



User Services

October 2004

OBJECTIVES

- Experience the Photoshop environment.
- Use tools found on the main Toolbar.
- Retouch a photograph.
- Save images to different file types.
- Handle images from a digital camera

Introduction to Adobe® Photoshop® CS

Adobe Photoshop is the leading professional graphics program. Participants will become familiar with the Photoshop interface including the general toolbar, painting and special view tools, palettes and menu items. Participants will get hands-on experience in the basics of this program. Learn special effects as well as tips for retouching photographs.

(www.adobe.com)

Getting Help

The ITS Help Desk, located in 108 Allen Hall, is a service provided to all Mississippi State University students, staff, and faculty. The ITS consultants are available to help with various computer-related problems as well as provide answers to computer and technology-related questions. Visit the Web site at www.its.msstate.edu for handouts and resolutions to common computer problems. If you cannot find an answer to your question on the Web or you do not have access to the Internet, please call at 325-0631 (7:30 a.m. to 5:00 p.m. Monday through Friday). You may also contact the ITS Help Desk by email at helpdesk@msstate.edu.

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Introduction

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Introduction

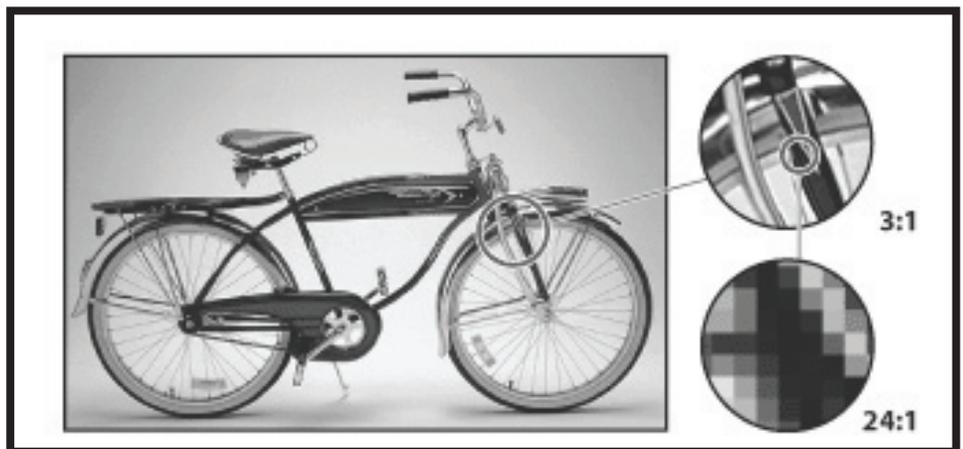
The history of image-editing applications should be divided into two categories: BP and AP (Before Photoshop and After Photoshop). Before Photoshop, there were various bitmap applications available, some of which were very good. There was Pixel Paint Pro, Studio 8, Digital Darkroom, and, of course, MacPaint. Like dinosaurs facing extinction, all these applications faded away after the comet called Photoshop fell to earth in the late 1980s (Daniel Giordan, 2002).

Most people look at Photoshop as a program that has many levels of complexity. They say things such as “I probably don’t use 10 percent of the program,” or “I just use it to open my digital camera images.” Although it’s true that Photoshop has a deep level of complexity, it’s also true that the program is easy for the beginner to use. This is one of the features that has made Photoshop so popular: It’s easy to jump in and get started and, as your needs grow, the program grows right along with you.

Photoshop is a raster-based or bitmap program. Raster images are made up of a grid of dots known as pixels. When working with bitmap images, you edit pixels rather than objects or shapes. Bitmap images are the most common electronic medium for continuous-tone images, such as photographs or digital paintings, because they can represent subtle gradations of shades and color.

Bitmap images can lose detail when scaled on-screen because they are resolution-dependent, they contain a fixed number of pixels, and each pixel is assigned a specific location and color value. Bitmapped images can look jagged if they’re printed at too low a resolution because the size of each pixel is increased.

