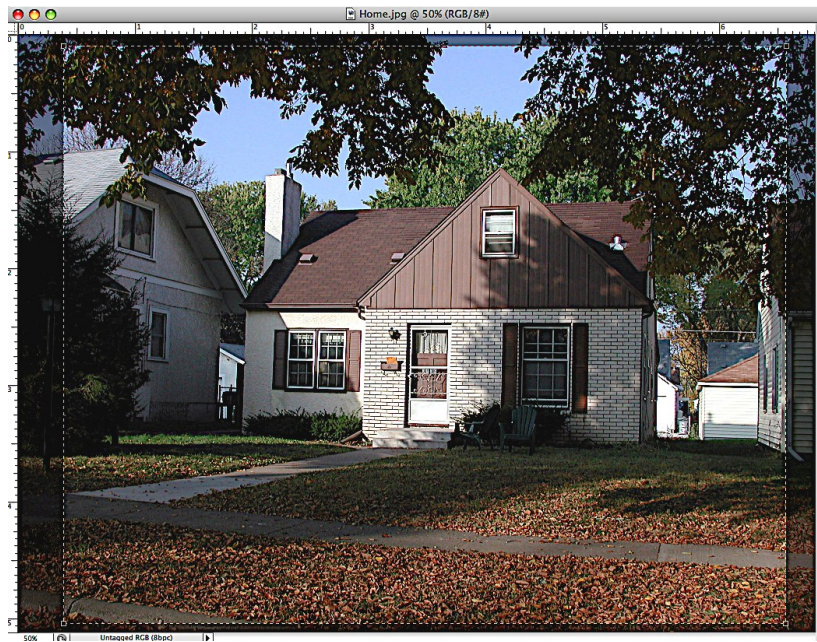
Set the height to 8 inches

Set the resolution to 300

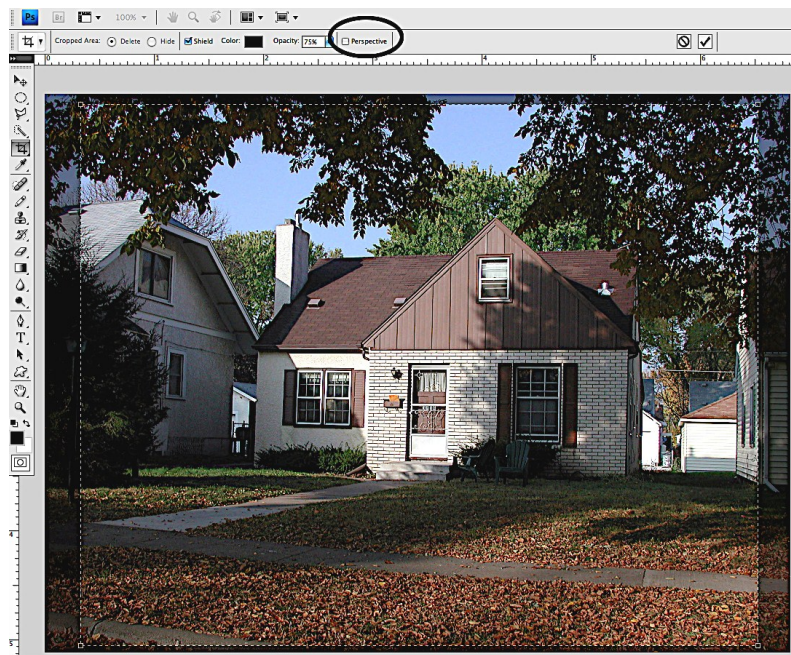


## PhotoShop CS6 Class - Week One - Crop Tool

Click and drag the crop tool from the upper left of the image to the lower right of the image. Leave a little extra space. Your screen will look like this:



Make sure the perspective box is unchecked for now.



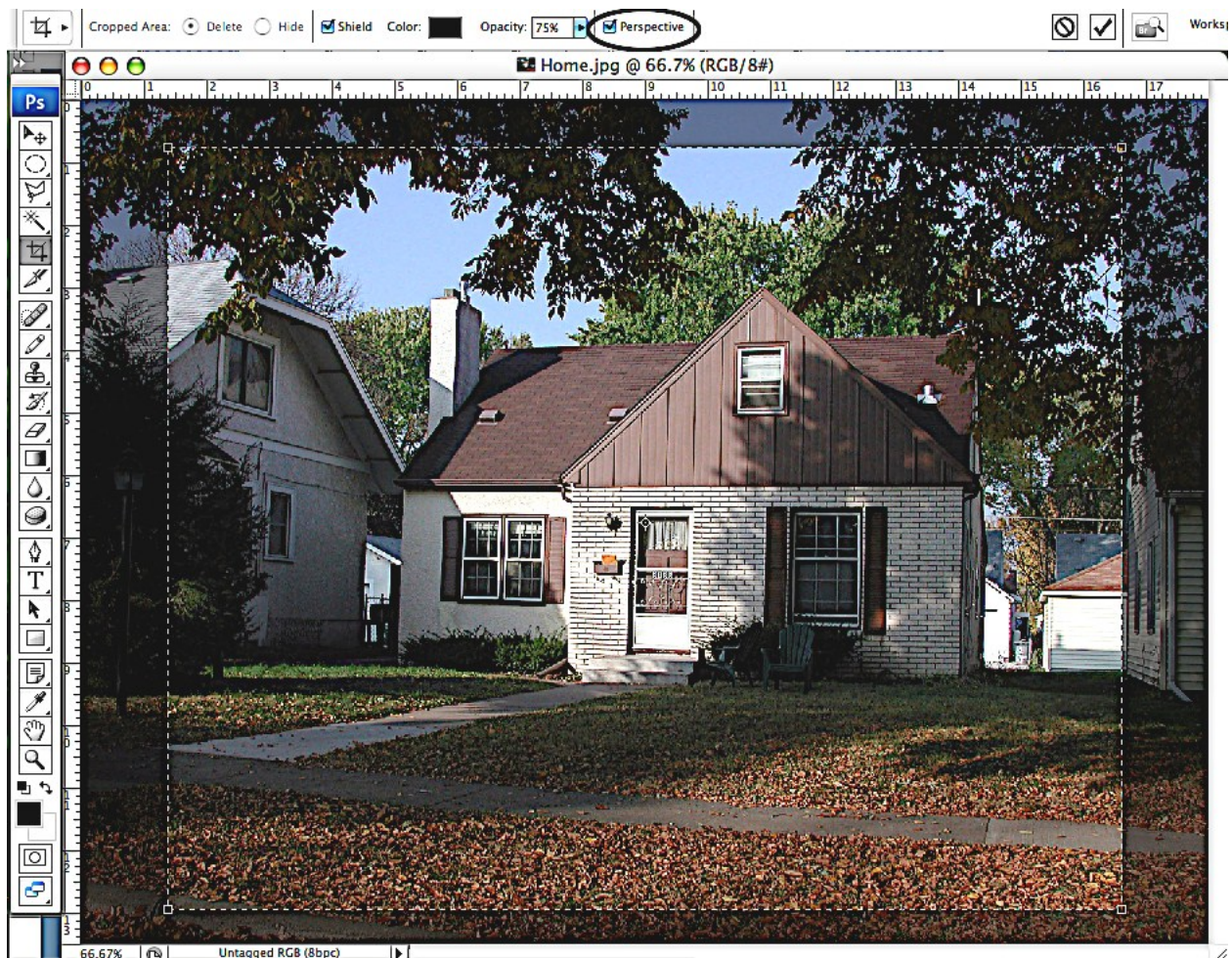


## PhotoShop CS6 Class - Week One - Crop Tool

To scale the crop, place the mouse just outside one of the corners until you see a straight line with an arrow tip on each end. Then click and drag the corner in. The width and height are constrained together.

To move the cropped area to another position, place the pointer inside the bounding box and drag. You can also use the Arrow Keys on the keyboard.

Put a check inside the perspective box. The crop tool has an additional option that allows you to transform the perspective of the image. This is very useful when working with images that contain keystone distortion. This picture was taken with the camera tilted up slightly. This resulted in “keystone” distortion. The house looks like it is leaning backwards.





## PhotoShop CS6 Class - Week One - Crop Tool

Drag the left handle, so the sides of the crop are parallel to the sides of the window of the house.



Choose: Image/Crop or Press Enter (Windows) or Press Return (Mac) to finish the crop.



There you have it, the image is cropped, sized, and perspective controlled using the crop tool.

## **SAVING YOUR WORK**

You can ensure the safety of your work by frequently saving it to your hard drive. A good rule of thumb is to save your work often enough so that you do not lose work that would be time consuming to reproduce. The first time you save a newly created image, you will rename it. When you save an image that has been named, the program does not ask for additional information, it just saves the image under the same name. The new version of the file replaces the old version and only the new version remains.

### **Save Command**

Use the save command to permanently record changes you have made to a file.

Saving an image that has already been named replaces the last saved version of the image with the latest version.

### **Save As... Command**

Use the “Save as...” command to permanently record changes you’ve made to a file, giving the file a new name, and leaving the original file unchanged. “Save as...” also is the command used for saving a file for the first time.

### **Save a Copy Command**

Use this to copy a file and continue to work on the original.

Get used to saving your file under a new descriptive name. How you name the file can make it easy or hard to find in the future. Give some thought to your naming of the file.

When I work on a file and like it, I will always choose: File/Save As and give it a new name. To me, File/Save As means save as a new named file. When you give the file a new name, the original file stays unchanged. You always want to have a version of the original untouched file. We’ll go more into this when we get to our image adjustment sequence.

## FILE FORMATS

If you are not too familiar with file formats, you might wonder why there are so many options in the “Save As” dialogue box.

**Photoshop format (PSD):** is the default file format that supports all of Photoshop features. Photoshop is required to open these files. Files need to be saved in this format to utilize the new crop tool feature.

**TIFF:** A flexible bitmap image format supported by virtually all paint, Image-editing, and page-layout programs. A tiff file can save selections and layers. The Tiff file can also be compressed, so more images can fit on your hard drive. This compression is called LZW Compression, and results in no loss of quality. The image is compressed smaller when saved. When the image is opened it is back to full size with no loss of quality. Images with layers should be saved as Photoshop PSD or as a Tiff to save the layers.

**Jpeg:** compresses files as it saves them, allowing various levels of compression, from 0-12. This compression is called “Lossy”, as it results in a loss of quality in the saved image. There is very little loss of quality at the upper levels of the Jpeg quality (10-12), even though there is a considerable reduction in the file size. I use Jpegs for images that I use on the web or to be sent to online labs.

In older versions of Photoshop: If you can't save a file to Jpeg, it's probably because it's in 16-bit color. Choose: Image/Mode/ 8 bit and then Jpeg will be an option when you try to save the file. CS5 can save a J-peg from a 16-bit file.

Save your jpegs a twelve quality and they will be good for print work. Jpegs can't save Photoshop layers.

Only Tiff and Photoshop files can save selections and layers. Tiffs can be opened in other software programs. Photoshop PSD files can only be opened in Photoshop.



## **WEEK ONE SUMMARY**

Open the Calibration file (The one with the four children at the bottom of the frame), and see how your monitor looks. If the skin tones don't look good, you will need to calibrate the monitor.

Choose a color space (Edit/Color Settings) I like Adobe 1998.

Set RGB values to the eyedroppers of the Levels box. Page 21

Practice making Levels adjustments to the image using the sliders.

Practice using the eyedroppers of the Levels box

Practice the Color Correction Technique

Practice using Curves

Practice the Killer Skin Tones Technique

Practice sizing images using the image size box

Practice using the Crop tool

Have Fun!

## KEYBOARD SHORTCUTS

It's a good idea to use shortcuts. It won't take long and you will be working faster. Here are a few to start practicing:

Show / hide all palettes, including toolbar --- Tab

Show / hide all but toolbox --- Shift + Tab

Toggle standard / full screen with menu / full screen modes --- F

Toggle menu when in full screen with menu mode --- Shift + F

Undo --- Ctrl + Z

Accept crop, transform, or any dialogue --- Enter / Return

Zoom in without changing window size --- Ctrl + (plus)

Zoom out without changing window size --- Ctrl - (minus)

Deselect --- Ctrl + D

Open image --- Ctrl + O

Close image --- Ctrl + W

Cut --- Ctrl + X

Paste --- Ctrl + V

Select previous brush --- [

Select next brush ---]

Move selection to a layer --- Ctrl + J

Cancel crop, transform, or any dialogue --- Esc



## WEEK TWO

### SELECTIONS

Your image should look pretty good after a Levels or Curves adjustment. Now it's time to look at the image for any specific areas that need to be lighter or darker. You might want to change the color of an area. Maybe throw a background out of focus. One way to edit a portion of your image, is to select the area. It is a good idea to build up your selection skills, because you will be using them every day.

Selection Tools:

- Magic Wand
- Marquee
- Elliptical Marquee
- Lasso
- Polygonal Lasso
- Magnetic Lasso
- Single Row Marquee (I've never used)
- Single Column Marquee (I've never used)
- Quick Selection Tool

The image will dictate which selection tool is best for a specific need. The Polygonal tool is best when you need to make a precise selection. This tool requires some technique. I recommend practicing with it all the time until you get comfortable. Once you make a selection, you can move, copy, paint, or apply numerous special effects to the area.

There are two types of selections in Photoshop: a normal selection and a feathered selection. A normal selection has a hard edge. You can easily see where the effect starts and stops. Feathered selections slowly fade out at their edges. This allows the adjustments to blend into the image without producing noticeable edges.

All selections need feathering to soften up the edge of the selection. It might be 1 pixel feathering on a sky and horizon line, or 25-50 pixel feathering to adjust an area within the image.

Like I said earlier, I come from a printmaker's perspective. That means addressing all of the tones of the image. When done correctly, the image

will seem to come to life. The old master photographer's would do this in the darkroom. I took a printing workshop years ago where the photographer showed me how he would bleach small areas of the print to make the light areas of the image "Pop". His prints just sparkled. Most of his adjustments were subtle. A little darkening here, a little lightening there. It was all feel. I asked him what most of my students ask me. "How did you know that you wanted to darken that area? He said it just comes from making prints. He showed me a stack of prints. They all looked good to me. Then he took one of the images and showed me all of the different subtle changes he was making to the image. One image seemed to be better than all of the others. He told me that he had made more bad prints than most people. That is the mindset of a great printmaker. Every section or tone in the image has been looked at and then adjusted to bring out the main subject.

These are the type of techniques that you will learn in this book.

Most of the techniques in this book will work on older versions of Photoshop. I like to think of it like a musician who can pick up an old instrument and make great music with it.

So the process is to make the image look great with either a Levels or Curves adjustment. Then really look at every area in the image and decide what needs to be worked on. Make a selection of the area. Feather the selection, and then adjust the area to your liking. The process is simple, the issue is how much to lighten or darken the area. Maybe an area needs more saturation. An area in shade may need to be warmed up. That's the feel part that can only come from practice.

Once the selection is made, just about any adjustment of Photoshop can happen within the selection.

Practice using these tools as you will use all of the time:

- Lasso Tool
- Polygonal Lasso Tool
- Quick Selection Tool
- Elliptical Marquee Tool
- Rectangular Lasso Tool
- Magic Wand Tool
- Magnetic Lasso

## LASSO TOOLS

By default the Lasso tool draws freeform selections Click and drag to make this selection

### **Polygonal Lasso Tool:**

The polygonal Lasso tool draws straight edged selections. Click to set a point, move the mouse and click to set another point. This tool can make very precise selections. You can toggle between the two with keyboard shortcuts to draw selections that have both freeform edges and straight edges. To switch between the Lasso tool and the Polygonal Lasso tool as you draw a selection, press Alt (PC) Option (Mac).

### **Quick Selection Tool:**

Click and drag and the tool will select similar pixels.

### **Elliptical Marquee Tool:**

Click and drag to make circular or elliptical selections.

### **Rectangular Marquee Tool:**

Click and drag to make a square or rectangular selections.

### **Magic Wand Tool:**

The Magic Wand Tool can select adjacent areas of similar color.

The default tolerance setting is 32. This is a good starting point.

Click on the area you want to select and similar pixel values will be selected.

### **Magnetic Lasso Tool:**

The Magnetic Lasso draws a selection that snaps to edge pixels as you drag. To switch to the Lasso tool as you draw with the Magnetic Lasso tool, press and hold Option (Mac)/Alt (PC) as you drag. To switch to the polygonal Lasso tool as you draw with the magnetic lasso tool, press Option/Alt and click on the next point.



Once a selection is made, here are the options from the Select Menu at the top of the screen.

**Select ➤ All** to select the whole image

**Select ➤ Deselect** to remove the selection

**Select ➤ Inverse** to select everything outside of the selection

**Select ➤ Color Range** to make a selection based on a specific color

**Select ➤ Define Edge** to soften or feather the edge of the selection

**Select ➤ Modify** to expand or contract the selection

**Select ➤ Grow** to add adjacent areas of similar color

**Select ➤ Similar** to add areas of similar color that aren't Adjacent.

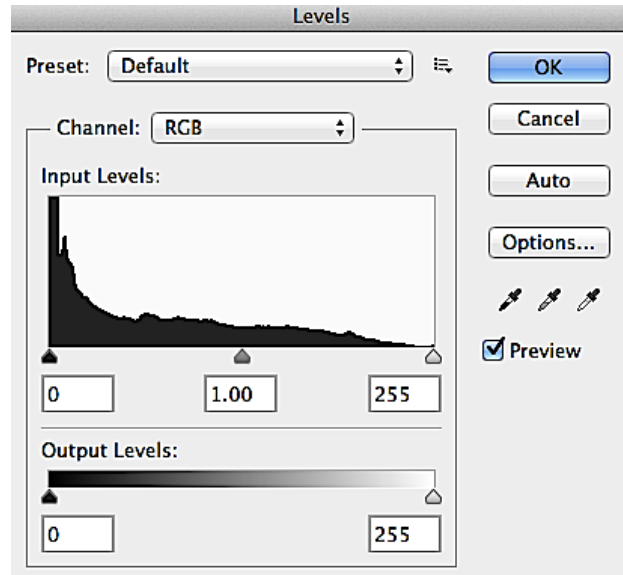
**Select ➤ Transform Selection**.....to change the size of the selection

**Select ➤ Load** to retrieve a saved selection

**Select ➤ Save Selection** to save the selection

Let's make some selections.

**Image: Buckeyes Win**

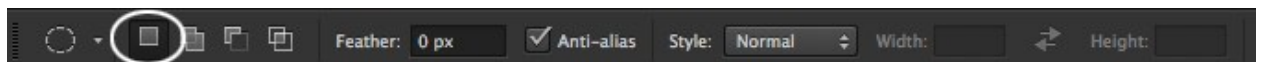


As you can see this image was exposed well. The histogram shows it will have a full range of tones from black to white. If I checked this histogram before taking the shot I would say it looks like a good exposure and go ahead and take the picture. This is a classic example of how selections

can improve the image greatly. Choose the Elliptical marquee tool.



Look at the top menu for the options for the Elliptical Marquee tool. Make sure the tool is set to “New Selection”.

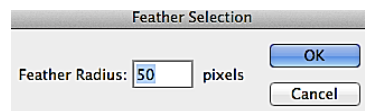


I like to have my selection tools set to ‘New Selection’ before making the selection. That way after making the selection, I can drag the selection into place if needed.

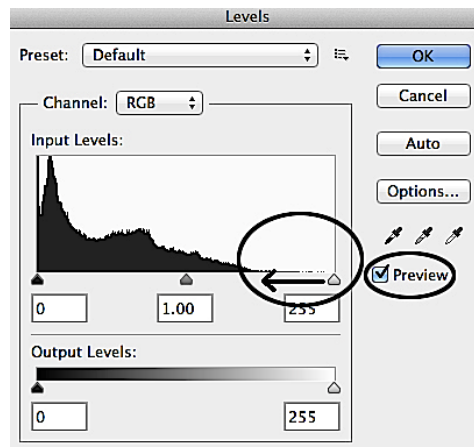
Click and drag a selection around the cheerleader's face that looks something like this. After making the selection (new selection) you can put your mouse inside the selection and drag it into a better spot if needed. If you don't like the selection, click outside of the selection to deselect it. Then go ahead and redraw the selection.



All selections need to be feathered (soften the edges). From the top menu, choose: Select/Modify/Feather and put in 50 pixels and click OK.



From the top menu, choose: Image/Adjustments/Levels.



This histogram of the cheerleaders face is different than the one that represented the whole image. Move the right slider in to the end of the Histogram. Click the "Preview" checkbox on and off and watch the cheerleader's face come to life! Click Ok to the Levels box and then choose: Select/Deselect to get rid of the selection.

This example really shows that you really need to analyze the tones in the image to make sure each important area gets adjusted if needed. The Cheerleaders face would print very dull without this Levels adjustment. So the trick is to first get the whole image looking good with a Levels or Curves adjustment and then look at all of the important parts of the picture and adjust them if necessary. In this image I would make selections to the male cheerleaders face. The adjustment will be similar to the one we just made.

The Newspaper is also very important. It needs to be darker so it can stand out better. Choose the zoom tool on the toolbar and zoom up the newspaper.

The newspaper needs a very precise selection. Choose the Polygonal Lasso tool and click and set a point on the edge of the newspaper.



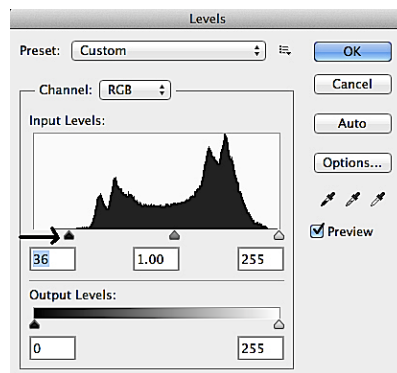
Move the mouse a little over to the right on the top of the newspaper and click to set another point. Think of it like stitching. Set a point, move the mouse and set another point. Always work at a high magnification.



When you work at a high magnification, you will need to scroll the newspaper over as you keep working with the Polygonal Lasso tool. Hold down the spacebar and click and drag the image over as you work. Let go of the spacebar to return to the Polygonal Lasso tool. Work around the newspaper until you get to the place where you started and when you touch the area where you started, you will see a little circle. Click on the little circle to finish the selection. You can also double click when you are close to the starting point and it will jump to the starting point and finish the selection.

From the top menu choose: Select/Modify/Feather and put in one pixel.

Choose: Image/Adjustments/Levels.



This histogram of the newspaper shows it has no blacks. Move the black slider to the right. Click the preview checkbox on and off and readjust the slider if needed. That's how the preview box is used. Make the adjustment and then check it with the preview box. Click Ok. Close the image.

Polygonal Lasso tool tips:

Delete key will remove any points that you set and want to undo. Each tap with the delete key will remove another point.

Escape key will let you start over while you're still making points.

By now you can see how important it is to look around the image after the initial Levels or Curves adjustment. I often get asked, "How did you know to adjust that area". My answer is always that I made a selection of the area and checked it out.

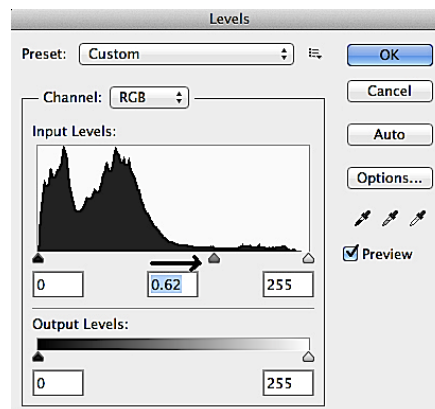
So far we have feathered a selection 50 pixels (cheerleaders face) and 1 pixel (Newspaper). My third most common feather setting is 250 pixels.

### ***Image Butterfly-Book***

One of my favorite techniques is to darken all around the main subject. Choose the Elliptical Marquee set to “New Selection” and click and drag an oval around the butterfly. After making the selection, put your mouse inside the selection and click and drag it into place.



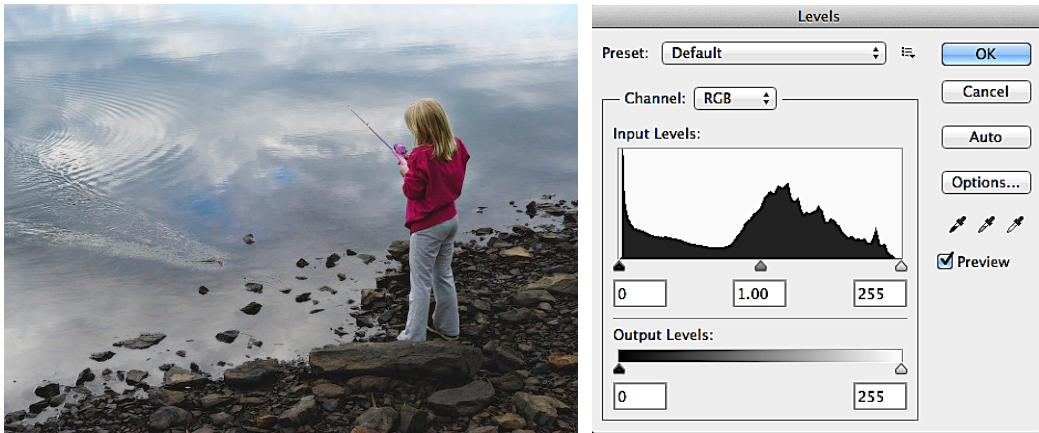
From the top menu, choose: Select/Inverse to select everything outside this selection. Choose: Select/Modify/Feather and put in 250 pixels and click Ok. Choose: Image/Adjustments/Levels and adjust the middle slider to the right to darken the background. Don't forget to check your final setting with the preview button.



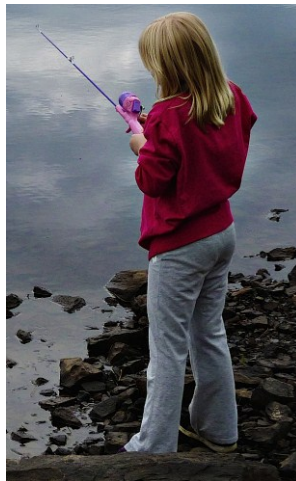
Practice these three types of selections and watch your images come to life!



***Image: Hayley Fishing***



This image also has a good histogram. Hayley looks a little dull and lacking any whites. Let's make a selection of her first. Choose the Zoom tool and click on Hayley a couple of times to get her zoomed up. Then hold down the spacebar and drag on her to center her on the screen.



Several different selection tools could work here, but let's use the Quick Selection Tool.



Move your mouse out over Hayley and then tap on the right "Bracket" key on the keyboard to make the tool larger. Tap on the "Left" bracket key to

get the tool smaller. Adjust until the tool looks like a small black dot. Place the circle in the middle of Hayleys head and slowly drag down.

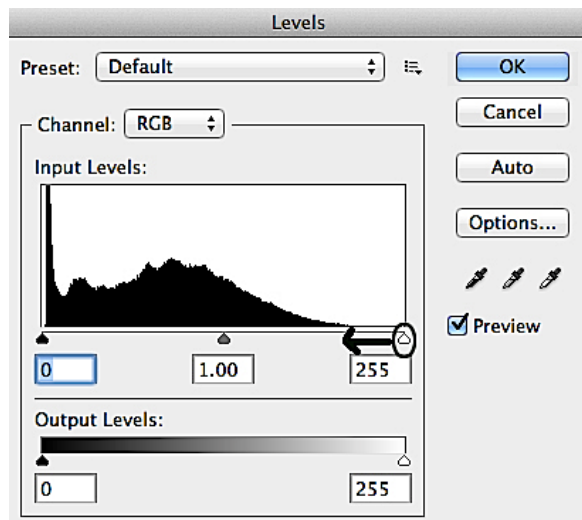
You will see the selection being made. You can tap the bracket keys to make the circle smaller to select smaller areas. The top of the screen has the Quick selection tool options.



Choose the plus or minus option to add to or subtract from the selection. Add to the selection by dragging inside the selection. Subtract from the selection by dragging outside the selection. This tool works great on Hayley because she is so different from the background. Once the selection is made it needs to be feathered. From the top menu, choose: Select/Modify/Feather and put in 1 pixel and click OK.



Now choose: Image/Adjustments/Levels and move the right slider a little to the left to brighten Hayley.



Click Ok To levels and then choose: Select/Deselect to get rid of the selection.

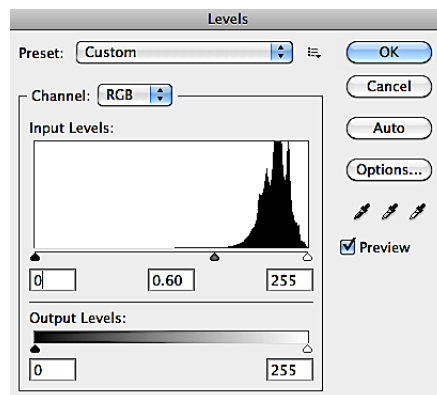
Every image has some areas that can be improved with a selection and a levels adjustment.

Let's make one last selection with the Lasso tool . The upper right hand corner of water is a little too light and is drawing too much attention to this less important part of the image. Click and drag a selection (See Black Line).



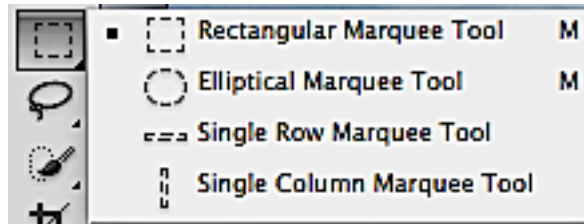
This selection can take much more feathering as it does not have a sharp edge to deal with. Choose: Select/Modify/Feather. Put in 50 pixels and click OK.

Choose: Image/Adjustment/Levels and move the middle slider to the right to darken the tone a little. Click OK. The image looks pretty good.



Let's make on last selection that will make Hayley stand out.

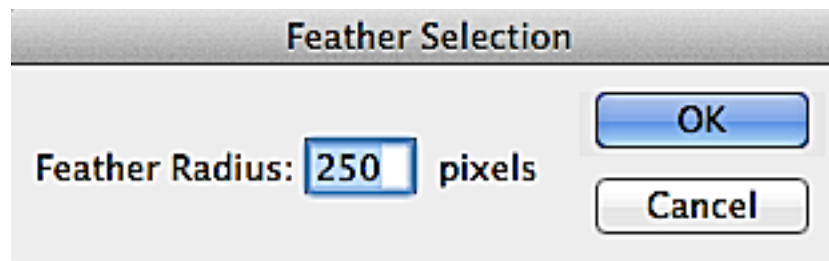
Choose the “Elliptical Marquee” tool.  , It might be hidden behind the Rectangular Marquee tool. If it is, click and hold down on the Rectangular Marquee tool and it will be visible.



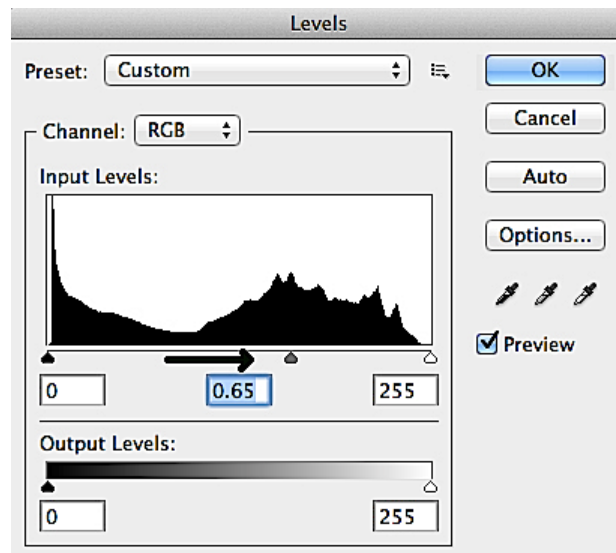
Click and drag a selection that looks like this:



Then choose: Select/Inverse to make a selection of everything outside of the selection. Choose: Select/Modify/Feather and this time put in 250 pixels and click OK.

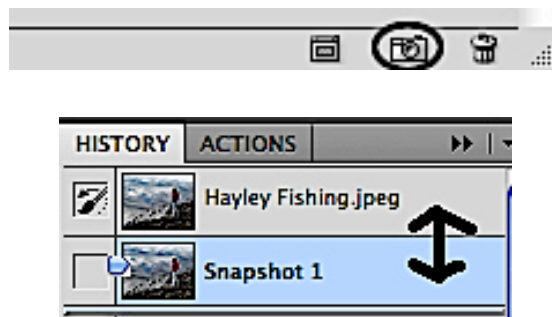


Now choose: Image/Adjustments/Levels and move the middle slider to the right to darken all around Hayley. Click Ok and then: Select/Deselect.



Let's see a before and after of how these selections have changed the image.

Look at your History palette. If you can't see your History palette, choose: Window/History from the top menu. Click on the little "Camera" at the bottom of the History palette. This will make a snapshot of our image that will sit at the top of the History palette.



Click on "Hayley Fishing" to see the before. Click on "Snapshot 1" to see the after.

Now you can see how much an image can change with some simple selections. Make sure to look at every part of the image. Some images can have good looking histograms but have areas that need to be addressed.



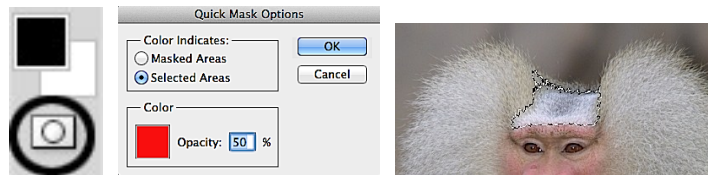
## QUICK MASK

### *Image: Baboon.*

Selected areas usually need to be modified. You either add to the selection or subtract from the selection to get it just right.



You can also modify a selection with a Quick Mask. Start by double clicking on the “Edit in Quick Mask” icon at the bottom of the toolbar. Then click on “Selected areas” and click OK.



Choose the Magic wand tool  and click on the **brightest** part of the forehead area to make a selection. Then change to “Add to selection” from the top of the screen and click on the next brightest area of the forehead. This will leave a crude selection that needs to be modified. Quick mask will work great for this. Press the letter “Q” to enter Quick mask mode.

Now choose the brush tool. Brushes can have feathering put to their edge. A Brush is said to have a hard or soft edge.

Hold down the shift key and tap on the right “Bracket” key on the keyboard, four times. This will make the brush have a hard edge. Then let go of the shift key and tap on the left or right bracket keys to get the right brush size. Press the letter “X” on the keyboard until the foreground color on the toolbar is set to “White”



Finally drag across the upper left hand corner of the red Quick Mask. Painting with white will erase the red mask. Press “X” again and the Foreground color on the toolbar will switch to black. Painting with black will paint in the red mask. This is a great way to modify the shape of a selection. Press “Q” again to return to the selection. Quick masks can be a great way to modify a selection.



With selections it's all about which tool will work best to make the selection and what is the best feathering. It might be 1 pixel feathering on a hard-edged area or it might be 50 pixels or more to blend in a less defined area. Let's say we want to tone down the flowerpots in the foreground of this image. What would be the best selection tool to use? The Quick Selection, Magic Wand, and Magnetic Lasso are probably not good choices, as the selected area needs a pretty defined edge for these tools to work well.

The three tools that could work here are the Elliptical Marquee tool, the Polygonal Lasso tool or the Lasso tool.

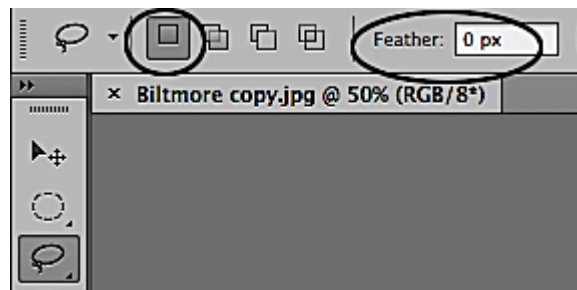
***Image: Biltmore Copy.***



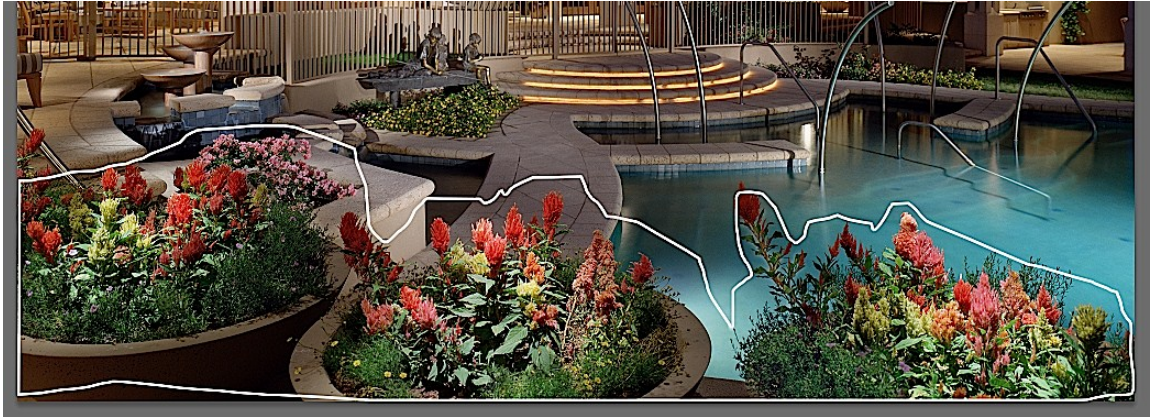
Double click the “Edit in Quick Mask” icon at the bottom of the toolbar and choose “Masked Areas” and click OK.



Choose the Lasso tool. Make sure the tool is set to “New Selection” with no feathering.

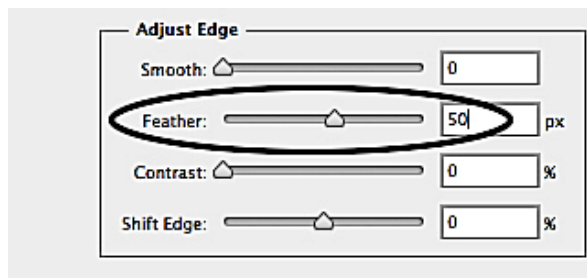


Click and drag a selection around all three flowerpots. It should look something like the area shown in white.



Pretty crude huh? You can't make a precise selection with the Lasso tool. The Polygonal lasso tool is the one to use for precise selections. That said it would take forever to make a selection around these flowerpots with the Polygonal lasso tool. This crude looking selection with the Lasso tool will work well if we get the feathering right.

Choose: Select/Refine Edge and adjust the Feather slider. Try 50 pixels and click OK.



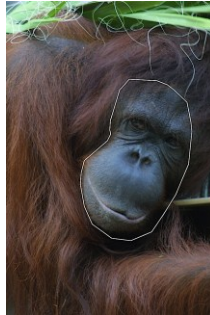
Choose: Image Adjustments Levels or Curves and darken the flowerpots so they don't draw too much attention to them. As you can see, feathering a selection 50 pixels really softens the edge of a selection. This crude looking selection actually works well because the feathering was correct.

For older versions of Photoshop that do not have Refine edge, Quick Mask will be a good way to see the edge of the feathered selection. Make a selection and then feather the selection. Press "Q" to enter Quick Mask to see the feathered edge to the selection. Press "Q" again to return to the selection

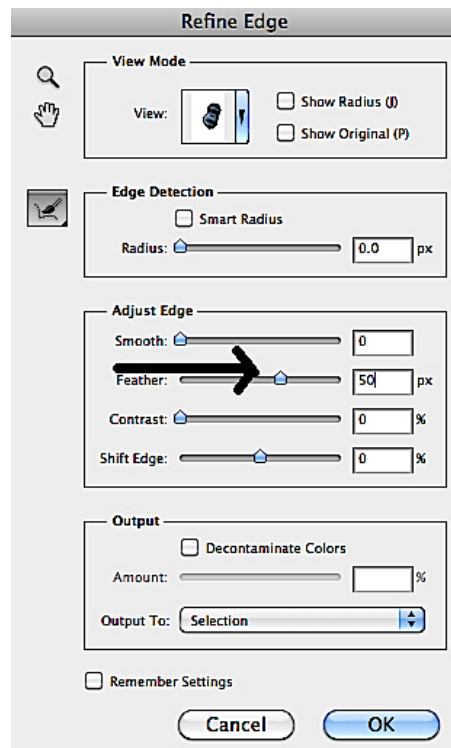
**Let's try the Polygonal Lasso tool.**

***Image: Orangutan***

Choose the Polygonal Lasso tool and make a selection that looks like this area outlined in white. It doesn't have to be exactly the same. The feathering will take care of the transition.



Choose: Select/Refine Edge and adjust the feather slider.



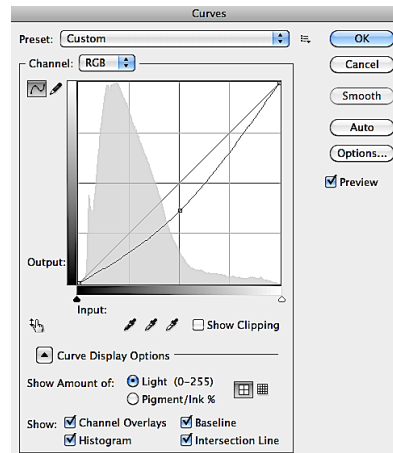
This is a great way to see the feathering of your selections. There is a lot of control in this box. We'll cover it more later on. Click Ok to return to the image.

Let's **Fish for Color**. Choose: Image/Adjustments/Curves. Click on the gray eyedropper and click inside the selection. Click in several spots until you find a color you like. This works great as the Orangutan's face is cold and blue. Remember the opposites? Red/Cyan, Green/Magenta, and Blue/Yellow. If the face is less blue, it is more yellow. Click OK when you have fished a good color.

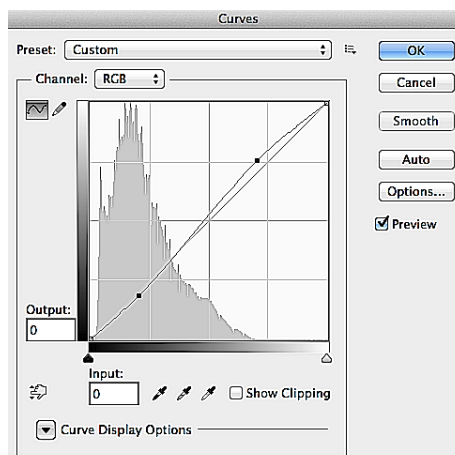
Choose: Select Inverse

Choose: Image/Adjustments/Curves

Click a dot in the middle of the curve and drag down so the curve looks something like this:



Choose: Select/Inverse to return to the selection of the face. The face needs to really stand out. Choose: Image/Adjustments/Curves. Here's two points on the curve that work pretty good. Click OK.



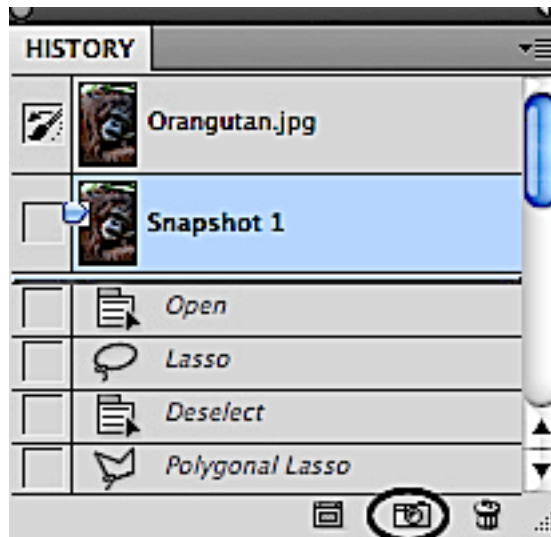
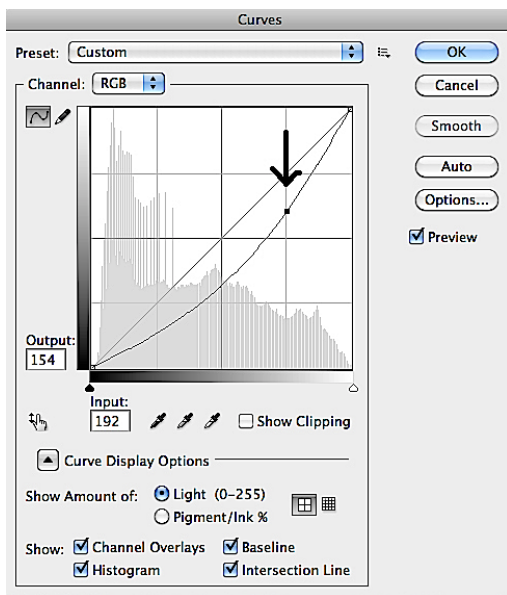
## PhotoShop CS6 Class - Week Two - Quick Mask

Every tone in the image should be scrutinized. The top palm leaves need to be addressed. Choose the Polygonal tool and make a selection like this one shown in red.



Choose: Select/Refine Edge and adjust the feather and click OK.

Finally choose: Image/Adjustments/Curves. Click a point on the  $\frac{3}{4}$  tone and drag down to darken.



This image has really taken on a new look. Let's see a before and after. Click on the little camera at the bottom of the History palette to make a snapshot. Click back and forth between Orangutan and snapshot 1.

Wow!

Every image is different, but every image has some areas that can greatly be improved with a selection and an adjustment. It's up to you to find them.

