

# the VERY, *VERY* BASICS of PHOTOSHOP

This tutorial is written for those of you who've found or been given some version of Photoshop, and you don't have a *clue* about how to use it. There are a lot of books out there which will instruct you far more thoroughly than this little PDF. Browse the used bookstores and you'll likely find a book for the version of Photoshop you have. If you don't know which version you have, load it on your computer and start up the program and look at the top of the Photoshop screen. Click on Help and drag to About Photoshop. That will tell you which version you're working in.

I've tried to write this tutorial so that no matter which version (from 3.0 up) of Photoshop you have, you'll learn about it here. Photoshop has ump-teen ways to do everything. I'm just going to show you the way I usually do the most simple things. See my more advanced tutorials when you're ready.

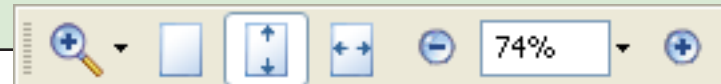
So much of Photoshop requires an understanding of the *rest*

of Photoshop. Learning Photoshop is like being one of those cranes which climbs a skyscraper as it is building it under itself. I've tried to design this tutorial to enable you to "spiral your way up," learning enough of "this" to understand "that," and then enough of "that" to further understand "this" better.

Let's begin by opening a basic image. You can scan a picture or open a new one from your camera – any simple, non-layered image. Got it open? Let's go along together.

**Note:**

You'll need to use the Zoom Tools at the top of your PDF screen to *really* see my example illustrations.



# Layers

If you don't see your Layers palette, press F7. On your layers palette, you see just one layer, called *Background*. Photoshop names it that and puts that name in italic letters. Layers are like sheets of glass, each with part of your image (or modifying the other layers), one on top of the other. We're going to just play around here a bit to get an understanding of Layers.

The first concept I want to pass along to you is **not to destroy any information (pixels)** in your photo. We're going to modify the photo you've opened, so let's make a **copy** of that Background layer so we don't damage the pixels on it: Drag your Background layer down to the New (in this case, new Layer) icon in the Layers palette. *Look!* You've created a new layer which Photoshop has named Background copy (no italics). Click on those words and edit "Background copy" and rename it something else. You *can't* do this with the [Background layer](#). You'll find it saves lots of headaches if you get in the habit of naming your layers so you can identify them later. Some Photoshop documents have over 100 layers!

Go down to the Background layer and click on the "eyeball." That icon toggles (turns on and off) the visibility of that layer. Play with toggling the visibility of your two layers by clicking on those two icons. Finish with the upper layer left on (eye showing) and the Background layer off (eye not showing).

Go to your Toolbox and click on the **Brush Tool**. Double click on your Foreground Layer icon to select a color (here I chose

Zoom in so you can really see!

The Background layer

New Layer icon

The Brush Tool

Foreground Color icon

Background Color icon

The Background layer, copied

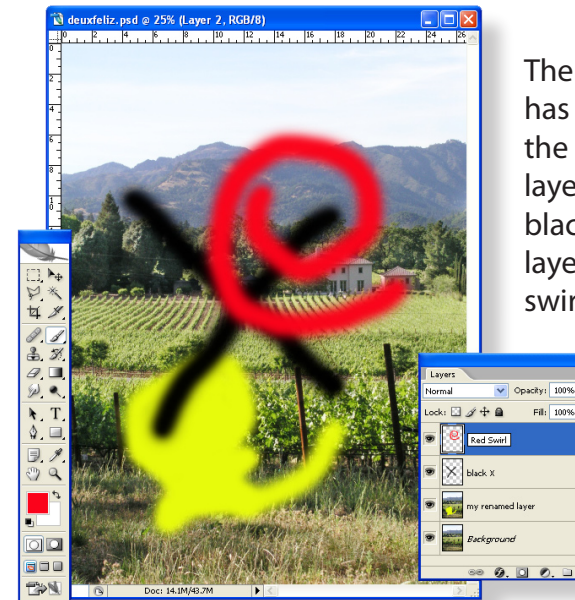
Layer visibility "eyeball"

yellow). Now paint on your newly named layer. Just a bit so you can see it.