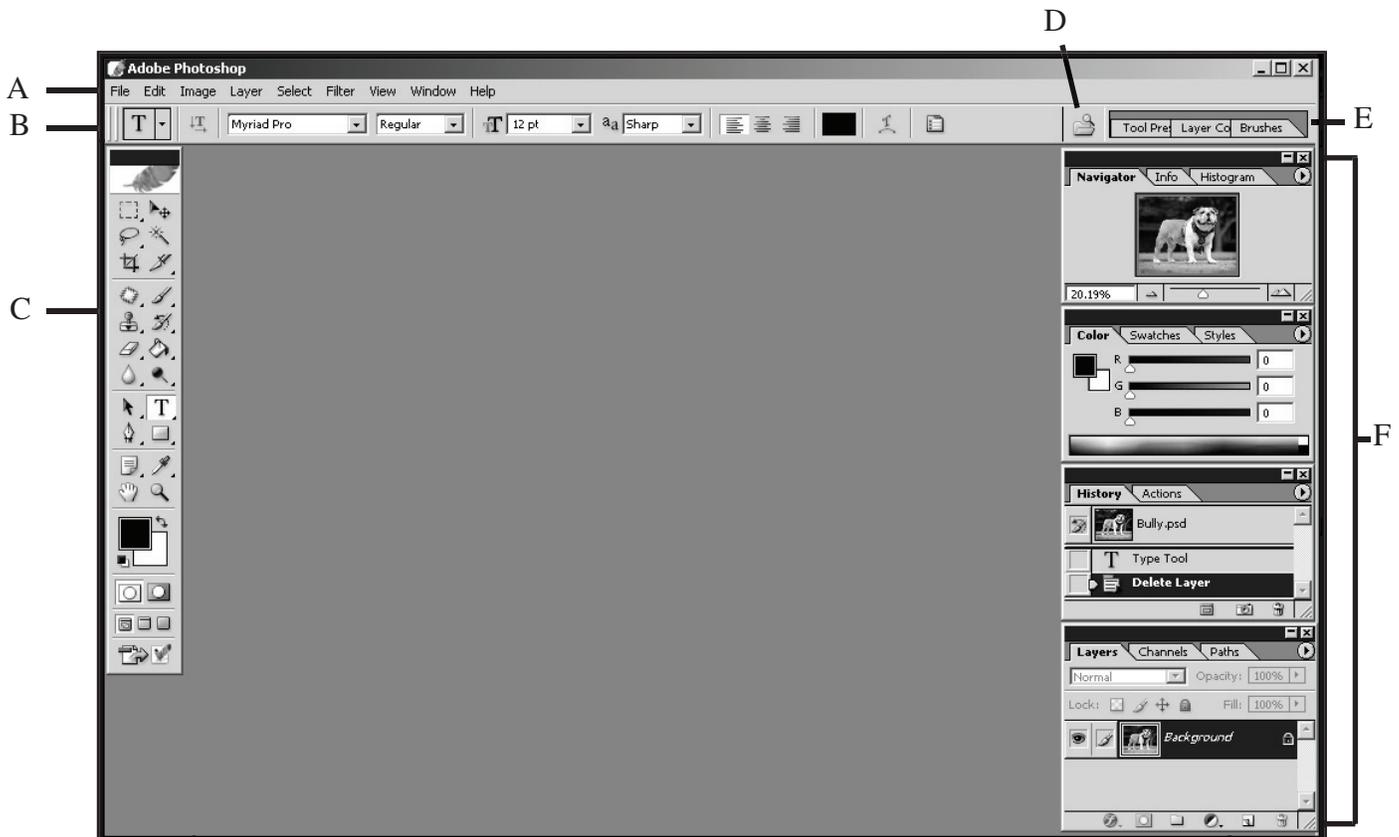
Resolution is very important when working with images in Photoshop. It is recommended that you work in the highest resolution possible, then save down to a more manageable resolution. You can always reduce the resolution of your image, but you cannot increase resolution. Resolution effects file size and is important when you are considering copyright and the protection of your work.



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The Work Area

By default, work areas of Photoshop consist of a menu bar at the top of the work area, a tool option bar below the menu bar, a floating toolbox on the left, floating palettes, and one or more image windows, which you open separately.



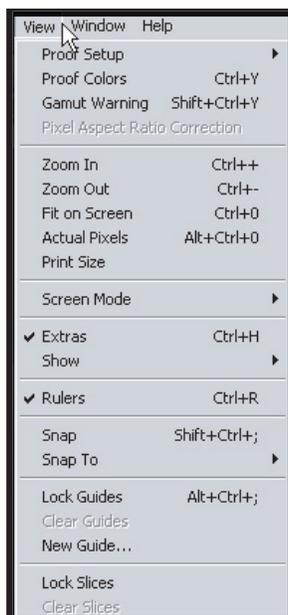
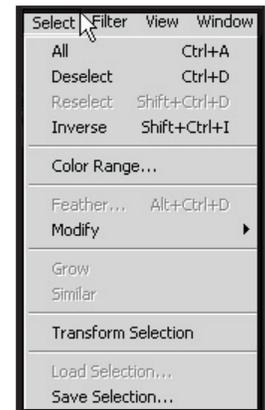
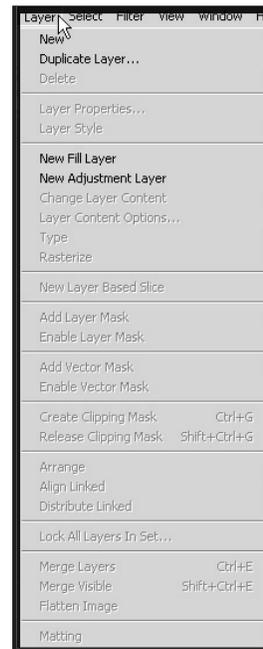
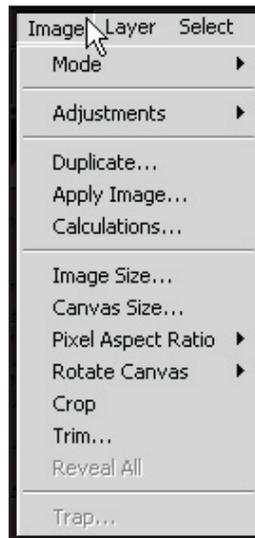
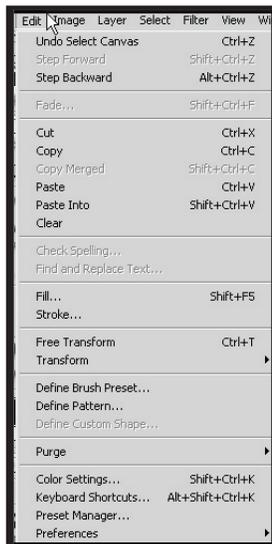
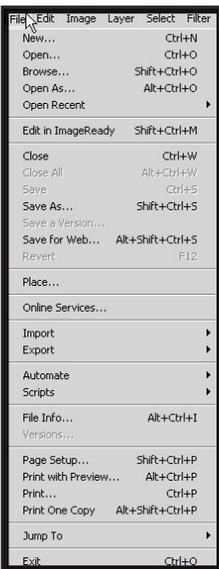
A. Menu Bar B. Tool options bar C. Toolbox D. File Browser button E. Palette well F. Palettes