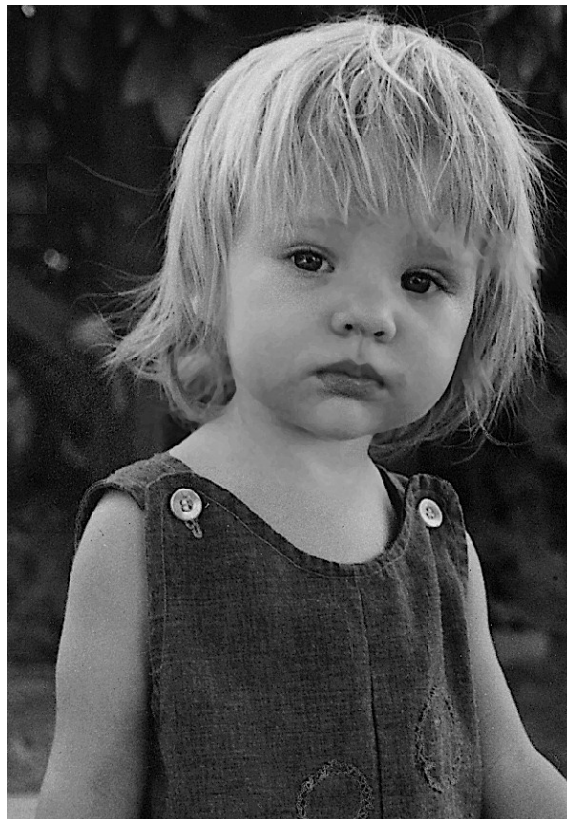
The Polygonal tool is my favorite lasso tool. In the beginning I hated it. I recommend practicing with it a little every time you're in Photoshop. With some practice, it is the fastest way to make a precise selection.

Precise selections are made at a high magnification.

***Image: Jessi***

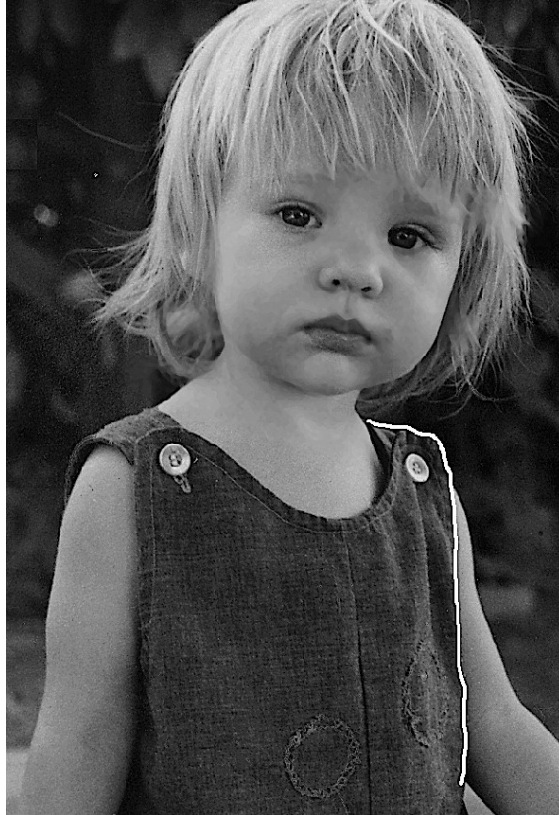


Choose the zoom tool and click and drag a box to zoom up to the top half of the jumpsuit.





The white line in this picture represents the Polygonal tool's selection being drawn. When you get close the edge of the frame, hold the spacebar down and drag the picture up so more of the jumpsuit shows.



When the mouse bumps the edge of the frame at this magnification, the image will bounce around and it can be frustrating. Make sure that you hold the spacebar down and drag the picture up or down a little to get more jumpsuit to work on before you get too close to the edge of the frame.

Always zoom up the image before trying to make a precise selection with the Polygonal Lasso tool. That way any imperfections will not show when the whole image is fit back on the screen.

Double clicking finishes the selection so make sure not to click points too close together.

When you get to the end of the selection and touch the starting point you will see a small circle and then a single click will finish the selection.

## QUICK MASK

Let's practice modifying another selection with Quick Masks. Make a selection of the jumpsuit. This file has some saved selections if you want to practice this lesson in the future without having to select the jumpsuit each time. Choose: Select/Load Selection and choose jumpsuit.



Click on the letter Q on the keyboard to enter Quick Mask. The area **not** masked in red, is the selection.



Choose the zoom tool and click on the edge of the jumpsuit 2-3 times to make it easier to see the edge of the selection.

Press the letter Q one more time to see the selection edge. Then press Q one more time to get back to Quick Mask. As you can see there are a few areas of the selection that aren't that great.



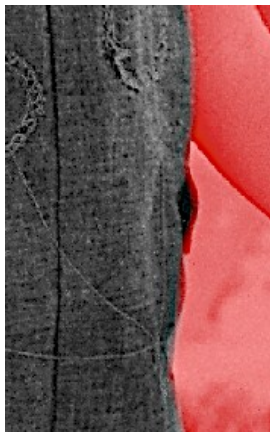
Choose the Brush tool and set the brush to it's hardest setting. Hold down the shift key and tap on the right bracket key four times to set the Brush tool to its hardest setting.

Look at the Foreground/Background colors on the tool bar. They should have been set to black/white when you entered the Quick Mask mode.

Press the letter "X" to scroll the Foreground color on the toolbar to "White"



Choose the zoom tool and zoom up to this area. At this magnification you can see the red mask overlapping onto the jumpsuit.



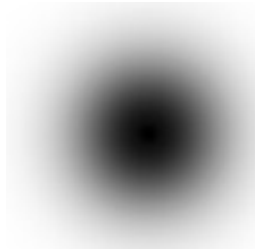
Choose the Brush tool and move your mouse out to the area. Tap on the left bracket key to make the brush smaller. Tap on the right bracket key to make the brush larger. Paint (drag) within the jumpsuit area to erase the red on the jumpsuit. Painting with white as the foreground color will erase the red mask. Painting with black as the foreground color will paint in the red mask. Click the letter "Q" on the keyboard, to view the selection. Click on the letter "Q" again to return to the mask.

To save the selection, choose: Select ➤ Save Selection. To bring a selection back, choose: Select>Load Selection.

## PAINT A SELECTION WITH QUICK MASK

All selections need feathering. So far our selections have been feathered 50 Pixels to make sure the local adjustment blends in seamlessly.

The brush tool can be used to paint in a selection in Quick Mask mode. This can be a very quick way to make a selection. To set the brush tool to its softest setting, by hold down the shift key and tap on the left bracket key four times.



A soft edge brush is similar to a selection with 50 pixel feathering.

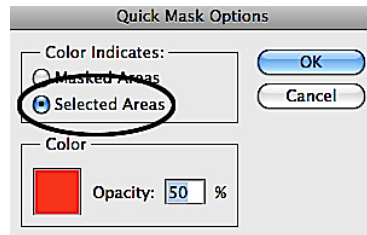
Hold down the shift key and tap on the right "Bracket" key four times and the brush will have a hard edge.



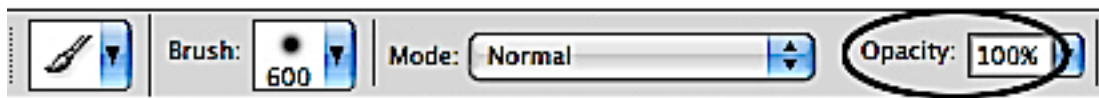
***Open the image called "Orangutan" one more time.*** Let's paint a selection with Quick Mask.

Double click on the "Edit in Standard Mode" button  on the toolbar.

Set Quick Mask Options to “Selected Areas” and click Ok.



Choose the brush tool and make sure it is set to the softest setting. That means hold down the shift key and then tap on the left bracket key four times. Make sure the opacity is set to 100% also.



Press “Q” to enter Quick Mask mode. Make sure the Foreground/Background colors on the toolbar are set to black/white. This is the default when you press the letter “Q” to enter quick mask.



Tap the right or left bracket keys to set the brush size and drag across the Baboon’s face. It should look something like this:

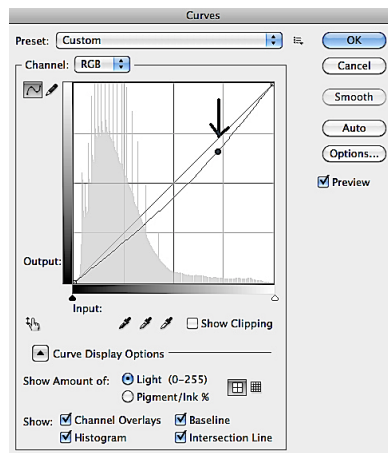


**Tip:** Press the letter “X” to scroll the foreground/background colors on the toolbar between black/white.

Press “Q” again to get the selection back on the screen. This selection looks as good as the selection we made with the Polygonal lasso tool.

Image/Adjustments/Curves. Choose the middle gray eyedropper and click around the forehead to find that warm tone we liked. Remember fishing for color? Now that the face looks warmer, choose Select / inverse.

Finally choose: image/adjustments/Curves. Click a point on the  $\frac{3}{4}$  tone and drag down a little to darken around the Orangutan's face. Click OK. Finally Choose: Select/Deselect.



Let's paint in one more selection with Quick mask. Press the letter “Q” to enter Quick Mask mode. Choose the brush tool and paint across the top of the image, something like this:





Press the letter “Q” one more time to return to the selection. Finally choose: Image/Adjustments/Curves and darken down the area.

As you can see the image looks the same no matter how the selections were made. This example of the orangutan shows that Quick Mask can be a very quick way to make a selection.

Sometimes when you enter Quick Mask mode, the foreground color will be white. Press “X” on the keyboard until the foreground color on the toolbar is black before painting in the red mask.

Once in Quick Mask mode:

Paint with black to paint in the red mask

Paint with white to remove the red mask.

### **Tip:**

Any selection can be cleaned up in Quick Mask mode. Just make the selection and then press the letter “Q” to enter Quick mask mode. The area in red will be the selection. Paint with white to modify the red mask. Once it looks good, press “Q” one last time to return to the selection.

**Tip:** Double click the “Edit in Quick Mask” icon at the bottom of the toolbar and choose “Masked Areas” or “Selected Areas”. When “Selected Areas” is chosen, the red mask will be the selected area. When “Masked Areas” is chosen the red mask will be the areas not selected.



This knowledge of Quick Masks will come in handy when we discuss regular masks. What's the difference? Quick masks don't save with the file and regular masks do. We'll cover that in week four. For now practice painting and modifying selections with Quick Mask.

## REFINE EDGE

Refine edge offers more control to the selecting process. Making selections of hair has always been a problem in Photoshop. Finally with refine edge, hair can be selected without much effort.

### ***Image: Refine Edge***



The background is the problem in this image. There is a shadow from the flash and a reflection on the gray wall. This lesson will use the “Quick Selection” tool and the new Refine edge feature to make a selection of the wall. Start by choosing the Quick selection tool and make a selection of the wall. You will notice the selection is easily made, but the mans hair is not perfectly selected.



## PhotoShop CS6 Class - Week Two - Refine Edge

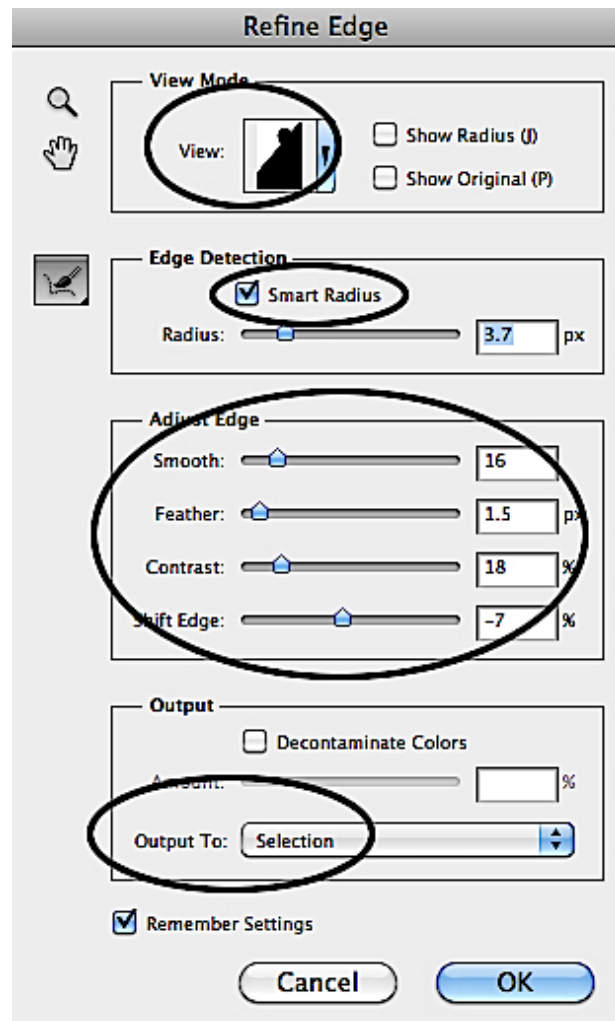
Choose: Select/Refine Edge

View: Black/White.

Check the “Smart Radius” checkbox.

Then start with these numbers for adjusting the edge.

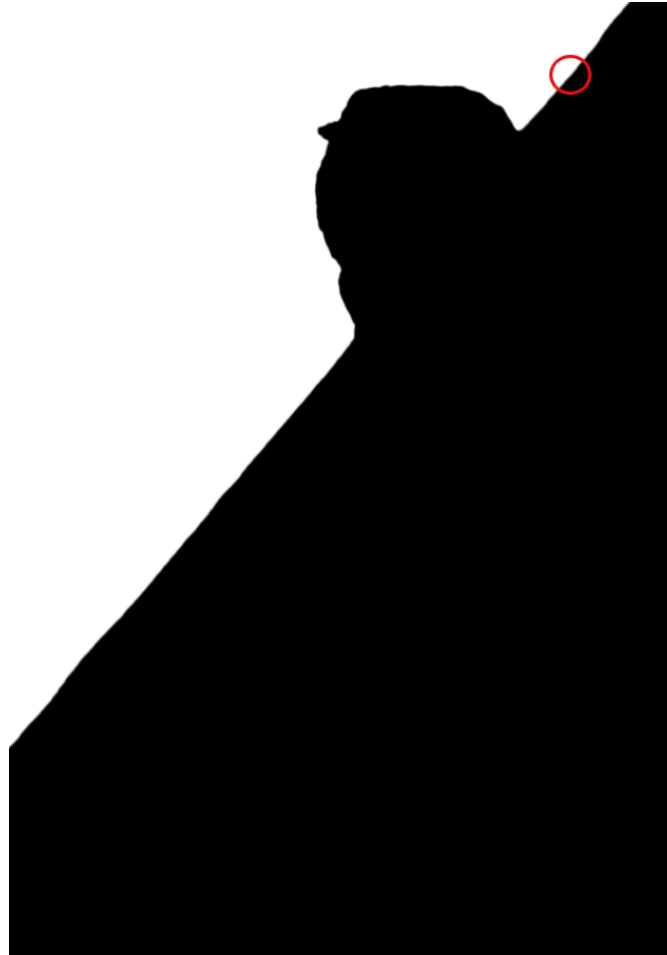
Finally change the output to “Selection”.



These settings are a good starting point and seem to work well on many images.

**Tip:** It's a good idea to check “Remember Settings”

It's time to use the new edge detection feature. Move your mouse out over the image and adjust the brush size with the bracket keys. Adjust the size like the red circle in this example. Place the brush half in the black and half in the white.



Click and drag all along this edge. Start at the top and drag down. Drag around the hair and then down the line. Stop at the bottom of the angled line of the wall. When you let go of the mouse you will see a delay and then the you will see the improvement to the black edge.

Click OK to see the selection on the image. This is the tricky part. The selection doesn't look any better, although it really is.

It's time to make a new grey wall.

## PhotoShop CS6 Class - Week Two - Refine Edge

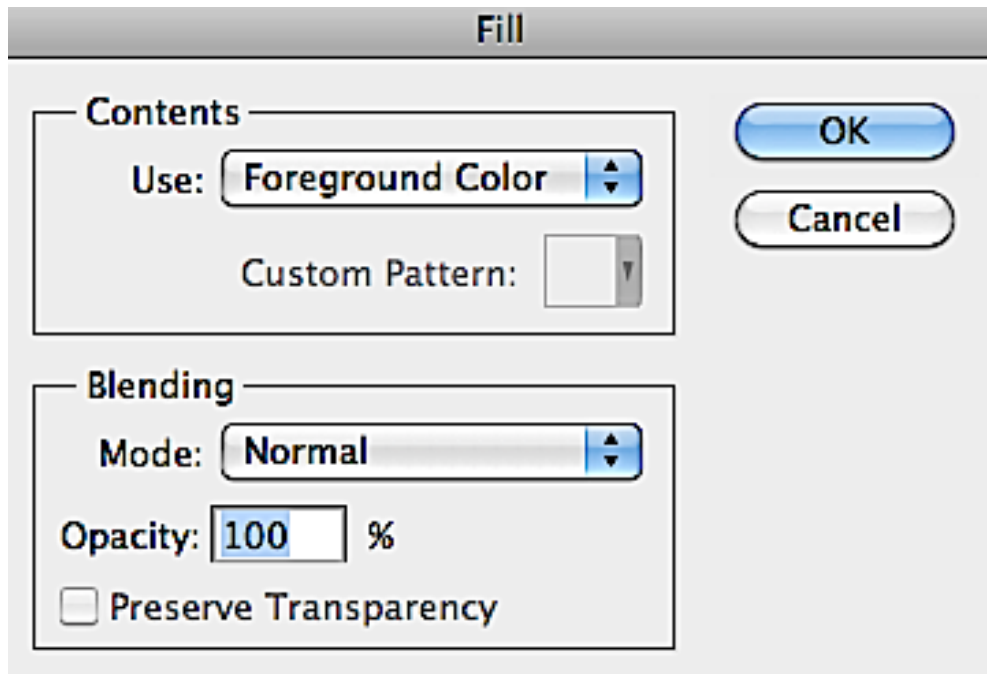
Choose the eyedropper tool on the toolbar and click on the grey wall of the image.



The Foreground color on the toolbar will now be shade or tone.



Now choose: Edit/Fill



Change to:

Foreground Color

Blending mode: Normal

Opacity 100%

Click OK.

Pretty cool Huh?

## PhotoShop CS6 Class - Week Two - Refine Edge

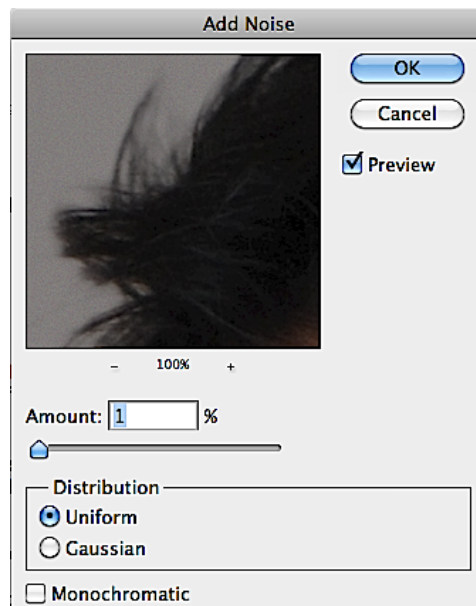
You might think that the problems in the background could have easily been cloned out. This type of grey background is actually very difficult to clone out.

The gray background needs some noise to make it look more natural. Right now it is way too smooth. A little noise will fix the problem.

Double click the Zoom tool to see the image up close.



Now choose: Filter/Noise/Add Noise



Set:

Amount: 1

Distribution: Uniform.

Click OK

Finally choose: Select/Deselect to get rid of the selection.

What a great way to fix this background!



## CREATE A MATTE IN PHOTOSHOP

Not all of the images you work on in Photoshop are going to be matted and framed. Matting can be expensive. Here's a great way to create a matte in Photoshop.

***Image: Cemetery***



This image is 7 inches by fall at 300 pixels per inch. It fits very nicely on an 8.5 x 11 white background so it can be used in a standard 8.5x11 frame when we're done. You can make the matte any color you want. It's about getting the bevel cut to look real.

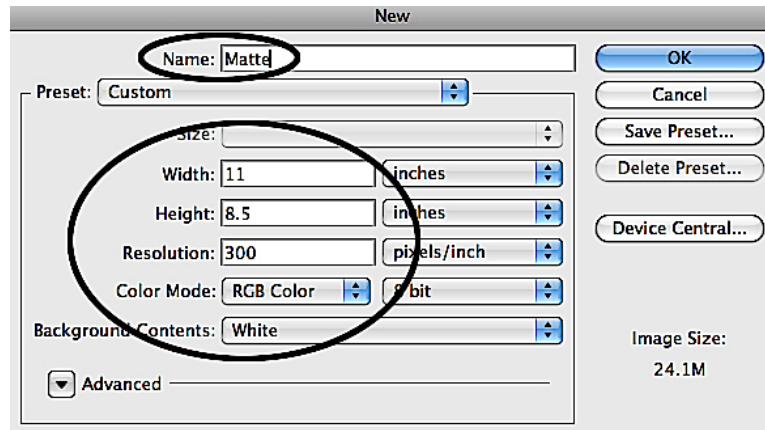
## PhotoShop CS6 Class - Week Two - Create A Matte In Photoshop

Here are the steps:

Choose: File/New. Title it “Matte”

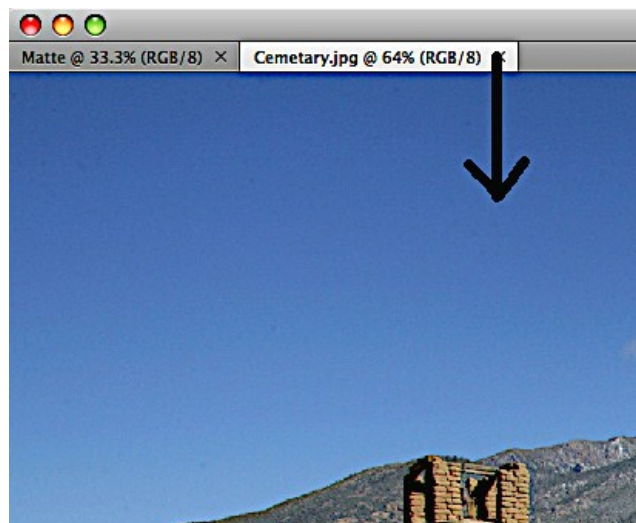
Set to 8.5x11 at 300 pixels per inch and background contents “White”.

The background color can be changed later. Click Ok.



### ***Open Image “Cemetery”***

Cemetery will be the only image visible. Both images show on a tab at the top of the file (Matte & Cemetery). Click and drag the cemetery tab down to separate it into its own window.



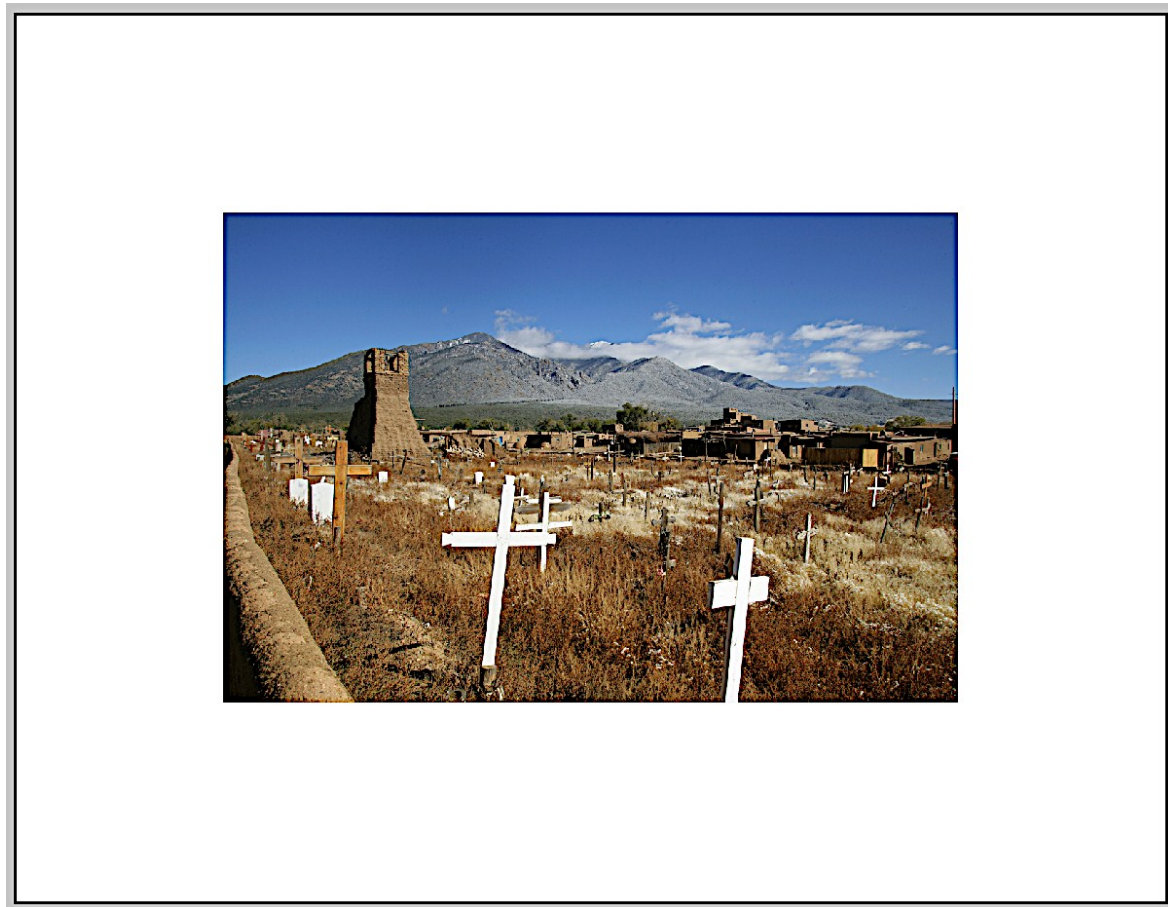
You can now see both the Matte background and the Cemetery image, just like in older versions of Photoshop.

Choose: Ctrl A (PC) or Command A (Mac) to select the Cemetery image.

Choose: Ctrl C (PC) or Command C (MAC) to copy the Cemetery image.

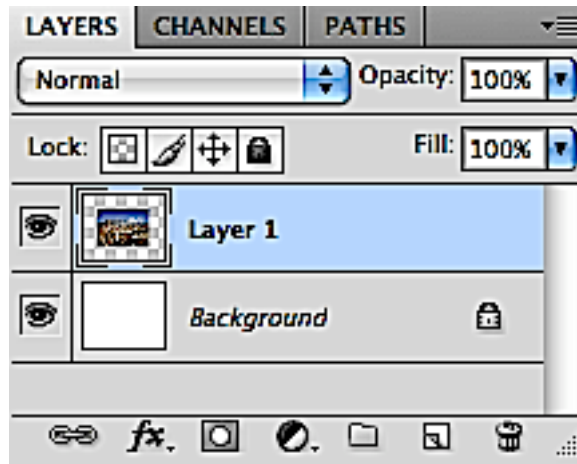
Then click on the Matte image tab to bring it to the front.

Choose: Ctrl V (PC) or Command V (Mac) to paste the cemetery image onto the matte image. The screen will look like this:



The image is now centered on the Matte (White). The black border on the outside of the matte in this screen shot is there so you can see the matte edge against the white paper of this page. You will not have a black border on the outside.

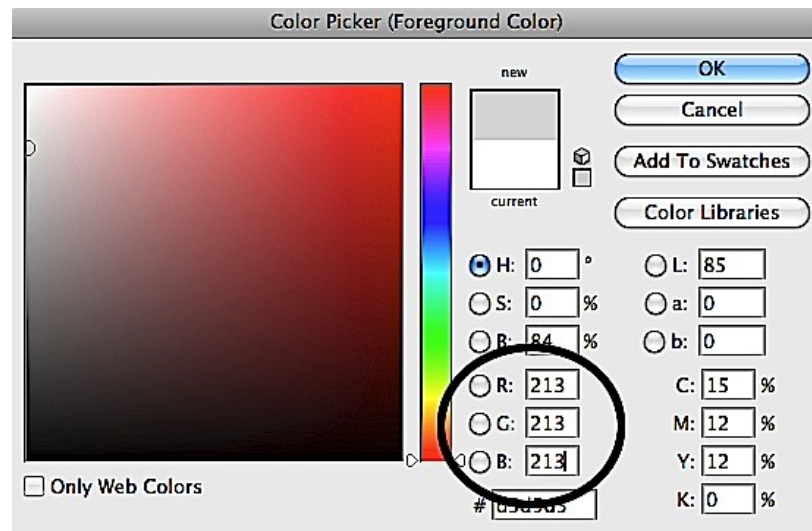
The layer palette will look like this:



Now for the bevel look that gets it looking like a matte. Double click on the Foreground color on the toolbar to bring up the Color Picker.



Type in RGB values of Red: 213 Green: 213 Blue: 213 and click Ok.



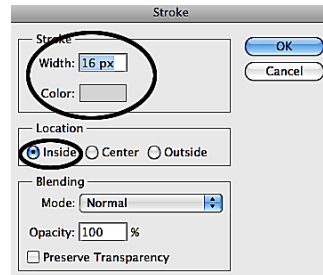
The Foreground color is now the perfect shade of gray for the bevel.



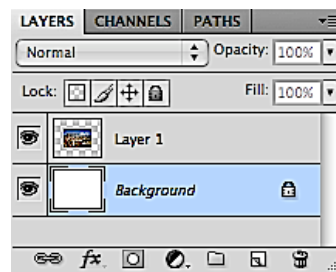
## PhotoShop CS6 Class - Week Two - Create A Matte In Photoshop

Choose: Edit/Stroke

Choose 16 pixel width and “Inside” location and click Ok. Increase the width to a bigger amount for a bigger bevel.



To change the color of the matte, Click on background layer to highlight it.



Double click on the Foreground color on the toolbar to bring up the Color picker again. Choose the color and click Ok, The color becomes the Foreground color on the toolbar.



Choose: Edit/Fill. Make sure it says “Foreground Color” and click ok.

You now have an 8.5 11 inch matted image that can fit in a standard size picture frame.

Tip: If you make your own inkjet prints, you don't need to create the background layer. After the image is prepped, choose: Select/All. Then choose: Edit stroke as you did before. This will put the stroke on the very outside of the image. Finally print the image on the next larger paper size. Example: 5X7 inch image that is printed on 8.5 x 11 inch paper.

## HAND COLORING

### *Image: Gathering Chips Original*



I took this image years ago. My old friend Jess Hawley and I spent 2 weeks in a covered wagon near Prescott Arizona. Jess just past away at 102 years old. He was a great man. Jess was a young boy when the country had the great land rush. His father was driving a covered wagon across Oklahoma to find some land to stake out. Jess wanted to recreate his memories of what it was like in that covered wagon. Long story short, Jess bought an old covered wagon and restored it. We had it hauled up near Dewey Arizona. We spent two weeks dragging that wagon over the hills of the Prescott area. I learned real fast that they really walked most of the way, as the ride is really tough on you if you are in the wagon. I would walk with the horses and sleep in the wagon at night. Jess said that was pretty much how everybody did it. We even found original wagon tracks from the old days. The word spread quickly with the locals that two guys were hauling a covered wagon around the hills. Several of the locals would come out to our campground every night. Jess told me that the wagons would set up camp well before dark. Then the women (his mother) would usually head out first thing to gather the Buffalo chips. This picture is of a local woman from the Dewey Arizona area recreating the gathering of the buffalo chips as Jess remembers. I never knew that this was such an important part of traveling across the west. No buffalo chips, no fire. The chips were picked up with a stick that had a nail on the end of it. Then the chip was put in the tub. A full tub was needed to have a fire that would burn through the night. The landscape was covered with chips. This time from cattle, back then from the buffalo.



I used to love to hand color black and white prints. I would make the print in the darkroom and then apply the color with oils and pencils after the print was dry. This lesson will show how to get the same look in Photoshop.

All of the parts of this image need to have a selection made.

Head Scarf – Dress - Bucket – Cow Pies – Full Subject – Foreground and sky.

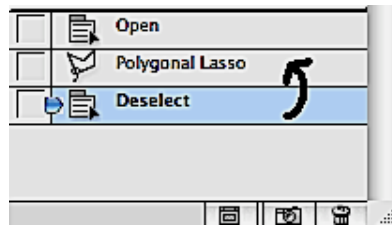
The selections need to be very accurate. Zoom the image up, and then choose the Polygonal Lasso tool. The black line in this picture represents a Polygonal tool selection being made. When you get close the edge of the frame, hold the spacebar down and drag the picture up so more of the dress shows.



If the mouse bumps the edge of the frame at this magnification, The image will bounce around and it can be frustrating. Make sure that you hold the spacebar down and drag the picture up or down a little to get more dress to work on before you get too close to the edge of the frame.

Press the delete key to undo a point that needs to be redone. Each time you press the delete key the last point will be removed. Press the Escape key to disengage the tool and start over. Double click to finish the selection. Double clicking finishes the selection so make sure not to click points too close together as the selection will be completed.

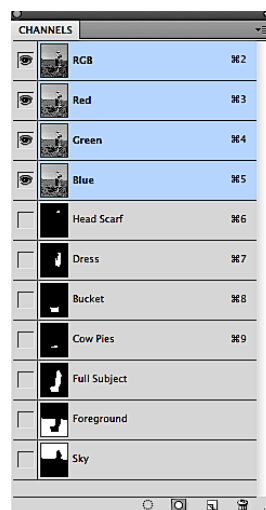
If you accidentally triple click, the selection will be deselected. This can be scary if the selection took some time to make. It's not a problem though. Here's what happened: The selection is completed with the first two clicks. The selection was deselected with the third click (accidental). This history palette shows that a selection was made with the Polygonal tool and was deselected. Click one history state back to return to the selection.



**Tip:** Sometimes when trying to double click and finish a selection, the selection will be deselected and the Polygonal tool will set a new starting point. This is also scary after making a detailed selection. Just press the Escape key and the selection will come back on the screen.

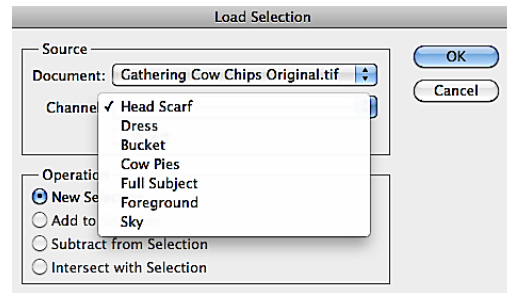
**Best Method to complete the selection:** When you get to the end of the selection and touch the starting point you will see a small circle and then a single click will finish the selection.

Selections can be saved, Choose: Select/Save Selection. Title the selection and click OK. I have made some selections for you. You can see them in the channel palette. We won't access them here. This is just to show you where they physically are saved.

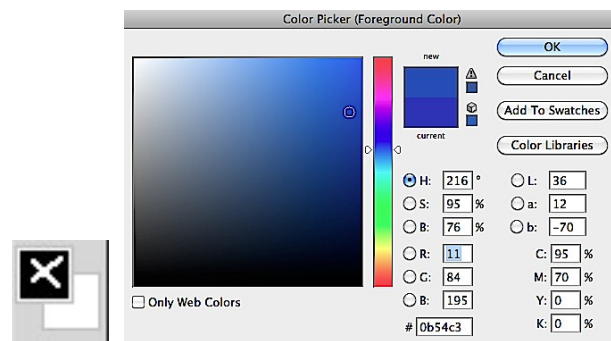


## PhotoShop CS6 Class - Week Two - Hand Coloring

Choose: Select/Load Selection to access the selections.



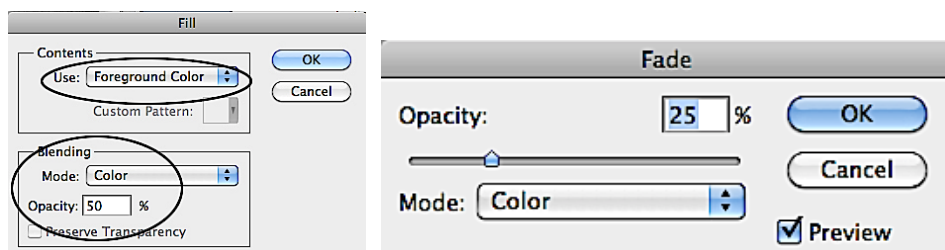
Choose the dress channel and click OK to load it up. Choose: Select/Modify/Feather and put in 1 pixel. All of these selections will require 1 pixel feathering. Double click on the Foreground color on the toolbar to bring up the color picker. Choose a color and click OK.



Choose: Edit/Fill. Use Foreground color and then change the blending mode to Color. Finally set the opacity to 50%. Click OK.

Immediately after clicking OK to the fill box, choose:

Choose: Edit /Fade Fill and then adjust the slider to get the final color.

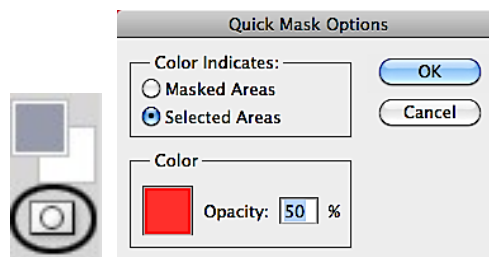


Practice loading the rest of the selections and adding color to the image.

The sky in this image has some unevenness from the processing of the 8x10 piece black & white film. Let's clean it up. Choose the Magic Wand tool and click in the sky. Then choose "Add to Selection" from the top option bar and click to fill in the missing areas.



Double click on the "Edit in Quick Mask" button at the bottom of the toolbar. Click on "Selected Areas" and click OK.



Press the letter "Q" on the keyboard to enter the Quick Mask Mode. The selected area will be seen in red. As you can see, the sky is selected but part of the woman's dress is also selected. When you enter the Quick Mask mode, the Foreground/Background color on the toolbar automatically switches to Black/White.

Choose the Zoom tool and zoom up to the problem area. Choose the brush tool, hold down the shift key and then tap on the right bracket key four times to get a hard-edged brush. Painting with black will paint in the red mask. Painting with white will erase the red mask. Click and drag across all of the red areas on the woman's dress. This will remove the red mask from the dress. Remove the entire red mask from the dress area.

Press the letter "Q" one more time to return to the selection.

Choose the "Eyedropper" tool on the toolbar and click in the sky; this will place the color as the Foreground color on the toolbar.



Choose: Edit/Fill. Make sure it is set to Foreground Color/Normal, and 100%. Click OK. Immediately After the fill, Choose: Edit/Fade Fill and adjust the slider back to the left until the sky looks good and click OK.

Here's an old hand colored print of Jess. He was 18 years old at the time and a government employed mountain lion hunter. Arizona had a mountain lion problem at the time. The government paid Jess \$30.00 a month. He had to pay for his own food and lodging. Needless to say it wouldn't last through the month. He told me he did it for three years.



Here's Jess and I riding electric three wheelers on a desert morning. He was 100 at the time. I asked him where he got them. He told me he got on the computer and went to "Yahoo" and typed in "Go carts". He said he kept fishing around the internet and found the trikes and had them delivered. Like I said, he was quite a guy. He would always give me the slower bike!





## PUT A GRADIENT IN A SELECTION

Gradients are very powerful. This lesson will show you how to put a gradient in a selection. Later on in week four we will put the gradient in an adjustment layer and have the most control over the gradient process. That said, let's put a gradient in a selection.

***Image: Watch***



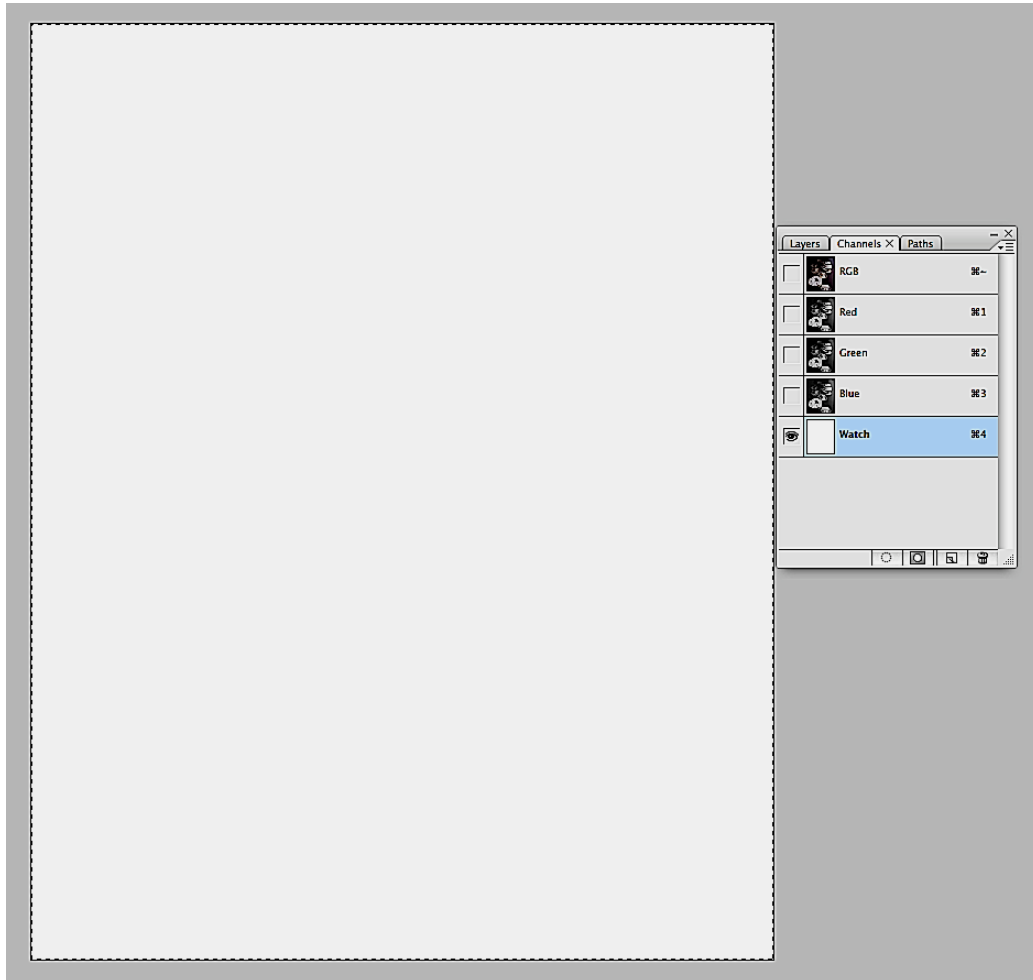


## PhotoShop CS6 Class - Week Two - Put a Gradient in a Selection

Start by selecting the whole image (Select ➤ All).

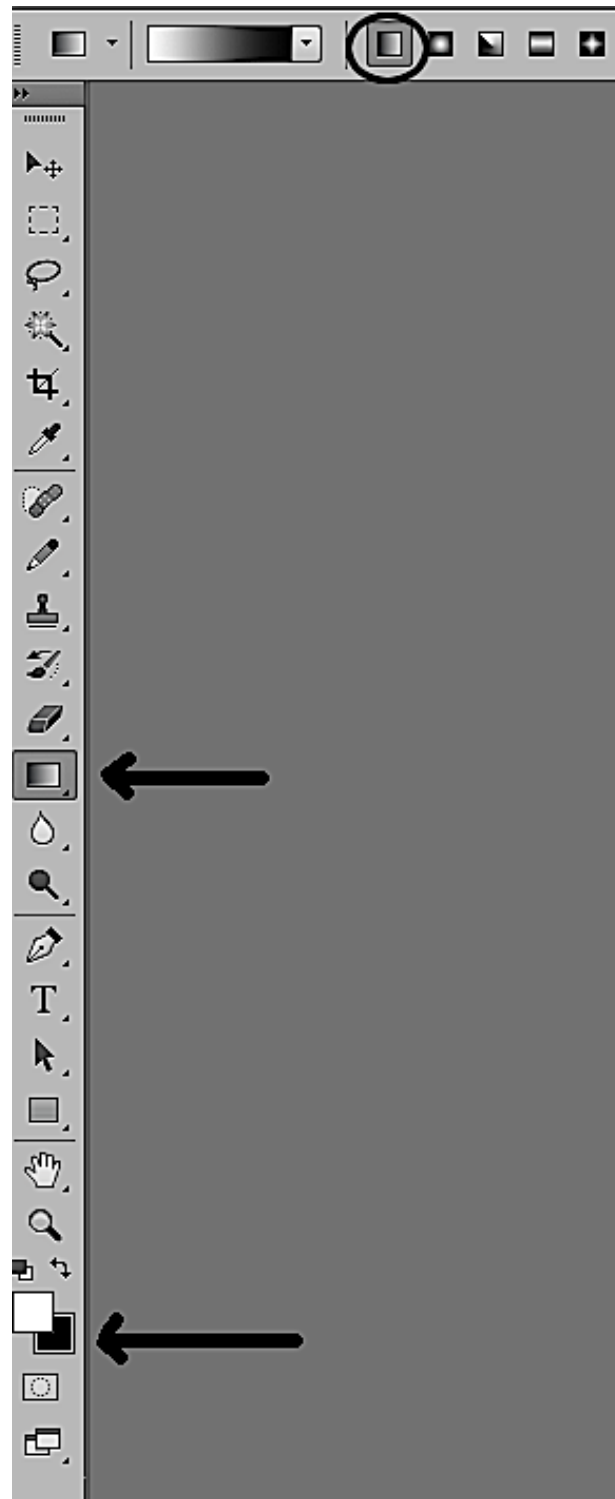
Save the selection (Select ➤ Save selection). Title the selection “Watch”.