Click on the New layer icon (don't drag anything to it) to create a new, blank layer. Now select a different Foreground Color (I've chosen black) and paint a stroke or two with that on your new layer. Click on the visibility icon (the eye) and see: your brush strokes disappear! Click again and they're back. It's just as if you painted on a clear acetate or a piece of glass. Notice that you when you "dissappear" the layer you painted on first the whole layer is invisible (not just your paint)! *Lesson learned?* That paint job could've been a correction you decided you didn't like, and you're stuck with it if you've put it on the original layer!

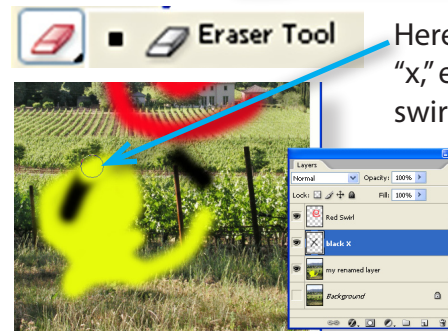
As a side trip, when your Brush Tool is active, press "x" and look at the foreground color and background color icons. See how they swap when you press "x"? Pretty handy! Depending upon which version of Photoshop you have, you can vary the opacity of this brush and how "hard" or "soft" (fluffy) your brush edge is. You can even get it to act like an airbrush. Experiment in your version and see what you can do with the brush.

On the left side of the toolbar click on the **Eraser Tool**. The eraser can be modified in the same way you just found to modify the opacity and hardness of your brush (the Eraser is a kind of brush... it just removes what's there instead of adding). In experimenting with erasing your previous brush work, go to your duplicated background layer and try to erase what you brushed on it. See? You can't. That's why we work on several layers. The eraser will erase whatever's under it on that layer. Rarely will you actually paint a color that will show up on your photo, but you will paint and erase on masks to control adjustments to your photos.



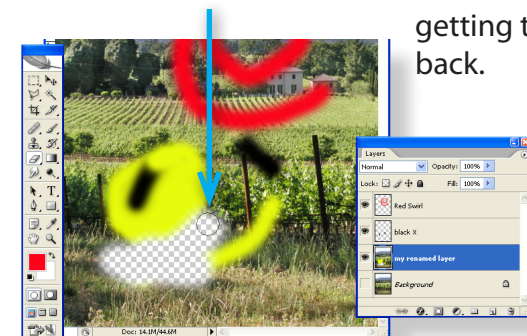
The background copy has a yellow, filled "e," the (otherwise blank) layer above it has a black "x," and the top layer just has a red swirl.

(Zoom in on the layers palettes and arrow tips!)



Here I'm erasing part of the black "x," even from underneath the red swirl, only affecting the "x" layer.

When I try to erase the yellow I painted on the background copy, it erases the picture, too! When you paint on a layer, you *replace* the pixels which were there and there's no getting them back.



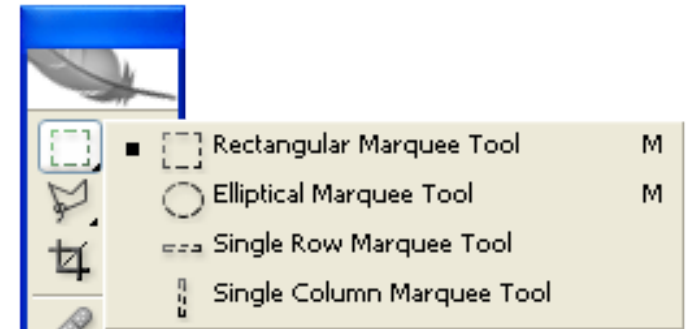
You can change the order (level) of layers, too. Make a third new layer and scribble on it a bit, as I've done with the red swirl. Since you have that layer selected in the Layers palette, drag it down below the one that's currently under it. See, you were able to trade the order in which you see them. That's one of the strengths of layers.

Different versions of Photoshop allow you to **group layers** in different ways. If there's a **folder icon** at the bottom of your layers palette, you can click on it to create a new folder (don't forget to name it), and drag some of your layers into it. When you click on the triangle in the folder layer, it compacts the layers and takes up less space in your layers palette. If I want to duplicate a bunch of layers, I'll also put them in a folder (group). Sometimes I'll do this just to keep a bunch of layers in the state they're in while I risk modifying their duplicates further.

