

Adobe Photoshop Elements
Basic Digital Retouching

By
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The following pages represent my speaker's notes to a presentation I put on for the Niagara Falls Camera Club on October 1, 2007. (I am currently President of the club).

As part of that presentation, I demonstrated some basic digital editing techniques, including various methods of red eye removal, using levels to set white and black point in an image, cropping, straightening an image, using layers for non-destructive editing and I finished up by demonstrating how I create a step mount as part of my image for my competition prints.

I have created low quality JPG's for the images I used in that presentation. Please feel free to use the images to work through these tutorials, but please do not use them for any other purposes.

Enjoy.

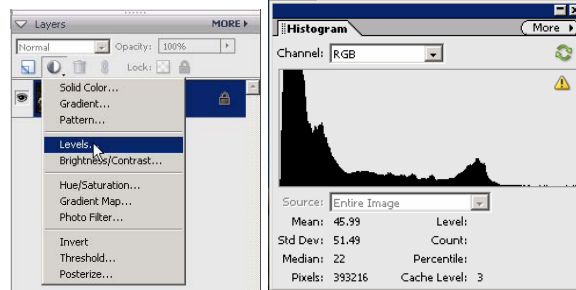
Chris

Leanne.JPG

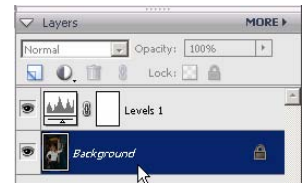
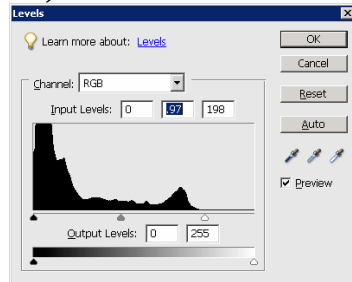
Image has exposure, red eye and composition problems.

Adjust Exposure

1. Image is a little underexposed. Set white and black point
2. Create Levels Adjustment layer - click the Adjustment Layer icon in the Layer Palette

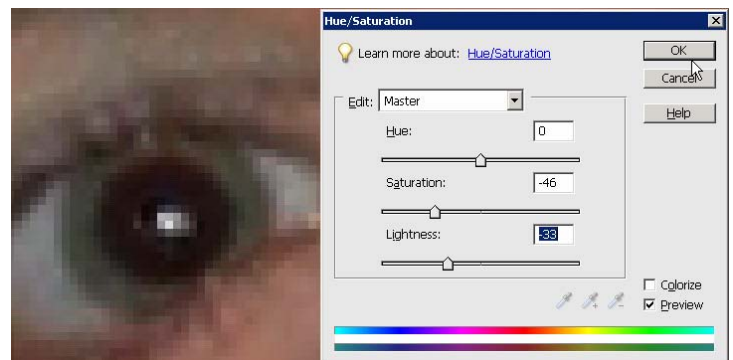
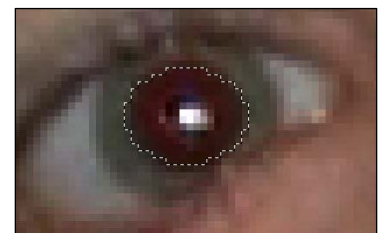


3. Histogram shows a lot of information on the left of the graph representing the dark tones in the image, and little in the right. We'll even this out by moving our white point slider to the left (198 or so.) and darken our midtones a little .97



Fix Red Eye

1. Select Background Layer
2. Zoom in on Left Eye (CTRL + to Zoom In, CTRL - to Zoom out)
3. Use Red Eye Tool to fix red eye in left eye by clicking on the tool then clicking on the red portion of the eye.
4. Manual Red Eye Removal
 - a. Zoom 800%
 - b. Select Round Marquee Tool (M switches between Round and Square)
 - c. Set Feather to 1px for a soft edge
 - d. Hold Shift down to keep a circle, ALT to center on cursor point, center your cursor in the center of the eye then drag the mouse holding the left mouse button down to select the pupil.
 - e. Create a Hue/Saturation adjustment layer and adjust saturation and lightness until the red in the eye is gone.
 - f. Press OK
5. Zoom out and compare the changes.