Make sure the “Channel Palette” is visible. Saved selections end up as Alpha channels in the channel palette. Click on the channel called Watch. Your screen will look like this:



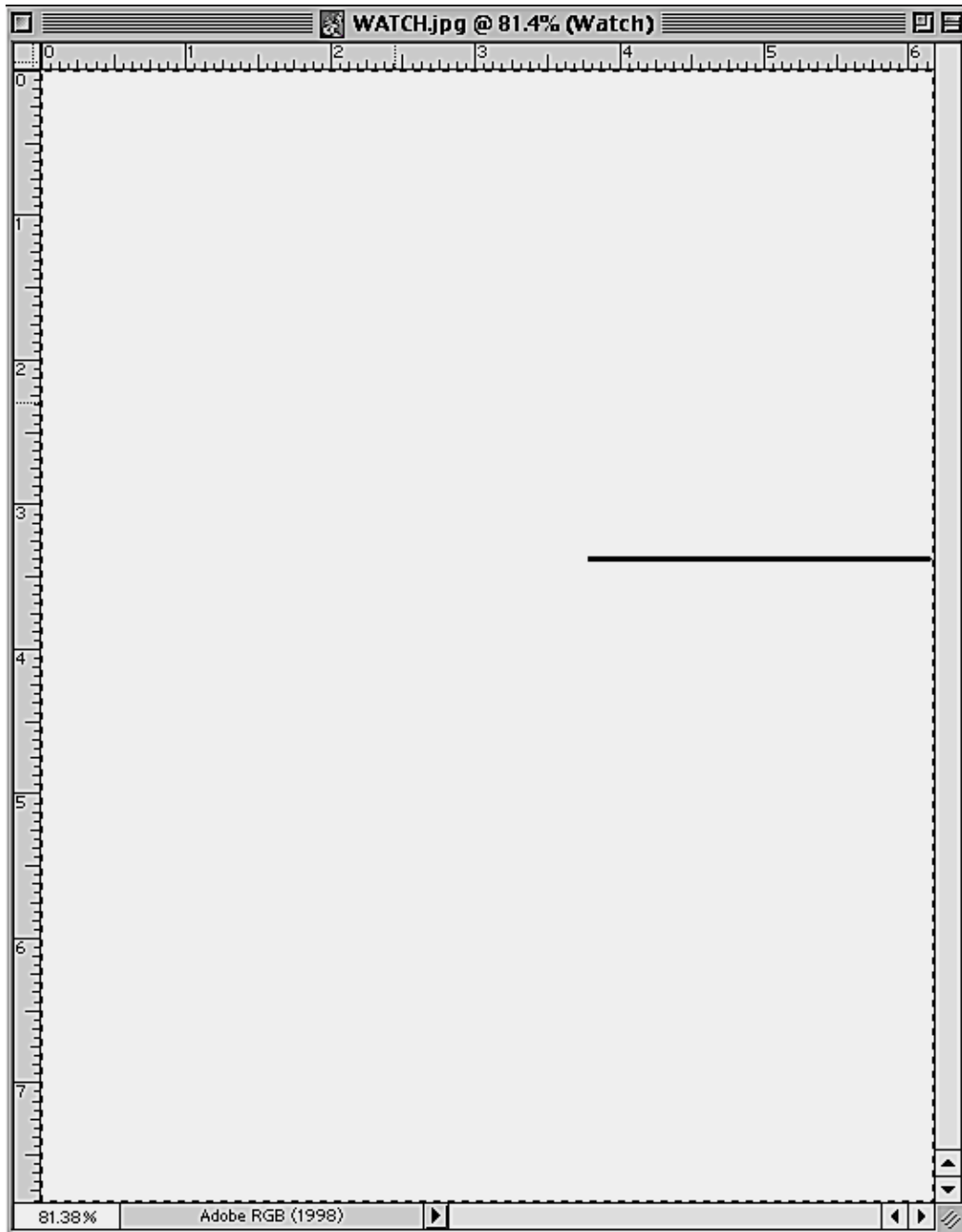
The next step is to put a gradient in the Alpha Channel.

Choose the Gradient tool on the toolbar and then set the foreground color on the toolbar to white/black. The toolbar should look like this:



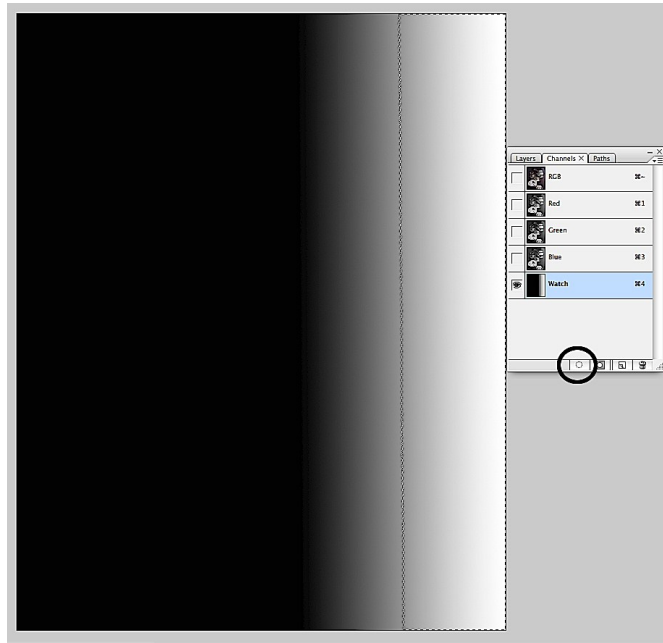
With the Gradient tool chosen, draw a line in the “Watch” channel.

Hold down on the “Shift Key” and drag a line from the right side of the channel towards the left. Drag a line something like this.



## PhotoShop CS6 Class - Week Two - Put a Gradient in a Selection

Now click on the “Load Channel as selection” button at the bottom of the Channel palette. Your screen will look like this:



You now have a gradient in the Selection (Alpha Channel). The line is showing the halfway point of the gradient.

Click on the RGB Channel at the top of the Channel Palette to return to the image.



Now make a Levels adjustment to darken the right side of the image without darkening anything else.

The final image will look like this:



That's how to put a gradient in a selection. Like I said, the layer palette offers an even better way to use Gradients. We'll get to that in Week Four (Layers).



## SUBTRACT FROM YOUR SELECTION

The dark canyon in the bottom right of this picture needs to be lightened up. Choose the Polygonal Lasso tool and make a selection around the dark canyon area.

**Image: Jacka**



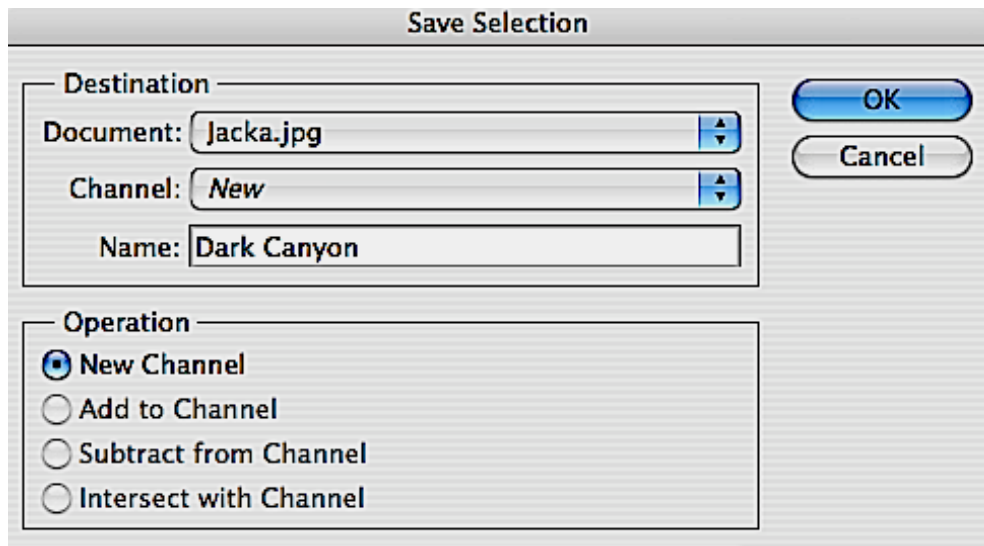
The selection has a few hot areas, where the sun is hitting in the dark canyon. Set the Polygonal Lasso tool to “Subtract From Selection” and make a selection of the hot areas.



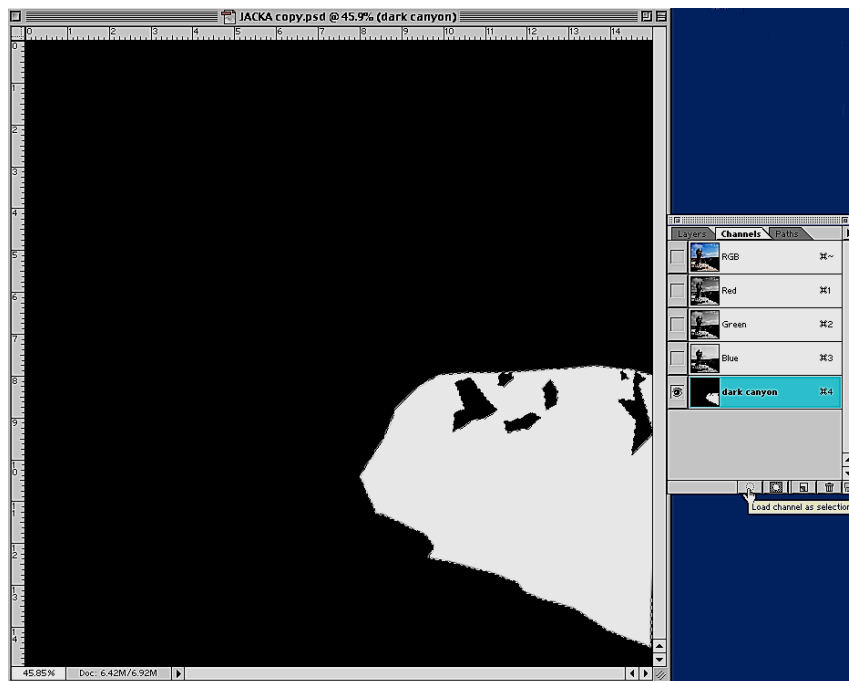
Feather the selection 10 pixels.



Next, choose: Save selection and title it Dark Canyon. Click Ok.



Selections are saved in the Channel Palette. Click on the Channel palette and then the Dark Canyon Channel. The white area is your selection and the black area is what is masked out.





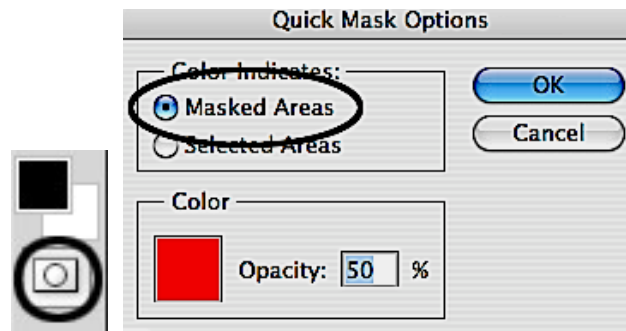
Click on the RGB channel to return to the image.

Now any adjustments to lighten the dark canyon will affect the dark areas, and not the areas subtracted from the selection.

## PUT A FANCY EDGE ON YOUR IMAGE

Double click the Edit in Quick Mask mode icon on the toolbar and choose Masked Areas.

***Image: Hayley Running***



Click Ok.

Open the image called “Hayley Running”.

Choose the Rectangular Marquee tool and make a selection just inside the edge of the image (see red). Then press the letter “Q” to enter Quick Mask mode. The area outside of your selection now appears with a red overlay.

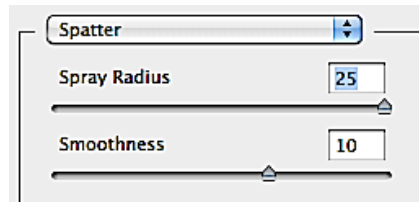


The mask is actually protecting the area of the image that it is covering. This way, when you apply filters to the image, the edges where the mask and the unmasked areas meet will be the only areas that are affected.



Let's apply the Spatter Filter to apply a jagged edge.

Select: Filter ➤ Brush Strokes ➤ Spatter. In the Spatter dialogue box, you'll see a preview of the filter in the preview window. Adjust the spray radius and the smoothness. Select a spray radius of 25 and a smoothness of 15. Click OK.

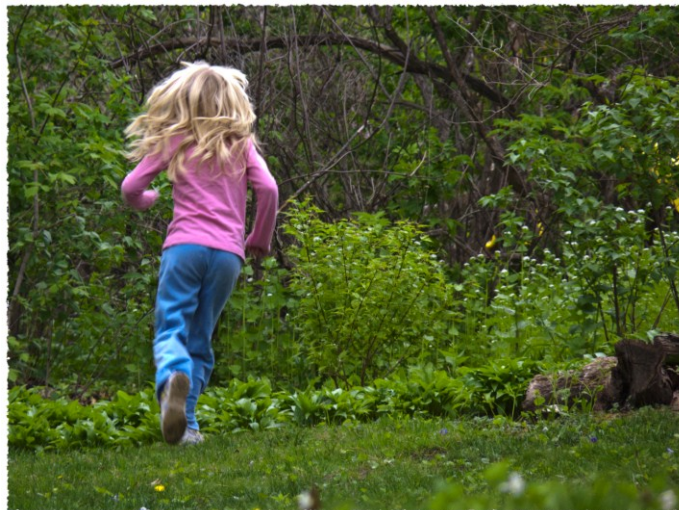


Once you've finished applying the filter, press the letter Q again to return to your Selection. Choose Select ➤ Inverse. Then Choose: Select / Modify / Feather and put in 1 pixel feathering.

Press the letter D and then the letter X until the Foreground/Background colors on the toolbar are set to Black / White.



Finally choose: Edit/Cut.



Now that you have a basic understanding of how to create photographic edges, try applying different filters to your mask.

## BLACK POINT & WHITE POINT TEST

This is a good lesson if you want to see what RGB values of 5,5,5 and 245,245,245 look like in your finished print. I used to do a lot of black and white printing in the darkroom. In the darkroom I would test to find the minimum exposure to make a maximum black on the paper. I also wanted the whites of the image to have detail and would test for that. This lesson is the digital equivalent.

File ➤ New:            Set the size to 8.5x11

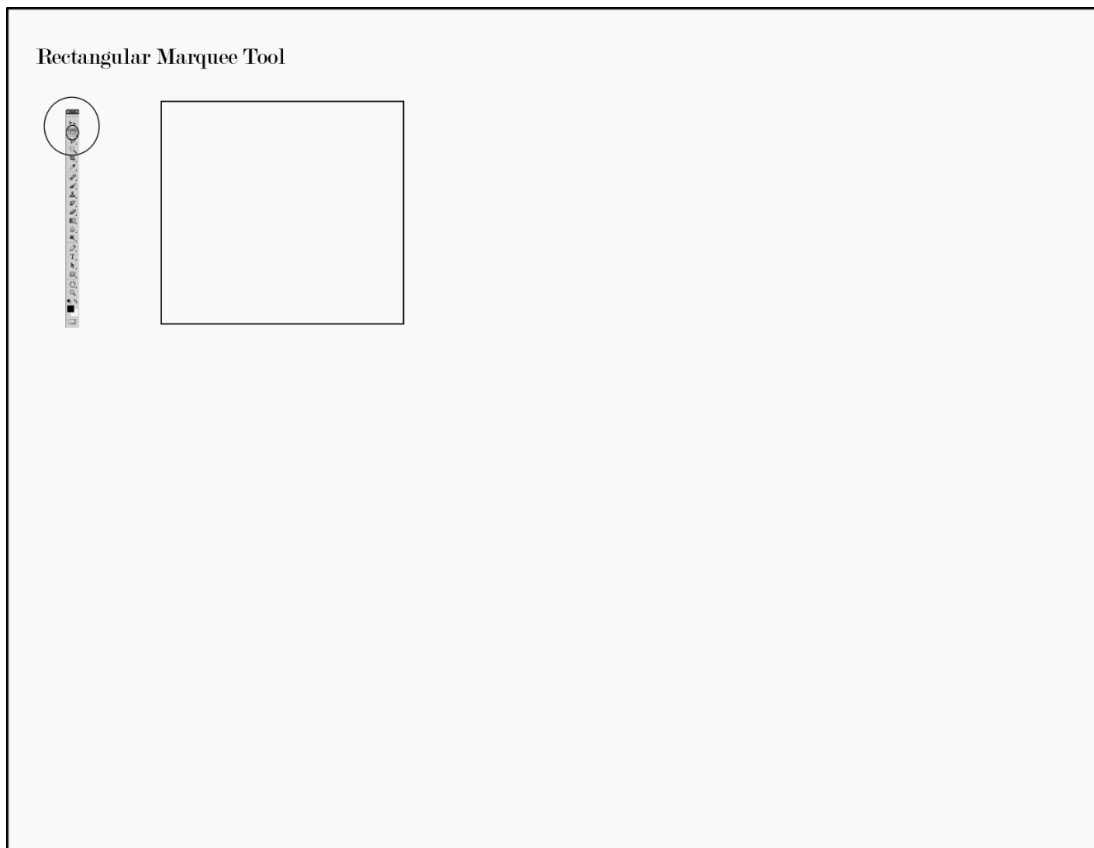
For Ink Jet outputs:        Set the Dpi to 300

For Lambda outputs:       Set the Dpi to 200

For Frontier & Light Jet output set the DPI to 300

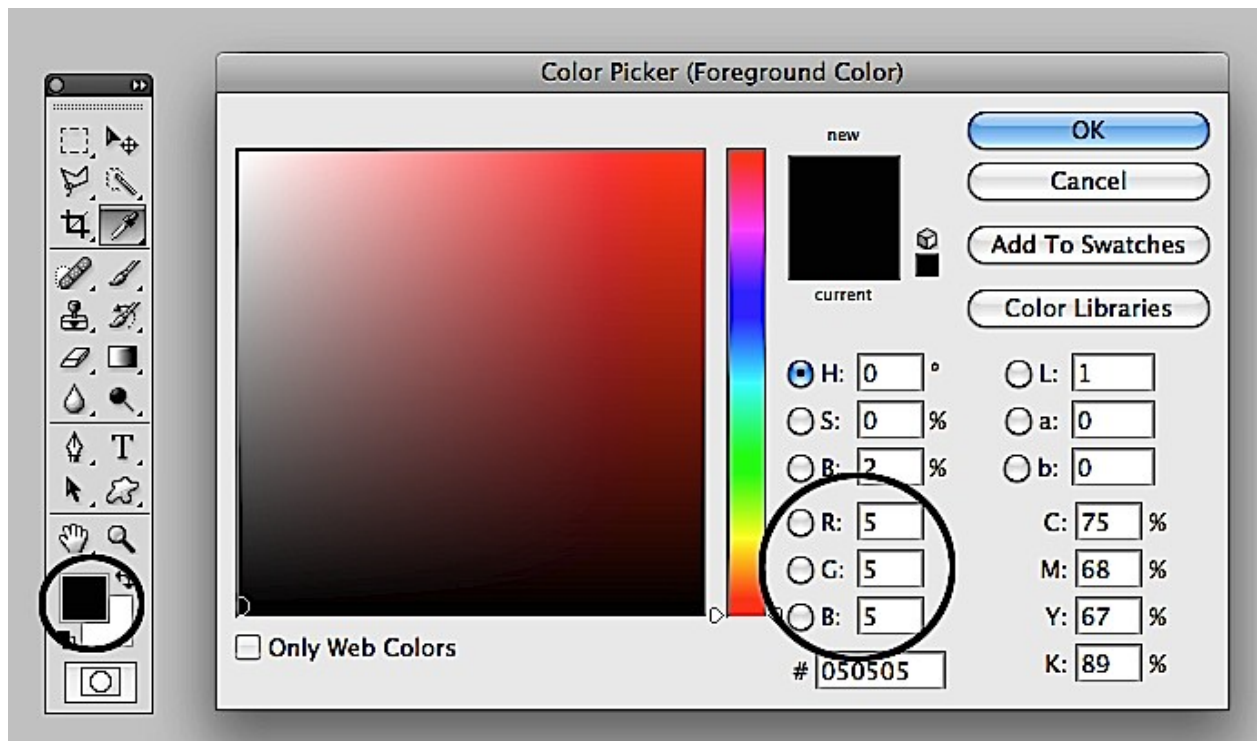
Click OK

Make a selection in the upper corner with the rectangular marquee tool.

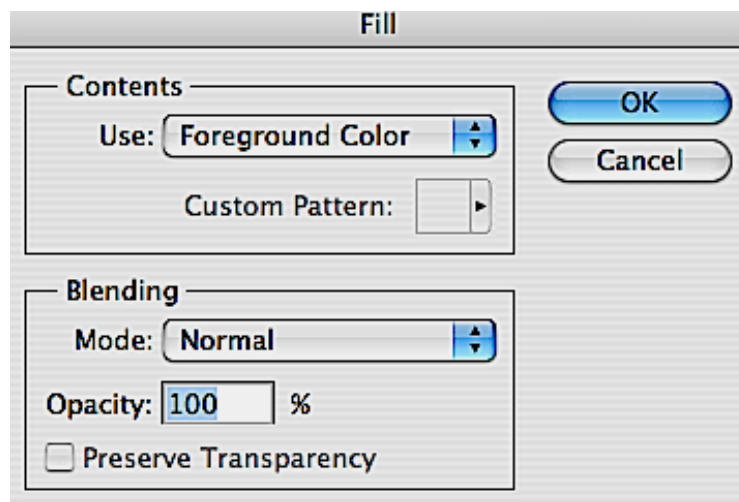


## PhotoShop CS6 Class - Week Two - Black Point & White Point Test

Double click the foreground color on the toolbar and bring up the color picker. Type in RGB values of 5,5,5 and click OK.

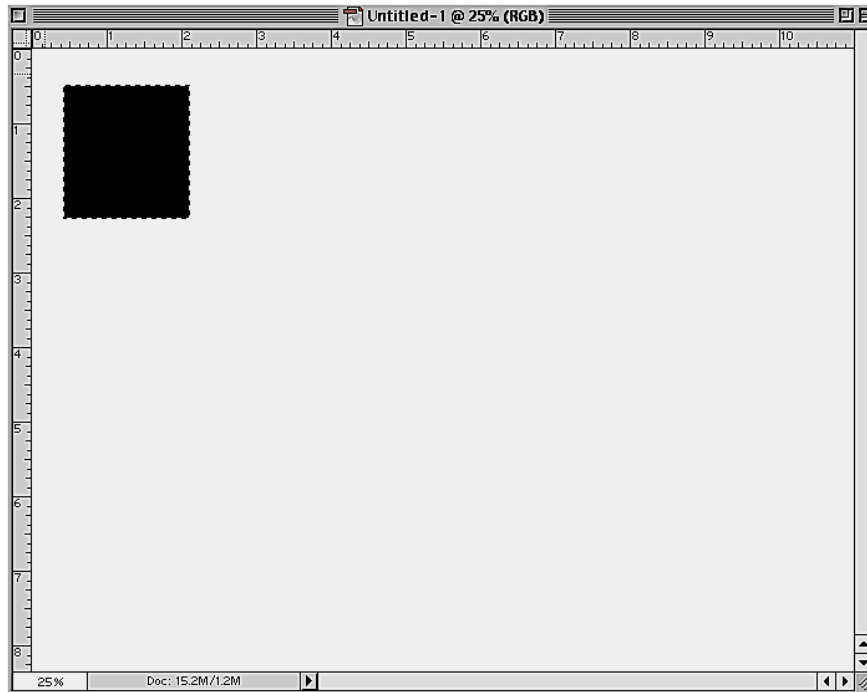


Choose EDIT > FILL and click OK.

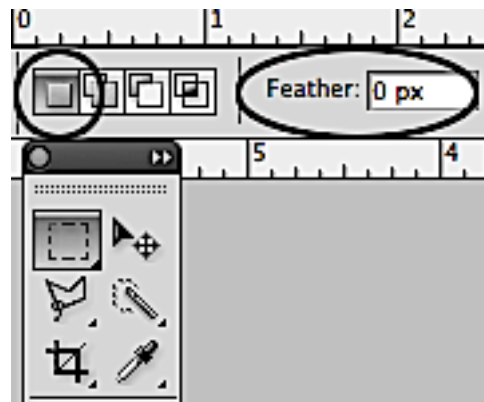




At this stage the canvas will look like this:



Make sure your Marquee tool options are set to New Selection with no feathering.

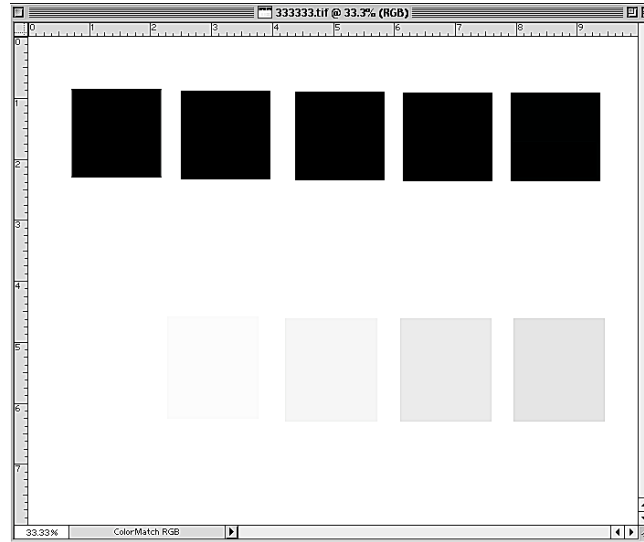


With the selection still active, click inside the selection and drag the selection to the right. Then double click the foreground color on the toolbar to bring up the color picker, and type in RGB values of 10,10,10 and fill the selection (Edit > Fill). Move the selection over by clicking inside and dragging it over. Make values of 5,5,5 - 10,10,10 - 15,15,15 - 20,20,20 25,25,25

## PhotoShop CS6 Class - Week Two - Black Point & White Point Test

Start a second row and follow the same procedure to type in values of 250,250,250 - 245,245,245 - 240,240,240 - 235,235,235 - 230,230,230.

At this stage your canvas will look like this:



The next step is to type in the appropriate number values under each box.

Press the letter “D” on the keyboard. This will set “Black” as the foreground color on the toolbar. Click on the letter “T” on the toolbar, to activate the type tool. Click underneath the first black box to get a blinking cursor. Type in 5,5,5. Use the spacebar to scroll over and type in 10,10,10. Use the spacebar and finish off the 15,15,15’s, the 20,20,20’s and the 25,25,25’s. Now press (Enter/Return) to scroll the cursor down just below the white boxes. Type in: 250,250,250 - 245,245,245 - 240,240,240 - 235,235,235 and 230,230,230.

When you are done click on the check mark at the top right of the option bar to complete your type.



Clicking on any other tool on the toolbar other than the type tool will also complete your type. When type is completed it becomes a layer. If you

ever want to edit your type, just double click on the type layer. You can now edit the type.

Your canvas should now look like this:



Print out this test on your inkjet printer or have your lab print it out. First look at the black boxes. Look for the highest number value that yields a rich black. Next look at the white boxes. Look for the number value that yields the lightest shade of gray on the white paper. This number value will be the white with detail.

**Place these values in the Eyedroppers of “Levels” or “Curves”**

## **WEEK TWO SUMMARY:**

Practice the Lasso Tools.

Practice painting a Selection with the Quick Selection tool.

Practice with the Polygonal Lasso Tool. Zoom up on an area of your image and then start making a selection. Hold down the spacebar, and drag the image over a little, to keep making the selection.

Practice the Hand Coloring technique

Practice The Content Aware – refine Edge Lesson

Practice painting a selection using Quick Mask

Put a gradient in a selection

Put a fancy edge around your image

Practice your Black Point White Point test.

First get the image looking good with a Levels or Curves adjustment.

Then look at the image on the screen and see if there are any specific areas that could use some more adjustment.

Make a selection of the area.

Feather the selection

Make adjustment to the area.

Save the selection.

Remember that just about any move in Photoshop can happen within your selection!

## **KEYBOARD SHORTCUTS**

Edit in Quick Mask mode Q (on keyboard)

Edit in standard mode (return to selection) Q again

Select all (Control/Command) A

Reselect (Control/Command), Shift, D

Select inverse (Control/Command), Shift, I

Feather.....Shift / F6

Marquee tool M

Lasso tool L

Fill selection Shift, Delete

Magic Wand Tool / Quick Selection Tool... W

Fill with Foreground.....(Alt/option), Delete

Fill with Background (control/command)...Delete

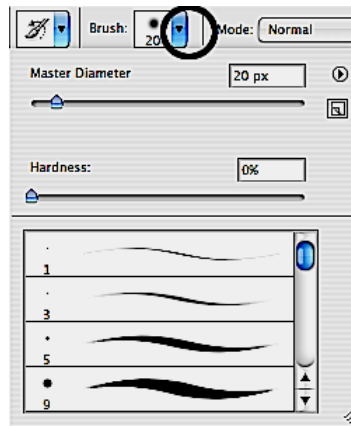
## WEEK THREE:

### HISTORY BRUSH TOOL

The History brush tool  can be used to adjust specific areas of the image. No selections are needed with this technique as the adjustments are painted in with the brush. The image will dictate which method will work best. Many images have areas that are easily “painted in” instead of “selecting” the area. This type of painting an adjustment to a local area of the image is usually with an adjustment layer and a mask. We’ll get into Adjustment layers in week four. That said, I’ve always loved this History Brush technique and use it to this day. It is a fast way to work and on some images that is a real plus.

Let’s talk a little bit about brushes.

When I work with brushes I’m concerned with the size of the brush and the softness of the brush. Highlight the History Brush tool.  Look at the option bar at the top of the screen. Click on the little arrow next to the brush box to open up the sliders for diameter and softness of the brush.



When working with brushes the diameter and softness of the brush are constantly being changed. You can also Right click (PC) or Control click (Mac) on the image to access this box.

Think of the hardness setting as feathering. Most every adjustment needs a soft edge brush to paint in the adjustment seamlessly.



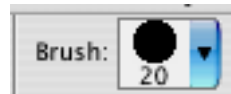
## PhotoShop CS6 Class - Week Three: - History Brush Tool

The bracket keys on the keyboard are my favorite way to set the diameter and hardness of the brush. The left bracket key scrolls the diameter smaller, and the right bracket key scrolls the diameter larger.

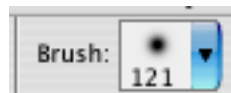


I very seldom use a brush at maximum hardness.

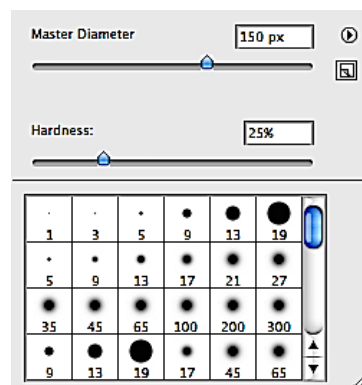
Hold down the shift key and then tap on the right bracket key four times and the brush will be set to its maximum hardness.



Hold down the shift key and tap the left bracket key four times and the brush will be at its maximum softness.



Hold down the Shift Key and tap on left bracket key four times and then the right bracket key once. This puts the softness of the brush to the 25 %.



## PhotoShop CS6 Class - Week Three: - History Brush Tool

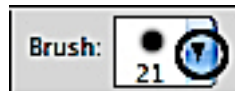
First set the hardness to the brush. Then move your mouse out into the image and use the bracket keys to set the diameter of the brush.



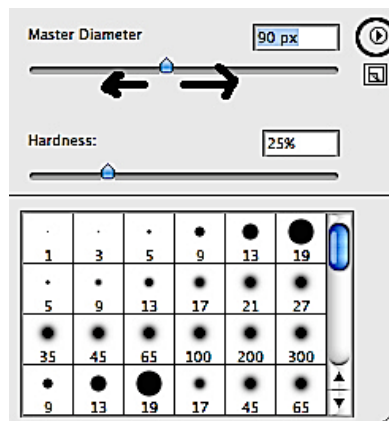
Ross Katz

Every once in a while the circular brush will disappear, replaced by a crosshair. If this happens, tap on the Caps Lock key. The Caps Lock key scrolls the brush tool between its normal circular shape and a crosshair shape.

Every once in a while the bracket keys will not change the diameter of the brush. Here's how to get them working again. Click on the brushes fly out



And move the diameter slider a little left and right. Click on the little arrow to close the box. Now the bracket keys will work again.



## FUN WITH THE HISTORY BRUSH

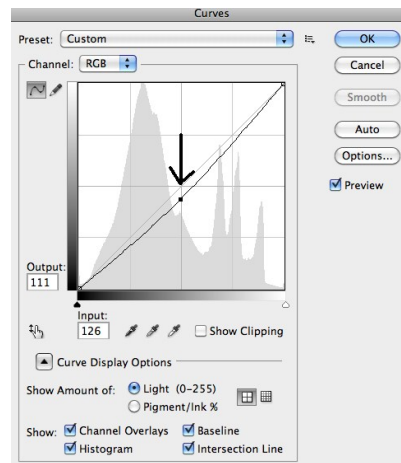
The History brush can be used to modify portions of the image without making a selection. Once you see how easy it is to use, you will love this tool. Make sure your History palette is open. If not choose Window / History.

***Image: Steve on Canyon Edge***



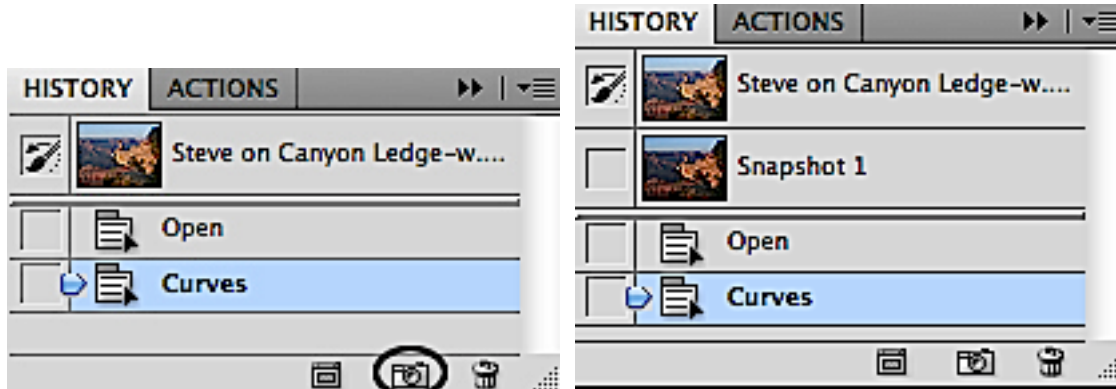
Some images lend themselves to painting. This is a classic example. I think the image will look better if it is darker, although I don't want to get too dark. Here we'll use the History brush to darken everything around me and then paint me back to my original tones with the History brush.

Image / Adjustments / Curves

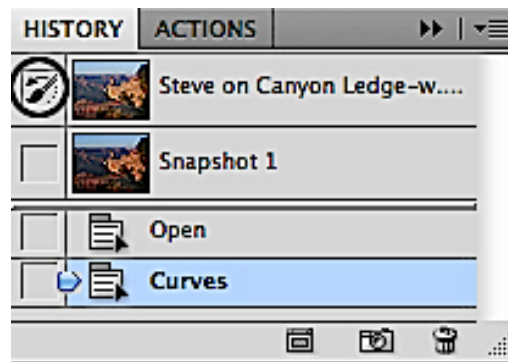


The histogram shows good black and white points. Click a point on the mid-tone and drag down a little to darken the image. Click OK. At this stage don't worry that I am getting a too dark.

Click on the “Create New Snapshot” icon at the bottom of the History palette. This snapshot sits at the top of the History palette. It is called Snapshot 1.



A little History brush is automatically put next to the original “Steve On Canyon Ledge”.



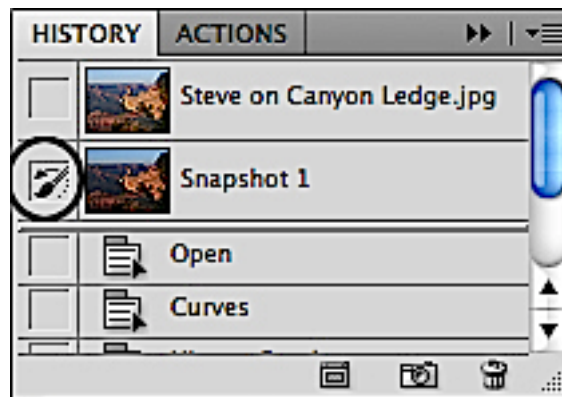
Now choose the History brush on the Toolbar.



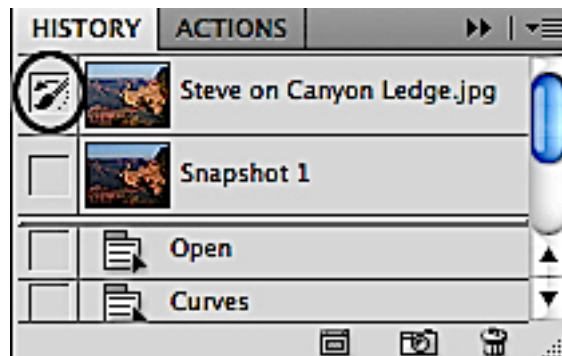
Use the bracket keys on the keyboard to get the right brush size to paint over me. Hold the shift key down and press the left bracket key four times to set a soft edge to the brush. Because of the placement of the little History brush at the top of the History palette, you will be painting the original tones back onto the darker Curves adjusted image. Press Ctrl + (PC) or Command + (Mac) to zoom up the image so you can be more precise when painting.

Tip: I like to set the opacity of the Brush to 50%. That means it will take two drags across an area to get it fully painted in. Sometimes one drag might look good.

If you paint outside of me, you will see the background get too light. This is easily fixed. Click and place the little “History Brush Icon” next to “Snapshot 1” and paint across the background area. Do you see what is going on? There are two different versions of the file sitting at the top of the History palette. This set-up will paint in the darker curves version.



This set-up will paint the original version.



The History brush is just another way to adjust parts of the image.

Almost every adjustment in Photoshop can be painted back in with the History brush. With some practice you will love this tool. You can paint in motion. You can paint a background out of focus.

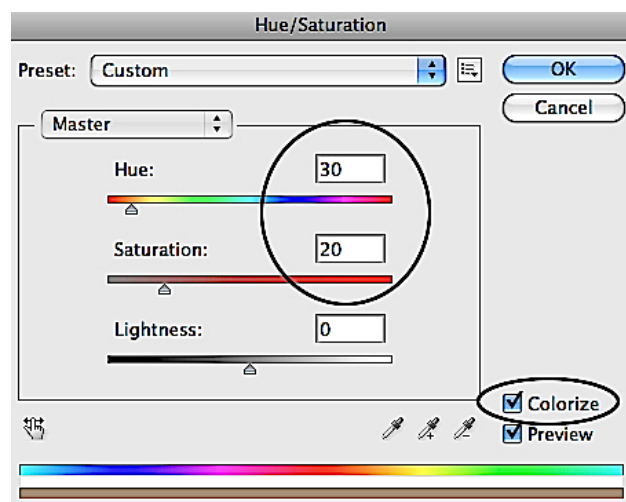
Here's a great way to get that old hand painted look with the History brush.

*Image: Girl & Tree*



Image / Adjustments / Hue & Saturation

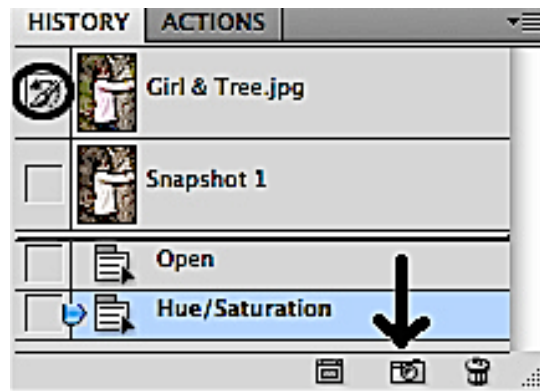
**Check the Colorize box** and then set the hue to 30 and the Saturation to 20. Click OK.





## PhotoShop CS6 Class - Week Three: - Fun with the History Brush

Click on the little camera icon at the bottom of the history palette to save a snapshot of the sepia tone history state (snapshot 1).

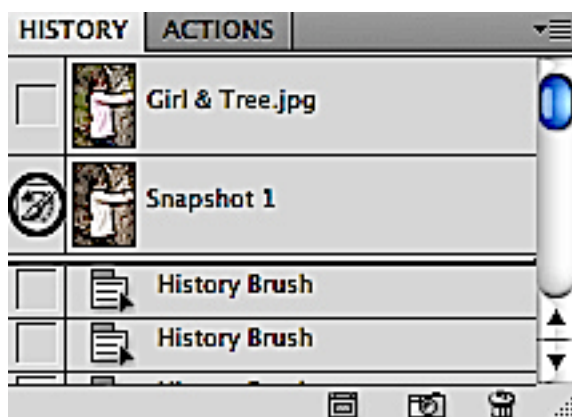


This snapshot sits at the top of the history palette. Look at the top of the history palette. The little history brush is already set next to Girl & Tree (the color image). It's ready to paint some color to the sepia image on screen.

Choose the history brush on the toolbar and paint in the areas you want to be in color.

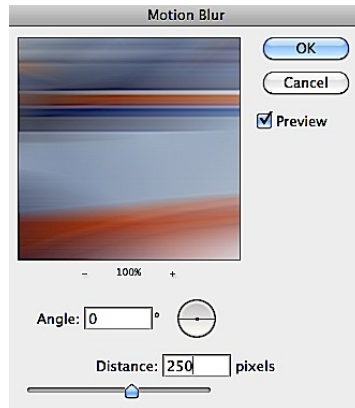


If you want to undo what you have painted in color, just click the little History Brush icon next to "Snapshot 1" and paint in the sepia tone.

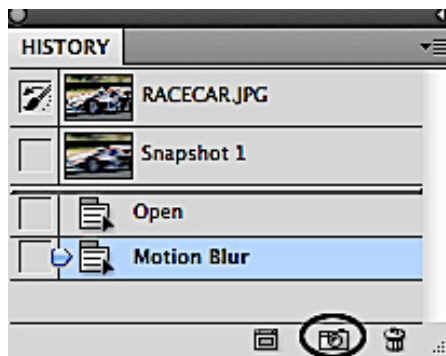


**Image: Racecar**

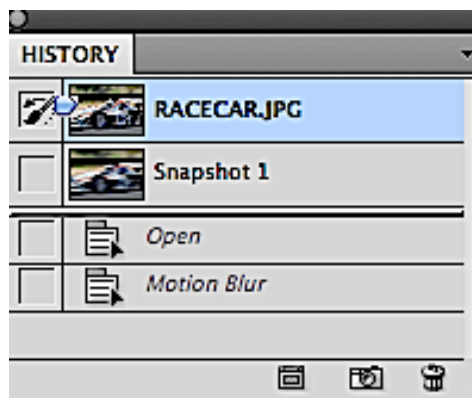
Filter / Blur / Motion Blur. Set the Angle to 0 and the distance to 250. Click OK.



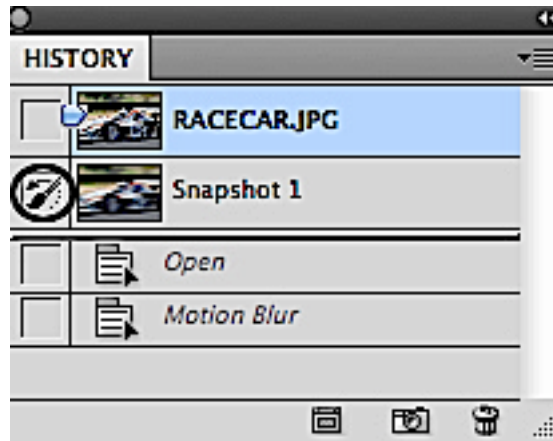
Click on the little camera at the bottom of the History palette to make a snapshot. You now have both versions of the racecar sitting on top of the history palette.



Click on "Racecar" to get the original image back on the screen.



Click the little History brush next to snapshot 1.



You can paint from the original image or you can paint from the blurry image. Just put the little history brush next to the snapshot you want to paint in.

History does not save with the file. That's not really a problem as this same technique can be done using the layer palette. Layers can save all of your adjustments to be revisited at a later date. We cover Layers in week four.