Depending upon your version, someplace in your layers palette you'll see a (chain) "link" icon. By linking layers, you can drag them around together using the Selection Tool (arrow at the top of the Tool Bar), and transform them together.

## Selection techniques

Now we'll look at the selection tools. Which tool you use depends upon the kind of thing you're selecting and your personal preference. I often wind up using several of the selection tools to create just one selection. In the upper left of your Tool Bar, select the **Marquee tool**. Note that, as with many of the Tools, there's a small triangle to its lower right. Clicking on the triangle will reveal the other, similar tools accessible there. Choose the **Rectangular Marquee Tool** and click and drag it across a portion of your image, then let go. You've selected all of the pixels in that rectangle on the layer you have selected. You can now modify only these pixels. This can be used like masking tape: masking off areas you don't want affected by painting, changing exposure, etc. If you hold Shift while dragging the Marquee, it selects a square. If you've chosen the **Elliptical Marquee**



The Rectangular Marquee, above, and the Polygon Lasso, below.

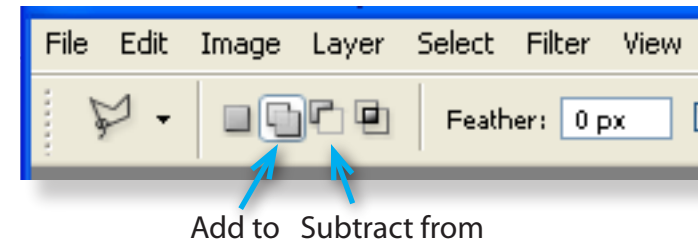


**Tool** and hold Shift, you'll select a perfect circle. **To de-select something, press Control/Command -D.** Whenever something isn't working in Photoshop, it's likely you have something selected. Pressing Control/Command-D won't hurt anything... try it! To re-select something, press Shift-Control/command-D. It's often handy to invert your selection: Select all of the sky instead of an airplane, and select Inverse (Shift-Control/Command-I) and the plane is selected!

Below the Marquee tool is the Lasso. I find the **Polygon Lasso** (the non-round one) to be the most handy. In the illustration at the bottom of the previous page, I've chosen the Polygon Lasso and clicked my way around the building in the photo. When I get near the closing point of my selection, a tiny circle shows up near the lasso cursor to show me I'm nearly done. To complete my selection I can either click my start point, or (easier) just click Return or Enter.

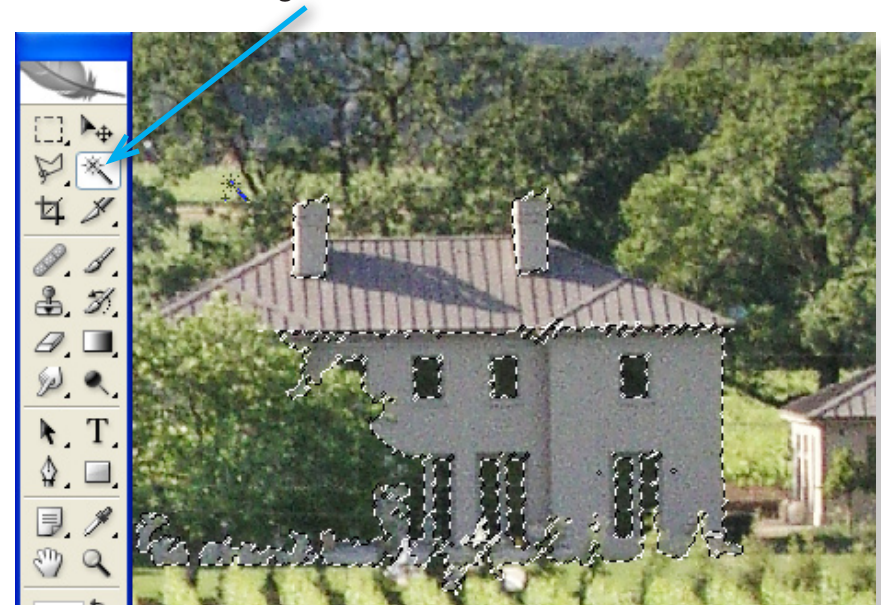
No matter which selection tool you've used, you can add to or subtract from you selection by selecting the add to or subtract from icons at the top of your screen, and before making the selection, you can tell it how much feathering you want it to have. A sharply selected object will look out of place (pasted in) on a slightly blurred background, so feather your selection. A feather of 3 is a good place to start with most photos.