Crop the image for better composition

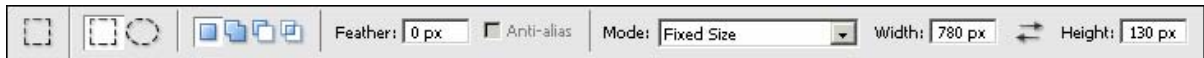


Many of the tools in Photoshop Elements have options when using them. Those options appear in their own tool bar just below the menus.



1. To crop an image, select the crop tool, and then drag your mouse over the image to select the area you want cropped.
2. If you want to crop for a specific size image, use the Aspect Ratio drop down to select from a list of preselected image sizes.
3. If the size you want to crop is not listed, you can specify a custom size by typing in your width and height in the appropriate boxes. Doing so will change the Aspect Ratio box to Custom. Clicking the double arrows will switch the width and height values
4. I typically do not enter a value in the Resolution box. Doing so resamples the image (adds or removes pixels to achieve the Resolution specified).

The way I usually crop is to use the Marquee Tool



The options I am interested in on the Marquee Tool toolbar are the Mode, Width and Height.

1. Select the Marquee tool using a rectangular marquee (choose this from the toolbar)
2. Change mode to Fixed Aspect Ratio
3. Type in your size that you want in the width and height boxes. Units (Inches, pixels) should not be used here, only the numbers
4. Drag on your image to create your crop boundaries
5. Click on Image then Crop



Cropping in this manner will not resample the image therefore preserving image quality.

NOTE: If you crop too much information out of your image, you may end up with an image whose dimensions are too small to print at a given size. I find that the local labs (Wal-Mart, Costco, etc) need at least 150 DPI for a useable print with more being better. An 8x10 at 150 DPI will be 1200x1500 pixels.

Beach Sunrise.jpg

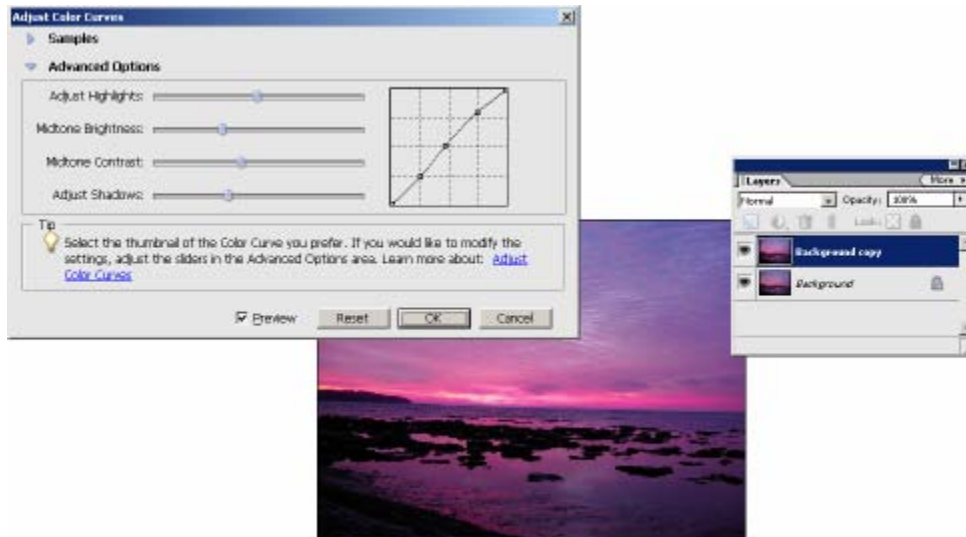
Image can be fixed with straightening and exposure compensation

Adjust Exposure

1. Open Beach Sunrise.jpg
2. White and Black points already okay (Histogram)
Window-Histogram



3. Copy Background Layer
 - a. Drag Background onto New Layer icon in Layers Palette
4. Adjust Colour Curves => Enhance – Adjust Colour - Adjust Colour Curves
5. Choose Advanced Options by clicking on Down Arrow
6. Adjust each of the sliders so they resemble what is in the following image



7. Press OK
8. Clicking the Eye icon on or off on a layer will make that layer visible or invisible.
9. Turning the Background copy layer on or off will let you see the change you just made.
10. You can now make fine adjustments using Opacity on Layer Palette by making sure the Background copy layer is selected and adjusting the Opacity slider above it.