## HUE AND SATURATION

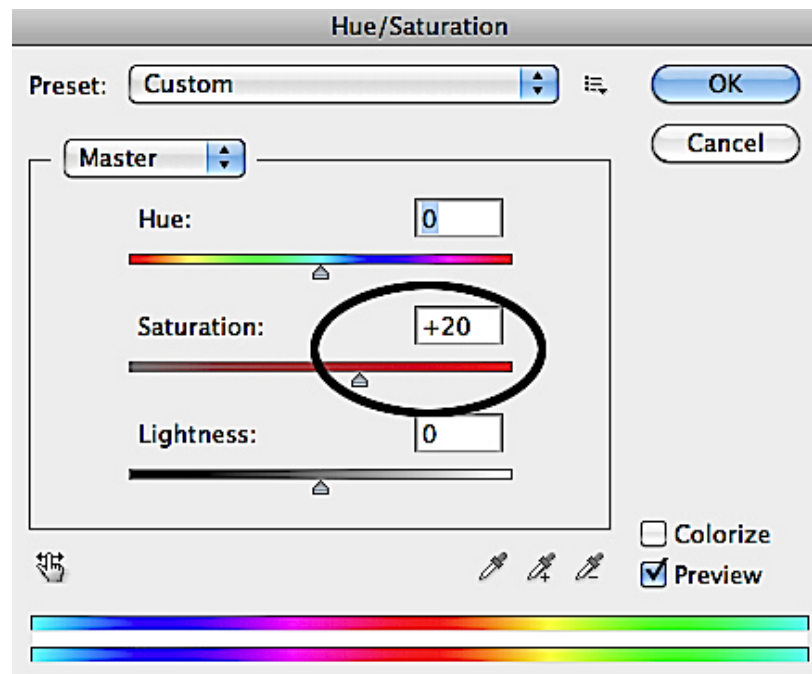
This box is very powerful and will be one of our image adjustment steps.

**Image: Lily Pads**



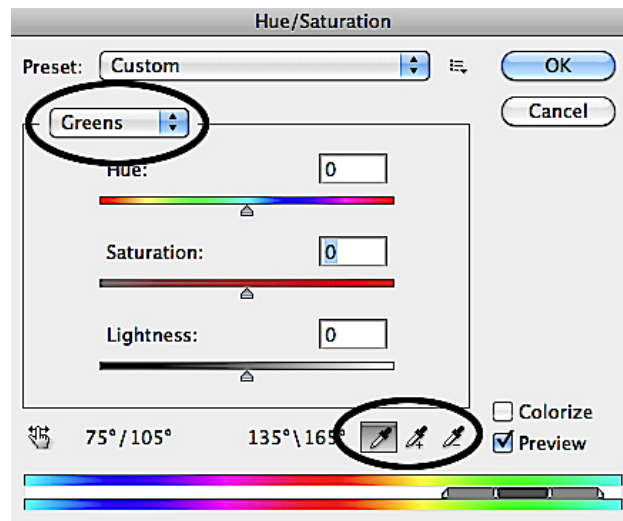
Choose: Image / Adjustments / Hue & Saturation.

Saturation is the intensity of color. Many times adding +10 or +20 saturation will really make the colors in the image pop. You have to be careful though as Hue & Saturation can be one of the most destructive adjustments in Photoshop when you add too much.



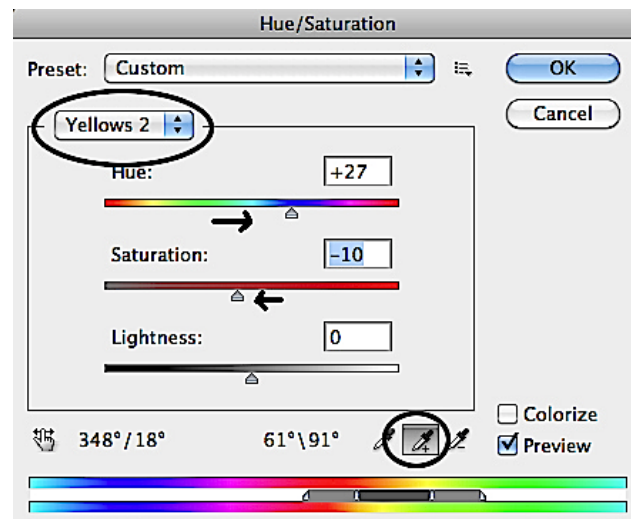
The eyedroppers are very powerful. They can be used to change the hue of a specific color in the image.

Let's change the hue of the lily pads. Change from "Master" to "Greens". The word Greens doesn't mean much to Photoshop.



Notice that one of the eyedroppers is highlighted. Move your mouse over one of the lily pads and click on it. The color you clicked on is made up of an RGB number. Photoshop will now know the specific color you want to adjust.

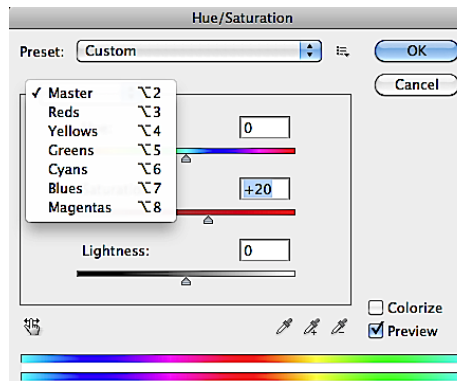
Click on the + eyedropper and then click on lighter and darker lily pads. Think of this like letting Photoshop know the full range of colors in the image that you want to change. Photoshop has even decided to call the color "Yellows 2".



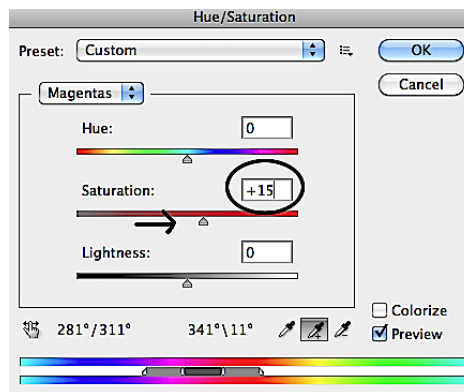
## PhotoShop CS6 Class - Week Three: - Hue and Saturation

Move the hue slider to the right to change the hue of the lily pads. Finally adjust the saturation slider to your liking.

You can use the same process to add saturation to a specific color in the image. First change from master to the specific color to activate the eyedroppers.



With the first eyedropper highlighted, click on the color in the image that you want to add saturation to. Highlight the + eyedropper and click on lighter and darker areas of the color. Finally move the saturation slider to the right.



Let's try another image.

***Image: Dew On Leaf-Hue & Saturation***



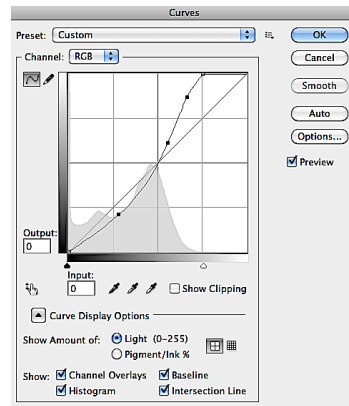


## PhotoShop CS6 Class - Week Three: - Hue and Saturation

I love taking macro shots in open shade. The soft light allows a lot of control in Photoshop. Start with a good Levels or Curves adjustment. You can't really judge the Hue & Saturation adjustment until the tones are right.

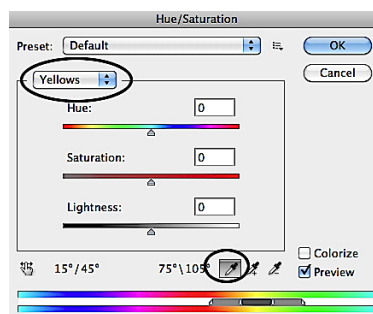
Here's how the Curve might look.

Now that the tones look better, let's see what we can do with the eyedroppers of Hue & Saturation.



Choose: Image / Adjustments / Hue & Saturation.

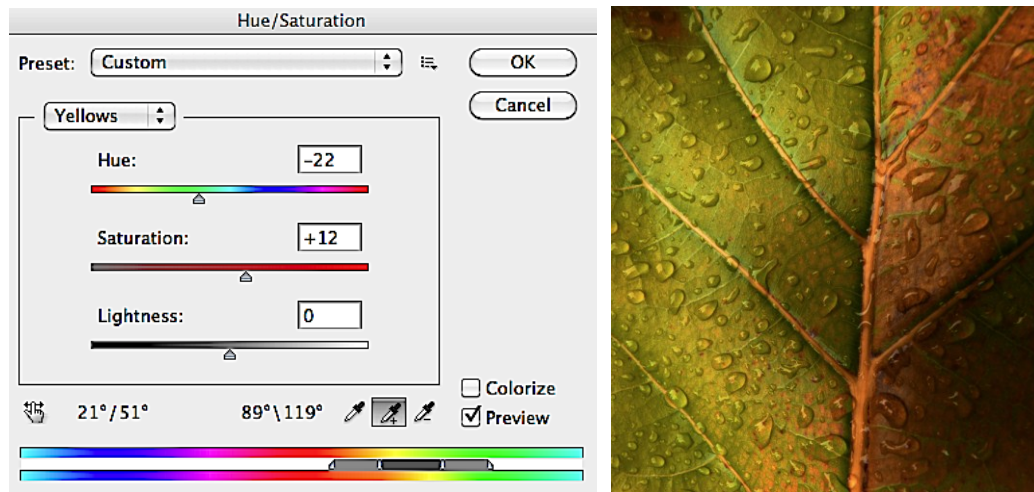
Change to “Yellows” and then with the first eyedropper highlighted, click on the greens or yellows in the image. There isn't a difference between picking “Yellows”, or “Greens” from the top menu. Once you click in the image, Photoshop knows the color you want to adjust.



Finally choose the + eyedropper and click around the other yellow-green tones in the image.



This type of macro shot can offer a lot of different choices. Here's how I adjusted the sliders.



The – eyedropper is used to subtract the adjustment from a specific area. It seems a bit too crude and it tends to remove other areas that you want to maintain. Once you adjust the Hue slider, you can choose the – eyedropper tool and click in the Image on the area to remove the adjustment from. Sometime after making the Hue adjustment you can see little areas that need to be clicked on with the + eyedropper to make them receive the adjustment also.

**Tip:** The “Sponge Tool” can also be used to saturate or de-saturate specific areas in the image. The sponge tool is a painting tool. Set the size and softness to the brush before painting saturation or removing saturation to local areas of the image.



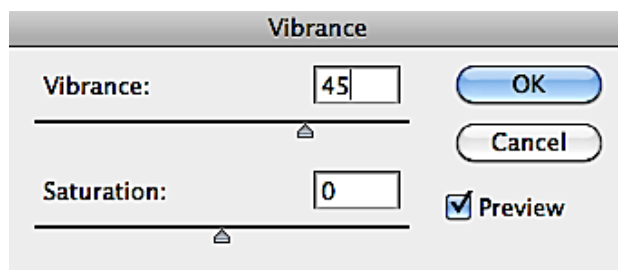
## VIBRANCE

This adjustment is similar to the Hue & Saturation adjustment. Hue & Saturation adds saturation mostly to the primary colors. Vibrance adds saturation mostly to the secondary colors. I like to use Vibrance instead of Hue & Saturation on my portraits.

### ***Image: Ringo-Vibrance***

Image / Adjustments / Vibrance

Skin tone has always been an issue with digital images. Too much red in the skin tone has always been an issue. As you can see the box has sliders for both Vibrance and Hue & Saturation. Set the Vibrance to +45 and click the preview on and off. A Hue & Saturation adjustment of +45 would be terrible.



Hue & Saturation has always been the most degrading adjustment in Photoshop. A little goes a long way. When applied too much, the colors get choppy or posterized. Vibrance does a much better job on skin tones.

Tip: For landscapes adjust the Vibrance slider first and then add a little with the Saturation slider, the combination of both works really well on a landscape.

No eyedroppers here, just a great new addition to skin tones.

## SELECTIVE COLOR

You can use Selective Color to adjust individual colors in the scene without making a selection. This box goes all the way back to the first edition of Photoshop. Back then it was used mostly by offset press people to get the file ready for the printing press. It is a very powerful tool for photographers. It isn't the most intuitive box in Photoshop though. Let's see how a photographer would use this.

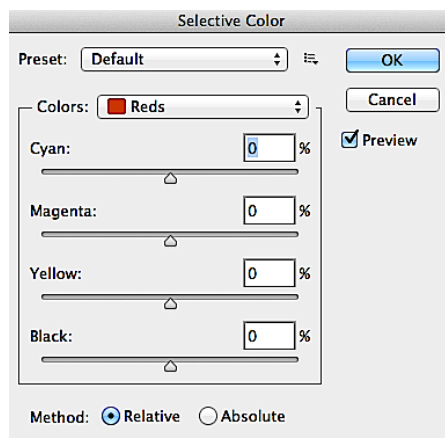
### ***Image: Peggy***

This shot of my lovely wife Peggy was taken many years ago at Hawley Lake. Hawley Lake is in the White mountains of Arizona and has a very special place in our hearts.



This image was scanned from a color negative. It was a bad scan. The reds of the image are way off. The skin tone is way too red. Selective color is perfect for this kind of image.

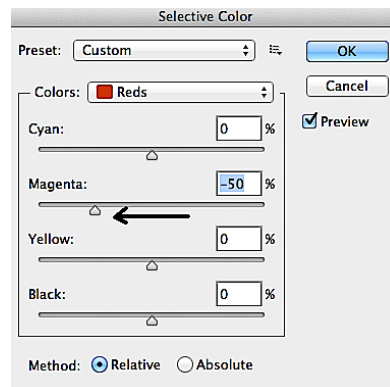
Choose: Image / Adjustments / Selective Color.



## PhotoShop CS6 Class - Week Three: - Selective Color

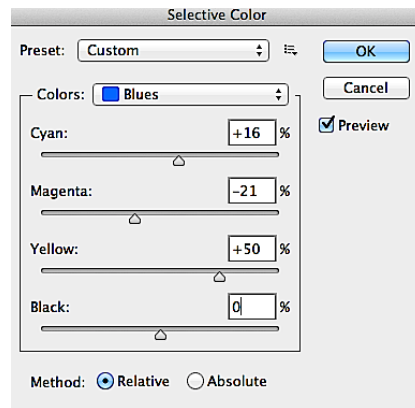
Start by checking the Relative box. As photographers, this is the one we will use.

Here's how it works. First you identify the color you want to adjust. Then adjust the sliders below. The sliders will add or take away that color from the color identified in the "Colors" fly-out menu. This image has too much red in the skin tones. Adjust the Magenta slider to the left to take some magenta out of the reds in the image. I know of no other move in Photoshop that can make this skin tone look like this.



Sometimes the sliders don't seem to do that much. There are no eyedroppers here to sample the colors in the image. The sliders either work with the specific color chosen or they don't.

Let's change the color of the water. Change from Reds to Blues. Adjust the sliders like the example below. In this example I have added some Cyan, subtracted some Magenta and added some Yellow to the blues of the water. Click the preview button on and off.



Tips:

**Great greens in your landscapes:**

Identify the “Greens” from the color menu.

Move the Magenta slider to the left to remove (little) magenta from the greens. Magenta is the opposite of green. When the greens have less magenta, they have more green. Change to “Yellows” and take a little magenta out also.

**Darken a Blue Sky:**

Choose the “Blues” and then move the “ Black” slider to the right.

**Fix Yellow Teeth:**

Make a loose selection around teeth. Just so it does not touch the teeth. Change the color to “Yellows” and move the yellow slider all the way to the left. Click OK. Choose: Image/Adjustments/Selective color and repeat the process to remove even more yellow if needed.

**Too Much Red in Face:** Identify “Reds” as the color and then move the magenta slider to the left to take magenta out of the reds in the image. Sometimes adding a little yellow helps also.



## DE-FOGGING

***Image: Wind Chime***



Choose: Filter / Sharpen / Un-Sharp Mask.

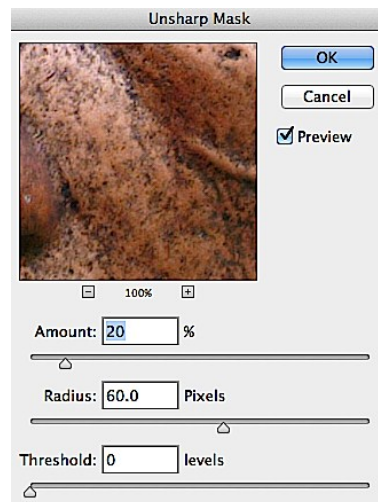
The Un-Sharp Mask was in the first version of Photoshop.

This setting with the filter makes the image look like it was taken with an expensive lens compared to a cheap lens. Expensive lenses produce images that had a bit more contrast. This De-Fog technique will yield that same look. Click the preview on and off.

Amount-20

Radius -60

Threshold-0

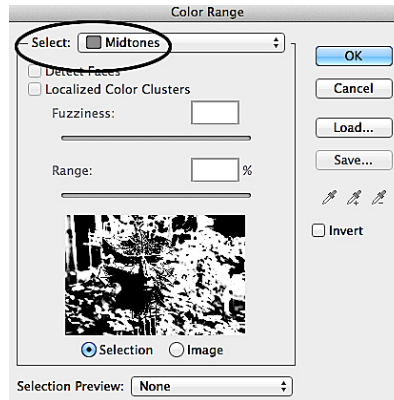


When I got my first digital camera, the files always looked a little foggy to me when I would open them up in Photoshop. This setting removes that foggy look. When we get to our “Image Adjustment Sequence”, this will be the very first adjustment.

## PhotoShop CS6 Class - Week Three: - De-Fogging

Sometimes De-Fogging might add too much contrast for a given image. Cancel the Un-Sharp Mask box.

Choose: Select / Color Range. Change to Mid-Tones and click OK.



The Mid-Tones are now selected, but all of the marching ants make it too hard to see the image. Choose Ctrl H (PC) or Command H (Mac) to hide the selection.

Choose: Filter / Sharpen / Un-Sharp Mask

Amount 20-40 Radius 60 Threshold 0.

Click the preview button on and off to see the before and after. You are looking for a subtle adding of contrast. Most images look better when the Mid-Tones are De-fogged.

Important: Don't forget to deselect the selection. The selection is hidden and that makes it very easy to forget to deselect it when you are done.

Choose: Select / Deselect.

Tip: If you are starting with a Raw file from your camera, the Clarity slider in the Raw converter is this same adjustment. Try a 25-50 setting.

This setting will match the De-Fog we just covered. If I shoot a Raw file, I start with the Clarity adjustment. Then I don't apply the De-Fog once I'm in Photoshop. If I shoot a J-PEG, I will apply the De-Fog to the mid-tones of the image. Either way it is the first adjustment I do to the file. This adjustment should be subtle.

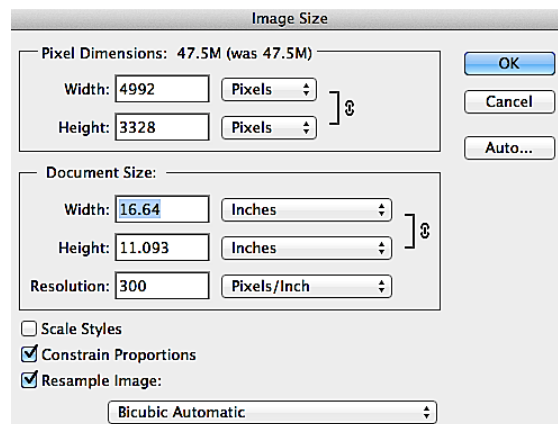
## UN-SHARP MASK FOR SHARPENING

There are many different ways to sharpen images in Photoshop. All images need to be sharpened no matter which method you choose or they will look soft. The Un-Sharp Mask filter is used to sharpen the file. This is done with a very different set of numbers than the ones we just used to De-Fog the image. De-fogging adds a little contrast to 60 pixels across or in essence to the whole image. Sharpening with the Un-Sharp mask filter adds contrast to the edge of every pixel (.1.2.3.4.5). When the setting is correct the Image looks sharper. When too much sharpening is applied to the edge of each pixel the image will look pixilated.

***Image: Hayley Facial***



Sharpening should always be done after sizing the image. Large images require more sharpening than small images. Let's see how big this image is. Choose: Image/Image Size.



300 Pixels per inch for 16.64 inches is a large file. Click Ok and let's sharpen the file.

## PhotoShop CS6 Class - Week Three: - Un-sharp Mask For Sharpening

Double click the zoom tool, to view the image at 100%.

Choose: Filter/Sharpen/Un-sharp Mask

Start by setting the amount to 500 percent.

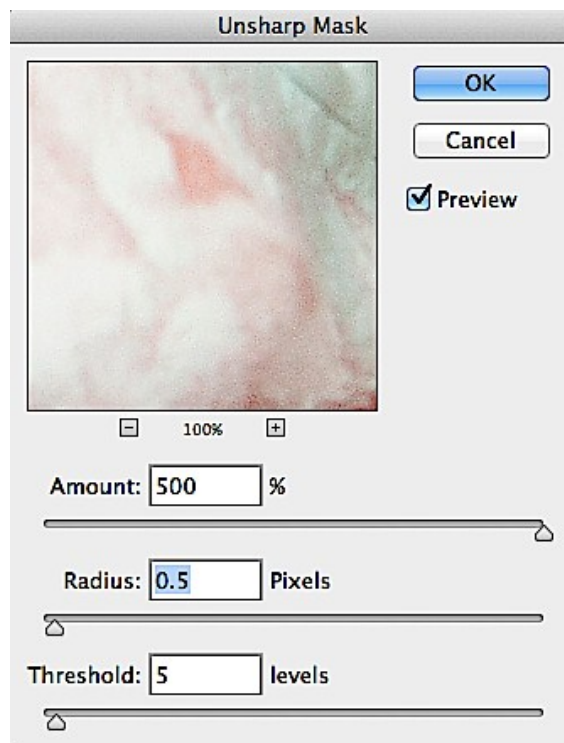
Set the Radius to .1

Set the Threshold to 5

Highlight the .1 radius setting (click and drag across the .1 to highlight it)

Tap the “up” arrow key on the keyboard to .2 and look and see if any sharpening takes place. If no sharpening is visible, tap the “Up” arrow key on the keyboard to .3 .4 .5 .6. Look for the first sign of sharpening. I usually go one or two taps past the first sign of sharpening.

This sharpening was first visible at .3. Tap two more taps to .5 don't worry if the image looks a little too sharp at this magnification. It won't look that sharp when the whole image is seen on the screen.

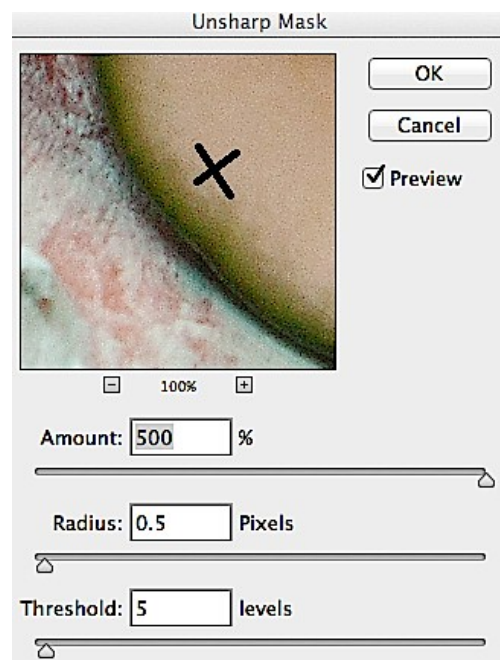


Click OK and then double click the “Hand” tool on the toolbar to fit the whole image back on screen

## PhotoShop CS6 Class - Week Three: - Un-sharp Mask For Sharpening

Smaller images will require less sharpening. An amount setting of 500 will be too much. Lower the amount to 400 or 300 and repeat the process of finding the Radius number. Always start with a .1 radius setting. Highlight the .1 radius setting and then tap on the “Up’ arrow key to .2 ,3 .4 .5.

You will need to develop a feel for the “before and after” look of the sharpening. First click the preview box on and off to see how the sharpening of the whole image looks. Click on the edge of one of the cucumbers and it will show up in the smaller Un-Sharp Mask window. This is the last place I like to check the before and after of my sharpening.



Click and hold down the mouse inside the little window. This will show the image with no sharpening (within the little window). Let go of the mouse and it will show the sharpening. Take a good look at the before and after. This setting of .5 on this image is the degree of the before and after that I look for on most of my images.

Tip: Sharpening can make or break your image. Too much sharpening and the image will look pixilated. Too little sharpening and the file will look soft or un-sharp. Some papers will require more sharpening than others. I make test prints to see how much sharpening the given paper can handle. When you learn how to sharpen your file correctly your images will take on a whole new quality.

## UN-SHARP MASK SETTINGS

### Amount

The amount parameter in Un-sharp Mask controls how effective your choice of Radius will be. In other words, this control refines how strong the Radius setting works. My Amount settings usually fall between 400 and 500.

### Threshold

The Threshold parameter controls what gets sharpened. Normally you would not want sharpening to occur in areas that are void of detail, like a transitional sky, which would exaggerate the grain; but you want to bring out the details, like the branches of a tree against that sky. The Threshold parameter lets you control this. Threshold deals with levels of tonal separation based on 255 levels and will only accept a numerical value between 0 and 255. When you type in “0” sharpening will occur everywhere in the image (or within the selected area). When you type in “127” the areas that sharpening will occur in will only be those which have pixels next to each other that are at least 50% lighter or darker. Dark areas next to light areas will be sharpened, but mid-tones next to light areas or dark areas would not. When 255 is entered as the number of levels, only areas that have black pixels next to white pixels will be sharpened. Sharpening will not occur anywhere else in the image. I like to set the threshold to 5. Blue Skies do not get any sharpening with a setting of 5.

### Radius

Radius is measured in pixels, and is really the amount of sharpening. I use very small radius settings. My radius settings usually fall between .1 and .7 for print work.

Tip: Monitors are not accurate at some zoom levels.

It is very important to double click the “Zoom” tool on the toolbar before choosing the Un-Sharp mask filter.



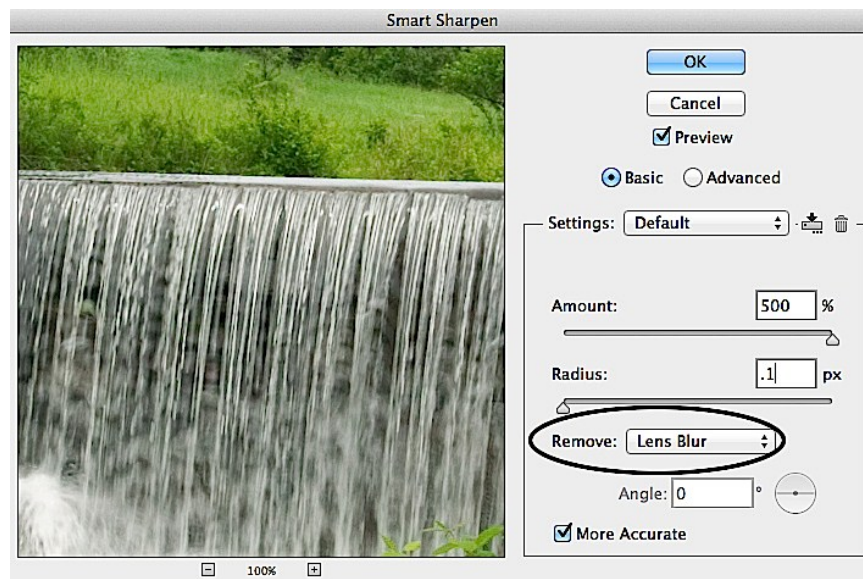
## SMART SHARPEN

### *Image: Waterfall*

As you know by now, I sharpen with the Un-Sharp Mask.

That said the Smart Sharpen filter is another good way to sharpen a file. Choose the “Lens Blur” option. This algorithm sharpens the file while minimizing the halos that can occur in the sharpening process. This filter has the ability to set different sharpening amounts for the Highlights and Shadows. When sharpening is applied to an image, areas in the image that have the most contrast require less sharpening (the water in this shot) and areas of lower contrast will require more sharpening (leaves in foreground). Always start with a double click of the Zoom tool.

### Filter/Sharpen/Smart Sharpen

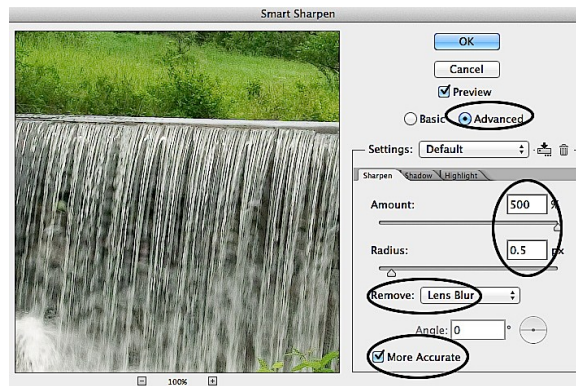


The Amount and Radius sliders control sharpening as they do with the Un-Sharp Mask. Smart Sharpen does not have a Threshold slider to control which pixels get sharpened. With this filter this is done with the Shadow and Highlight sliders.

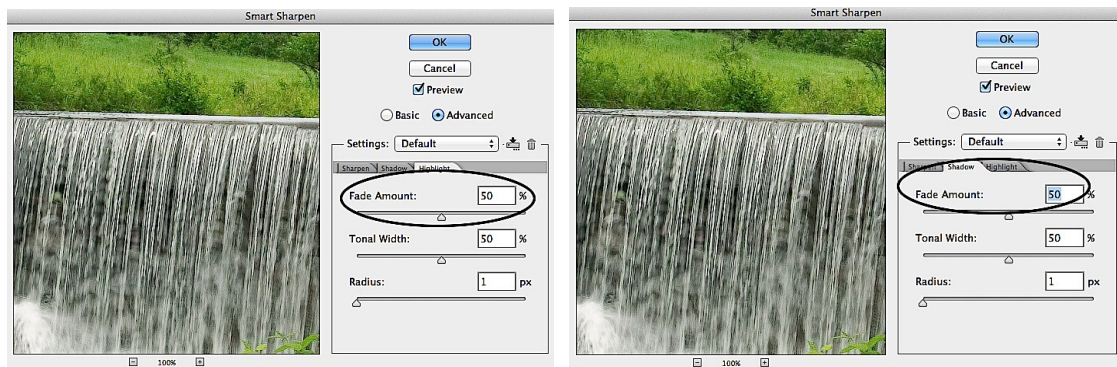
The Motion Blur option improves blurring due to motion (e.g., camera movement). I have never had an image with camera movement that was helped with this feature.

## PhotoShop CS6 Class - Week Three: - Smart Sharpen

Set the Amount to 500 and the Radius to .1. Highlight .1 and then tap on the “Up” arrow key on the keyboard to: .2 .3 .4 .5 etc. Set the Radius to .5. Click the “Preview” button on and off. The leaves in the foreground look good with this setting but the waterfall looks way too sharp. This is where the Shadow and Highlight tabs come into play. Check the “Advanced” button to access the Shadow and Highlight tabs.



Click on the “Highlight” tab and set the fade amount to 50. This will remove 50% of the sharpening in the highlights (waterfall). Click the “Preview” button on and off to see the effect.



Click the “Shadows” tab and set the Fade Amount to 50% also. This will also remove some sharpening to the water. Shadows contain most of the noise in an image. Reducing the sharpening in the shadows will also reduce the amount of noise in the image.

Click the “Preview” button on and off. These Shadow and Highlight settings are a great way to tone down areas of more contrast in the image.

Click OK.

### Shadow and Highlight Settings:

**Amount:** How much the sharpening in the highlights is reduced. The higher the setting, the more the sharpening is reduced. A setting of 0 will result in no reduction. A setting of 100% will result in no sharpening of the highlights.

**Tonal Width:** determines which tonal values will be affected by the reduction in sharpness. Smaller values of Tonal Width result in only the lightest highlights being affected by the sharpening reduction. Larger values of Tonal Width will result in a wider range of the highlights being affected.

**Radius:** The radius setting determines how many pixels, around a particular pixel, will be evaluated to determine to which tonal area a pixel belongs (i.e.), is that particular pixel a highlight, mid-tone, or shadow).

As good as this filter is, I still use the Un-Sharp mask for my sharpening. In the fourth week "Layers" we will show how to use the Un-Sharp mask on a layer with a mask. Sharpening on a layer with a mask will offer even more control over which tones in the image will get sharpened.

## IMAGE ADJUSTMENT SEQUENCE

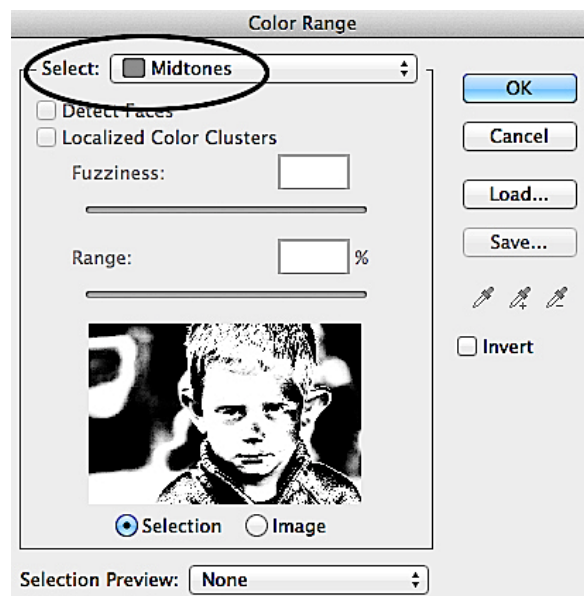
It's time to put what we have learned so far into a workflow or image adjustment sequence. This will be the first of two workflows that we cover in this book.

***Image: DSC0044\_1.jpg***



Once I have identified an image to work on, the first thing I do is name the file. Choose: File/Save As and title the file “Aiden”. This file will be the same as the original DSC0044\_1.jpg file. Think of this step like making a duplicate of the original that is easy to find. Keep the file in the same folder that it came out of. After prepping the image we will save off another version called “Haden-Prepped”.

Let's De-Fog the mid-tones of the image. Choose: Select/Color Range. Choose the Mid-tones and click OK.



## PhotoShop CS6 Class - Week Three: - Image Adjustment Sequence

Hide the selection:

Ctrl H (PC) or Command H (Mac)

Filter/Sharpen/Un-Sharp Mask: Amount 20 -Radius 60-Threshold 0

Click the “Preview” button on and off. Eyes can get too dark when A De-Fog is applied to the whole image. Notice how the eyes do not get any darker when just the mid-tones are selected. Click OK.

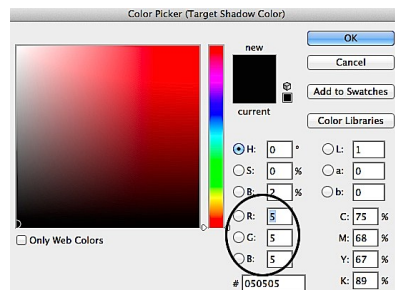
**Choose: Select/Deselect. It is very easy to forget this step as the selection is hidden.**

**Make sure you can see the “Info” palette.**

**If you can't see it, choose: Window/Info.**

Choose: Image/Adjustments/Levels

I don't like the color of this shot. It looks too cold. Lets see what the eyedroppers can do. Double click the black eyedropper and set the RGB values to 5-5-5. This will be a good setting for the blacks. Click OK.



What values do we put on the white eyedropper? Highlight the White eyedropper and move your mouse out over the sweater (See X). Hold the “Shift” key down and click to set a #1 color sampler point in the info palette. This color sample point shows RGB values of 187-199-211.

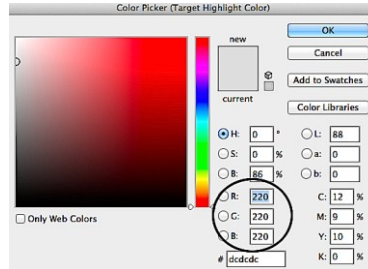




## PhotoShop CS6 Class - Week Three: - Image Adjustment Sequence

Let's try 220-220-220 to lighten the image a little also.

Double click the white eyedropper and set the RGB values to 220-220-220  
Click OK.

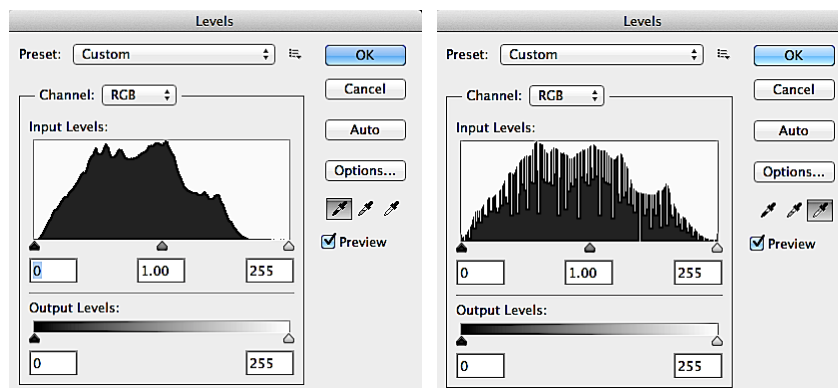


Highlight the black eyedropper and click in the shadow as shown. Highlight the White eyedropper and click on the sweater as shown.



Tip: Always have the "Info" palette open. If you can't see it, choose: Window/Info. Then you can put the eyedropper over the area (on the sweater) and read the RGB values. This will help you in choosing what values to place on the eyedropper.

Here's the Histogram "Before and After" the adjustment.



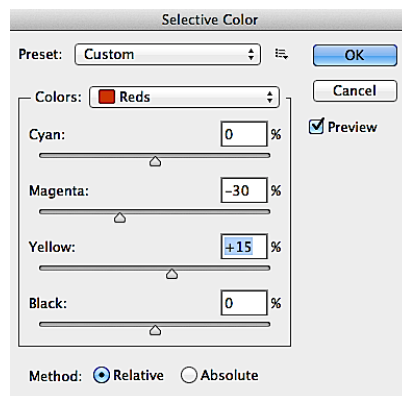


## PhotoShop CS6 Class - Week Three: - Image Adjustment Sequence

Now look at the image for the intensity of the colors (Saturation). Most images can be improved with either a Hue & Saturation or Vibrance adjustment. This image doesn't need the colors to be any more intense so we'll move on.

Let's see if we can improve the skin tone.

Choose: Image/Adjustments/Selective color. Selective color can be a very powerful tool when dealing with skin tones. Move the Magenta slider to the left to remove Magenta from the reds in the skin tone. Move the Yellow slider to the right to add some yellow to the reds of the image.



Click the "Preview" button on and off. Click OK.

Selective color can be a very powerful way to adjust skin tones. Taking Magenta out of the "Reds" is a very good move when the skin tones look too red. I like that the background is out of focus in this shot, but it's too bright and drawing attention away from our subject's face. Choose the Elliptical Marquee tool and draw a selection that looks like this:



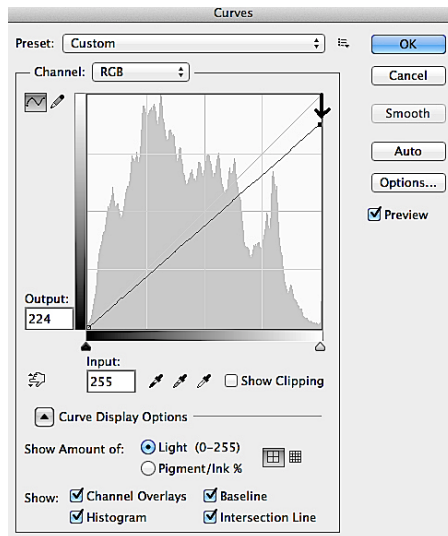
## PhotoShop CS6 Class - Week Three: - Image Adjustment Sequence

Choose: Select/Inverse

Choose: Select/Modify/Feather

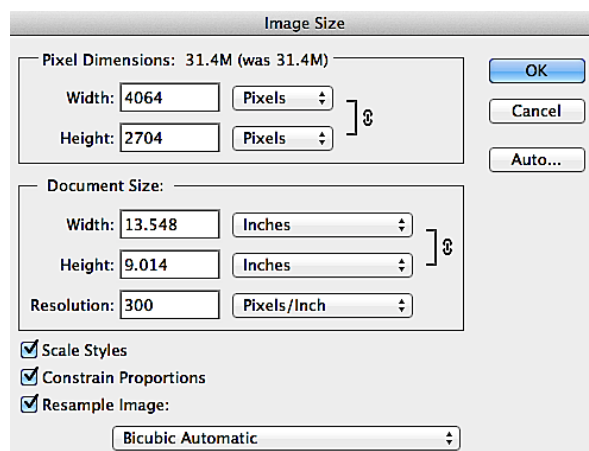
Choose: 250 Pixels and click Ok.

Choose: Image/Adjustment/Curves and drag the white end (dot) down as shown to dull the whites a little all around our subject. Click the “Preview” on and off to see the effect. I love this Curves technique and use it often to make my main subjects stand out. Click OK to Curves.



Choose: Image/Image/Size.

The pixel dimensions at the top say this is a big file even though it is being divided up into 72 pixels per inch increments. Let's see how big this file is at 300 pixels per inch. Un-Check the Resample Image box and put in 300 and then recheck the Resample box and click OK.



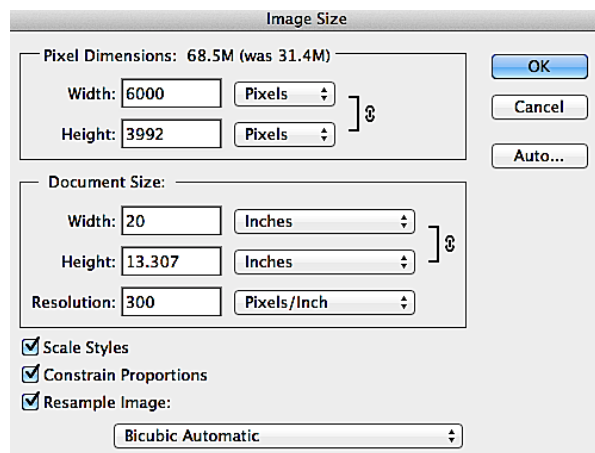
## PhotoShop CS6 Class - Week Three: - Image Adjustment Sequence

I like to save off another version of the file at this stage. The file is prepped and the same size the camera shot. Choose: File/Save As and title this one: Aiden-Prepped. Save as a jpeg. Click OK.

We now have two versions of the file saved off, the original and the prepped image.

Let's say I need a 20-inch version of the file for a print.

Choose: Image/Image Size and change the width to 20 inches and click OK.



It's time to sharpen the file.

Always start with a double click of the Zoom tool.

Choose: Filter/Sharpen Un-Sharp Mask

Remember the ritual?

Amount 500

Radius.1 Threshold 5 Highlight the .1

Tap on "Up" arrow key on keyboard to .2 .3 .4 .5 .6

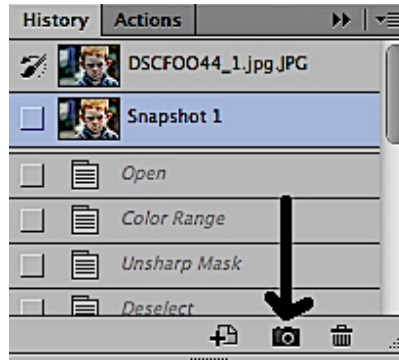
I like .5, Click OK.

It's time to save another version of the file.

Choose: File/Save As and title this one: Aiden-20 inches. Save as a jpeg and click OK.

## PhotoShop CS6 Class - Week Three: - Image Adjustment Sequence

Let's see how well we have done. Click on the little "Camera" at the bottom of the History palette to make a snapshot. If you can't see the History palette, choose: Window/History. Click on the original and Snapshot 1 to see the before and after.

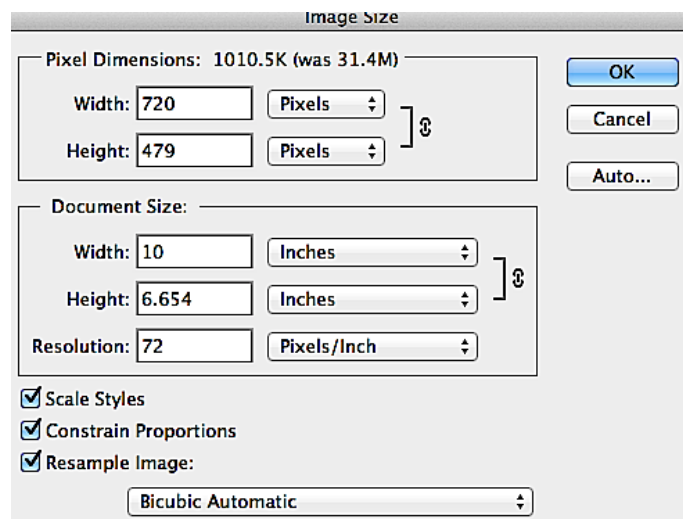


We now have three versions of the file, the original, the prepped and the 20-inch version. Lets say someone likes the image and wants a 14-inch version. I would open up the "Prepped" version and size it to 14 inches. Then I would sharpen the 14-inch version and save a version called "Aiden-14 inch". Close the file.

It's time to make a version for the web.

### ***Image: Aiden-Prepped***

Choose: Image/Image Size



Set the resolution to 72 and the width to 10 inches and click OK.