Next to the Lasso tools, select the **Magic Wand** and click on a color, Photoshop will make a selection of pixels which are that color. You get to choose if it will select every pixel that's that color or just contiguous (touching) pixels, and how close to that color the pixel has to be to be selected (Tolerance), and whether the pixels have to be only on the layer you have selected. Very handy, especially considering that you can select with the magic wand

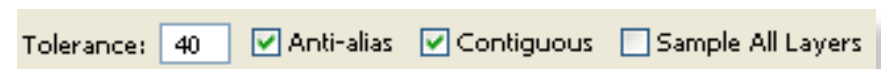


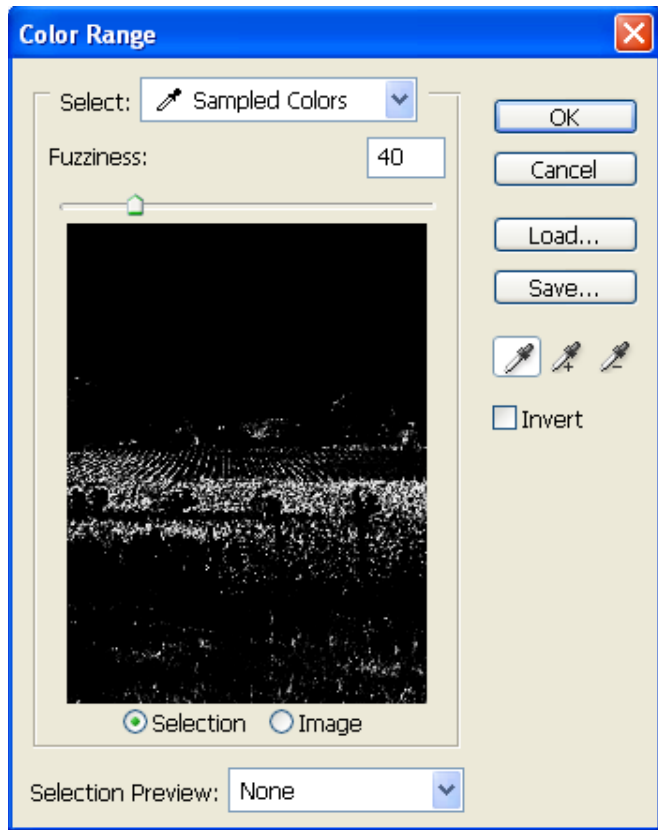
Here I've added the tree to the building I selected previously.