The Menu Bar

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Photoshop Pulldown Menu Bar



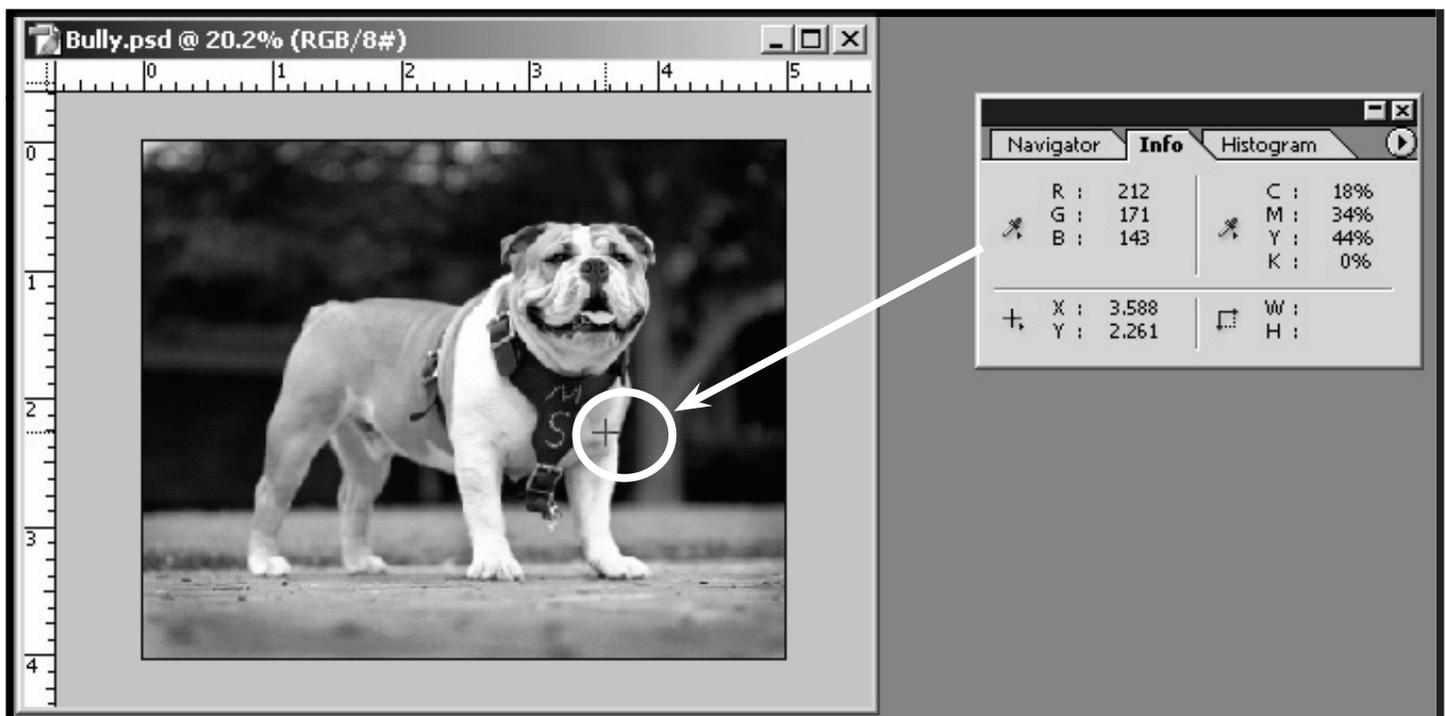
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The Palettes

Adobe Photoshop also has supplementary windows that give you more options and flexibility when using the tools. A few windows will be open to the right side of your screen when the program opens. If you ever have to find a window, go to the main menu at the top of the screen and choose Window and then choose Show (window you are looking for). Each window also has one or more tabs at the top with more options to choose from.

The Navigator palette shows you a thumbnail preview of the current image that you are working on. A slide bar at the bottom of this small window allows you to zoom in and out of the view of your image. Your mouse will also turn into a hand icon when you move it into the thumbnail image. With the hand icon, you can move around in the image.

The Info palette provides information on the mouse coordinates of the open image. It gives the X and Y coordinates of your mouse as well as color values for the pixel the mouse is currently on.



The Histogram palette offers many options for viewing tonal and color information about an image. By default, the histogram displays the tonal range of the entire image. To display histogram data for a portion of the image, first select that portion.

Opening the Histogram palette

In the Window pulldown, choose Histogram or click the Histogram tab to open the Histogram palette. By default, the Histogram palette opens in Compact View with no controls or statistics. See the following section to learn how to show the Histogram palette in different views.



The Color palette displays the color values for the current foreground and background colors. Using the sliders in the Color palette, you can edit the foreground and background colors according to several different color models. You can also choose a foreground or background color from the spectrum of colors displayed in the color ramp at the bottom of the palette.

The Color palette may display the following alerts when you select a color:

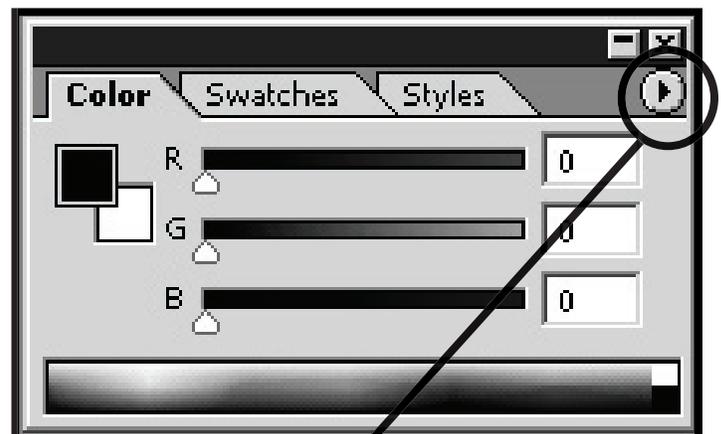
In Photoshop, an exclamation point inside a triangle appears above the left side of the color ramp when you choose a color that cannot be printed using CMYK inks. A cube appears above the left side of the color ramp when you choose a color that is not Web-safe.