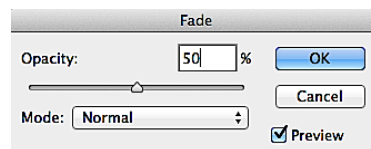
## PhotoShop CS6 Class - Week Three: - Image Adjustment Sequence

Initially the image will look smaller than 10 inches on the screen. Double click the “Hand” tool and then Double click the “Zoom” tool and the image will be 10 inches on your screen. This is what is called “Actual Pixels”. An image sized down this far will need a little sharpening. I don’t use the Un-Sharp mask filter to sharpen my web images. I use a preset called “Sharpen”.

Choose: Filter/Sharpen/Sharpen. Don’t worry if the image looks a little too sharp.

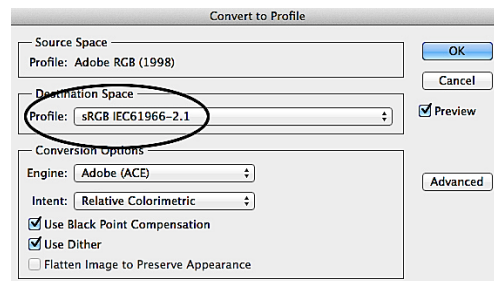
Choose: Edit/Fade Sharpen and adjust the slider to get just the right amount of sharpening. I usually end up in the 50% range. Click OK.

Edit/Fade Sharpen must be chosen right after “Sharpen” or the fade box will not be available.



Web images need to be in the sRGB color space.

Choose: Edit/Convert to profile and choose sRGB and click OK.



I save my web images to a different folder. I have a folder on my desktop called “Web Images”. Every time I prep an image that I like, I save a web version to this folder. My web versions are mostly used for email. I have friends and family that I like to show the images that I’m currently working on. After typing the email I will open the “Web” folder and decide which image to drag in the email.

Practice this workflow until all of the steps seem second nature. In week four we will create another workflow that utilizes the layer palette.

## **IMAGE ADJUSTMENT - STEPS**

1. De-Fog (Mid-tones if necessary)
2. Make a Levels or Curves Adjustment
3. Make a Hue & Saturation and or Vibrance Adjustment
4. Make a Selective Color adjustment if needed
5. Make local adjustments using either Selections or History brush
6. Save a version (before sizing). File/Save As, Title it: Name-Prepped
7. Size the image: Image/Image Size or Crop Tool
8. Sharpen: Filter/Sharpen/Un-Sharp Mask
9. Save a version - File/Save As Title it: Name-Size
10. Size a web version and convert file's color space to sRGB.
11. Save a version. Title it: Name-web



## DUST AND SCRATCHES FILTER

The dust and scratches filter is a great way to clean up images that have dust from the scanning process. It uses the History brush. You must be careful with this filter, as it can soften the image if not used correctly. This technique works well on skies and other single toned surfaces.

Image: Jacka

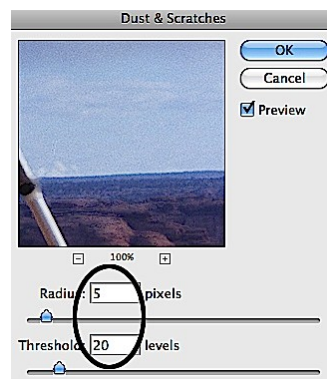
Double click the zoom tool. This will enlarge the image and make it easier to see the dust & scratches.



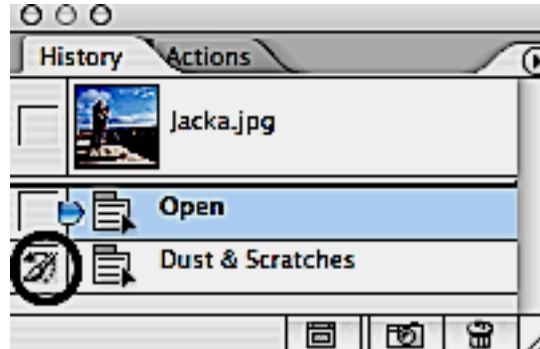
Choose: Filter/Noise/Dust and Scratches

There are two adjustments — radius and threshold. Adjust the radius until your image gets blurry enough to hide the dust or scratch. Try 5.

Next, adjust the threshold. Try 20. Try to find the largest threshold number that will throw the dust or scratches out of focus. When the radius and threshold are right, the dust will disappear but the sky will not go out of focus when the preview button is clicked on and off. Click OK.



It's basic History brush logic at this point. Click one history state above the Dust & Scratches history state. Then click in the little box to the left of the Dust & Scratches state.



Now choose the History brush on the toolbar. Make sure the Opacity is set to 100%.



**Note:** Use the navigator as a reference and scroll around the picture and paint across all of the dust and scratches.

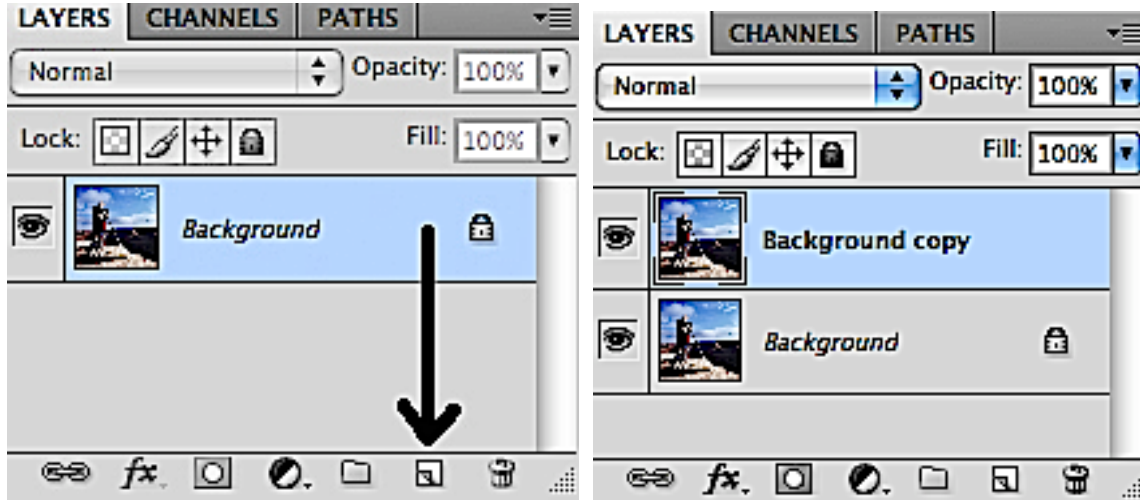


Remember that this filter works best on single tone surfaces. You have to be careful not to paint across anything but the sky in this picture or the image will get less sharp and soft looking.

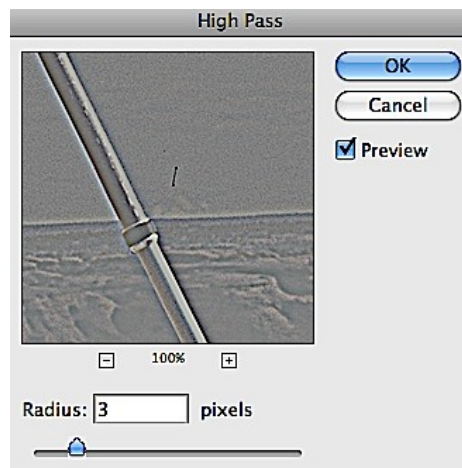
I use this filter on my flatbed scans. Sometimes the prints come out with a lot of dust. Once you get this technique down it will save you hours of time.

## HIGH PASS SHARPENING

I don't use this technique all the time, but some images really work well with this technique! Open the image you want to sharpen. Make a Background copy by dragging the background in the layer palette to the New Layer icon at the bottom of the layer palette.

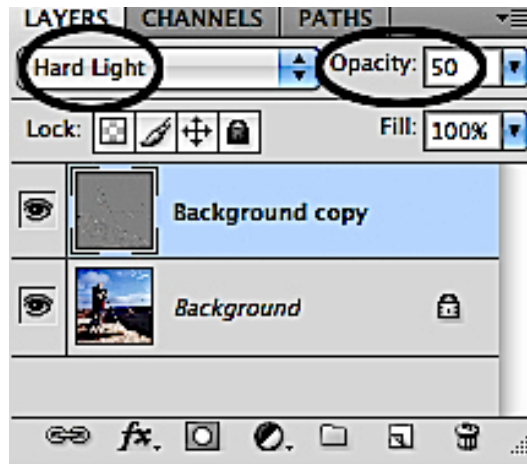


Go to the filter menu, under “Other”, and choose “High Pass”



In the High Pass dialogue box, start the slider at the far left and gradually increase the radius until the edges start to really stand out. When it looks right (it may take 10 pixels depending on the file size), for the edges to really “pop” click OK.

Once you've applied the "High Pass Filter" go to the layer palette, and change the blend mode of this layer from Normal to Hard Light. This will apply the Sharpening to just the edges. It can really work wonders on images with lots of edges, and can work surprisingly well on images with more subtle edges. If the image is too sharp, you can lower the opacity of the layer.



## AUTO COLOR COMMAND

I'm sure you have surmised by now that I don't use many "Auto" settings in Photoshop. Here's how "Auto" works with Levels and Curves.

### Setting auto correction options

The Auto Correction Options dialog box lets you automatically adjust the overall tonal range of an image, specify clipping percentages, and assign color values to shadows, mid-tones, and highlights. You can apply the settings during a single use of the Levels dialog box or Curves dialog box, or you can save the settings for future use with the Levels, Auto Levels, Auto Contrast, Auto Color, and Curves commands.

### To set auto correction options:

Click Options in the Levels dialog box or Curves dialog box.

Specify the algorithm you want Photoshop to use to adjust the overall tonal range of an image:

**Enhance Monochromatic Contrast** clips all channels identically.

This preserves the overall color relationship while making highlights appear lighter and shadows appear darker. The Auto Contrast command uses this algorithm.

**Enhance Per Channel Contrast** maximizes the tonal range in each channel to produce a more dramatic correction. Because each channel is adjusted individually, Enhance Per Channel Contrast may remove or introduce colorcasts. The Auto Levels command uses this algorithm.

**Find Dark & Light Colors** finds the average lightest and darkest pixels in an image and uses them to maximize contrast while minimizing clipping. The Auto Color command uses this algorithm.

**Snap Neutral Mid-tones** if you want Photoshop to find an average nearly neutral color in an image and then adjust the gamma values to make the color neutral. The Auto Color command uses this algorithm.

To specify how much to clip black and white pixels, enter percentages in the Clip text boxes. A value between 0.5% and 1% is recommended.

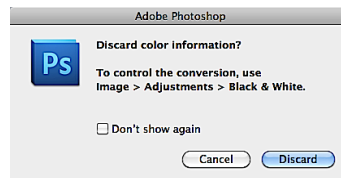
## COLOR IMAGE TO BLACK & WHITE

I love Black & White. It goes back to my darkroom days. Today you can make great black & white prints with a good inkjet printer. That usually means the printer has several different black Inks. With this type of printer the blacks in the print are neutral or lacking any color. This lesson will show several different ways the file can look in black & white

Image: Old Cowboy.

It's always best to have the image looking good in color before you convert to Black & White. Choose: Image/Adjustments/Curves" and adjust so the image looks good in color.

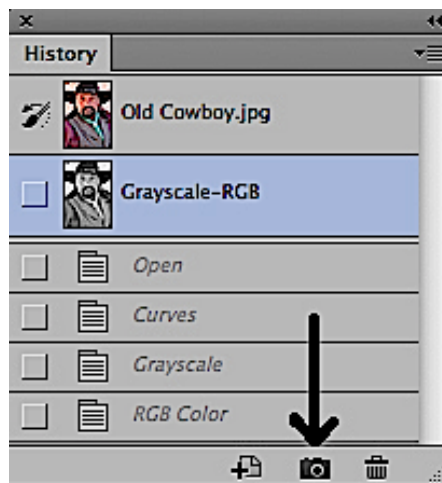
Choose: Image/Mode/Grayscale. Click "Discard" to this box



Many times grayscale is worth looking at. I like it.

Choose: Image/Mode/RGB Color to get this black and white look (Grayscale), back to an RGB file.

Click on the "Create New Snapshot" button at the bottom of the history palette. If you can't see your history, choose: Window/History. Double click and title the snapshot "Grayscale-RGB".

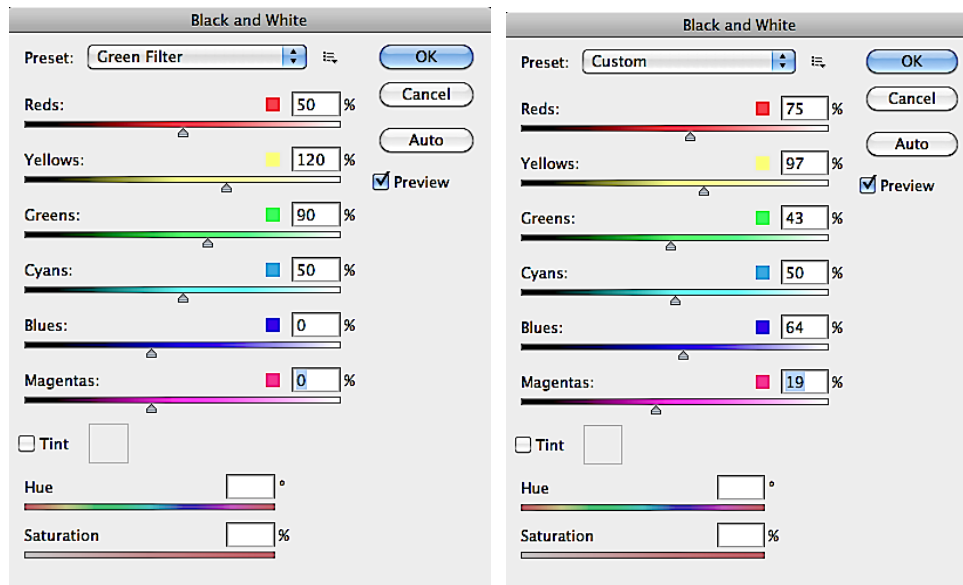




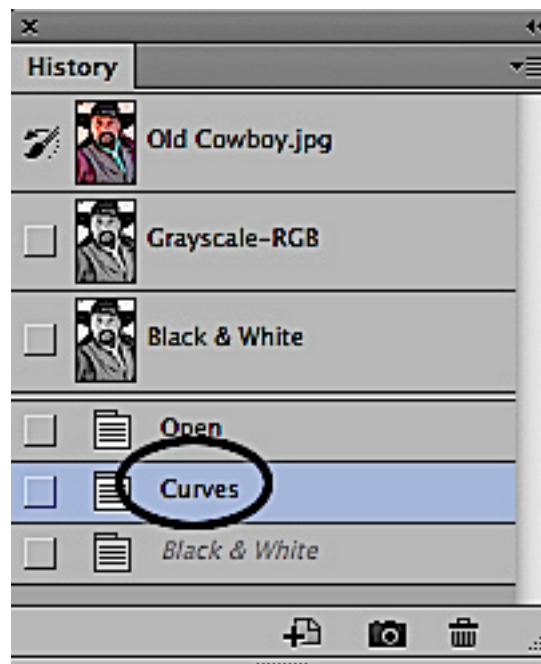
## PhotoShop CS6 Class - Week Three: - Color Image To Black & White

Let's make a different version. Click on the "Curves" history state to get back to that spot. This is the corrected color image.

Choose: Image/Adjustments/Black & White. Look through the different presets. Put it on the "Green" preset. Now adjust the sliders to your liking. Here are some settings that look pretty good.

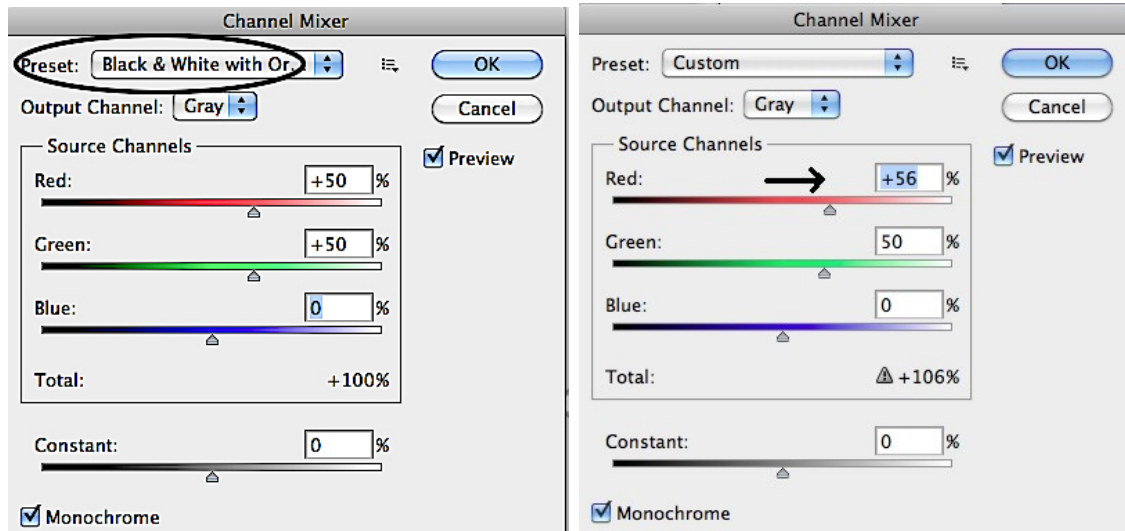


Click Ok and then make another snapshot in the History palette. Title it "Black & White" and then click back on the "Curves" history state.

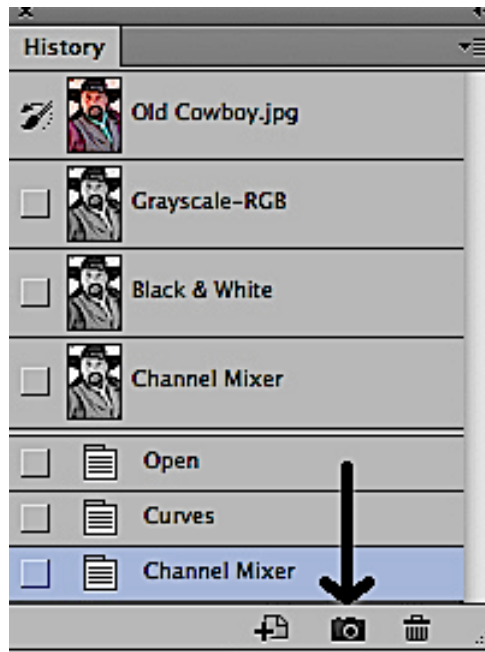


## PhotoShop CS6 Class - Week Three: - Color Image To Black & White

Choose: Image/Adjustments/Channel Mixer. Change the preset to “Black & White With Orange Filter”. Looks pretty good. You can adjust the sliders further. The quality is usually at its best when the two or three numbers add up to 100. That is not carved in stone though. This image can handle the red kicked up a little.

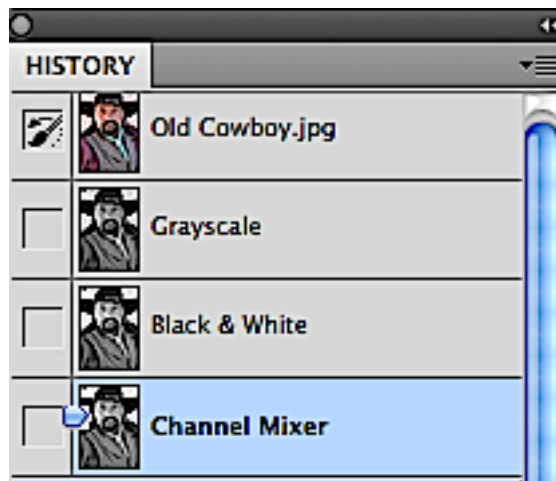


Click on the “Create New Snapshot” button at the bottom of the layer palette. Double click on the snapshot and call it “Channel Mixer”.

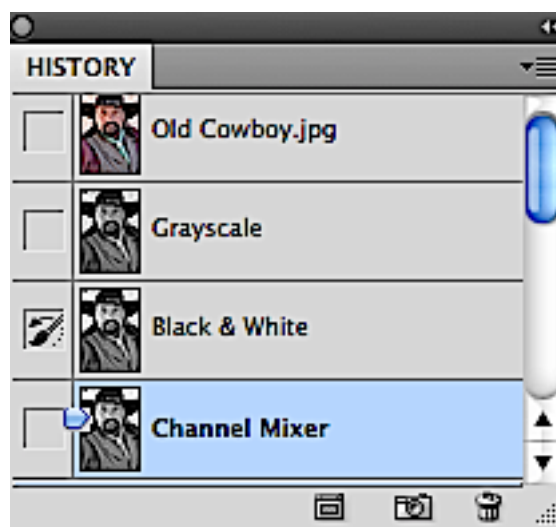


## PhotoShop CS6 Class - Week Three: - Color Image To Black & White

Click on the different Snapshots too see which one looks best. Click on the channel Mixer Snapshot.



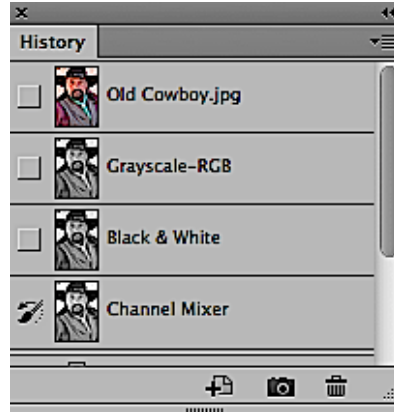
Notice that there is a little History Brush next to the Old Cowboy (color image). Any one of these versions of the file including the color version can be painted into this Channel Mixer Snapshot. All you have to do is put the little history brush next to the snapshot you want to paint in. Then choose the history brush on the toolbar and paint in the adjustment. Let's paint in some of that good Black & White snapshot. Click the little history brush next to the black & white snapshot.



Choose the History brush and drag across the brightest part of the cowboys face. Drag across his sleeves and hat too.

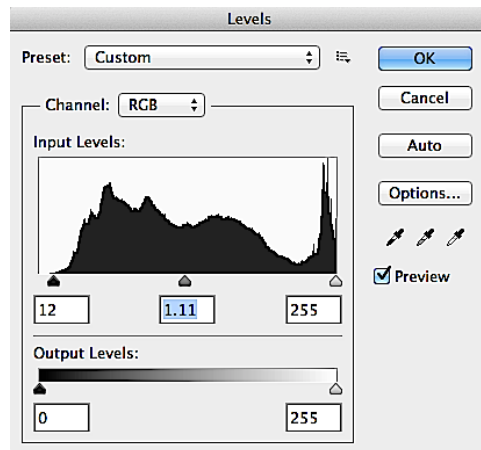
## PhotoShop CS6 Class - Week Three: - Color Image To Black & White

Let's say you don't like that look. No problem just put the little History brush next to the "Channel Mixer" snapshot and paint across the same area.



Put the History brush next to the snapshot you want to paint from. Try changing the opacity of the History brush. If you added some color and don't like it, just put the little History brush to the left of one of the black & white versions (Channel Mixer, black & White, Grayscale)) and paint from that snapshot.

**Tip:** Choose: Image/Adjustments/Levels (or Curves) and make sure the Histogram looks good. Sometimes the tones will will need to be adjusted after painting from the different snapshots.

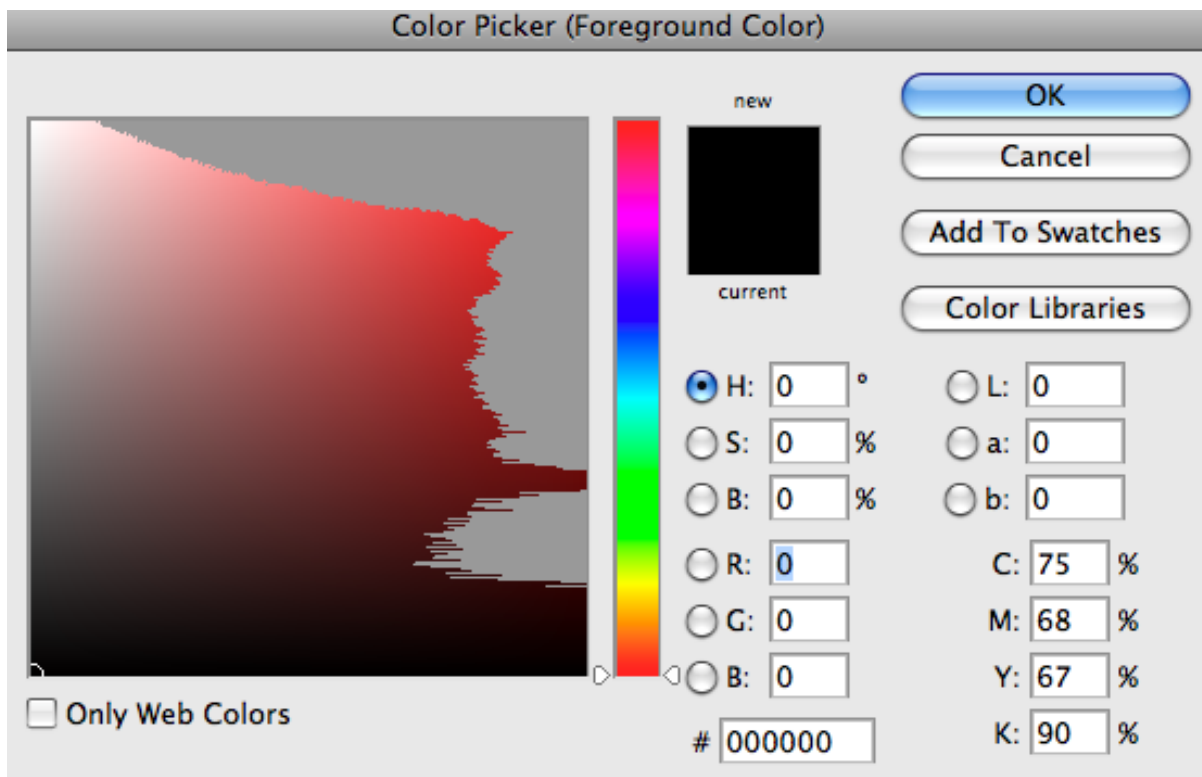


**Tip:** There are many ways to change a color image to black & white. Always start with a levels or Curves adjustment to the color image before converting to Black & White.

## CREATE A CMYK COLOR PICKER

If your image is going to be printed on a printing press it will need to be converted to CMYK. This color mode is not as vibrant as RGB color. Here's a great way to set up the Color picker to show only colors that can be reproduced in CMYK. The gray area will show the RGB colors that are out of the CMYK gamut.

Double click on the Foreground Color on the toolbar to bring up the color picker box.



Press: Shift/Command/Y (Mac) or Shift/Control/Y (PC)

The colors that are outside The CMYK gamut will no longer appear in your Color Picker. Instead the “out of gamut” colors will be replaced with a solid gray color. Now just move the sliders through the colors to see the out of gamut areas for each color.

Press: Shift/Command/Y- (Mac) or Shift/Ctrl/Y- (PC) to return the Color Picker to its normal setting.

## WEEK THREE SUMMARY

Practice using the History Brush tool

Make “Snapshots” in the History palette and paint back and forth between the different snapshots.

Practice Defogging and Sharpening with the Un-Sharp Mask.

Change the “Hue” of a color in the image with the eyedroppers in Hue & Saturation.

Practice Selective color on different images.

Practice the different Black & White conversions.

Think of these lessons as recipes. Some of the lessons in the book you may not use very often. The “image Adjustment Sequence” (page 173) you will use all of the time. Prepping a file is a performance. Some days you will do better than others. With practice you develop a feel for each adjustment in the sequence.

**Tip:** I would not move on in the book until you feel comfortable with the steps in the Image Adjustment Sequence.





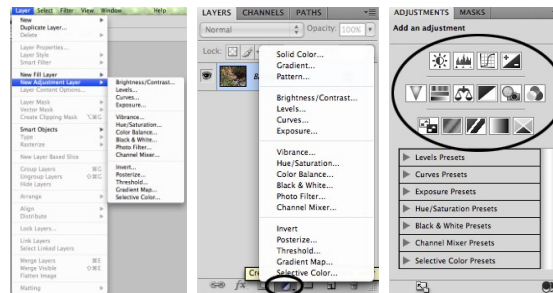
## WEEK FOUR

### ADJUSTMENT LAYERS

So far all of our image adjustments have come from the top menu (Image/Adjustments). This method changes the pixel values every time you click OK. To some degree each adjustment degrades the image. Most of the time you can't see the degradation.

Now that you can prep a file and make it look better, it's time to see how these same adjustments can be made as an adjustment layer for even more control and be non-destructive also. I like to think of Adjustment Layers as custom filters. You can remove the filter (adjustment layer) and be back to the original. You can modify the filter (adjustment layer) so only part of the image gets the filter effect (mask). You can even adjust the Opacity of the layer to fine-tune the effect if necessary.

Adjustment layers can be accessed several ways. From the layer menu: Layer/New Adjustment layer, or click on the little Black/White circle at the bottom of the layer palette, or you can click on one of the icons in the Adjustment palette. How's that for overkill? I like to click on the little Black/White circle at the bottom of the layer palette.



Adjustment layers apply color and tonal adjustments to the image without permanently changing the pixel values. An adjustment layer is a non-destructive edit. The color and tone are stored in the layer and apply to all the layers below it. You can even paint in the image to apply the adjustment to specific part of the image. Adjustment layers offer the most control when prepping a file. Some images are more important than others.

Whenever I have a special image, I will prep it with adjustment layers. The steps in the "Image Adjustment Sequence" are the same, they just end up as a layer.

## IMAGE ADJUSTMENT SEQUENCE-LAYERS

### ***Image: Aiden***

De-Fog the Mid-Tones.

Choose: Select/Color Range, select the Mid-Tones and Click Ok.

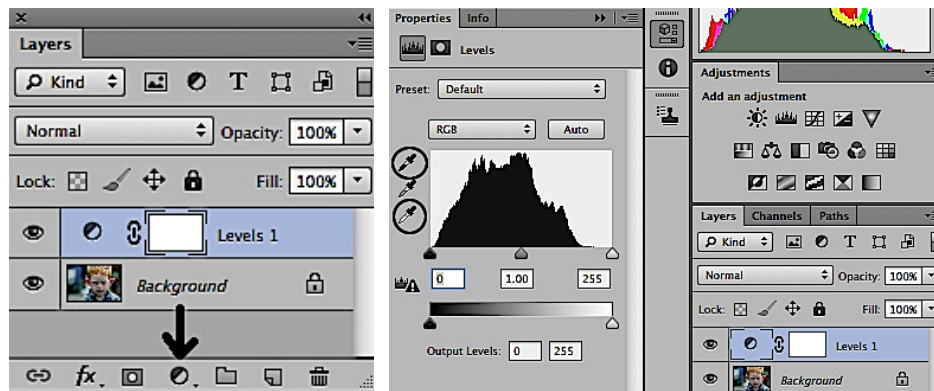
Press Ctrl/H (PC) or Command/H (Mac) to hide the selection.

Filter/Sharpen/Un-Sharp Mask: Amount 20, Radius 60, Threshold 0

Click Ok.

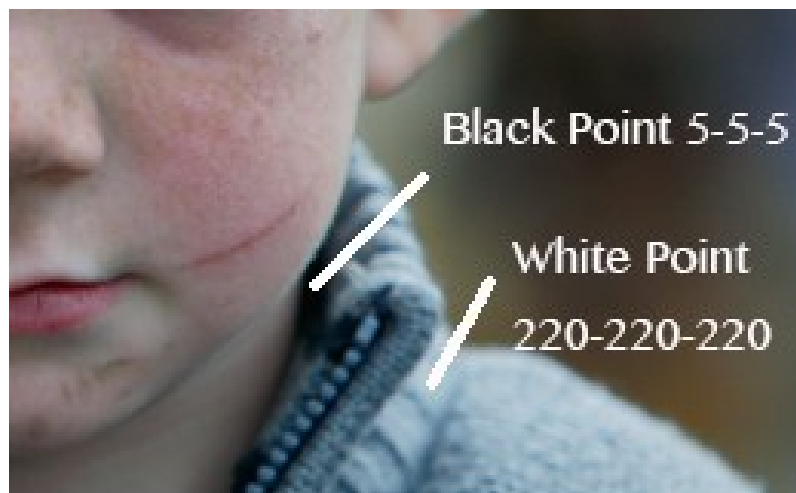
Choose: Select/Deselect (It is easy to forget this step as the selection is hidden).

Click on the little Black/White circle at the bottom of the layer palette and choose "Levels".

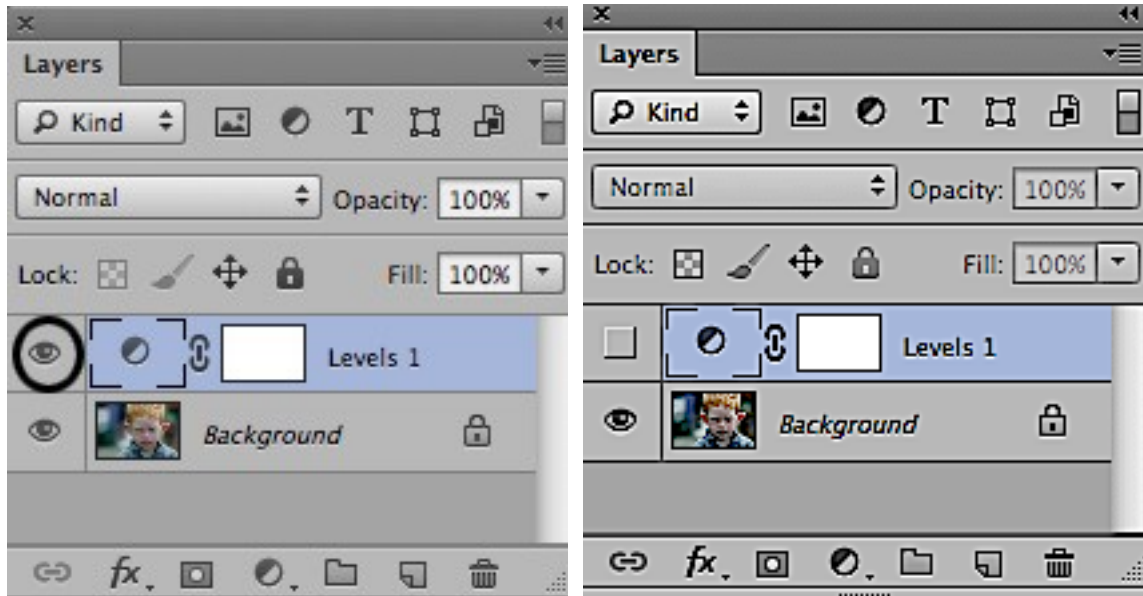


Highlight the Black eyedropper and set the black (5-5-5) in the image.

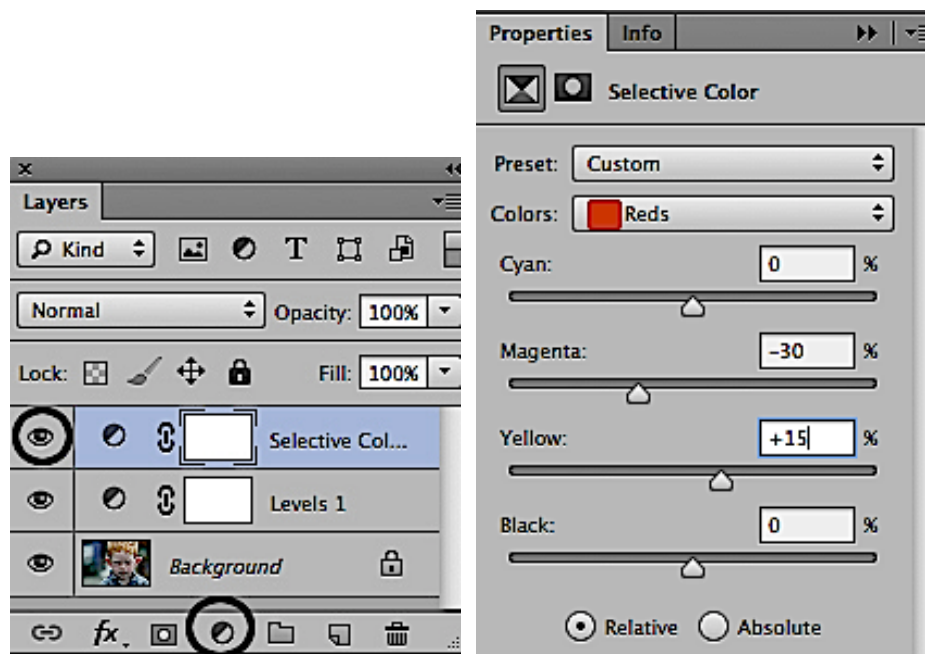
Highlight the White eyedropper and set the white (220-220-220) point.



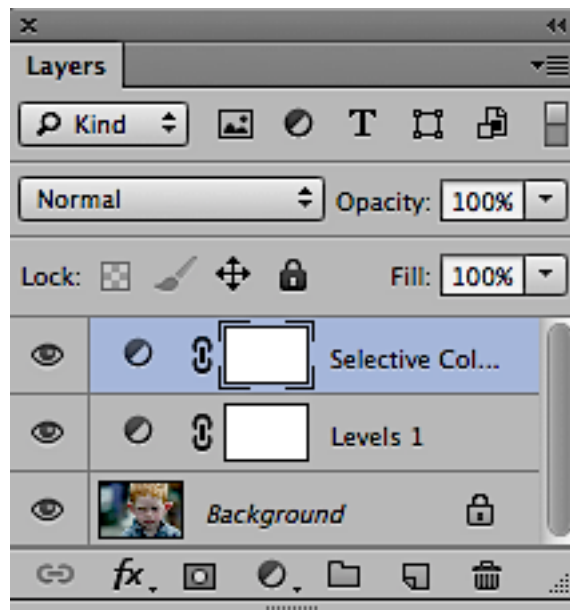
Adjustment layers don't have a "Preview" button. With an adjustment layer this is accomplished by clicking the layer's eyeball on and off. This is called turning the visibility of the layer on and off.



Click on the little Black/White circle at the bottom of the layer palette and choose: Selective Color. Take some Magenta out of the "Reds" and add some Yellow to the "Reds". Click the layer eyeball on and off to see the adjustment. Readjust and fine-tune the adjustment if necessary.



The layer palette will look like this:



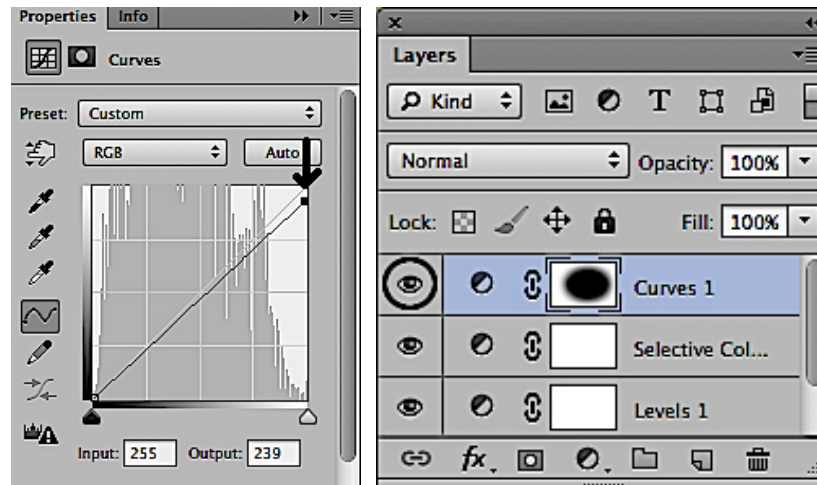
Choose the Elliptical Marquee tool and make a selection that looks like this:



From the top menu, Choose:  
Select/Inverse  
Select/Modify/Feather and put in 250 pixels. Click OK.

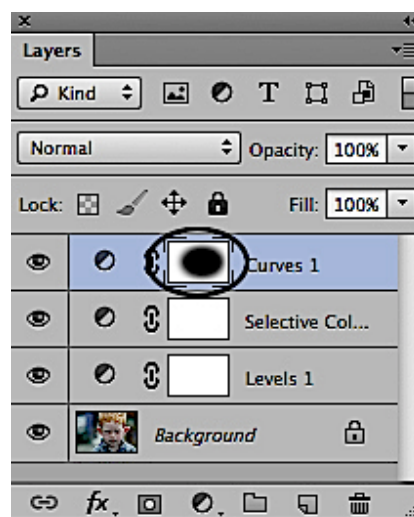
Click on the little Black/White circle at the bottom of the layer palette and choose: Curves. The selection will disappear when the Curves adjustment layer is made. It is reflected in the mask. The white area is the selection.

Drag the upper right hand corner dot (White) of the curve down ½ of a square to dull the whites around our main subject.



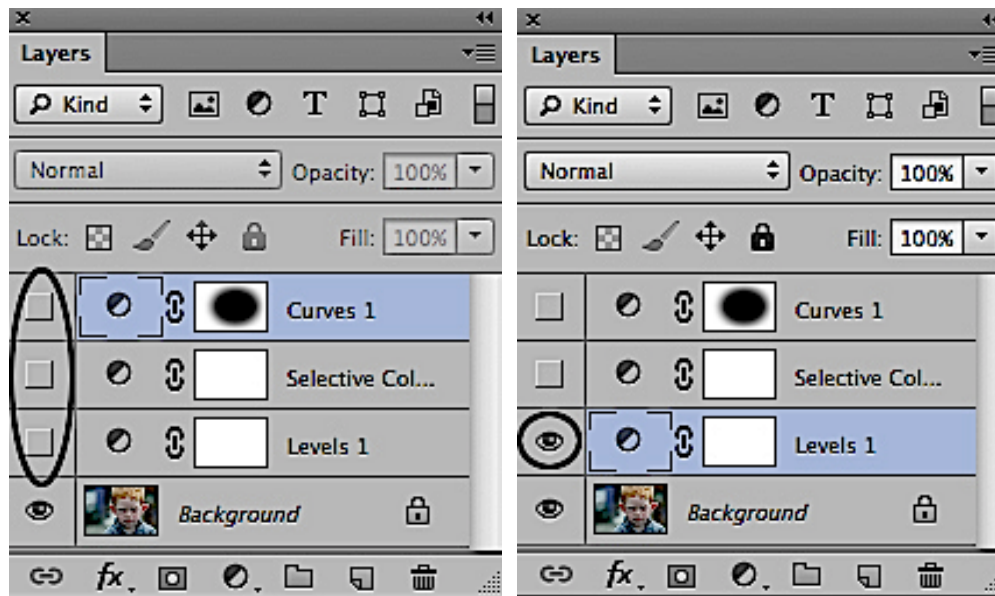
Click the layer eyeball on and off to see a before and after. The black area of the mask is the area not getting the Curves adjustment.

**Tip:** Sometimes you might want to use the same selection for a different Adjustment Layer. Ctrl/Click (Pc) or Command/Click (Mac) on the layer mask to bring the selection back to the screen. Choose: Select/Deselect to get rid of the selection for now.

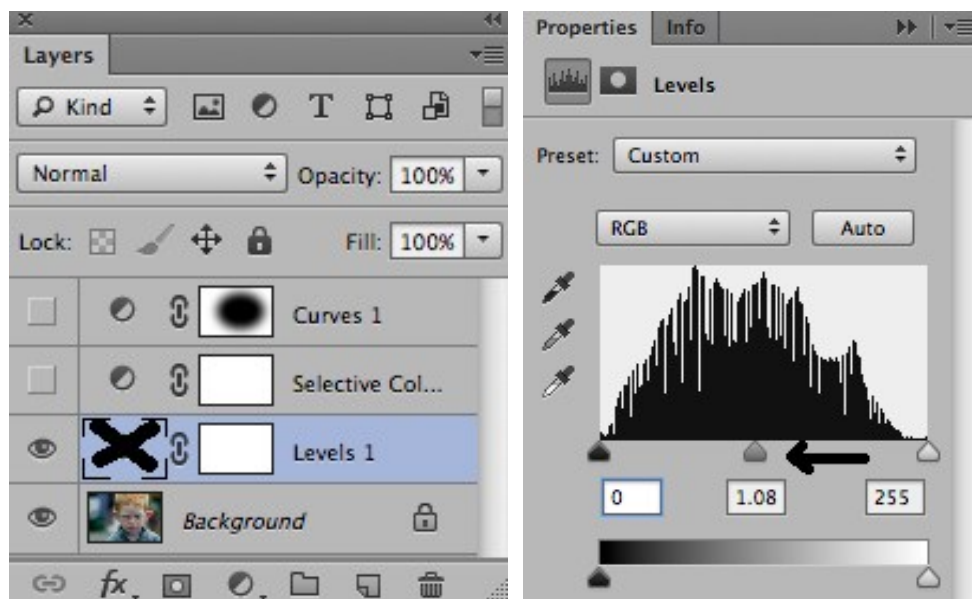




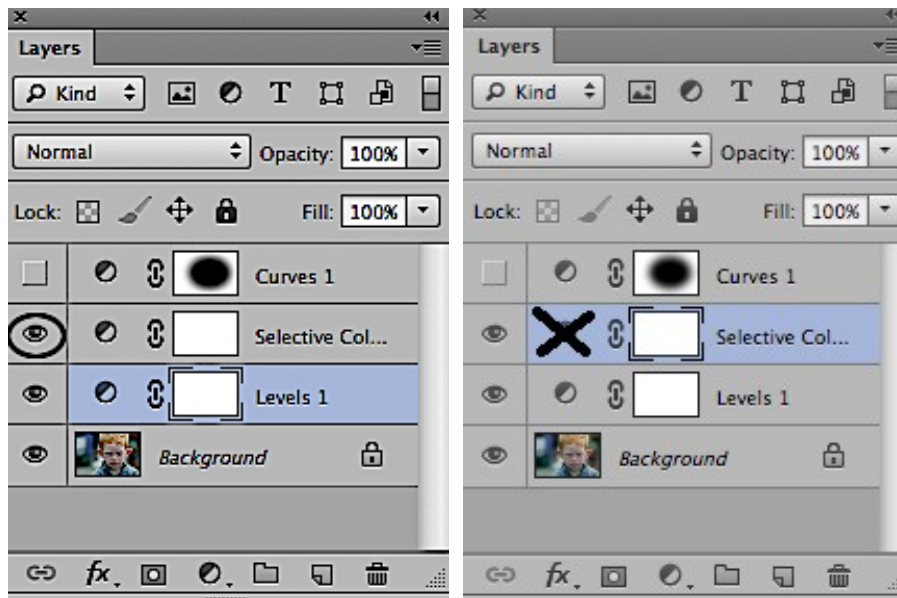
We might want to fine-tune each adjustment before saving the file as our prepped version. Turn off the visibility of each adjustment layer (click on eyeballs). Then click the Levels eyeball on and off to get one last look at the adjustment.