Magic Wand



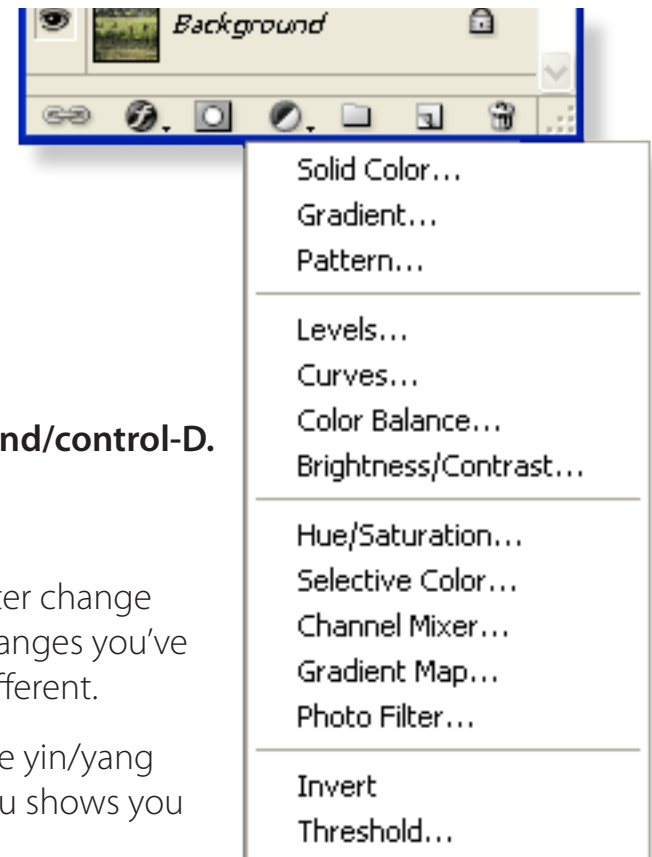
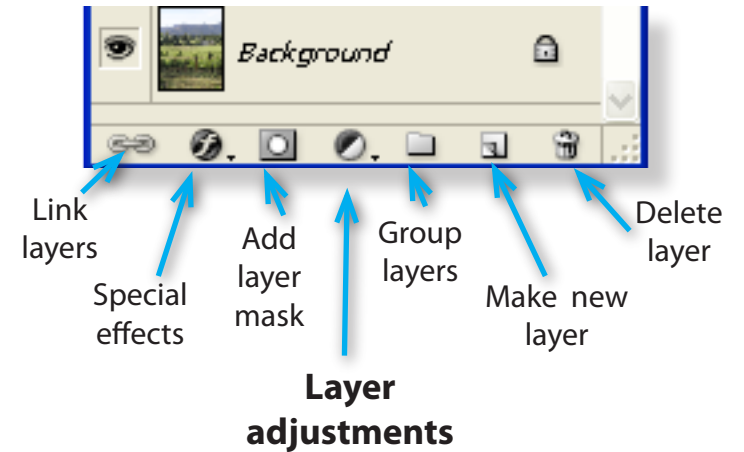
Selecting a color with the Magic Wand





and then un-select part of the selection as described above.

Here's a favorite selection method of mine: Go up to the top of your screen to **Select**, and click and drag down to **Color Range...** Use the left eyedropper in the Color Range dialog box to select a color. You can hold shift and add more colors, or use the + and - eyedroppers to add and subtract colors. Fuzziness will feather the edges of your selection. I'll show you why we want to select things in the next section.



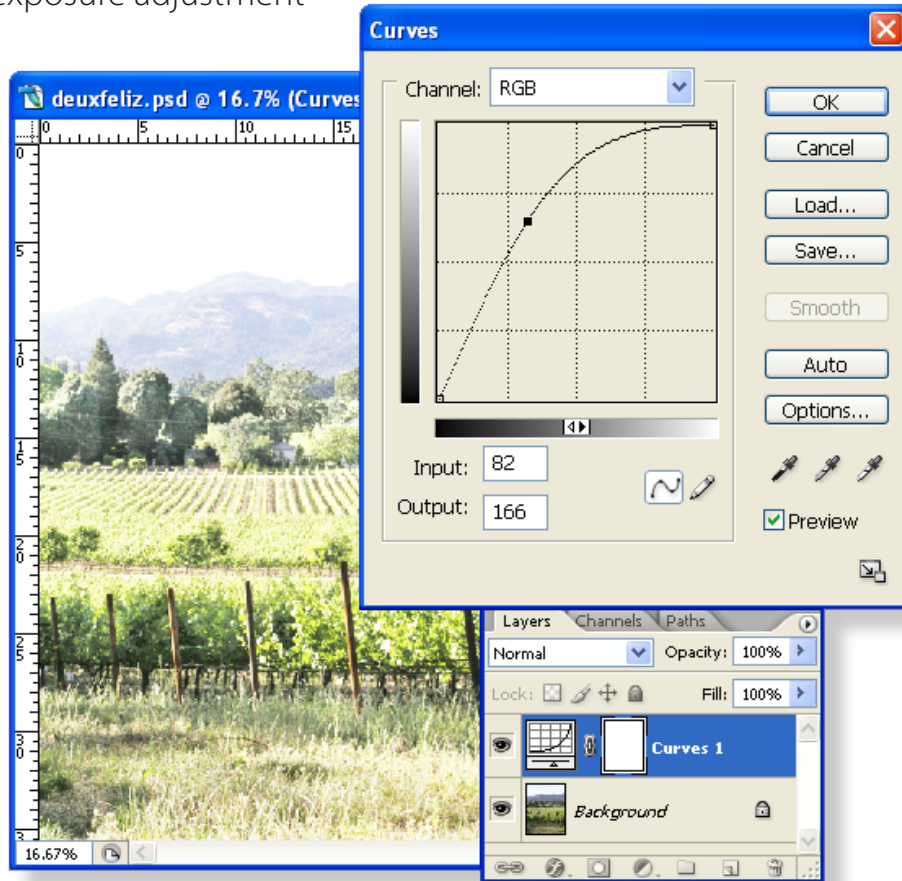
For the next part you'll want to be sure you have nothing selected, so **press command/control-D**.