Straighten Image

There are several way you can straighten and image:

1. Image-Rotate-Straighten or Image-Rotate-Straighten and Crop (Automatic)

This method may not always work

2. Manually using Straighten Tool

- a. Select Straighten Tool from the toolbar



- b. Draw a line from one point to another that should be a horizontal line



- c. Image will be resized without having been cropped
- d. Use your crop tool to crop off the excess border



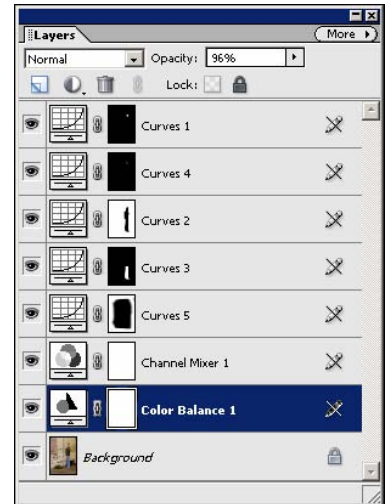
Layers

An important step in digital editing is giving yourself room for corrections. A digital image is made up of millions of pixels, or little dots of colour. If you change a pixel that information stored in the pixel is lost. Adobe gives you tools to help preserve your original pixel data so that you may refer back to it later.

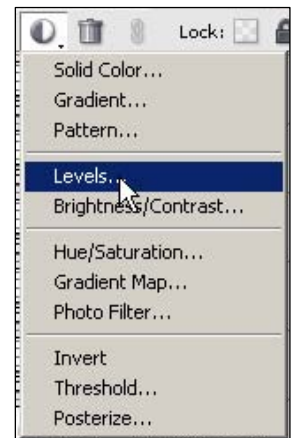
Two kinds of Layers

1. Regular Layers – Contain an image (Pixels)
2. Adjustment Layers – Contain instructions on modifying previous layers
 - a. Adjustment layers do not directly modify your pixels
 - b. Adjustment layers may be re-edited later for complete editing freedom

Because Adjustment layers do not directly modify your pixels, they allow for what is called non-destructive editing.



1. Open Dave.PSD
This image was created in Photoshop CS2. These layers are not editable in Photoshop Elements but we can turn them on or off and adjust their opacity. This image is a good example of using adjustment layers to make non destructive changes to an image.
2. This image contains 7 adjustment layers and the background. The background is the only layer that contain true pixels, or image information.
3. I have used masks on each of the adjustment layers so that they adjustment layer only affects a portion of the image
4. To create a new adjustment layer click on the Background, then click on the adjustment layer icon.
5. Pick the type of adjustment layer you wish to use.
6. Double clicking on the Icon for the Adjustment Layer will allow you to reopen the palette for the adjustment layer and make additional changes to the layer any time throughout the editing process.
7. The two images below show before and after the adjustment layers. No Pixel information has been modified.



Adding Borders

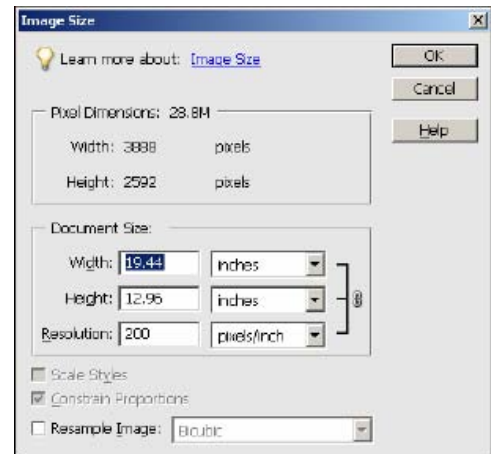
Adding a keyline border to a competition print is very easy. There are a lot of steps, but it is a very repetitive process. Here we will be modifying an image to print on a 12"x18" image.

We will be working with only two Dialog boxes here, image size and canvas size.

Image Size

The image size dialog box is split into three sections. Pixel Dimensions, Document Size and options. The pixel dimension is what we would use when resizing an image for projection. The Resample Image option box needs to be checked in order to use this section.

The Document Size box is used for print work. This sets up your print for Width, Height and Resolution. You can see that the three values are currently linked. Changing one will automatically change the others.