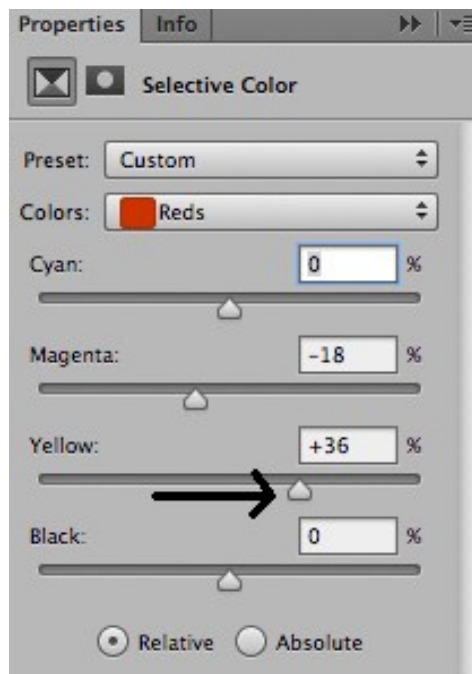
I think the face looks a little too dark. Double click on the Levels icon to the left of the mask to see the Levels adjustment (see "X"). Adjust the middle slider a little to the left to slightly lighten the face (right image).



Let's revisit the "Selective Color" adjustment. Turn the visibility of the layer on and off to see the Selective Color's before and after (click eyeball on and off, left image). Then double click on the icon to the left of the mask to revisit the adjustment (right image).



Let's add a little more yellow to the reds of the image. Move the yellow slider a little more to the right.



Let's revisit the Curves layer that darkened around our subject. Turn the visibility of the layer on and off to see the effect (click eyeball on and off). I like how the dulling of the whites has helped our subject stand out.



This light area (X) is too bright. This area is not getting the Curves adjustment. It needs to be toned down like the rest of the layer. We need to modify the mask so this hot area gets toned down also.

Choose the Brush tool. Press the letter "D" and then the letter "X" on the keyboard to set the Foreground/Background colors on the toolbar to White/Black.



Look at the Curves mask. The area in white is the area getting the adjustment. The area in black is the area not getting the adjustment.



Make sure the mask is activated (double set of lines around the mask). If it is not activated, click on the mask and you will see the double set of black lines.

The Brush tool needs to have a soft edge. Hold down the shift key and tap on the left Bracket key four times to soften the brush. Then let go of the shift key and tap on the left or right Bracket key to get the brush size for the area to be modified. You modify a mask by painting in the image with either white or black. Where you paint with white will add that area to the adjustment. We need to paint across the hot area with the brush tool set to white to add it to our Curves adjustment. Paint across the hot area. The mask will show the added area of the image that is getting the adjustment (white part of mask).



Sometimes you might over paint an area. Press the letter "X" on the keyboard to set the Foreground/Background colors on the toolbar to Black/White And paint across the area.



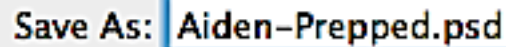
Tap on the "Backslash" key (to the right of bracket keys) on the keyboard to see a red mask over the image. The red area is the masked area of the image that is not getting the Curves adjustment. This red mask will make it easier to see where to paint. Paint with Black or White and get the red mask to look like this:



Tap on the "Backslash" key one more time to remove the red mask.

Let's save this prepped file.

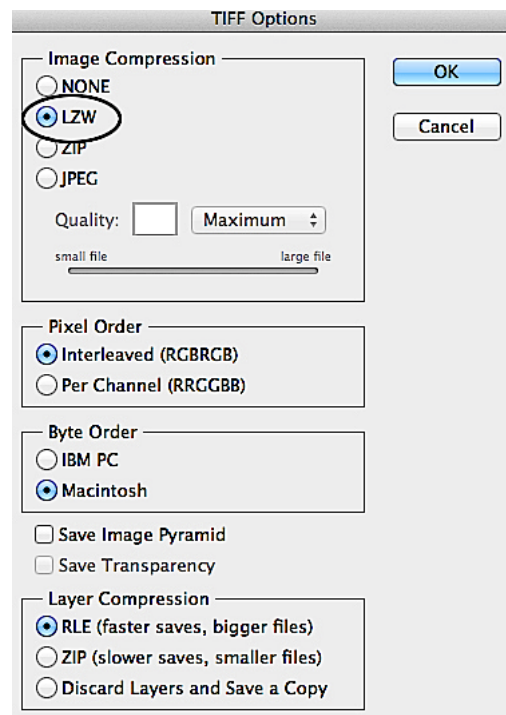
Choose: File/Save As and title the file: "Aiden Prepped". Save as a PSD and click OK.

The image shows a 'Save As' dialog box with the text 'Save As: Aiden-Prepped.psd'. The text 'Aiden-Prepped.psd' is highlighted with a blue rectangular border.

**Tip:** Layered files can also be saved in the "Tiff" file format. A PSD file can only be opened in Photoshop while Tiff files can be opened in other software programs.

When you save a file as a Tiff, you will see a "Tiffs Option" box. Tiff files can be compressed. This compression is called LZW compression. The file saves with a smaller file size (about 15%) and then opens up at the larger size. There is no loss of quality with this compression. So you get more images on your hard drive.

Leave Pixel Order, Byte Order and Layer Compression on their default settings.

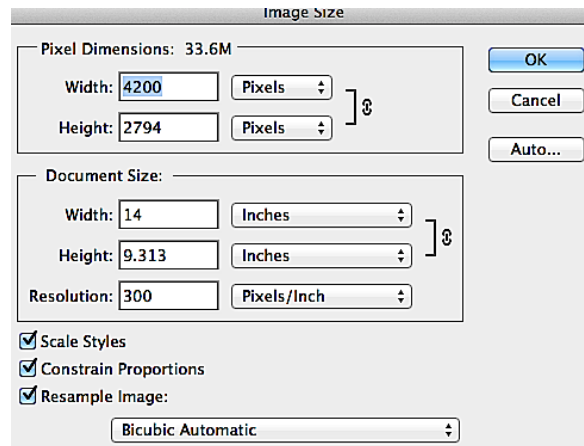


Now that we have our prepped file saved off, let's size and sharpen the file.

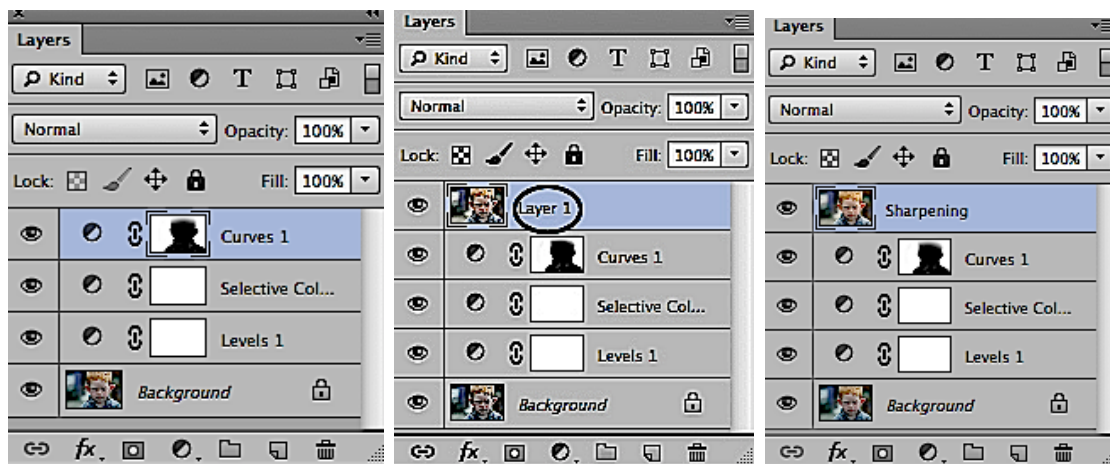
Always size your files before sharpening.

Let's size this file to 14 inches.

Choose: Image/Image Size. Set the Resolution to 300 and the width to 14 inches and click OK.



Highlight the top layer (left image). With your left hand, press and hold down on Shift/Alt/Ctrl (PC) or Shift/Option/Command (MAC) and then tap the letter "E" with your right hand to make a new layer. This new layer combines all of our layers into a layer that sits at the top of the layer palette (middle image). Double click on "Layer 1" and title it "Sharpening" (right image).





Remember our sharpening technique?

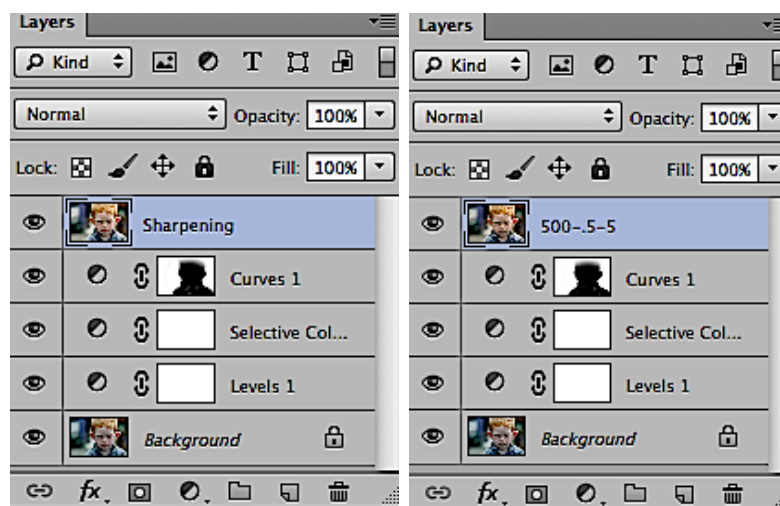
Start with a double click of the Zoom tool.

Choose: Filter/Sharpen Un-Sharp Mask

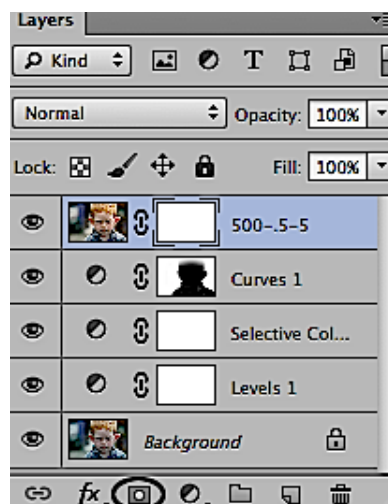
Set the Amount to 500, the Radius to .1 and the Threshold to 5.

Highlight the .1 and tap on the “Up” arrow key to .2 .3 .4 .5 .6.

Try .5 and click OK. Double click on the word “Sharpening” and title the layer: 500-.5-.5 (right image).



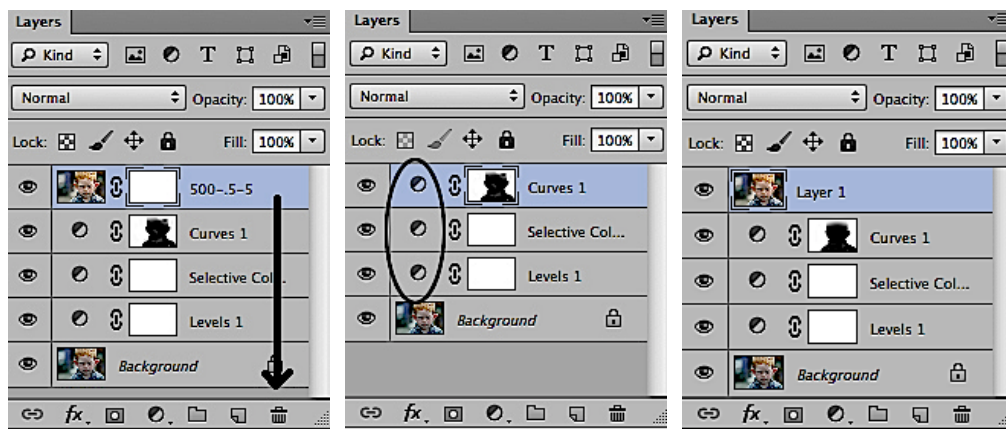
This sharpening layer can also have a mask attached to it for even more control. Click on the “Add Layer Mask” icon at the bottom of the layer palette to add the mask.



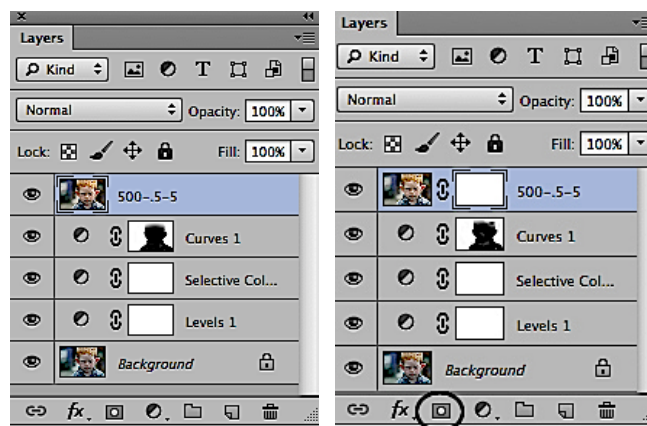
The mask can control which tones in the image get the sharpening. This image looks good with all of the tones getting sharpened.

Let's save this sized file. Choose: File/Save As and title the file: Aiden-14 inch and then save the file as a PSD.

Sometimes you might want to re-adjust the layers below the sharpening layer. Drag the sharpening layer to the trash at the bottom of the layer palette (left image). Then the layers can be readjusted (middle image). When you are done you will need to remake the Sharpening layer. Make sure the top layer is highlighted (middle image). With your left hand, press and hold down on Shift/Alt/Ctrl (PC) or Shift/Option/Command (MAC) and then tap the letter "E" with your right hand to make a new layer (Layer 1, right image).



Double click on "Layer 1" and title it: 500 -.5 – 5 (below left image). Click on the "Add Layer Mask" icon at the bottom of the layer palette to add a layer mask to the sharpened layer (below right image).



**Tip:** Sometimes a small area in the image will look too sharp with a given sharpening setting. Let's say a wisp of hair looks too sharp. That is where the mask comes in. Choose the Brush tool set to black and paint across the wisp of hair that looks too sharp and the sharpening will be removed from that area.

**Tip:** Press Ctrl/I (PC) or Command/I (Mac) to invert the mask to black and then none of the sharpening will be visible. A black mask blocks the layer from being seen.



Press the letter "X" to set the on the Foreground/Background color on the toolbar to White/Black.



Now paint in the image where you want the sharpening to be. Sometimes with portraits I paint in the eyes and parts of the face and nothing else. The mask might look like this:



Many images have areas that sharpen quicker than others. If you sharpen on a layer with a mask you can get each tone sharpened correctly.

**Tip:** Sometimes a Levels or Curves adjustment layer will make the image look better, but one little area of the image doesn't look better with the adjustment. Choose the Brush tool set to "Black" and paint across the area that needs to be removed from the adjustment. It is all about the mask.

Practice this Image Adjustment sequence until it becomes second nature.

## HUE & SATURATION ADJUSTMENT LAYER

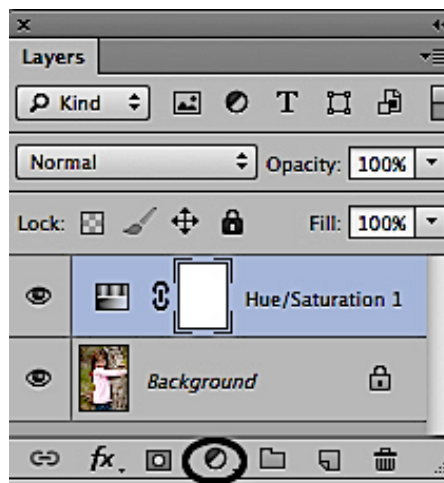
### *Image: Girl & Tree*



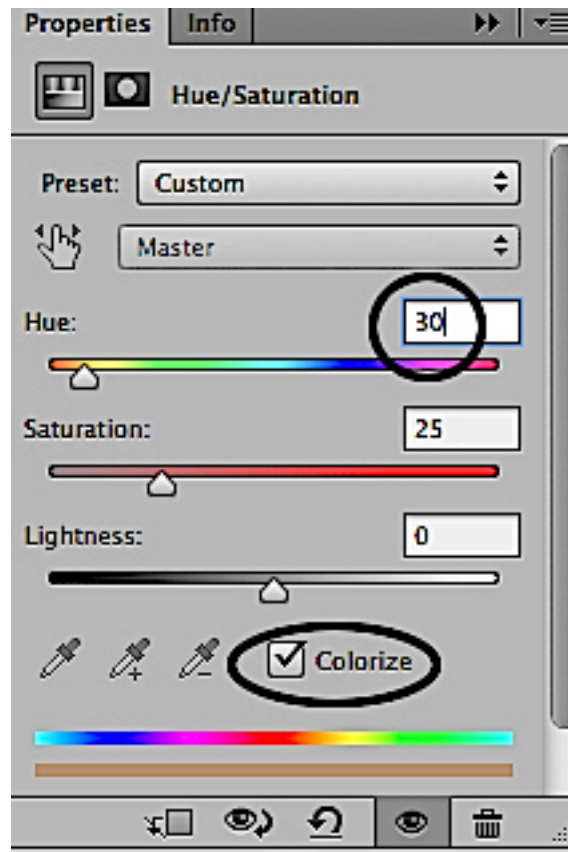
Remember the History Brush Technique? We turned the image into sepia tone and then painted some color on sepia toned image.

As much as I like that History brush Technique, history does not save with the file. When you open the image again it has no history, it just says open. This layer mask technique will do the same thing to the image, but be easily editable later on because it was done with a layer with a mask.

Click on the little black/White circle at the bottom of the layer palette and choose Hue & Saturation.



Check the “Colorize” and put in a Hue of 30.



Now that the image is a nice Sepia tone, it's time to use the layer mask to paint in the color.

The Foreground color on the toolbar should be set to Black/White. If it isn't press the letter “X” on the keyboard. The letter “X” on the keyboard scrolls the Foreground color on the toolbar between Black & White.



Now choose the Brush tool on the toolbar (B)



Paint across the girl to paint in the color of the image. When you paint with black, you are painting in the color.

Press the letter 'X' on the toolbar to set the Foreground color on the toolbar to white. When you paint with "White" you are painting in the sepia tone.



Press the Letter "X" one more time to set it back to Black/White.



Now paint in the image everywhere you want the color to be. When you are done, the layer mask might look like this:



Press the "Backslash" key on the keyboard to see how accurately your painting is. It is just to the right of the "Bracket" keys. A red mask will show you any areas that need to be refined.



The red mask is where the color part of the image is. When you paint with black, you are adding to the red mask area. When you paint with white you are removing the red mask area.



Sometimes you might need a harder edged brush to refine the areas.

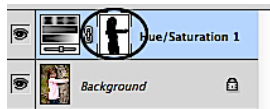
Hold down the “Shift” key and tap on the “Right” bracket key four times to set a hard edge to the brush. Hold down the “Shift” key and tap on the “Left” bracket key four times to set a soft edge to the brush.

Once you have the red mask looking good, press the “Backslash” key again to return to the image.

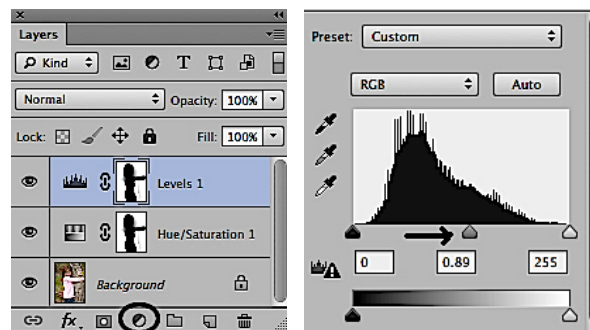
The beauty of the layer mask compared to the Quick Mask is that it saves with the file. When you choose: File/Save As, Photoshop will make the default file format either a Tiff or a PSD file and the layers will be saved.

When this file is opened again the Hue & Saturation layer and mask will open exactly where you left it.

Tip: Ctrl/Click (PC) or Command/Click (Mac) on the layer mask to get the selection back from the mask. The selection can then be used for other adjustment layers.



With the selection back on your screen, click on the little black/White circle at the bottom of the layer palette and choose ‘Levels’. Move the Middle slider to the right to darken the background around the subject.



With adjustment layers you can revisit each layer and have the slider right where it was. Think of these layers like filters that can be modified (mask). This is what is called Non-Destructive Editing.

## PHOTO MONTAGE

I've always loved the photomontage. When produced in the darkroom they were called a photo composite or photomontage. Check out the work of **Jerry Uelsman** and you will see some of the finest photomontages ever made. Some of Jerry's photo composites would use 12 enlargers at a time and take several days to produce. His images are mystical and surreal. Jerry's work truly has extended the definition of Photography. With Photoshop the Photomontage is much easier to produce. What used to take days to do in the darkroom can now be done in a matter of hours. In Photoshop this is done with a layer and a mask.

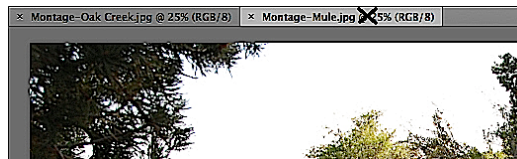
Let's make a simple Photomontage.

Images: Montage-Mule and Montage-Oak Creek.

Open both images in Photoshop.

Only the last image you opened will be seen initially. The other image will show up as a tab at the top of the screen. This is what Photoshop calls a tab window interface. The first step is to get one of the images on top of the other in the layer palette.

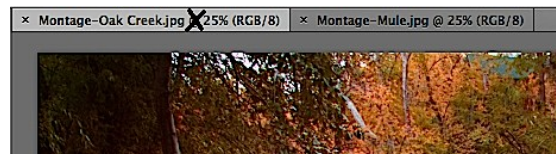
Click on the Montage-Mule tab so it is the image that is visible on the screen.



Press Ctrl A (PC) or Command/A (Mac) to select the image.

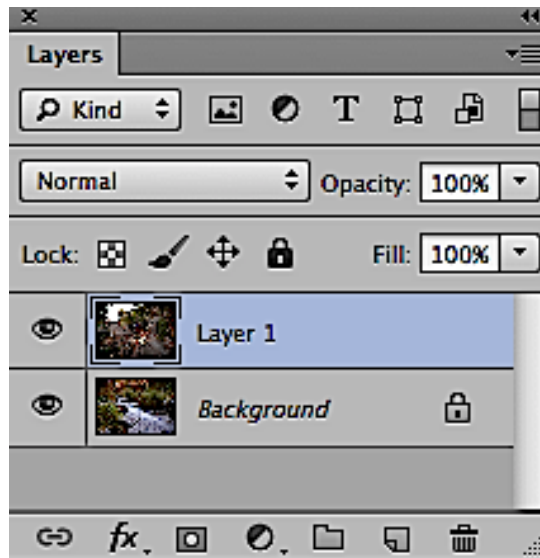
Press Ctrl/C (PC) or Command/C (Mac) to copy the image

Click on the Montage-Oak Creek tab so it is the image that is visible on the screen.

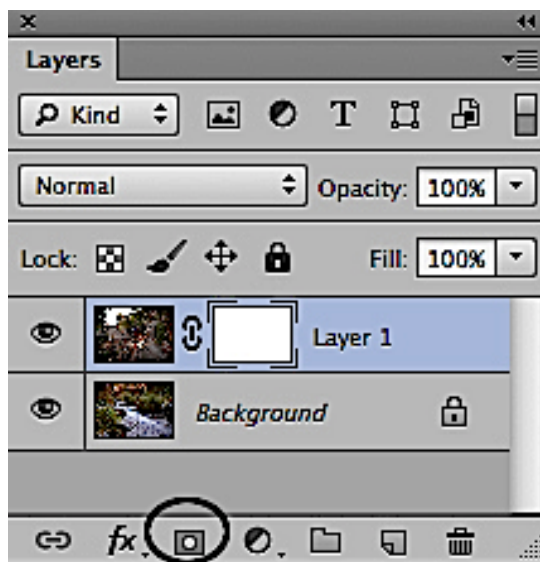


Press Ctrl/V (PC) or Command/V (Mac) to paste the Montage-Mule image on top of the Montage-Oak Creek image. The Montage-Mule image will be the only image visible on your screen at this stage.

The layer palette will look like this:

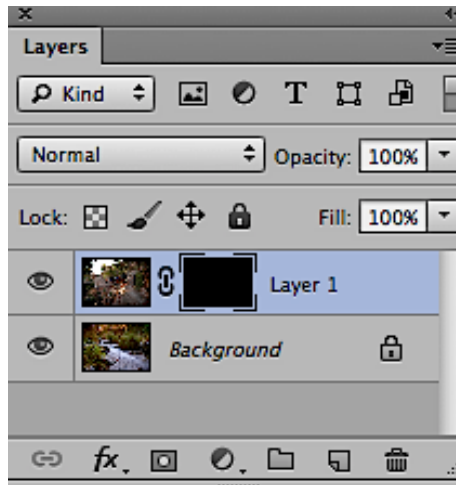


By now we have learned that the job of the layer mask is to show all or part of the layer that it is attached to. Click on the “Add Layer Mask” icon at the bottom of the layer palette to add a layer mask to Layer 1 (Montage-Mule).



The mask always starts out white. A white mask reveals or shows the whole layer.

Press Ctrl/I (PC) or Command/I (Mac) to invert the mask to black. A black mask hides the layer from being seen.



Press the letter “X” on the keyboard to set the Foreground/Background colors on the toolbar to White/Black.

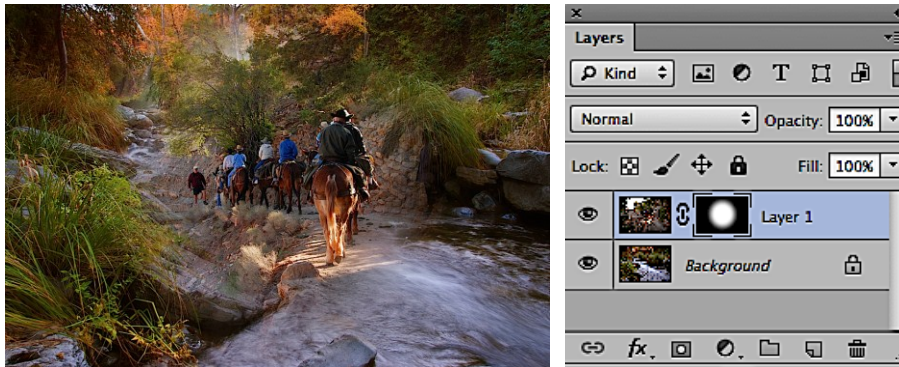


Choose the Brush tool. Hold down the “Shift” key and tap on the left bracket key 4 times to soften the edge of the Brush. Let go of the “Shift” key and tap on the left or right “Bracket” until the brush size looks something like this:



With the brush tool set to white, click a couple of times with the brush in this spot. When the brush tool is set to its softest setting it takes a couple to see the full effect.

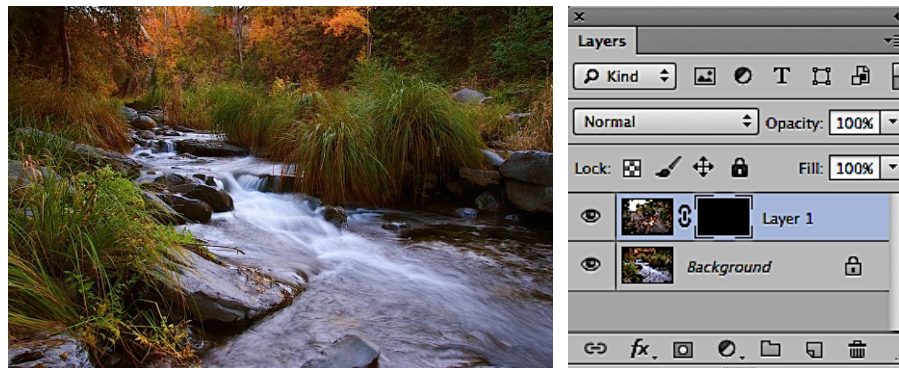
Not quite a Jerry Uelsman but pretty cool huh?



Here's what is going on. With masks, White reveals and Black hides. So with the brush tool set to White, wherever we paint will show the Mule image.

Paint with black in the image to hide the Mule image.

Press the letter "X" on the keyboard to set the Foreground/Background color on the toolbar to Black/White and paint in the same area.



White reveals, Black hides when it comes to a layer mask. So this layer is being hidden right now (black mask).

Now that we have a feel for the mask, lets blend these two images.

Press the letter "X" again to set the Foreground/Background colors on the toolbar to White/Black and paint in the Mule image.





Sometimes the image that you add to the montage will need to be resized.

Choose: Edit/Free Transform. Hold down the shift key and drag in from one of the corner handles. Press the “Enter/Return” to finish the transform.



Size and drag the mules into position. Something like this:





Let's add another image to the montage.

***Image: Montage-Elk***

It's always a good idea to check the resolution of any new images to be added to the montage. Make sure they all have the same resolution. All of these images are 300 Resolution at or about 14 inches. Lets put the elk on the right side of the image, so he is watching the mules go by.



Here are the steps:

Select/All

Press Ctrl/C (PC) or Command/C (Mac) to copy the image.

Click on 'Montage-Oak Creek image to make it the active image on screen.

Press Ctrl/V (PC) or Command/V (Mac) to paste the elk image.

Edit/Free Transform, hold the shift key and drag the elk image smaller.

Press: Enter/Return to finish the Transform.

Choose the move tool and drag the Elk image into place.



## PhotoShop CS6 Class - Week Four - Photo Montage

Click on “Add Layer Mask” icon at the bottom of the layer palette.

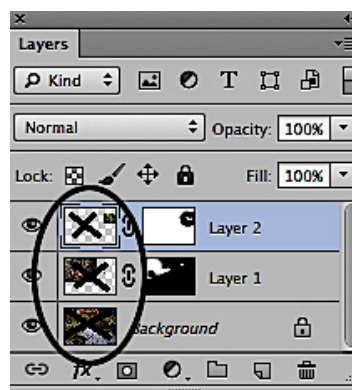
Choose the Brush tool set to “Black” and paint across the edges of the elk image to blend it in. The layer palette will look like this:



At this stage you can add as many new images to the montage as you want. Remember the Resolution of each images should be the same before you copy and paste the image.

Each element to the montage has its own layer. I like to save a version with the layers. File/Save As (Oak Creek Mule montage-Prepped).

Once the prepped file is saved off, its time to size and sharpen the file. Click and highlight each image layer (not the mask) before sharpening. The image layer will have a double set of black lines around it when it is activated.



With practice you will love making montages as much as I do!

## LAYER MASK TIPS

When you first add a Layer Mask to a layer, the mask will be active, so any painting you do will affect the mask instead of the actual image data. But, if you make a different layer active and then switch back to the layer that has the mask applied to it, Photoshop will make the image active instead of the Layer Mask. That means you have to be careful anytime you switch between layers; otherwise, you might unintentionally start messing with your image instead of the layer mask. You can use a little safety net by turning on the Lock Image Pixels icon at the top of the Layers palette (it's the checkbox to the left of the paintbrush icon). With that turned on, you will not be able to paint on the image, but you'll still be able to paint on the layer mask. That way, if you switch layers and don't realize that the image is active, you'll get a warning telling you that the image is locked, which should remind you to click on the Layer Mask instead.

When you add a Layer Mask to a layer, Photoshop automatically places a link symbol between the image thumbnail and the Layer Mask thumbnail in your Layers palette. That link causes the Layer Mask to move along with the layer anytime you use the Move tool. If you don't want them both to move at the same time, then click on the link symbol to turn it off. Once you've done that, the Move tool will only be able to move what's active — either the layer mask, or the image on that layer. A double border around the thumbnail image will indicate what's active.

When the Layer Mask is linked to the layer, the mask will cause parts of the layer to become hidden, and have an effect on where any Layer Styles show up (like drop shadows). The reason for this is that the Layer Style thinks the hidden areas are actually deleted areas and will, therefore, simply ignore those areas. If you'd rather not have the Layer Mask affect where the effects show up, then unlink the Layer Mask. When you do that, the effects will apply where they usually would and the Layer Mask will mask not only the image that's on that layer, but it will also make any effects disappear where the mask is filled with black.

One last Layer Mask tip: You can Command-click (Mac), or Ctrl-click (Win) in the middle of a Layer Mask and you'll end up with a selection based on the contents of the layer mask. The black areas of the mask will turn into a selection.

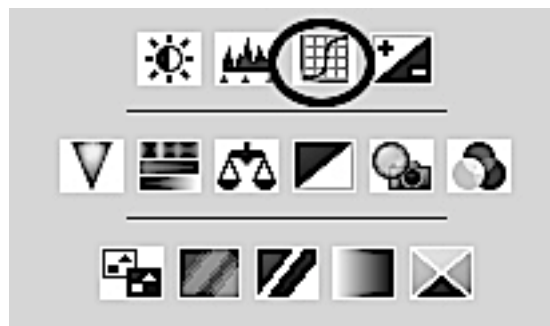
## TARGET ADJUSTMENT TOOL.



***Image: West Fork***



Let's start with a curves adjustment layer. This can be accessed from the icons above the layer palette. Click on the curves icon.



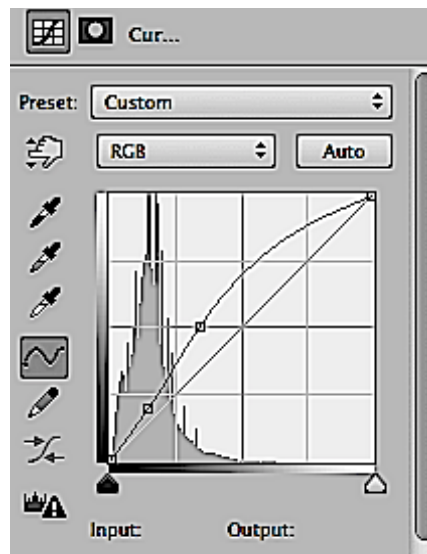
Click on the Target adjustment tool.

Place your mouse on the lightest rock area and drag down to darken the image from this point.

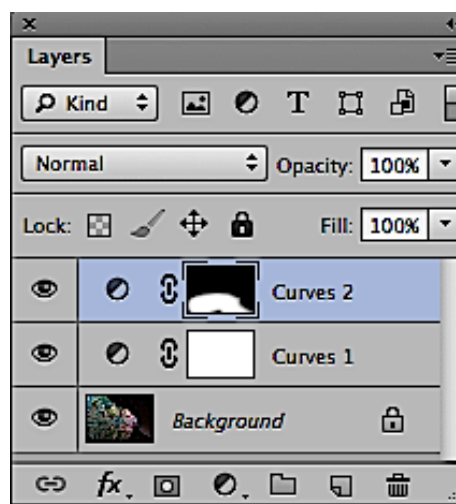
Now that the image looks better, let's adjust the reflections in the water.



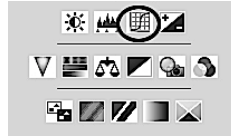
Highlight the target adjustment tool (little hand) and drag up in the water to lighten. Drag down to darken. In this example I dragged down on the brightest water and dragged up on the darkest water. The curve looks like this:



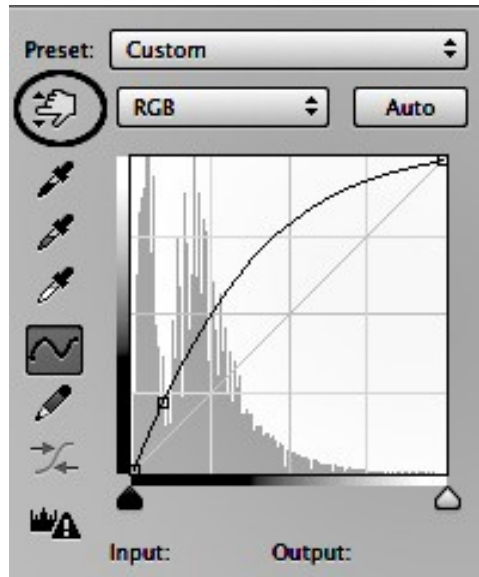
Press Ctrl/I (PC) or Command/I (Mac) to invert the layer mask. An inverted layer mask blocks the layer from being seen. We are now ready to paint in the Curves adjustment to the water. Press "X" until white is the Foreground color on the toolbar. Choose the Brush Tool and paint in the water. The layer palette will look like this:



Let's lighten up the darkest rock area on the right side with the same technique. Choose Curves one more time from the adjustment panel.

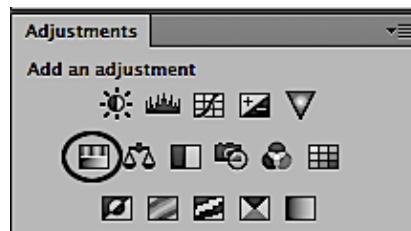


Highlight the Target Adjustment tool and then drag up on the part of the rock that has some detail. The curve will look like this:



Press Ctrl/I (PC) or Command/I (Mac) to invert the layer mask. An inverted layer mask blocks the layer from being seen. Now press the letter "X" on the keyboard until the Foreground color is White. Finally choose the brush tool and paint in the darkest rock area.

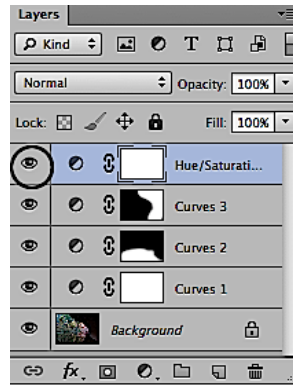
Let's use the Target Adjustment tool to add some saturation to the trees. Choose Hue & Saturation from the adjustment panel.



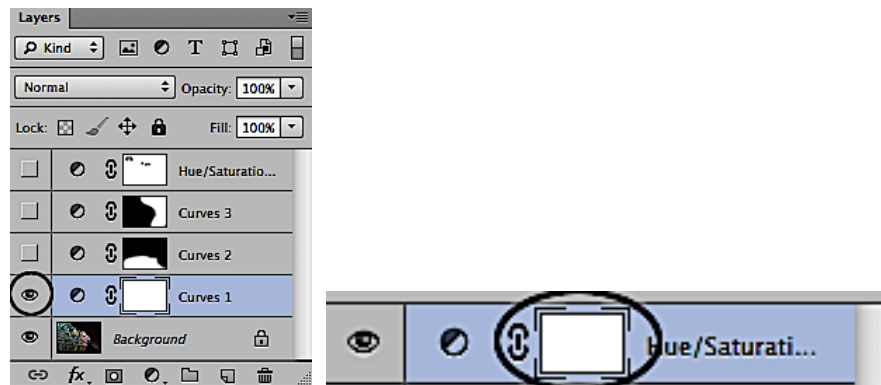


## PhotoShop CS6 Class - Week Four - Target Adjustment Tool.

Highlight the target adjustment tool (little hand) and put your mouse on the brightest leaves of the far right tree and drag to the right to add saturation. Then let go of the mouse and hold down Ctrl (PC) or Command (Mac) and drag to the left again to change the hue of the tree. Stop when the tree is a pretty orange. Click the layer eyeball on and off to see the before and after.



There are some areas that look a little too saturated. No problem, press the letter “X” until the Foreground color on the toolbar is set to black. Choose the brush tool. Set the brush opacity to 50% and paint over any areas that look too saturated. Lets see how we have done. Turn off the visibility off all of the layers except the background and then highlight the first Curves layer. Click the eyeball on and off to see the adjustment. Readjust the Curve if necessary. Highlight each layer and turn the eyeball on and off for that layer to see the adjustment. Readjust each layer if necessary.



Tip: The layer mask can become deactivated and not seem to work. If that happens, click on the layer mask to activate it. The mask will have a double set of black lines around it when it is activated.

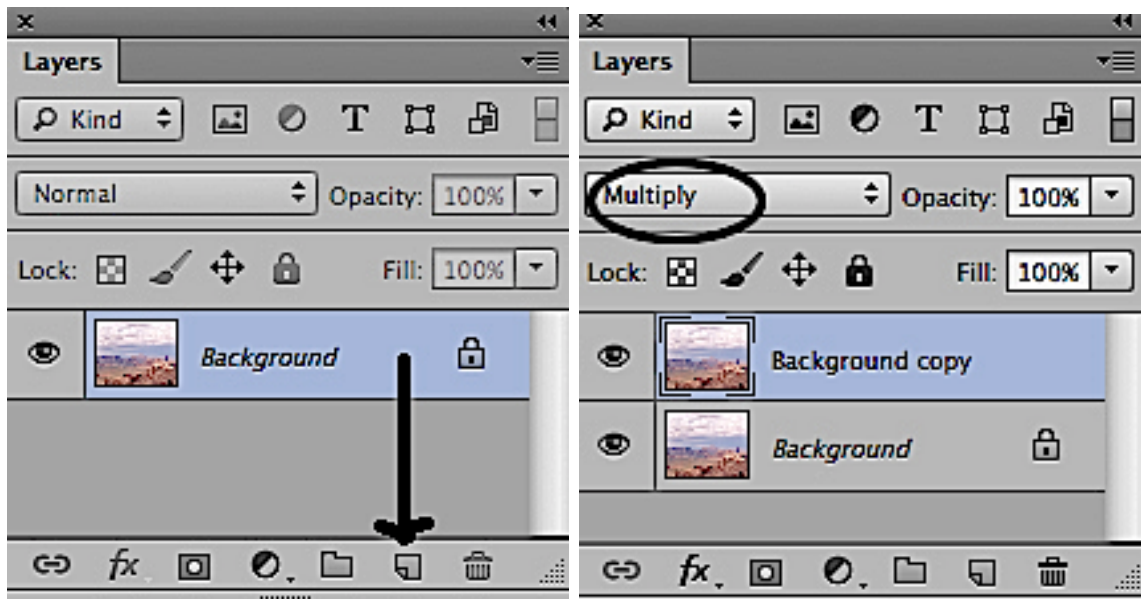
## IMAGE TOO LIGHT? TRY MULTIPLY



### ***Image: Monument Valley***

Here's great way to start on an image that is way too light.

Start by making a background copy. Change the blending mode to "Multiply" the layer palette will look like this:

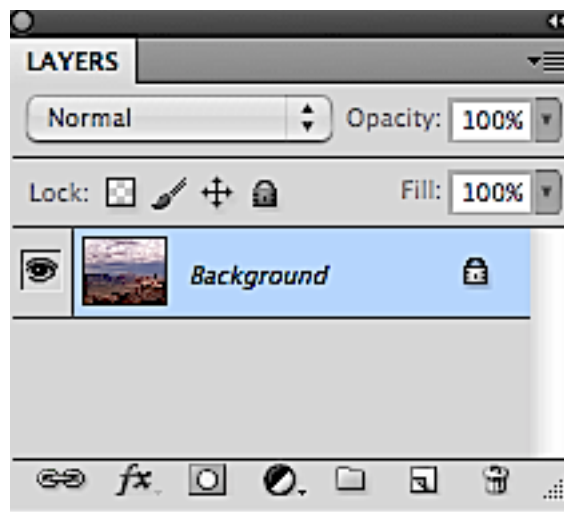


A layer's blending mode determines how its pixels blend with underlying pixels in the image. You can create a variety of special effects with these blending modes.

The image will look like this:



At this stage I will flatten the image and then start prepping the file. Think of it like a better starting point before you start to prep the file.  
Layer/Flatten Image.



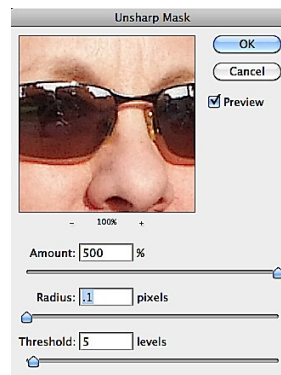
Blending modes can simplify and speed tonal correction. Every Photoshop layer, including Adjustment Layers, supports blending modes, which influence how a layer interacts with the layer below it.