## Exposure modification

Many of Photoshop's ways to lighten and darken a photo are not reversible. If you later change your mind, too bad. The methods I'll show you are forgiving. After you look at the changes you've made in a photo, you (or your boss) may want to change it back or do something different.

In the photo you have open in Photoshop, go down to **Layer Adjustments** (the little yin/yang looking icon) at the bottom of the layers palette and click on it. The drop down menu shows you just about every adjustment you'd want to do to your image... non-destructively!

For now, I'll just show you my favorite: **Curves...** Select Curves... from the drop down menu under Layer Adjustments. Click on the diagonal line across that graph and drag it up and left or down and right. See the exposure adjustment



you're making? Make some noticeable adjustment and click OK. Now click the visibility eyeball off and back on. Cool, huh? Now change the opacity of the curves layer (upper right of Layers palette). Nifty. Now be sure you're addressed to the mask of the curves layer (it'll have an inner frame, otherwise, click on it.)

With a black brush (100% opacity & flow) paint on the image. Notice that you're *removing* the effect of the curves adjustment! You can un-remove by painting white. Only the white areas of the mask will allow the Curves adjustment to be effective. Grey will reduce the effectiveness. This is really powerful!

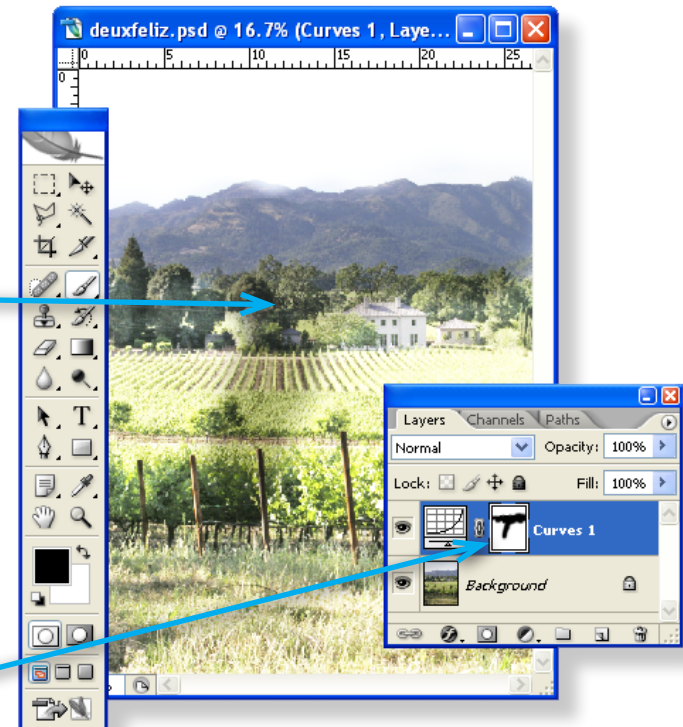
You can make a selection, as we learned earlier, and then make a Curves adjustment layer, and your selection will automatically be masked!