Appears when a color cannot be printed using CMYK inks.



Appears above the left side of the color ramp when you choose a color that is not Web-safe.



In the Color palette Options pulldown menu, color mode choices are available for selection.

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You can choose a foreground or background color from the Swatches palette, or you can add or delete colors to create a custom Swatch Library. Creating libraries of swatches can help you group related or special swatches and manage palette size.

To display the Swatches palette go the Window pulldown menu, choose Swatches, or click the Swatches palette tab.

To change how swatches are displayed, choose a display option from the Swatches palette menu:

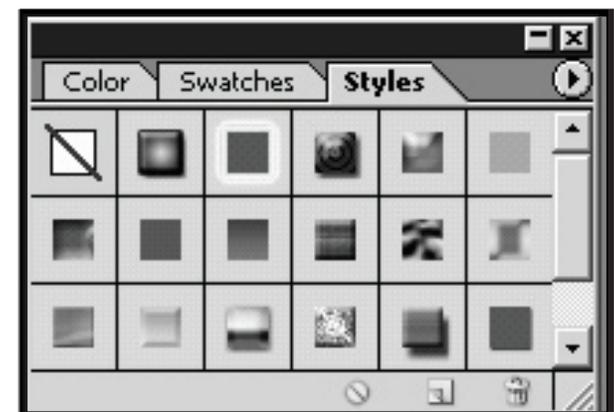
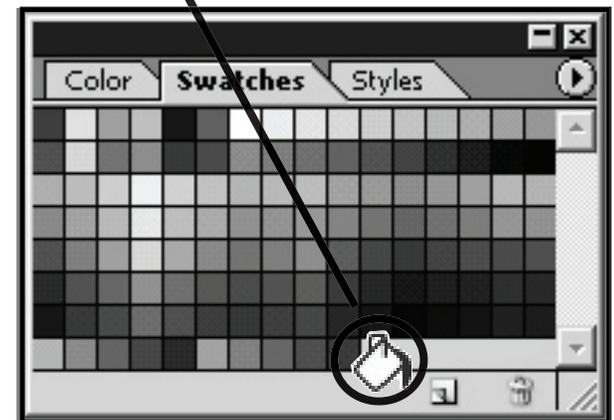
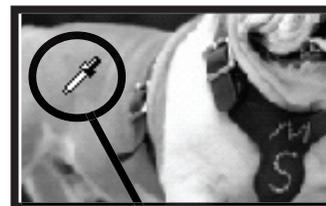
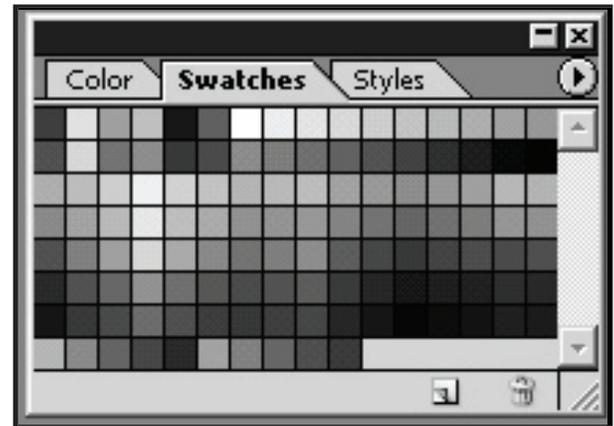
- Small Thumbnail to display a thumbnail of each swatch. This is the default view.
- Small List to display the name and thumbnail of each swatch.

To add a color to the Swatches palette:

Set the foreground color to the color you want to add. Position the pointer over an empty space in the bottom row of the Swatches palette (the pointer turns into the Paint Bucket tool), and click to add the color. Enter a name for the new color and click OK.

The Styles palette, Layer Styles dialog box, and Layer Styles pop-up palette in the options bar for the Pen and Shape tool let you view and select preset layer styles. By default, applying a preset style replaces the current layer style. However, you can add the attributes of a second style to those of the current style using a keyboard modifier.

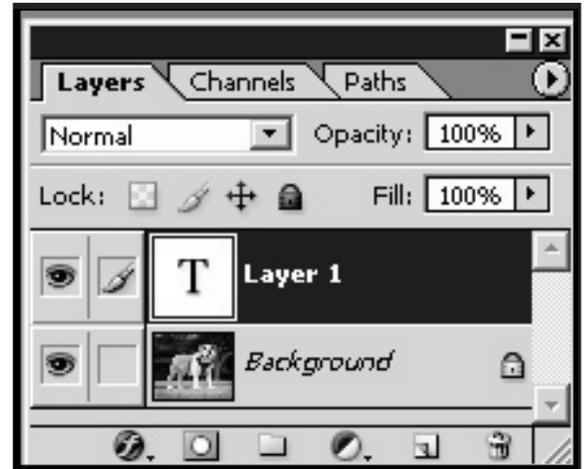
The layer styles that come with Photoshop are grouped into libraries by function. For example, one library contains styles for creating Web buttons; another library contains styles for adding effects to text.



The Layers palette lists all layers, layer sets, and layer effects in an image. You can accomplish many tasks--such as creating, hiding, displaying, copying, and deleting layers--using the buttons in the Layers palette. You can access additional commands and options in the Layers palette menu and the Layers menu.

The layers are listed in the order that you create them. You can take your mouse and move the layers into different stacking orders. The Background layer is always your bottom layer. Think of it as the canvas for your image. You cannot put a layer below the background layer.

If an image has multiple layers, you must select which layer you want to work on. Any changes you make to the image affect only the active layer. You select a layer to make it active. In Photoshop you can select only one layer. The name of the active layer appears in the title bar of the document window, and a paintbrush icon appears next to the layer in the Layers palette.