## SOFT FOCUS TECHNIQUE

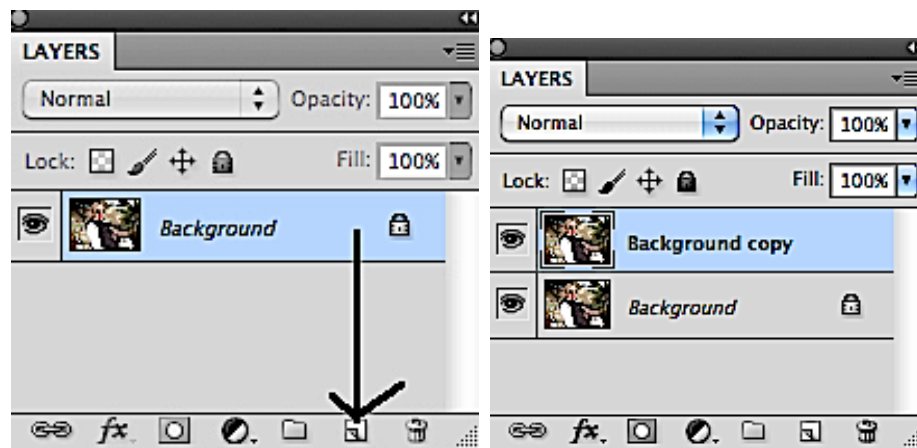
### *Image: Karen*

I love a good soft focus portrait. The problem was finding the right soft focus filter. Most of them are too soft for my liking. This technique creates a nice soft focus filter and then uses the eraser tool to erase back the areas that you want to keep sharp. Let's try this soft focus technique on my sister Karen.

Start by sharpening the file. Double click the Zoom tool, Choose: Filter/Sharpe/Un-Sharp Mask. Start with Amount 500, Radius .1 and the Threshold at 5 Highlight the .1 Tap on the "Up" arrow key. For this file make the radius .5. Click OK.



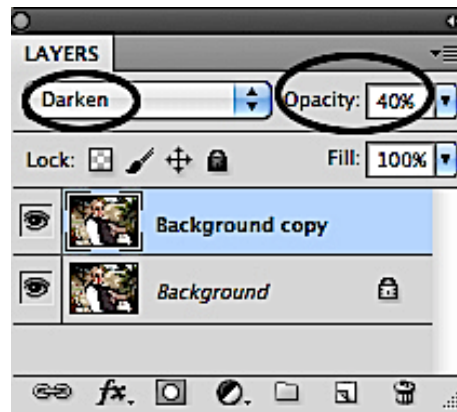
Make a background copy. Drag the background layer down over the "New Layer Icon" at the bottom of the layer palette.



Choose: **Filter** ➤ **Blur** ➤ **Gaussian Blur**. Set the radius to 7 and Click Ok.

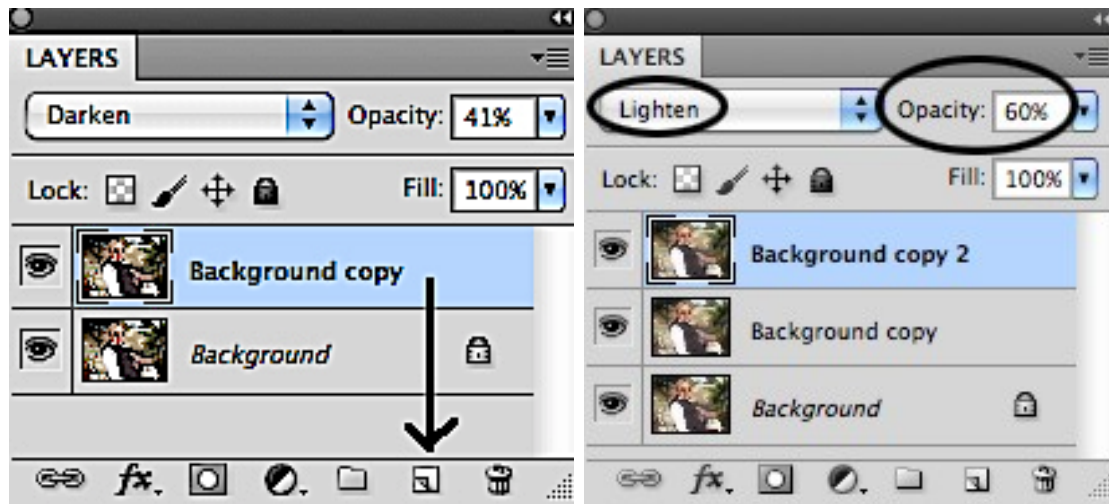
Don't be worried by what you see on the screen at this point.

Change the blending mode from normal to darken and set the opacity to 40%.



Drag the background copy to the “create new Layer” icon at the bottom of the layer palette and make a copy of the background copy layer.

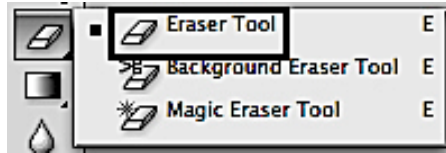
Change the blending mode of the new layer to “Lighten” and the opacity to 60%. The layer palette will look like this:



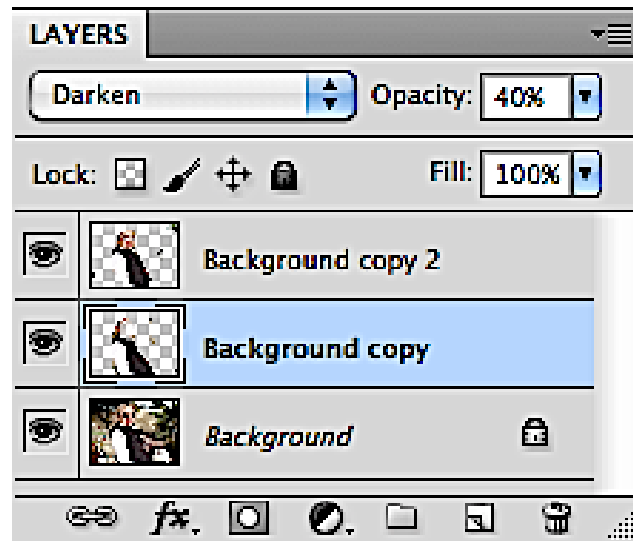
At this point you have three layers. If you look in the “layers” palette, the top layer is called background copy two. The middle layer is called background copy. Both of these layers are soft focus layers on top of the sharper background.



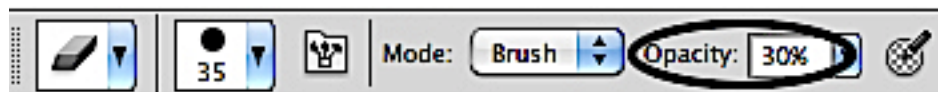
With the top layer highlighted, choose the eraser tool. Use the bracket keys to adjust the brush size and drag across all of the areas you want sharp. (Eyes, lips, mouth, hair, background).



Highlight the Background copy layer (middle layer) and repeat the process with the Eraser Tool. This step is optional, but will yield more sharpness if needed.



**Tip:** Lower the opacity of the Eraser tool too 30% and drag across the face if the image looks too soft.

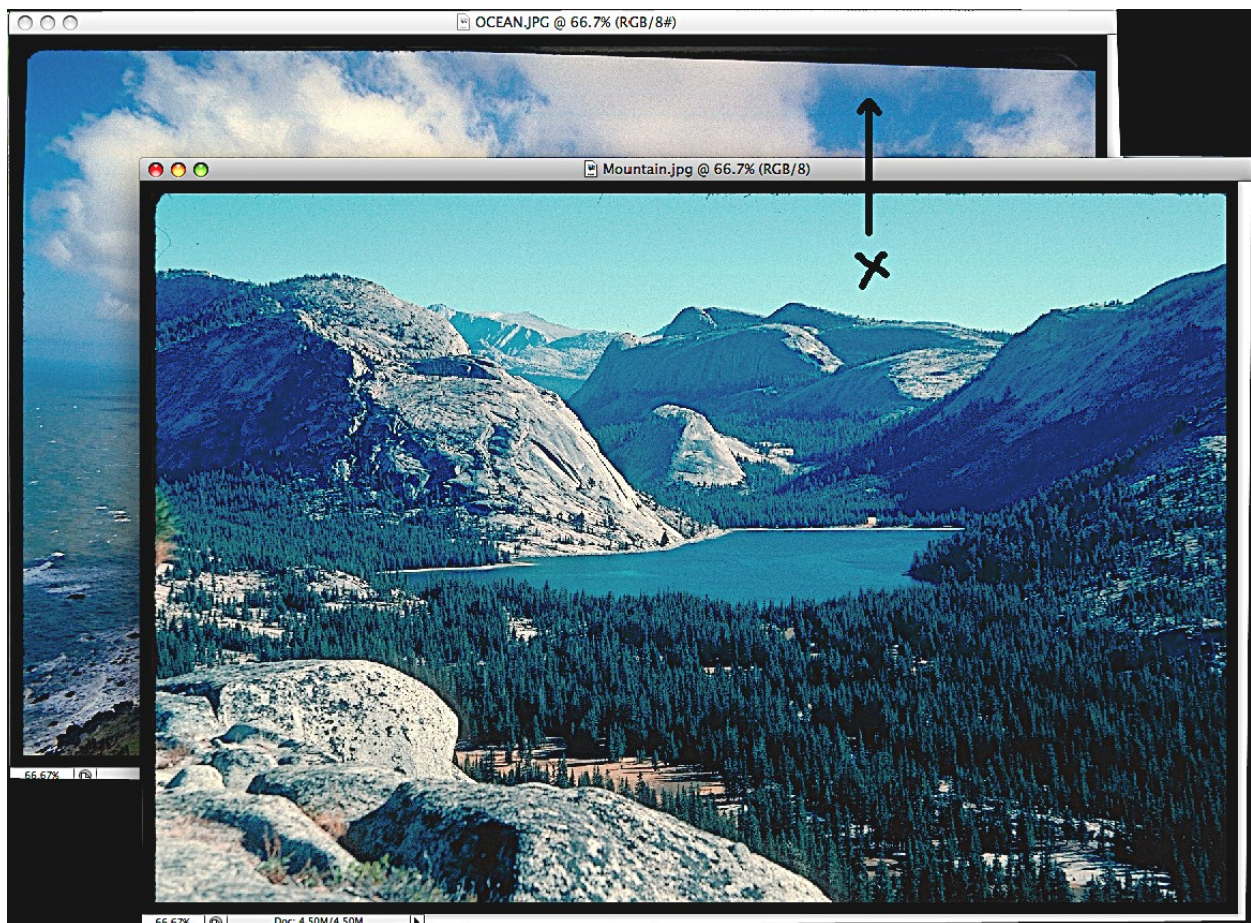




## IMPORTING CLOUDS

Open both images: Mountain and Ocean. The screen will only show one image. Go to the top menu and choose: Window/Arrange/Float all in Windows. For this technique, both images need to be at the same size and resolution.

Move your top image over a little, so you can see part of your cloud image.

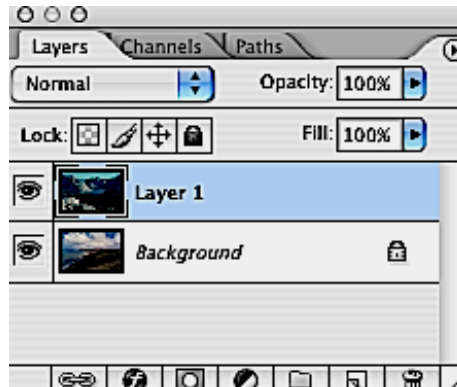


Now use your Move tool. Place the move tool on the top image (X). Hold down on the Shift key and click and drag over to the Cloud image. Be sure and hold the Shift key the whole time your dragging the image, and let go of the mouse as your move tool gets on the Cloud image.



You could also select the top image (select/all) and then copy and paste the image on top of the other image. Either way you end up with one image on top of the other.

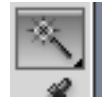
The layer palette will look like this:



Click on the image behind the active image to bring it to the front of the screen (See X) and close it. It will ask do you want to save changes. Say no. You now have one image on top of the other in the Layer palette.



Click and hold down on the Quick Selection tool on the tool bar and then choose the Magic Wand Tool (Underneath the Quick Selection tool). Set the Magic Wand tolerance to 20 at the top of the screen. Now click in the sky to make a selection.



Then click on the “Add to Selection” option at the top of the screen and click in the areas of the sky that are not selected.



Changing the tolerance changes how many pixels get selected with each click. This type of sky selects very easy with the Magic Wand.



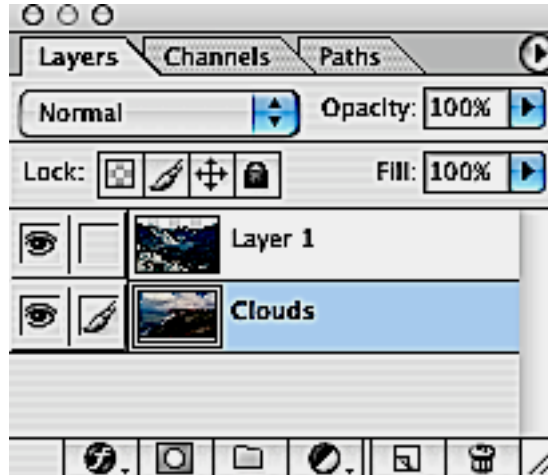
Choose: Select/Modify/Feather. Put in 1 pixel and click OK.

Choose: Edit/Cut from the top menu.

Pretty cool huh? You're not done yet.

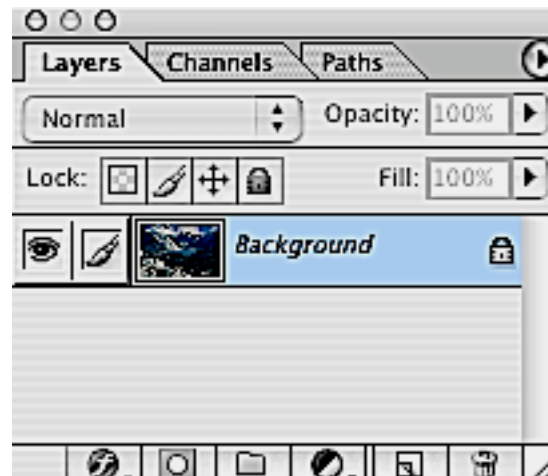
## PhotoShop CS6 Class - Week Four - Importing Clouds

Double click on the background layer and title it: Clouds. Background layers can't be moved. Once the background layer is renamed, it can be moved.



Choose the move tool and click and drag in the sky area and move the clouds to their final placement.

Choose: Layer / Flatten Image when you're done.



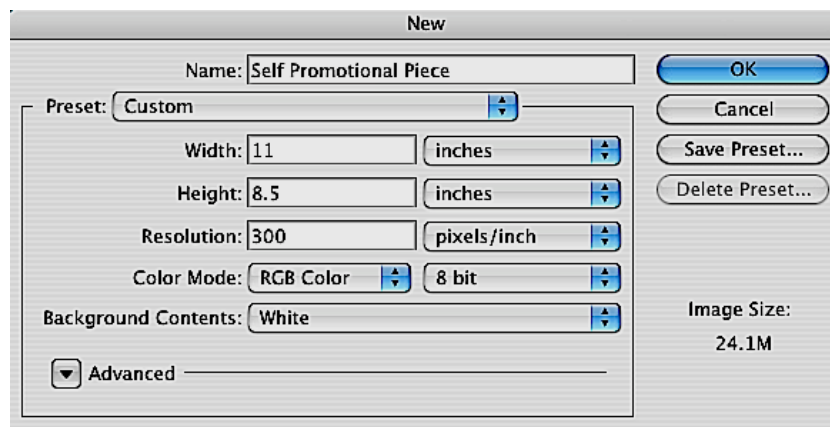
I'll be real honest with you. I have never imported clouds from one picture to another in my own work, but if I did, this how I would do it.



## MAKE A SELF-PROMOTIONAL PIECE



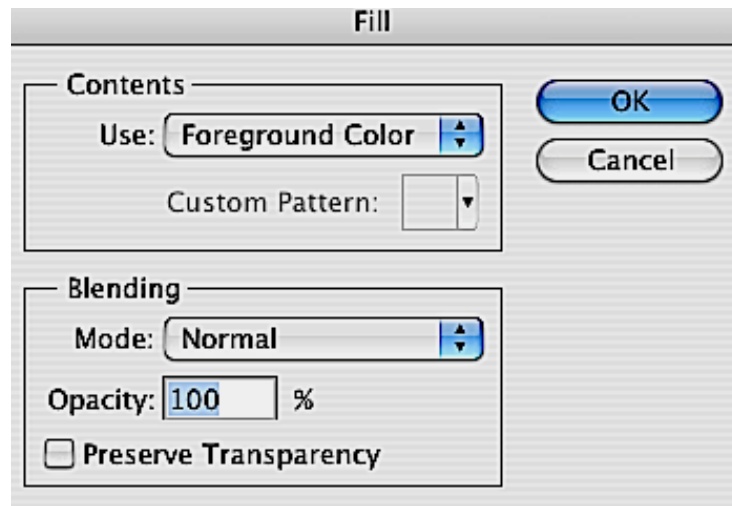
Choose: File / New



This is the background that the images will go on. Press the letter “D” on the keyboard to set the foreground color on the toolbar to black. Press the letter “X” to scroll between black/white. Make sure black is the foreground color.



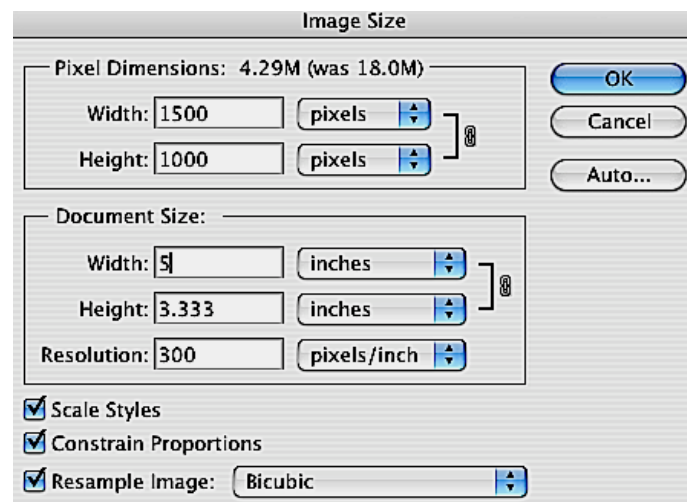
Choose: Edit / Fill to fill the canvas with black.



Click Ok.

The background color can be changed at any time. All you need to do is highlight the background layer, pick a color and then Edit / Fill.

Open an image. The image must be sized smaller than the background. Choose: **Image > Image Size**. The image must also be set to the same resolution as the background. Check the "Resample" box and type in a width of 5 inches. The height will change accordingly if you have the "Constrain Proportions" box checked. Click Ok.



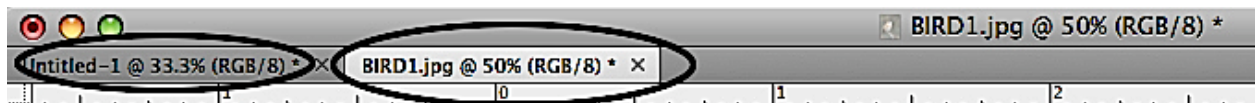


## PhotoShop CS6 Class - Week Four - Make A Self-Promotional Piece

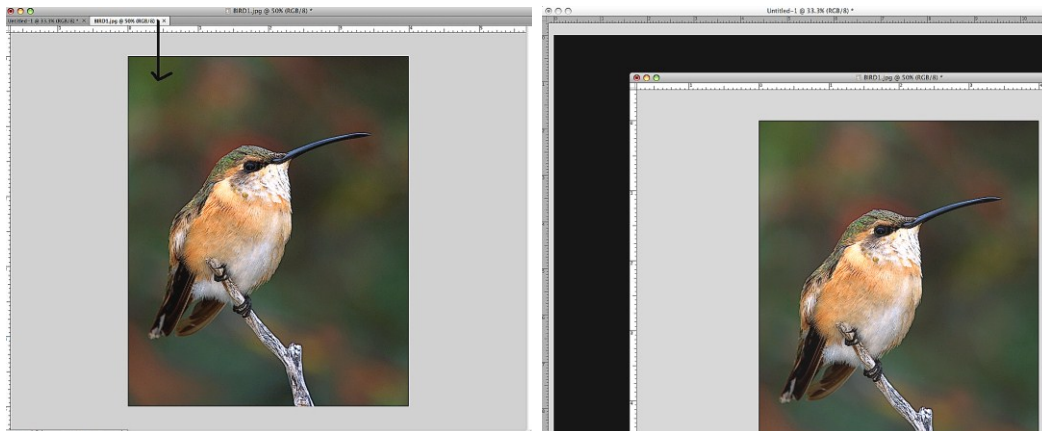
The image will look like this with just the latest open image showing and not the background.



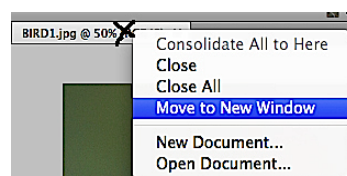
The top bar shows there are both images (background and Bird)



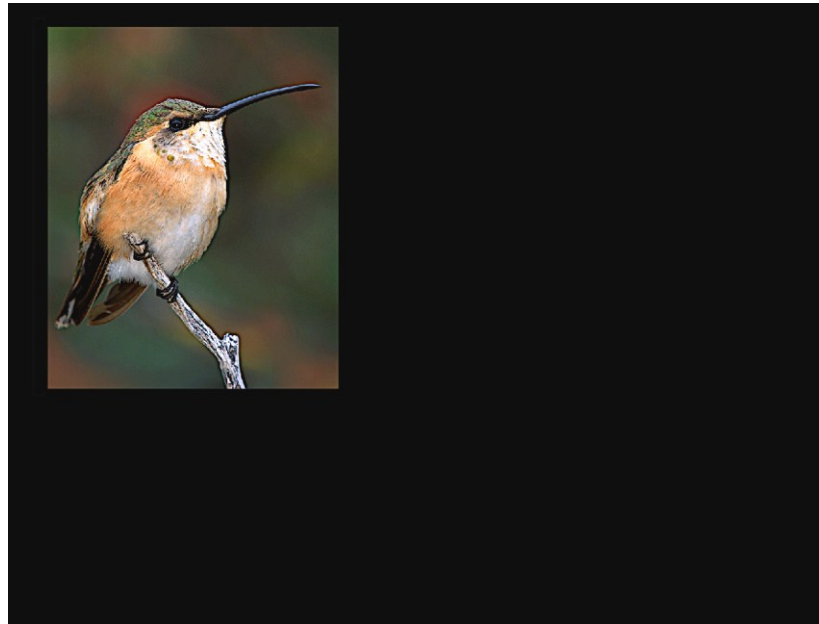
The bird is highlighted so it's the one showing now. Click and drag the tab down to dislodge it and make it a separate window. Then you will see it and the black background.



You can also Right click (PC) or Control click (Mac) at the top bar on the last image opened up and choose: Move To New Window.



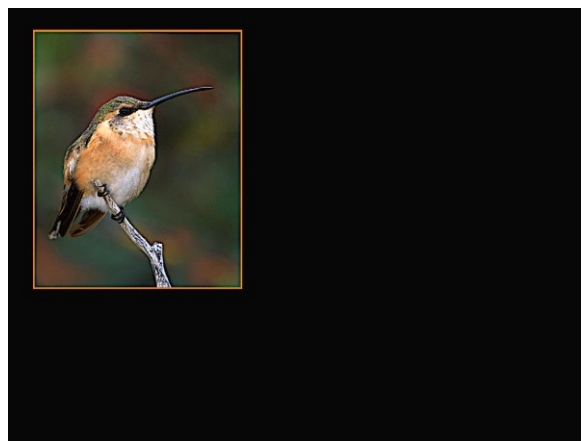
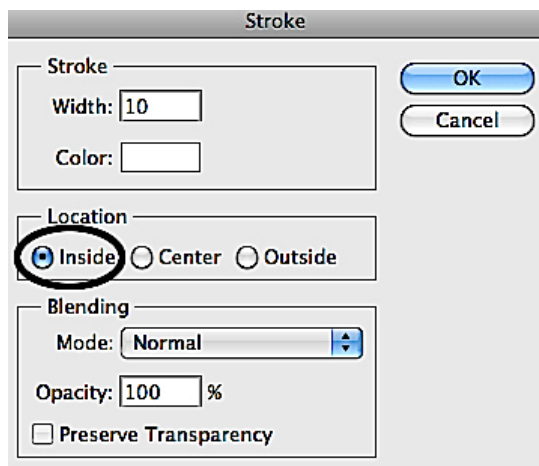
Use the “Move” Tool and click and drag the image onto the background. Drag the image where you want it.



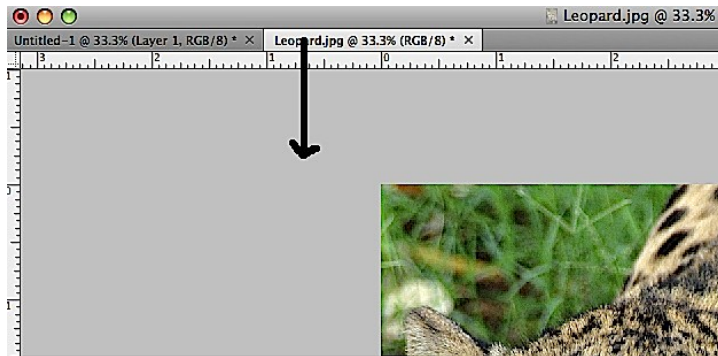
Let's put a border around the image. First choose the color you want the border to be. You can choose a color from the swatches or by using the “Eyedropper” tool and sampling a color in the image. Either way it will become the Foreground Color on the toolbar. Choose: Edit / Stroke.

Set the number of pixels and make sure the location is set to “Inside”

Click Ok.

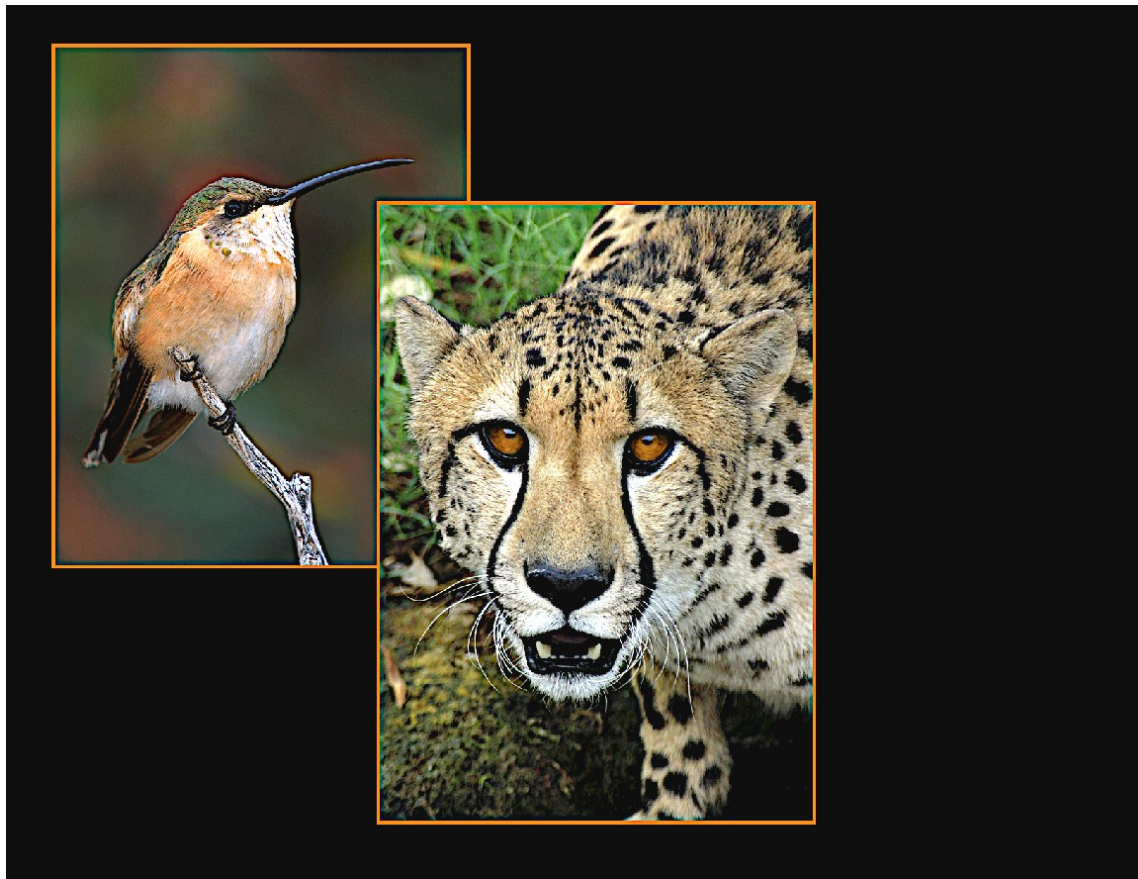


Open up another image. You will only see the new opened image. Drag the tab down to put the image in a separate window.



Make a Levels adjustment. Remember to size it down.

Now you can use the move tool and drag the new image over to the background. Then add the same stroke by choosing: Edit / Stroke. The image will look like this:



Repeat the process.

Open new image.

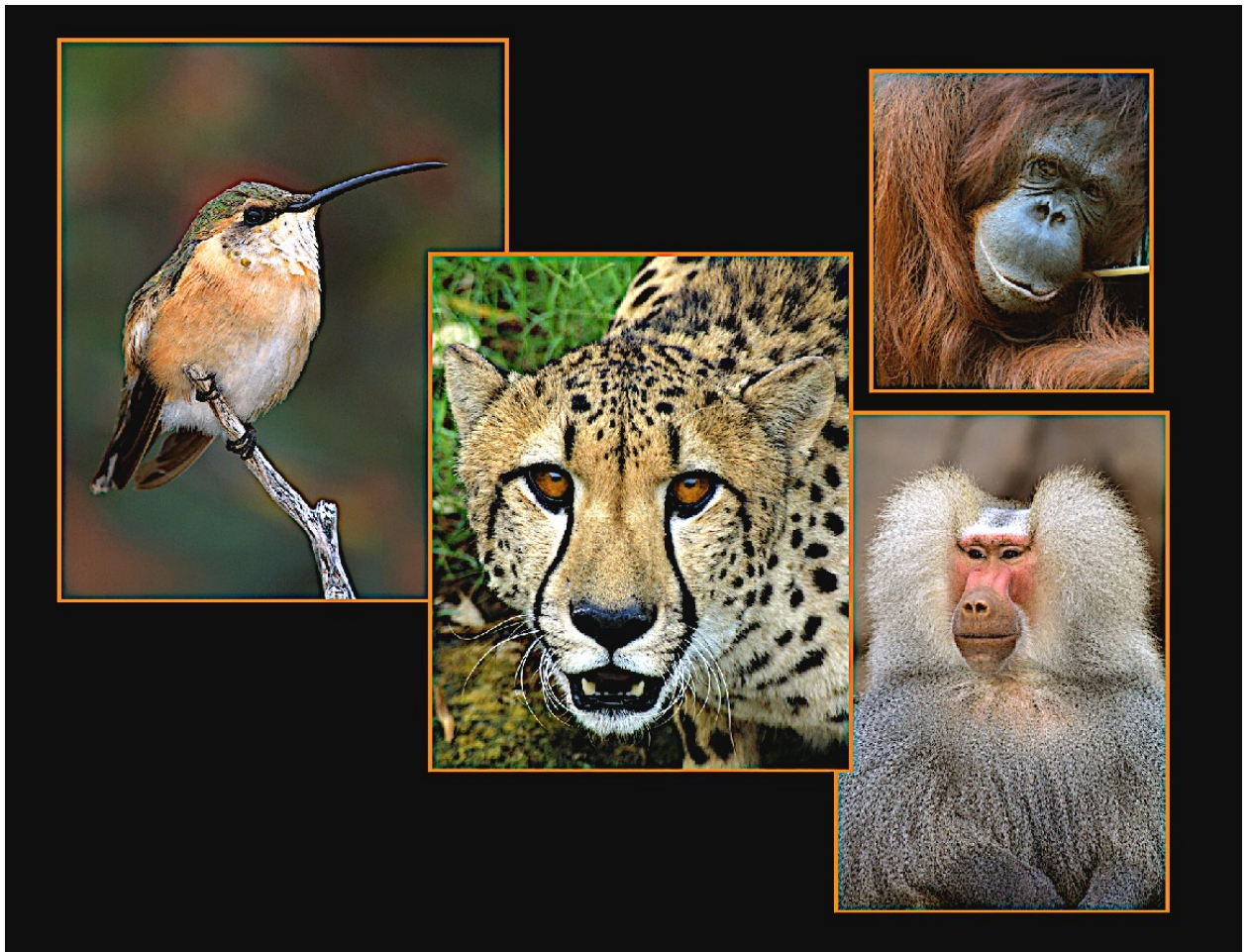
Make a Levels adjustment.

Size the Image

Drag down off of the top menu to create it's own window

Use move tool to drag onto background

Edit/Stroke to add border

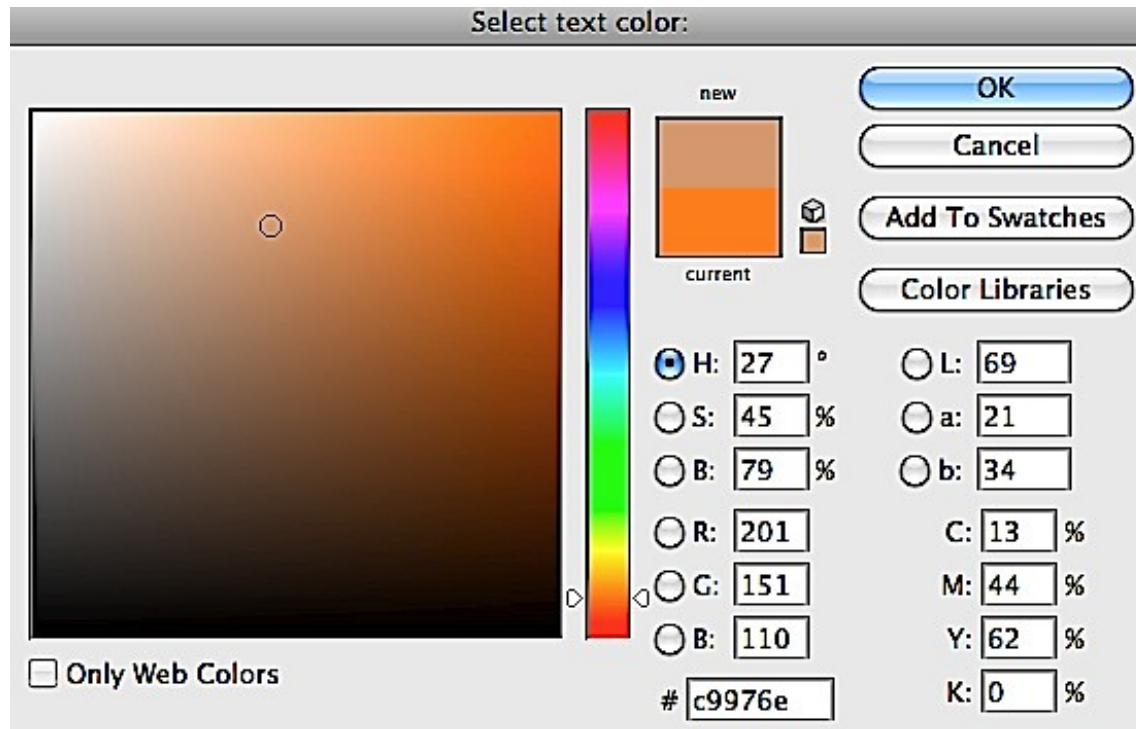
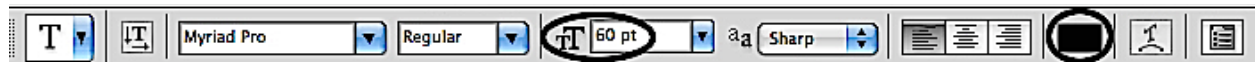


Let's add some type. Click the letter "T" on the Toolbar.





Then go to the top option bar and set the size to 60 pixels. Don't worry about the font right now. We will change it in a minute. Then double click on the "Color" box to bring up the Color Picker to choose the color for the type.



Choose your color here. If you want you can choose take your mouse out in the image a click on a color in the image. Click Ok.

Then click on the black background to get a curser and type in what you want.

Click on the check mark at the top option bar to finish the type.



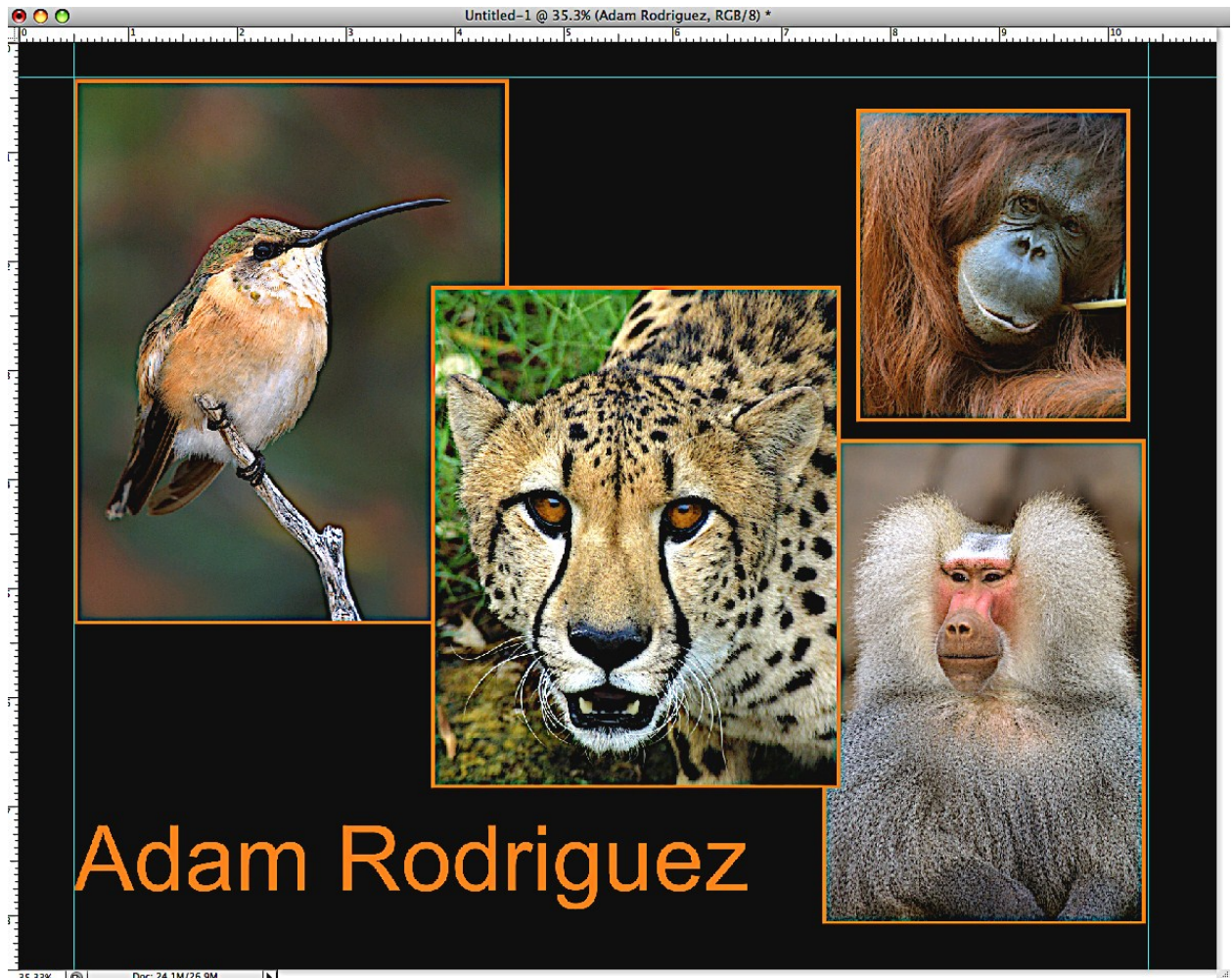
Photoshop has guides that you can use to help line up your images. The guides pull out from the rulers. If your background doesn't have rulers on the sides, go to the top menu and choose: **View > Rulers**.

Photoshop's guides pull out from these rulers.

Use the move tool and drag a guide out from the top ruler.



Then drag a guide out from left ruler. The guides don't print. They are there for layout. When you move an image with the move tool it will snap to the guide. This is very helpful when making the final layout.



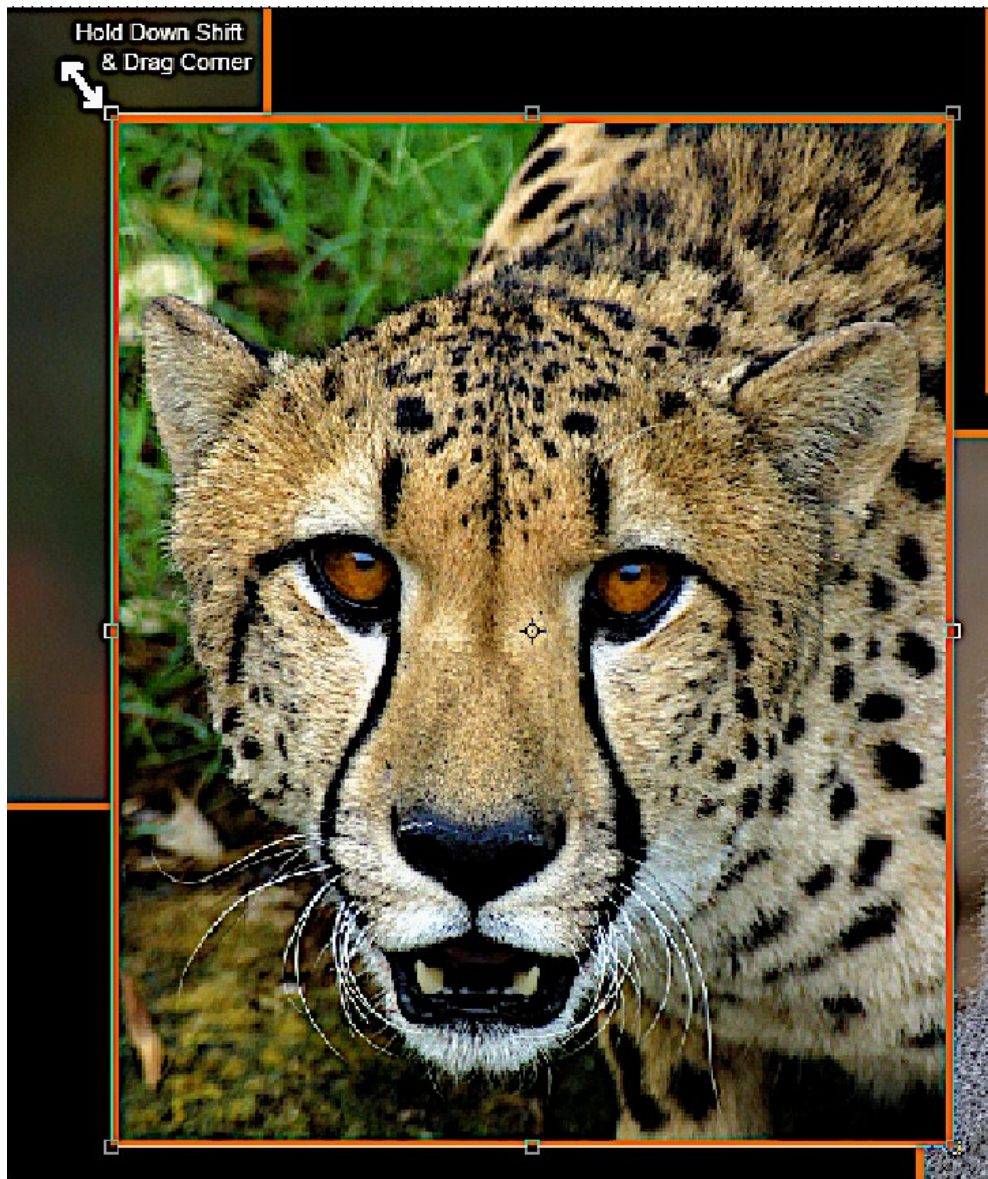
To get rid of the guides, Choose: View / Clear Guides

Remember each image is a layer. To automatically highlight the layer you want to move. Choose the move tool and click on the image while pressing the Control key (PC) or Command key (Mac)

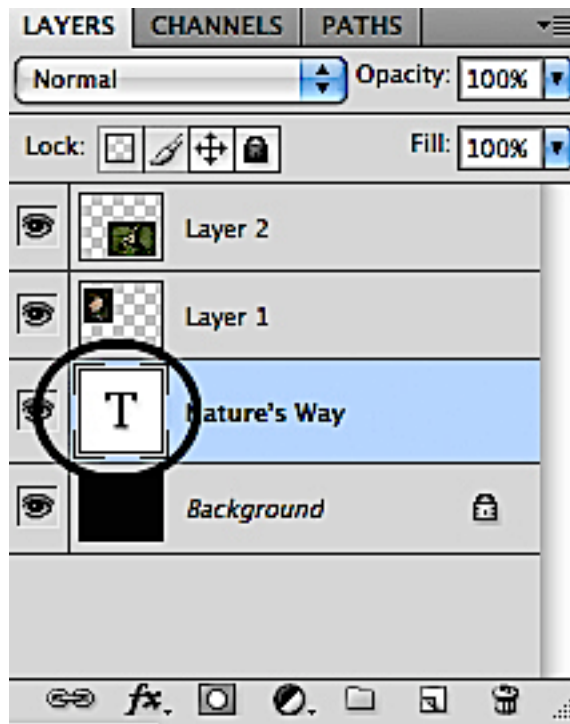


You can still adjust the size of each individual image. Choose the Move tool and then hold down the Control key (Pc) or Command key (Mac) and click on the image you want to resize. This will highlight the layer in the layer palette.