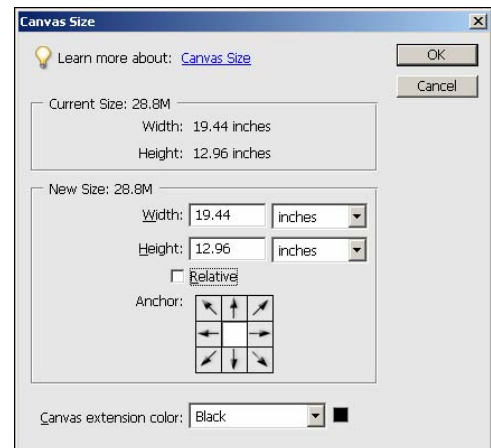


Canvas Size

The canvas size dialog box is split into three sections as well. Current Size, New Size and Extension Color.

The Current size shows our current print size (which is the same as the print size from the Image Size dialog box).

The new size is where we modify our document size. We can work in absolute numbers as we see here or by clicking on the Relative check box, we can work in sizes relative to the documents size. If we want to add .25" on all four sides of the image, then working relative make more sense as we do not have to do the math to get the exact dimension of our new canvas size.



The anchor show us how our new image size will be distributed in our image.

The canvas extension color will be the colour of our added canvas size.

1. Open Tree.JPG
2. Go to Image – Resize – Image Size
3. Turn off Resample Image (so we are not adjusting actual pixels)
 - a. This will only change the resolution (DPI) of the image, it will not add or delete image data
4. Change height to 10.50
 - a. My final print will be 12” high and I want 1/2” on each side plus some extra on the bottom for weighting
 - b. Press OK

At this point, your image will not have changed.

5. Go to Image – Resize – Canvas Size
6. Make sure the Relative Box is checked
7. Put in .1 in the width and height boxes and make sure your units are in inches
8. Make your canvas extension colour is black
9. Press OK
10. Go to Image – Resize – Canvas Size
11. Make sure the Relative Box is checked
12. Put in .05 in the width and height boxes and make sure your units are in inches
13. Click the coloured box beside canvas extension colour drop down
14. Use the colour picker to pick a colour from your image for the keyline (I choose a pink from the image)
15. Press OK
16. Go to Image – Resize – Canvas Size
17. Make sure the Relative Box is checked
18. Put in 1 in the width and height boxes and make sure your units are in inches
19. Make your canvas extension colour is black
20. Press OK
21. You should now have a black border equal on all sides. Inside of that a pink keyline, inside of that another thick black border and finally your image.
22. Now we will add the extra on the bottom of the image for weighting.
23. Go to Image – Resize – Canvas size
24. Uncheck the Relative box. Your document should be 16.9 x 11.65 inches
25. We know we want to our final document height to be 12” so type that into the height box but leave the width as it is.
26. Select the Top Middle arrow of the Anchor grid. This is so we will be adding the .35” of black ONLY on the bottom of the print
27. Make your sure canvas extension colour is black
28. Press OK

This will become your final print, however, if you are sending it off to a lab for printing, there is one more step to complete. Commercial labs print images on standard size paper only. Our image is 16.9 x 12 which is not a standard size. Most labs will zoom in on the image until the size fits the paper size. For us, this would eliminate our borders. To prevent this from happening, make sure your documents size it the same as your final printed page.

29. Go to Image – Resize – Canvas Size
30. Make sure the Relative Box is NOT checked
31. Put in 18 in the width and leave the height box as it is. Make sure your units are in inches. Choose a different colour for your canvas colour, I often use red
32. Select the left Middle arrow of the Anchor grid. This is so that we will be adding extra space to my image to ensure the printer does not zoom in to make the image fit when they print it. I can then cut off this extra portion or use it for additional mounting surface if framing the image.
33. Press OK
34. Your final image should look like this.



Additional Resources

- EasyFilter SmartCurves: <http://free.pages.at/easyfilter/curves.html> (FREE)
(adds full curves support to Photoshop Elements)
- FastStone Image Viewer - <http://www.faststone.org/index.htm>
 - Free Image Viewer which also includes resizing function. Good for resizing images for Digital Projection if you do not have a good photo editor