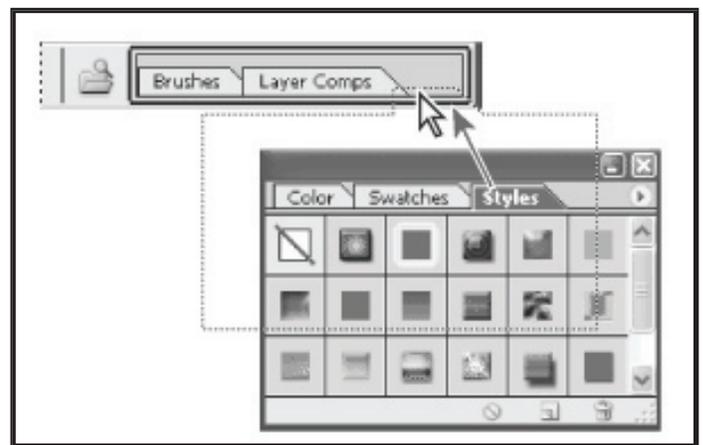
NOTE: If you don't see the desired results when using a tool or applying a command, you may not have the correct layer selected. Check the Layers palette to make sure that you're working on the desired layer.

The Photoshop options bar includes a palette well that helps you organize and manage palettes. The palette well stores, or docks, palettes that you use frequently, without having to keep them open on the work area.

The palette well is available only when using a screen resolution greater than 800 pixels x 600 pixels (a setting of at least 1024 x 768 is recommended).

To dock palettes in the palette well:

Drag the palette's tab into the palette well so that the palette well is highlighted.



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You can use the History palette to revert to a previous state of an image, to delete an image's states, and to create a document from a state or snapshot.

To delete one or more states of the image, do one of the following:



- Click the name of the state, and choose Delete from the History palette menu to delete that change and those that came after it.
- Drag the state to the Trash button to delete that change and those that came after it.
- Choose Clear History from the palette menu to delete the list of states from the History palette, without changing the image. This option doesn't reduce the amount of memory used by Photoshop.
- Hold down Alt (Windows) or Option (Mac OS), and choose Clear History from the palette menu to purge the list of states from the History palette without changing the image. If you get a message that Photoshop is low on memory, purging states is useful, since the command deletes the states from the Undo buffer and frees up memory. You can't undo the Clear History command.
- In the Edit pulldown menu, select Purge, then choose Histories to purge the list of states from the History palette for all open documents. You can't undo this action.

To create a new document from the selected state or snapshot of the image. Do one of the following:

- Drag a state or snapshot onto the New Document button .
- Select a state or snapshot, and click the New Document button.
- Select a state or snapshot, and choose New Document from the History palette menu.
- The history list for the newly created document will be empty.

NOTE: If you delete or trash an action in the middle of the list, the actions that follow will also be deleted.

You use the Actions palette to record, play, edit, and delete individual actions. This palette also lets you save and load action files.

In Photoshop, actions are grouped into sets--you can create new sets to better organize your actions.

To create and record an action:

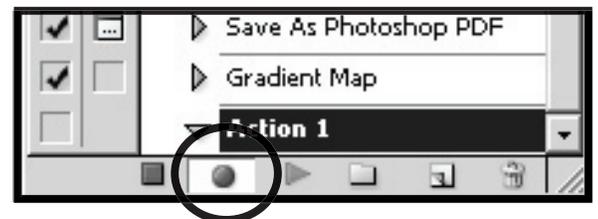
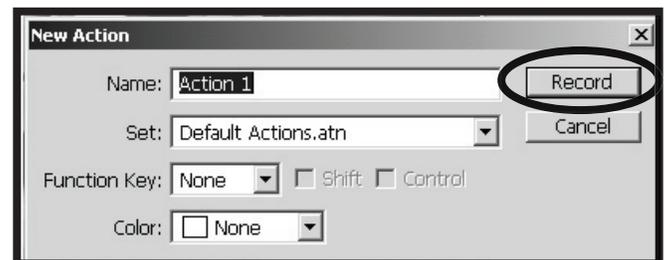
1. Open an image file in Photoshop.
2. In the Actions window click on the icon at the bottom of the window to create a New Action.
3. Name the action and assign the action to a control key if you'd like (you can set an F key on your keyboard to activate the action).
4. Click the Record button which is red and located at the bottom of the window.
5. Perform commands on your image in the order that you want them recorded. For example: Image Size, Adjust Brightness and Contrast, Save.
6. To Stop recording, press the square button at the far left on the bottom of the window.

To play or use an action:

1. Open an image file.
2. To play an entire action, select the action name by clicking on it from the list in the window. Click on the little triangle next to the action name. This will reveal a list of each command that makes up that action. You can click on an individual command in that list and only perform that one command.
3. Click the Play button at the bottom of the actions window to activate the action.



Create a New Action



Begin Recording



Stop Recording



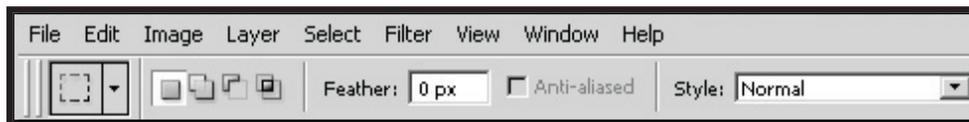
Play the Action

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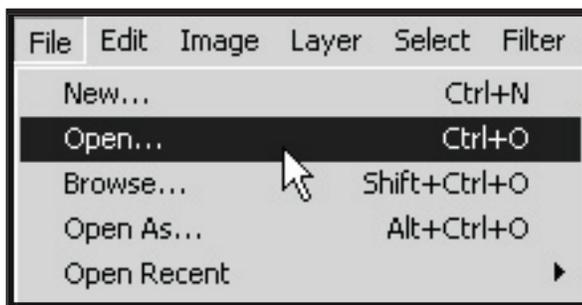
The Options Bar

Most tools have options that are displayed in the Options Bar. The options bar is context sensitive and changes as different tools are selected. Some settings in the Options Bar are common to several tools (such as painting modes and opacity), and some are specific to one tool (such as the Auto Erase setting for the Pencil tool).