Then choose: Edit / Free Transform. Hold the shift key down and drag one of the corner handles to resize the image. Holding the shift key keeps the proportions as you drag. Press Enter (PC) or Return (Mac) to finish the transform.

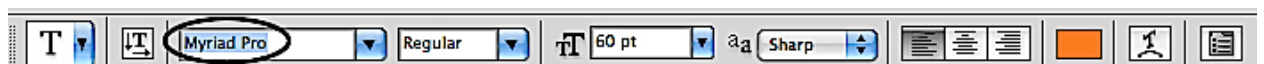


Let's see what some different fonts look like. Double click on the letter "T" in the layer palette to reactivate the type.



Press Control H (PC) or Command H (Mac) to hide the highlighting around the type.

Now go to the top of the screen and click on the font to highlight it.



Now tap on the down arrow on the keyboard until you see a font you like. Click on the little check mark at the top of the screen to finish the type.



## PhotoShop CS6 Class - Week Four - Make A Self-Promotional Piece

I like to type in a copyright symbol and then my name under the images.  
To get the copyright symbol with the type tool:

On a PC: Alt 0169 = ©

With the type tool active hold down the alt key and type in 0169 using the number keys on the right side of the keyboard. Then press the spacebar and type in your name.

Alt 0174 = ®, Alt 0153 = ™

On a Mac: Option G = ©

With the type tool active hold down option G then press the spacebar and type in your name.

Option R = ®, Option 2 = ™





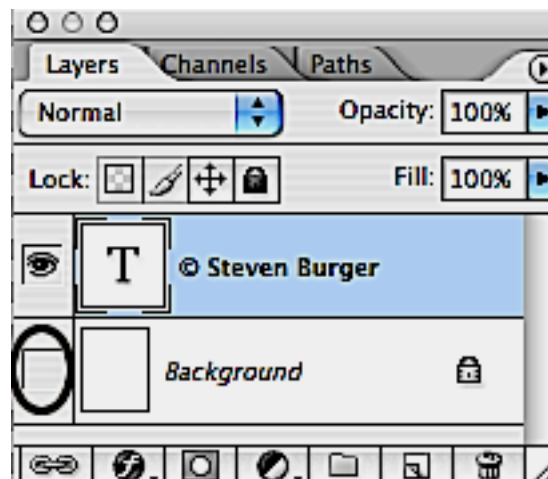
If you type your copyright signature a lot, you might want to create a custom brush to accomplish the task.

The trick is to create a new brush preset. Here are the steps:

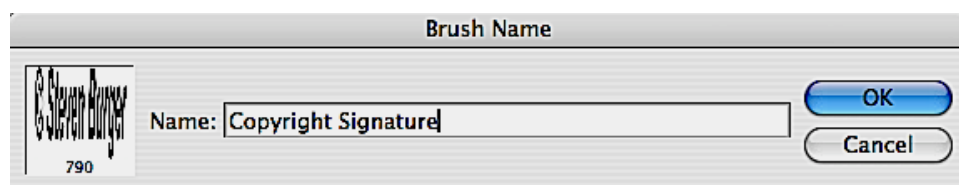
Open any image or create a new blank document (file / new).  
Select the type tool and choose the font and font size. Try a 30 pt. size as a starting point for a 300 PPI file. Finish the type and then make a rectangular Marquee selection around the type.



Turn off the visibility of all layers other than the text layer by clicking on the eye icon to the left of the layer thumbnail.



Select: Edit / Define brush preset. Title the brush and click OK.



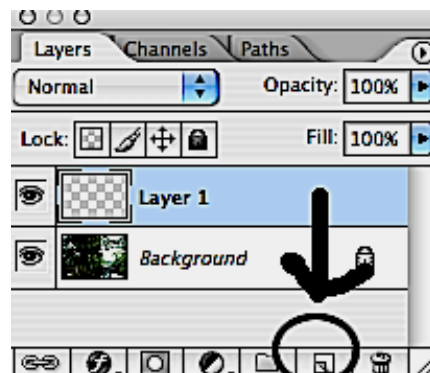
Your brush is now created.

To put this brush to use, select the brush tool from the tool palette. Then from the brush tool options bar, click the brush dropdown and scroll down to the bottom to find your newly created brush.

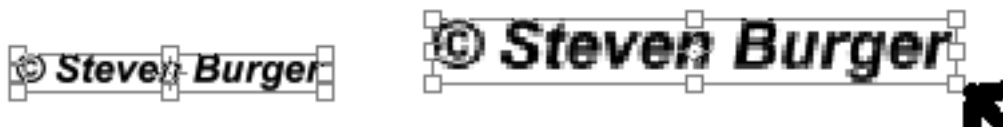


Here's how to use this new brush:

Open an image and click on the “add new layer button” at the bottom of the layer palette.



Choose the brush tool and then the color you want the type. Then click in the image where you want the type to be. Because the type is on its own layer, you can readjust the size of the type later with the “Free Transform Tool. Double click on the type layer to highlight the type and then choose: Edit / Free Transform. Hold down the shift key and drag one of the corners to increase or decrease the size of the text.



For future images, just choose the brush tool. Adjust the brush size and color as you normally would, and when you're ready to apply your copyright signature, just click your mouse where you want the text to appear.

## **WEEK FOUR SUMMARY:**

Open an image and practice making Adjustment Layers.

Take an image through the “Image Adjustment Sequence”.

Practice the “Layer Mask” technique on page

Open a portrait and apply the “Great Soft Focus Technique”.

Import Clouds from one image to another.

Try the “Dodge & Burn Technique”.

Make your own Self Promotional piece.

Create a custom brush preset with your copyright signature.

”When do I work in layers? If it’s an important image, I’ll prep it in layers. That way I can re-tweak any of the layers at a later date without degrading the image.

When do I opt to not work in Layers? If it’s just a snapshot or a picture from a family get together, I will not prep the file with layers. I still want the image to look good, but I probably will not be readjusting the file at a later date.





## WEEK FIVE

### USING THE CLONE STAMP TOOL



By now your images should be looking pretty good. Retouching needs to fit in our sequence somewhere. In the first non-layered image adjustment sequence, the retouching should be done last, after all of the other adjustments. This will embed the retouching into the file. Notice that we saved a version of the file that was prepped, but had no retouching done to it. That way if you wake up the next day and don't like the retouching, you don't have to prep the whole file over again. I prefer to retouch on a layer.

There is a lot of redundancy to Photoshop's retouching tools. Try them all and then find the ones that fit you best.

Clone Stamp Tool, Healing Brush, Spot Healing Brush, Patch Tool, and the Pattern Stamp Tool.

The oldest retouching tool is the Clone Stamp tool. It was in the first edition of Photoshop. The clone stamp tool takes a sample of an image, which you then can apply over another image or part of the same image. Each stroke of the tool paints on more of the sample. Cross hairs mark the original sampling point.

To use the clone stamp tool:

Select the Clone stamp tool.

Choose a brush size. The Bracket keys on the keyboard are an easy way to set the brush size.

Set the softness of the brush. Hold the shift key and tap the left bracket key four times. When cloning, you need a soft edge to the brush. This setting will work well.

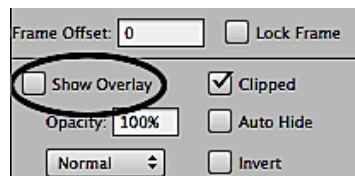
Position the pointer on the part of the image you want to sample, and Alt-click (Windows), or Option-click (Mac OS). This sample point is the location from which the image is duplicated as you paint. Finally, move the brush over to the area you want to fix and click.

## PhotoShop CS6 Class - Week Five - Using the Clone Stamp Tool

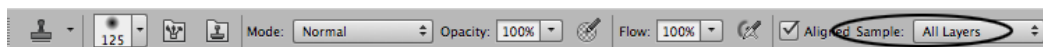
The Caps Lock key scrolls the brush tip shape between a crosshair and the standard brush tip shape.



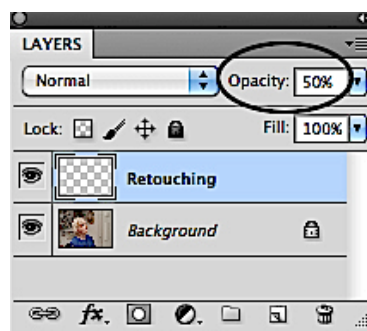
The tool can show an overlay to see what is being cloned. Choose: Window/Clone source to turn this feature on or off. I turn this feature off for most of my cloning and turn it back on when a very specific cloning is needed.



When you choose the clone Stamp tool, there are options for the tool at the top of the screen. Choose: All Layers.



The big question when retouching a face is always “How much should I retouch”? You never want the person to look over retouched. That’s why it is always best to retouch on a layer. Sometimes you will look at the image and think that you retouched it too much. This isn’t a problem if you retouch on a layer as you can lower the opacity of the layer.



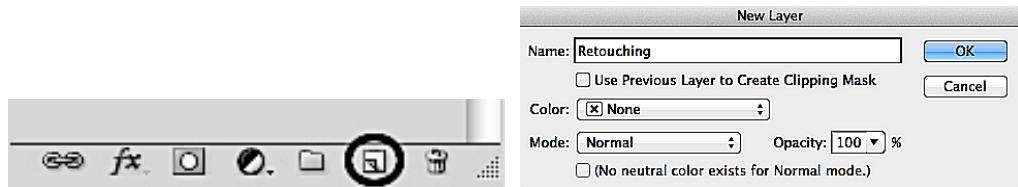
Opacity of 50% will show 50% of the retouching and 50% of the original.

Let’s do some retouching on a layer.

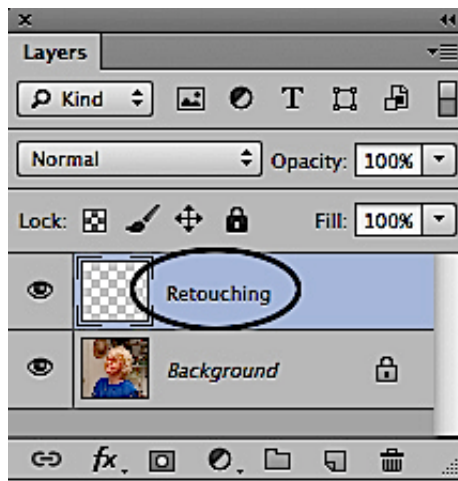
## RETOUCHING FACES WITH CLONE STAMP TOOL

### *Image: Bette Mae- Retouch*

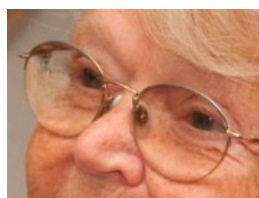
Facial retouching should always be done on a layer. **Alt/Click (PC) or Option Click (Mac)** on the “Create New Layer” icon at the bottom of the layer palette and title it retouching. Click Ok.



Choose the Clone Stamp tool and change the blending mode to **Lighten**. Choose **Sample All Layers**. Lower the opacity of the brush to 25%.



Let's re-touch the dark lines under Betty's eyes. Use the zoom tool to zoom up close to the eyes.



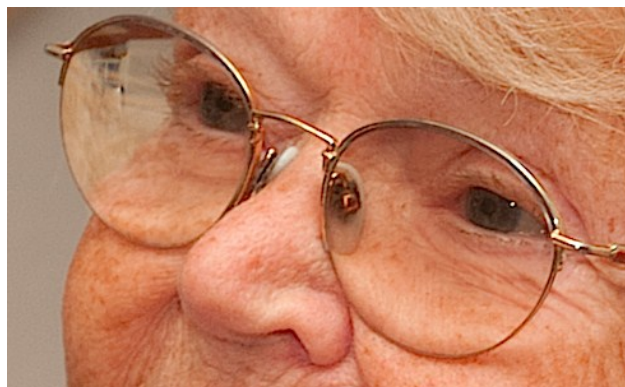
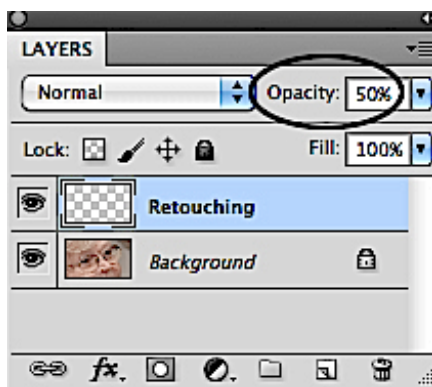
## PhotoShop CS6 Class - Week Five - Retouching Faces With Clone Stamp Tool

Set the softness of the brush. Hold down the “Shift” key and tap on the left Bracket key four times. With most cloning you will need a soft edged brush. Use the bracket keys to get a brush size similar to this.



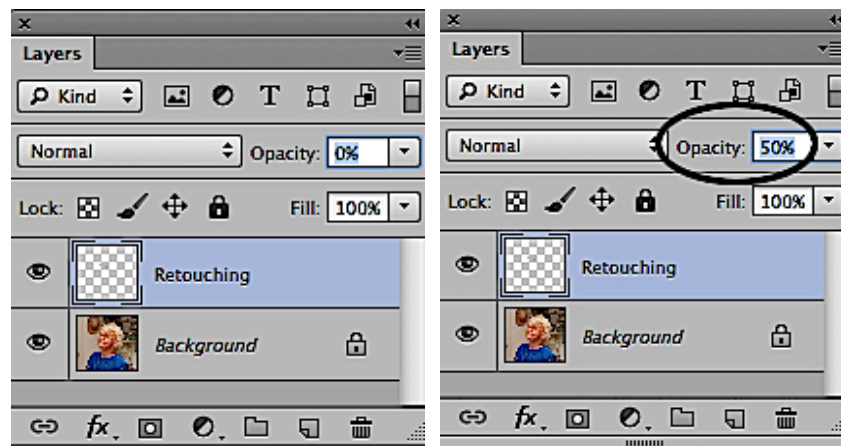
Move the brush under the dark area. Alt/click (PC) or Option/click (Mac). When the Clone Stamp tool is set to “Lighten” the tool doesn’t paint pixels from one spot to another, it lightens pixels to the level of the sample point. Move the mouse over the dark area and click. The dark area will be lightened to the level of the sample point. Go ahead and clone the dark areas under both eyes. Keep resetting the sample point with an Alt/click (PC) or Option/click (Mac) directly under the dark area. Then move the mouse up to clone the area dark area directly above the sample point.

The big question with retouching a face is always: “When do I stop”? You don’t want to overdo it. Here is a way to always get it right. Retouch the face more than you would normally do. It should look a little overdone. Then go to your layer palette and lower the opacity of the layer to 50%.



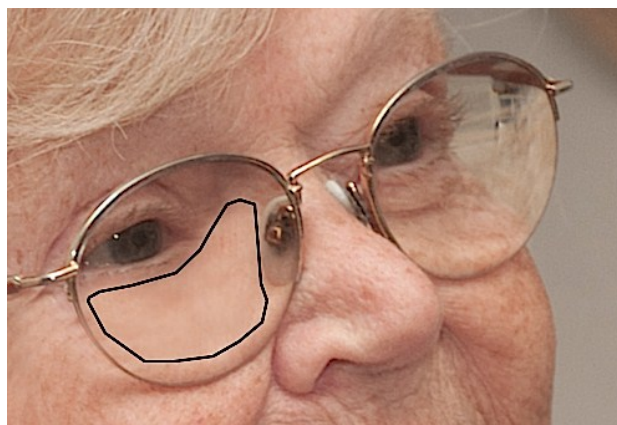
## PhotoShop CS6 Class - Week Five - Retouching Faces With Clone Stamp Tool

You will always find an opacity that you like. I learned this technique from the late Carl Volk. Carl was a great friend and Photoshop teacher. Carl did most all of the retouching for the stars in Las Vegas. He told me they were very picky. He would invite them over to look at the retouching with the opacity slider at 0. The image looked un-retouched. He would then highlight the 0% slider, hold down the shift key, and tap on the “Up” arrow key on the keyboard. The opacity of the layer would increase by 10% every tap of the arrow key. Each tap will show more retouching. Usually around 50% they would say that’s it right there. Now you know why I like to retouch on a layer.



***Image: Betty Mae-Too blurry.***

Here is an example of the same image that was not retouched on a layer. The retouching is overdone and the area looks blurry. Choose the “Polygonal Lasso tool and make a selection that looks like this:

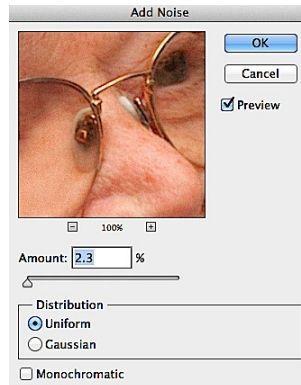




## PhotoShop CS6 Class - Week Five - Retouching Faces With Clone Stamp Tool

Choose: Select/Modify/Feather. Put in 5 pixels and Click Ok.

Noise is a great way to fix this problem. Choose: Filter/Noise/Add Noise. Try Amount 2.3 and Uniform distribution and click Ok.



Think of noise like adding some texture to the blurry area. I usually check all of the settings Gaussian, Uniform and Monochromatic. They all work at times. Check them all until you find the best combination. The trick here is to adjust until you get a very small grain like look in the blurry area.

**Tip:** When you create a blurry background in Photoshop the area will need some noise added. The white blurry background area in this shot looks good on the screen, but if you printed it, it would show banding and not look good at all. This background is on a layer so the noise can be added to just the blurry area. Add just a very small amount of noise to the area and the the image prints without any banding.



## CLONE STAMP TOOL - ADD A SELECTION

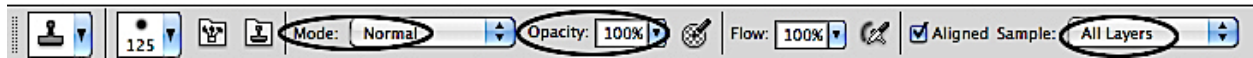
*Image: Trio*



This technique will use the clone stamp tool to remove the two people that are in the background. Zoom in closer (zoom tool), and make a selection around the two people in the background.



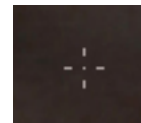
Feather the selection 1 pixel. If you feather this selection more than 1 pixel, the edge of the suit will look fuzzy. Choose the clone stamp tool.



Set the brush size with the bracket keys and then place the brush just outside of the selection.



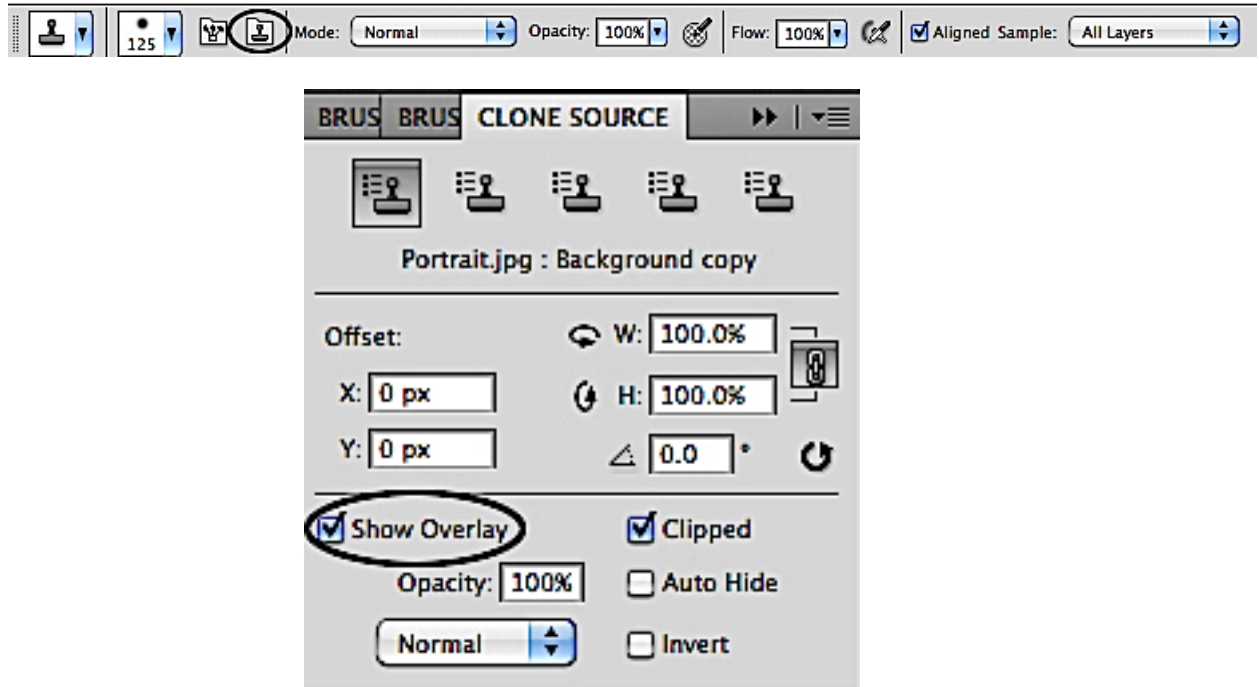
Older versions of Photoshop do not have a preview (overlay) to see where to put the sampled pixels.



**Press the “Caps Lock” key to get a precise brush tip.** This is an example where the crosshair brush tip will work better than the circular brush tip. The Caps Lock key scrolls back and forth between these two brush tips. Put the crosshair on a vertical line of the window and click. Then move the mouse down the vertical line of the window and click again.



If you have the “Overlay” function, use it. It works even better than the crosshair technique we just tried. Click on the little Clone Stamp icon at the top option bar and choose: Show overlay.



Now when you “Alt” or “Option” click to pick up the pixels from a certain area, the area will be shown within the circular brush. This is perfect for this image.

I usually have the Overlay feature turned off. I don’t need to see the preview for most cloning. I will turn this feature on with a difficult clone like this one.

**Tip:** When this feature is turned on it will show a preview of the last sample point. This can be a little confusing looking until you set Alt or Option click to set your new sample point. Once the new sample point is made everything looks good again.

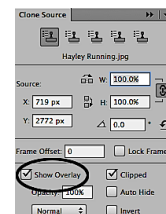
## HEALING BRUSH TOOL



### *Image: Hayley Running*

The Healing brush tool tries to match the texture, lighting and shading of the sampled pixels to the source pixels. Then you paint those sampled pixels somewhere else in the picture. Think of this tool as having an auto setting that softens the edge of the brush. This means the sampled pixels blend seamlessly into the rest of the image. Just like the Clone Stamp Tool, you Alt/click (PC) or Option/click (Mac) to pick up the pixels from a certain area. You don't need to soften the edge of the brush as you would with the clone Stamp Tool. In fact leave it at its default hard setting.

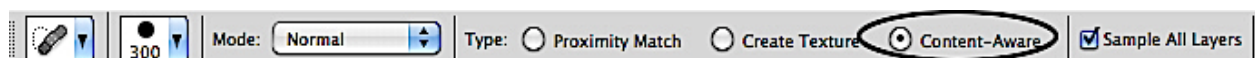
This tool also shows a preview (overlay) of the sampled area. This overlay can make it easier to see where to click and put the sampled pixels. The feature can be turned on and off. Some people find it distracting. Choose the Healing brush tool. Click on the icon at the top of the screen (left image) to see the Clone Source Box (right image –show overlay box). Use the Healing brush to Clone out the out of focus dots in the foreground.



## SPOT HEALING BRUSH- CONTENT AWARE



You don't need to pick a sample point with the Spot Healing brush. Put your mouse right on the problem area. Use the bracket keys to get a brush size a little bit bigger than the problem area and click. The tool will pick the spot it thinks is best to get the point to sample from. This works great for camera sensor dust problems in a sky area, but maybe not so great on intricate areas. No need to set the hardness to the brush either, it will do that also. Don't forget to choose the "Content Aware" feature.



## PATCH TOOL- CONTENT AWARE



***Image: Content Aware Car***



The Patch tool is a selection tool. In its default setting it works like the Lasso tool. You hold down and draw with it. Hold down Alt (PC) or Option (Mac) and it will act like the Polygonal Lasso tool. Choose: The “Content Aware” feature at the top of the screen. This tool will work well cloning out the people in the upper left of the frame. Press and hold down Alt (PC) or Option (Mac) to make the tool act as the Polygonal Lasso tool and make a selection like the one shown in red. Be sure to leave some space around the people.





Once you have made the selection, put your mouse inside the selection and drag it to the right. You will see a preview in the selection as you drag. Drag the mouse a little up or down until the horizontal shadow lines up and the preview area looks good. When it looks good, let go of the mouse and watch the magic happen. Pretty cool huh? Choose: Select/Deselect to get rid of the selection. Boy that worked well.

Let's retouch out this black area too. Make a selection that leaves a little room around the area. Put your mouse inside the selection and drag it to the right. Watch the preview as you drag the selection into position. Let go of the mouse.



I never used to use the Patch tool much as I like to do this type of retouching manually with a selection and a layer. The lesson is called "Precise Cloning Technique". The Patch tool has been improved so much in Photoshop CS6 that I will be using it a lot more often.



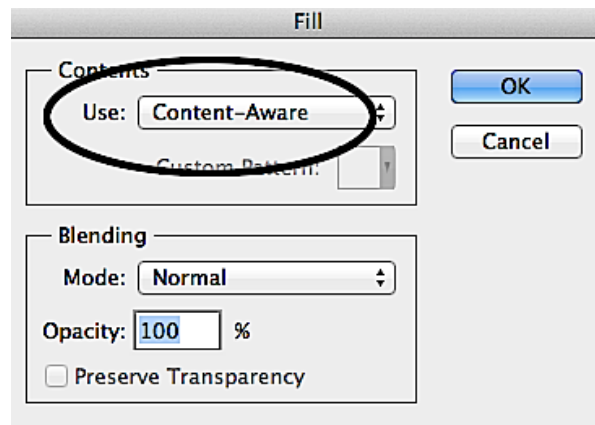
## CONTENT AWARE

### *Image: Content Aware-Red Rocks*

Any selection tool can be used to take advantage of this great new feature. Choose the Elliptical Marquee tool and make a selection of the man in the foreground. Something that looks like this:



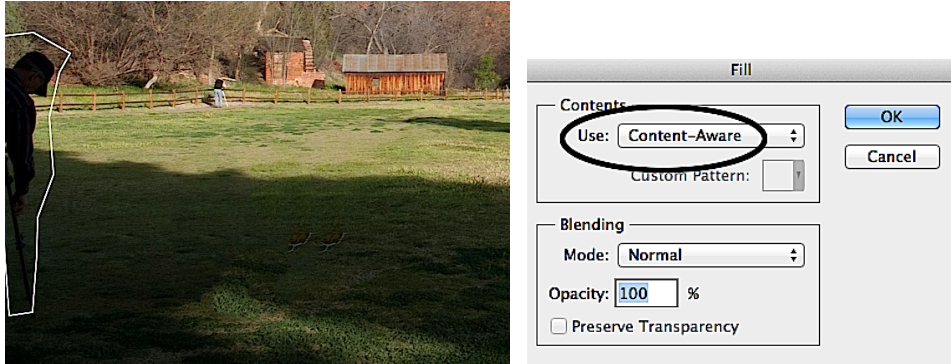
Press the “Delete” key and then choose: Content Aware and click OK.



Looks good. The Clone Stamp Tool and the Patch tool could also have been used here. Neither of those tools would have worked as fast though.

Let's remove the man on the far left of the image with Content Aware.

This time choose the Polygonal Lasso tool and make a selection that looks like the example below. Press Delete and then choose Content Aware and click OK. Finally, choose: Select/Deselect.



Use the same technique to take out these two guys on the right of the image.



When content Aware works, it really works. As good as content Aware is, sometimes it doesn't do a good job.

These people in back by the fence do not work as well with Content Aware. Getting the fence to line up is the issue.



When none of the Content Aware technique work, you will need to know how retouch manually with a layer. Keep this image open, as the next lesson will show how to remove the people by the fence.



## PRECISE CLONING TECHNIQUE - LAYERS

It's time for my favorite retouching technique. This technique does not use any cloning tools. It clones using a layer. All versions of Photoshop can do this technique. In fact it isn't Ram intensive like the Content Aware feature, so you don't have to go out and buy that new computer.

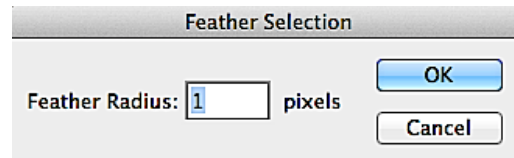
Choose the Zoom tool and zoom up to the Photographer with tripod on the left side of the image (circled area).



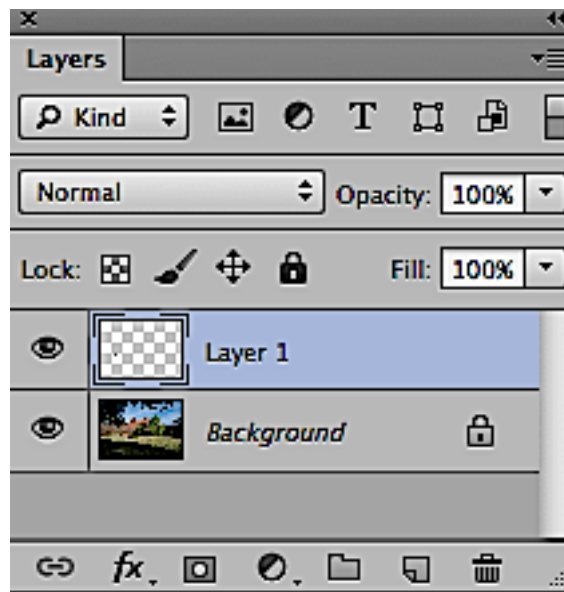
Choose the Rectangular Marquee tool and make a selection that looks like this:



Choose: Select/Modify/ Feather. Put in 1 pixel and click OK.



Press Ctrl/J (PC) or Command/J (Mac) to turn the selection onto a layer.  
The layer palette will look like this:



Choose the “Move” tool or press the letter “V” (shortcut for Move tool) and then tap on the left “Arrow” key to move the layer to the left. Move the layer over about this much:



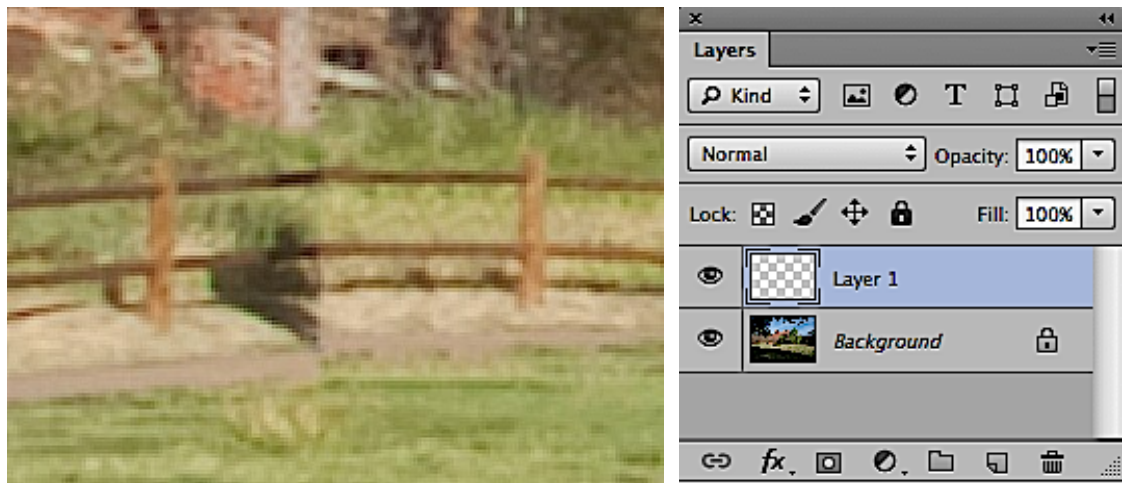
Choose: Layer/Flatten image.

Make a selection that looks like this. Choose: Select/Modify/Feather put in 1 pixel and click OK.



Press: Ctrl/J (PC) or Command/J (Mac) to turn the selection into a layer. Choose the “Move” Tool and tap on the “Left” arrow key to move the layer to the left.

The image and the layer palette should look like this:





Choose: Layer/Flatten Image one more time. Flattening merges Layer 1 into the background.

Choose the Rectangular Marquee tool and make a selection that looks like this. Feather the selection 1 pixel (Select/Modify/Feather).



Press Ctrl/J (PC) or Command/J (Mac) to turn the selection into a layer. Choose the “Move” tool and this time tap on the “Right” arrow key to move the layer into position.



Choose: Layer/Flatten image one more time. One more layer ought to do it.

Repeat the process one more time. Make a selection that looks like this. Feather the selection 1 pixel. Press Ctrl/J (PC) or Command/J (Mac) to turn the selection into a layer.

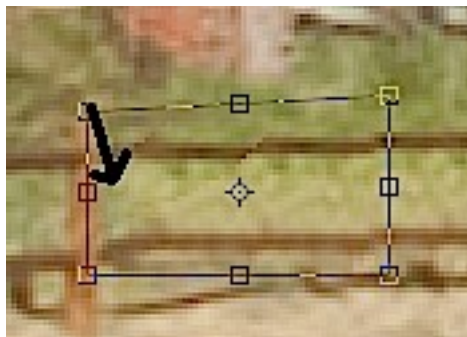


Choose the Move tool and tap on the “Left” arrow key to move the layer into place.

It looks a little off where the wood meets the post.



Choose: Edit/Transform/Skew. Drag the upper left corner handle down until the wood meets the post better. Press “Enter” or “Return” to finish the skew



Choose: Layer/Flatten Image.

The same technique can be used to take out the people and their dogs. Make a selection that looks like this. Feather the selection 1 pixel and then press: Ctrl/J (PC) or Command/J (Mac) to turn the selection into a layer. Choose the Move tool and move the layer into place (Arrow key).



Not perfect but a good start. Choose: Layer/Flatten Image one more time.



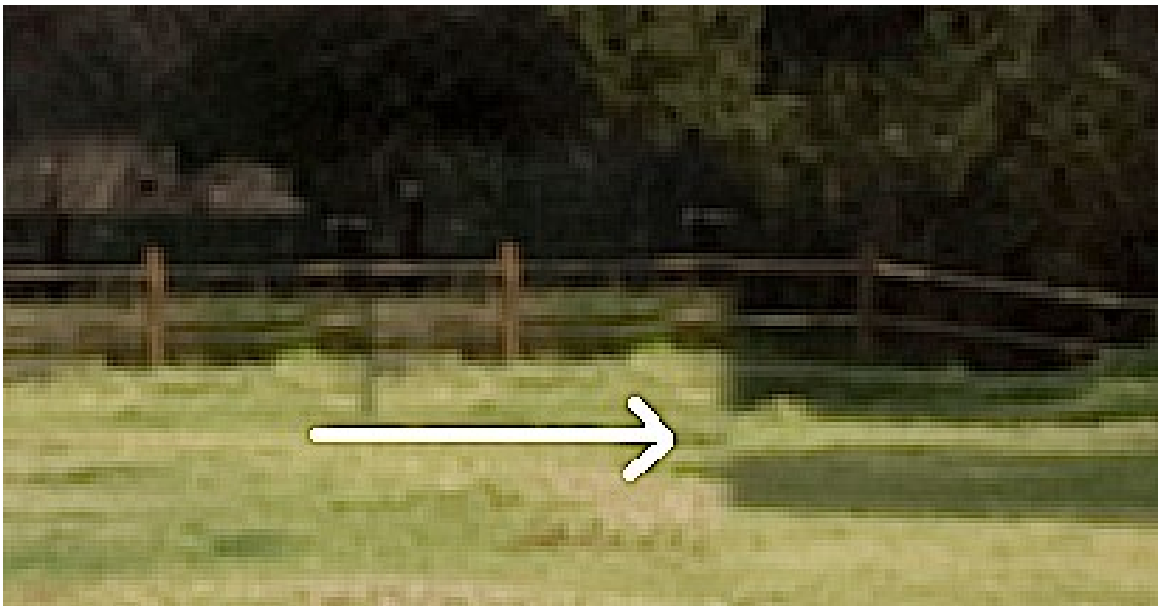
Repeat the process one more time on the fence.

Make a selection that looks like this. Feather the selection 1 pixel and then choose: Ctrl/J (PC) or Command/J (Mac) to turn the selection into a layer.



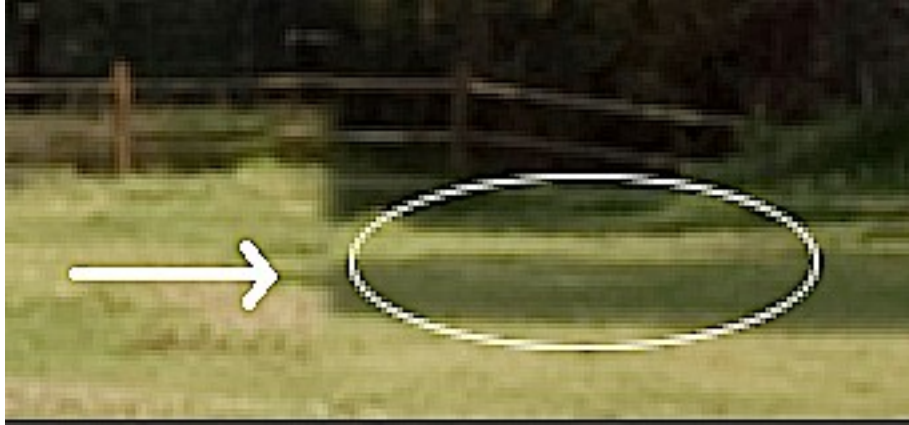
Choose the Move tool and tap on the “Left” arrow key to move the layer into place. Finally choose” Layer/Flatten Image.

The fence looks good but the shadows in the grass don’t look right.

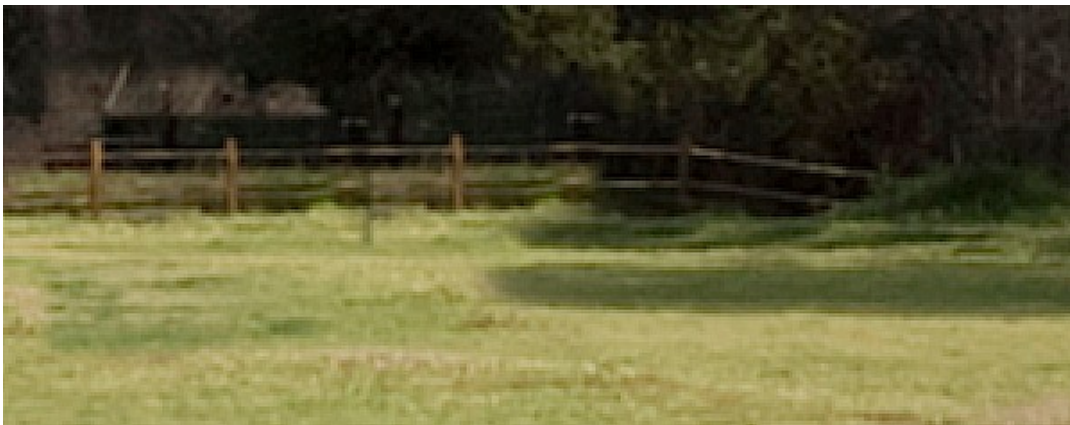




Choose the “Elliptical” Marquee tool and make a selection that looks like this. This time, feather the selection 4 pixels and Click OK. Press Ctrl/J (PC) or Command/J (Mac) to turn the selection into a layer.



Choose the “Move” tool and move the layer into place. Choose: Layer/Flatten Image one last time.



With this image none of the Retouching tools worked very well. Practice this technique until it becomes second nature. Just about anything can be removed with this layer cloning technique.

**Tip:** It is very important to get the feathering correct for each selection that you make. If you feather the selection too much the edge of the layer will look fuzzy. If you feather too little the edge of the layer will look too hard.

## BODY SCULPTING WITH LIQUIFY

### *Image: Karen*

Which brings us to the most fun tool in Photoshop. I have told my students over the years that every time I take a plane trip somewhere, I bring my laptop with Photoshop and Liquify. I start playing and before I know it I'm at my destination.

Besides just playing around, this is a serious tool that works great at what I call body sculpting. Lets use this tool to thin up my sister' shoulder and then to give her a nose job.





Choose: Filter/Liquify

Choose the “Pucker Tool”. Tap on the right or left “Bracket” key on the keyboard to get the brush about this size. Place the “X” inside the brush on Karen’s nose and Click two times.. How’s that for a nose job?



Karen’s arm looks too big. Choose the “Forward Warp Tool”. Use the “Bracket” keys to get the circle size as shown. Place the little “X” as shown.



With the mouse in this position, click and drag a little to the left. If you don’t like the look, press Ctrl/Z (PC) or Command/Z (Mac) to undo the effect and try again.

Move the brush lower on the arm and repeat the process. Drag slightly to the left.



Ctrl/Z (PC) and Command/Z (Mac) are your friends here. It usually takes a couple of tries to get the effect just right. Click OK.



This image was taken with a normal lens (50 mm). When a normal lens is used up close, the closest things to the lens get distorted a little bigger (arm, nose). As you can see, this is easy to fix with the Pucker and Forward Warp tools. There also is a “Bloat” tool. It makes areas bigger. I’ll leave that up to your imagination.

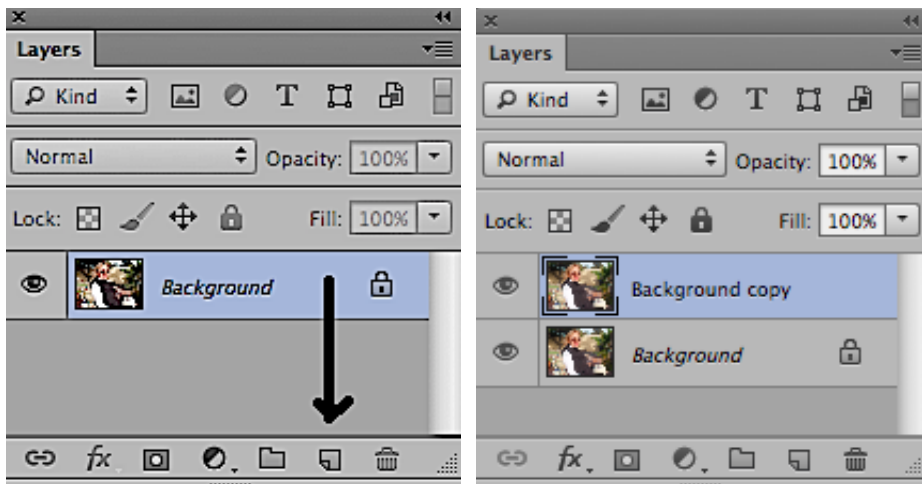


## TEN POUNDS THINNER

As long as we are working on my sister, lets make her look ten pounds thinner. You need to be subtle with this technique, as it is easy to overdo. Remember you never want your client to know that they have been retouched! I learned this technique from the late Carl Volk. Carl was a great Photoshop instructor and friend. Some Photoshop techniques are more involved than others. This one is as simple as it gets.

### ***Image: Karen***

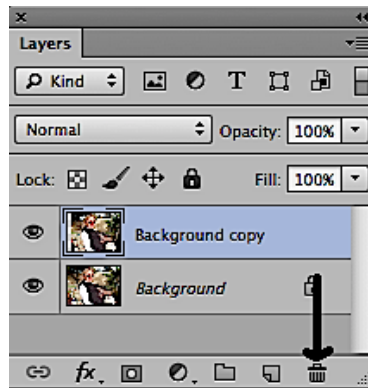
Make a background Copy.



Choose: Edit/Free transform. Grab the handle on the left side and drag a little to the right. Press: Enter or Return to finish the transform.



Drag the Background layer to the trash at the bottom of the layer palette.



Choose the Rectangular Marquee tool and make a selection as shown in red. Then choose: Image/Crop from the top menu to finish the crop.



I use this technique all of the time. Everybody likes to look thinner.

My clients never know that these retouching techniques have been used. They just comment that they like the way they look when they have me photograph them.

Here are the steps:

Make Background Copy.  
Edit / Free Transform and drag a side handle in a little.  
Throw the background layer away  
Re-Crop the image

## **WEEK FIVE SUMMARY**

Practice retouching faces with the clone tool set to “Lighten”

Practice adding a selection before you clone.

Practice the new Content Aware feature

Practice the Precise Cloning technique that uses layers

Make someone ten pounds Thinner

Have some fun with Liquify!