## Layer Mask *(Illustrations on the next page)*

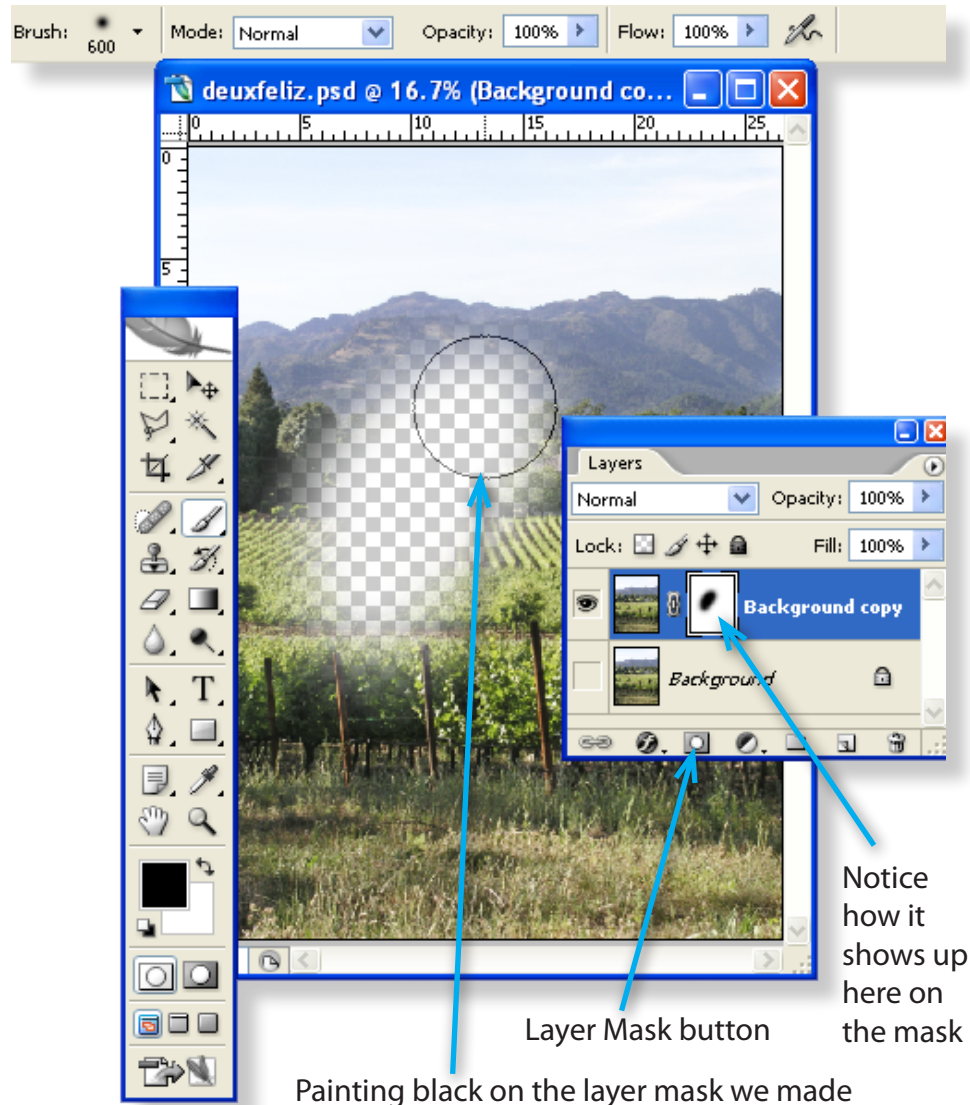
Select a non-background image layer (like the copy you made of the background layer). For our purposes, be sure

Painting black on the Curves Adjustment layer mask

See how it shows up on the Curves layer mask



any layers beneath it are not visible (click the eyeball). Now click the **Add Layer Mask** (circle-in-square) icon. That makes a mask for the layer you're on. Now paint black on that mask. Wow, the layer seems to disappear in that area. Now paint on the mask with white and the image comes back!



Very powerful. This certainly beats erasing (where you can never get the pixels back).

Well, now you know enough to start experimenting non-destructively on images in your version of Photoshop. We've barely scratched the surface of this powerful program. To learn more about it, read my other tutorials. Better yet, get one of the books I recommend on my web site.

Those [blue, underlined](#) words link to these

## Footnotes:

### Pixels

Your photo is made up of tiny dots, (on your screen:) Red, Green and Blue dots. How many of those dots you'll have in one square inch is expressed in "Pixels Per Inch" (ppi). When they're printed, they're really dots, so we refer to how many dots per inch. ([Link back to text](#))

### Brush Tool

That tiny tringle to the lower right of it will give you access to the Pencil icon. If you see the Pencil icon, click on that icon to access the Brush tool. ([Link back to text](#))

### Background layer

If you double click on a Background layer and just press Enter or Return (to accept the default values), it becomes a regular layer which can have transparency and be Transformed. ([Link back to text](#))