You can move the Options Bar anywhere in the work area using the gripper bar, and dock it at the top or bottom of the screen. Tool tips appear when you hold the pointer over a tool.



As we go through the tools and how they are used, it may help to have an image open so you can practice using the tools. The image named Bully.psd in your Temp folder on your desktop is the image used in the following examples. To open this image, go to the File pulldown menu and choose Open. Navigate to the Temp folder on your desktop and select the file named Bully.psd and open.





The Toolbox

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The Toolbox

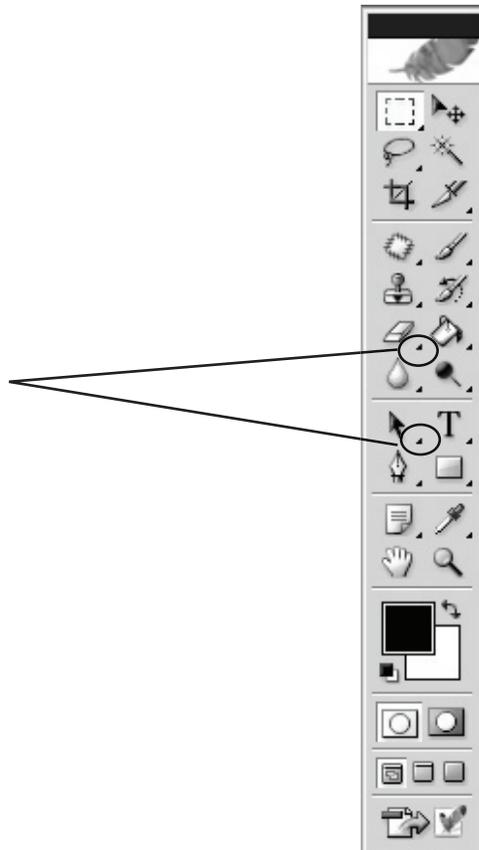
After opening Adobe Photoshop, you will notice many tools and windows. The Photoshop toolbox is found to the left on your computer screen. The tools in the toolbox allow you to select, paint, edit, and view images. Most tools have associated Brushes and Options which are located in the Options Bar and allow you to define the tools' effects.

Selecting Tools

A tool can be selected by clicking its icon in the toolbox. A small triangle to the right of a tool icon indicates a pull-out menu of hidden tools. To select a tool, do one of the following:

- Click on the visible tool icon.
- To select a hidden tool, click and hold the pointer on the visible tool, and drag to highlight the tool you want.

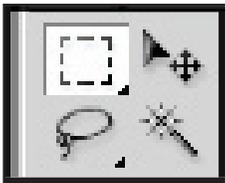
Small triangles indicate hidden tools.



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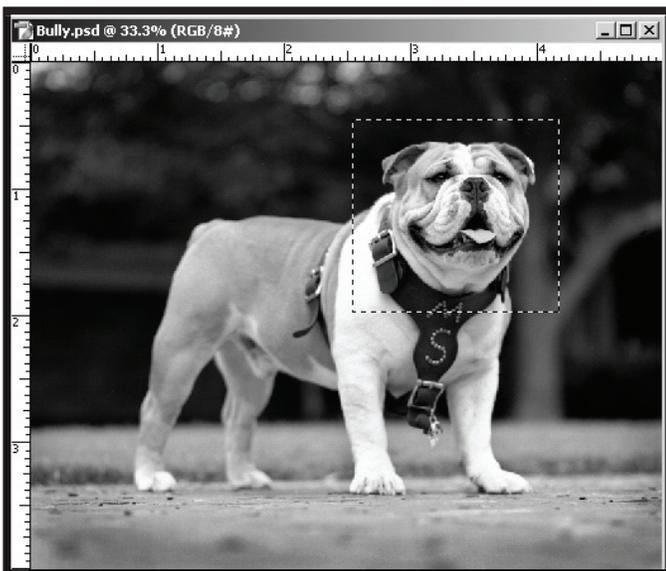
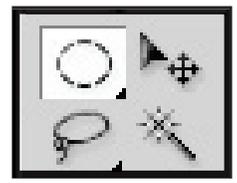
Marquee Tools and Selecting in Photoshop

Once you have chosen a Marquee tool, go into the image, click and drag on the image to make a selection. A moving dotted line will appear when you let go of the mouse indicating your selection. Within this selected area, you may apply the desired Photoshop effects.

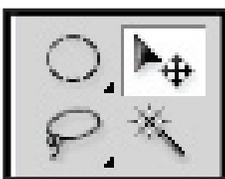


Rectangular Marquee Tool

Elliptical Marquee Tool



With the Rectangle or the Elliptical Marquee tool, drag over the area you want to select. Hold down Shift as you drag to constrain the marquee to a square or circle (release the mouse button before Shift to keep the shape constrained). To drag a marquee from its center, hold down Alt after you begin dragging.



Move Tool

There are many ways to select elements of an image in order to manipulate them. Once you have an area selected, you can move it in two different ways:

1. Make a selection and then click on the Move Tool. Click and drag with your mouse to move the selection. You will notice that it cuts out the selection and moves it, leaving the background color.
2. If you hold down the Alt key on your keyboard while you are moving the selection, it moves a copy of the selection and leaves the image intact underneath.



Lasso Tool



The Lasso tool allows you to make a selection in a freehand manner. You can trace the contours of an element in an image and when the ends of the lines meet, it will make a selection. Also, if you hold the Alt key while making the trace, this allows you to click off the mouse without the tool completing the selection. This can be a bit difficult if you are only using a mouse.



Magic Wand Tool



The Magic Wand tool allows the selection of a consistently colored area without having to trace the area's outline. In the option bar, specify the tolerance level and whether the selection will be made on all layers.



Magic Wand Options Bar

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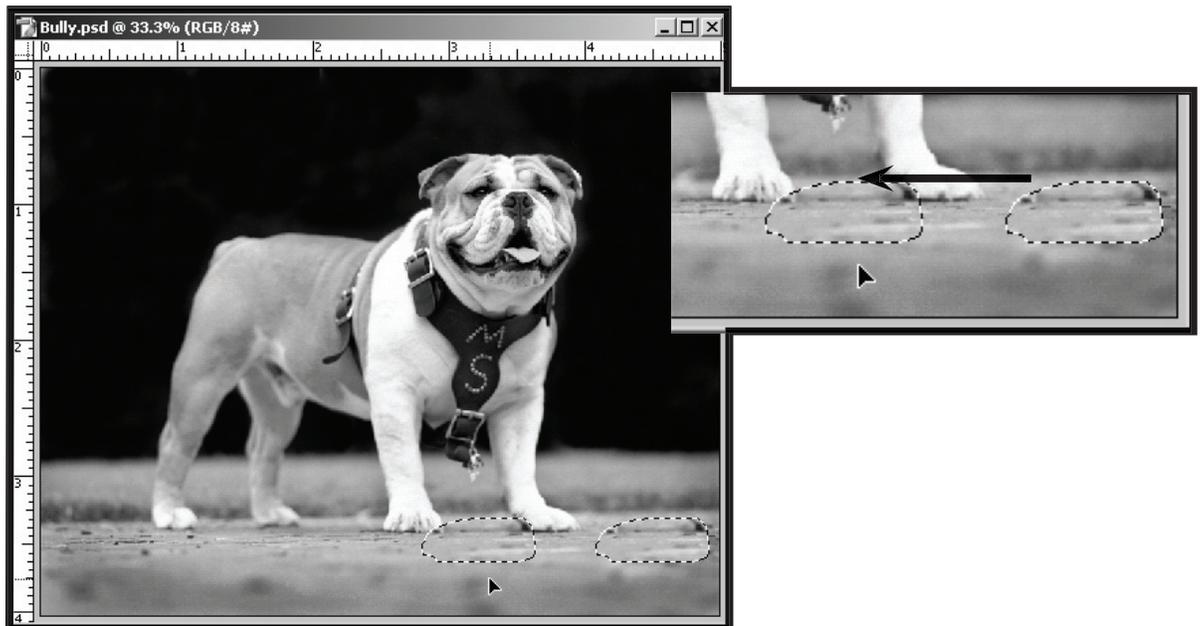
Patch Tool

The Patch tool lets you repair a selected area with pixels from another area or a pattern. Like the Healing Brush tool, the Patch tool matches the texture, lighting, and shading of the sampled pixels to the source pixels. You can also use the Patch tool to clone isolated areas of an image.

When repairing with pixels from the image, select a small area to produce the best result.



Select the area you would like replaced. When you release the mouse, the selected areas outlined with a dashed line is the area that will be replaced. With the Patch tool still selected, click and drag the selected area around until you located an area to use as a replacement.





Healing Brush Tool

The Healing Brush tool lets you correct imperfections, causing them to disappear into the surrounding image. Like the cloning tools, you use the Healing Brush tool to paint with sampled pixels from an image or pattern. However, the Healing Brush tool also matches the texture, lighting, transparency, and shading of the sampled pixels to the source pixels. As a result, the repaired pixels blend seamlessly into the rest of the image.



Paint Brush Tool

The Paint Brush tool allows you to create effects in your image as if you were using a paint brush. To customize the tool, go to the Options Bar at the top of the window. You may select the type of brush you wish to use, the mode, and the opacity of the effect.

The Pencil tool is hidden behind the Paint Brush tool. It functions similarly, except it creates hard-edged freehand lines.



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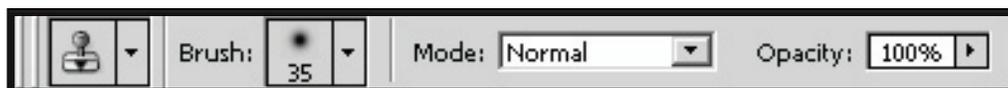
The Clone Stamp Tool (AKA, the Rubber Stamp Tool)



The Clone Stamp tool takes a sample of an image, which you can then apply over another image or part of the same image. You can also clone part of one layer over another layer. Each stroke of the tool paints on more of the sample.

When you use the Clone Stamp tool, you set a sampling point on the area you want to apply over another area. By selecting Aligned in the options bar, you can reuse the most current sampling point, no matter how many times you stop and resume painting. When Aligned is deselected, you'll reuse the same sampled pixels each time you paint.

Because you can use any brush tip with the Clone Stamp tool, you have a lot of control over the size of the area you clone. You can also use opacity and flow settings in the options bar to finesse the way you apply the cloned area. You can also sample from one image and apply the clone in another image, as long as both images are in the same color mode.



To use the Clone Stamp tool:

1. Select the Clone Stamp tool on the toolbar.
2. Choose a brush size from the Options Bar.
3. Position the mouse pointer on any part of the open image you want to sample.
4. Hold down the Alt key on your keyboard (Option key on a Mac), click and release. You have just specified the sample point from where the image will be duplicated.
5. Position your mouse in the area of the image where you want the duplication. Begin painting with the mouse as if you are using a paint brush. A cross hair icon will indicate what area you are copying.

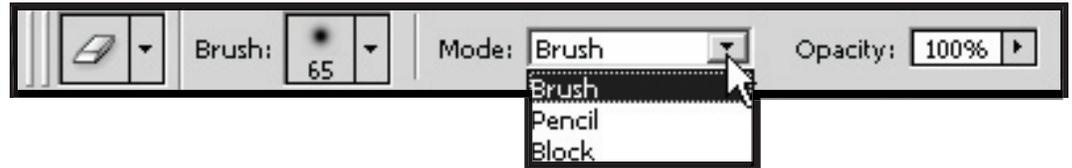




The Eraser Tool

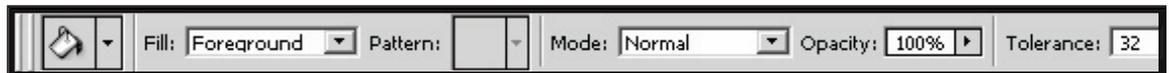
The Eraser tool functions as an eraser, but with several options. You are able to erase in three different modes: Brush, Pencil, and Block. The Brush and Pencil modes allow you to choose brush styles and sizes.

When using the Eraser tool, the image is erased to the background or to transparency, depending on how the layers are placed. Opacity can also be set for the Eraser tool by using the slider in the Options Bar.



The Paint Bucket Tool

The Paint Bucket tool applies a preselected color (foreground) to an area of an image. If you have an area selected with the one of the selector tools, color will be applied only to that area. If you click on an area within the image, the fill color will be applied to, depending on the tolerance set in the Options Bar, adjacent similar pixels. The Options Bar also allow you to customize the tool by designating the fill color, fill pattern, mode, opacity, and tolerance. It is important to note that the Paint Bucket tool cannot be used with images in Bitmap mode.

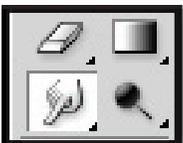
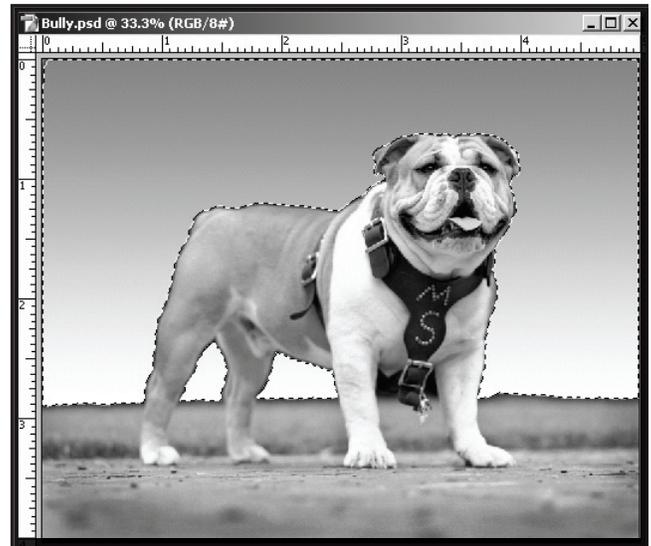


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The Gradient Tool

The Gradient tool is used to perform a gradation between specified colors. In the Options Bar, Photoshop offers a wide variety of preset gradients and patterns, or allows you to select your own gradient colors in the foreground and background color picker. Select an area to apply the gradient, choose the Gradient tool, then click at the top of the selected area and drag downward. Once you let go of the mouse, the gradient will appear. Photoshop makes very smooth gradients that print without banding.



The Smudge Tool

The Smudge tool is grouped with the Blur and Sharpen tools on the toolbar and is used to “smudge” your image. It is as if you are running your fingers through wet paint. Customize the smudge in the options bar to give a drastic or subtle smudge effect, adjust pressure, mode, and brushes.



The Sharpen Tool

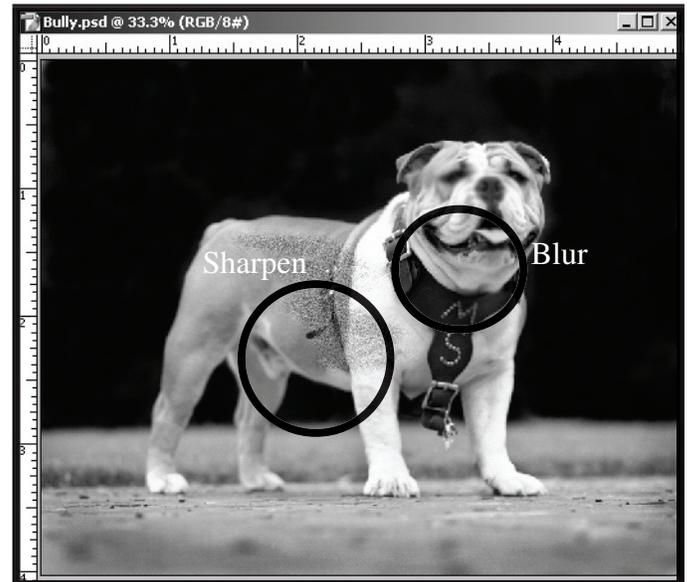


The Sharpen tool is used to sharpen areas of your image. The more you “paint” with the sharpen tool, the more you will sharpen the image. You may customize the tool in the Options Bar.



The Blur Tool

The Blur tool is used to blur areas of your image. The more you “paint” with the blur tool, the more you will blur the image. You may customize the tool in the Options Bar.



The Dodge Tool



The Dodge tool adds exposure (lightens) just as a camera would add exposure to a photograph. This is good for lightening shadows and areas that are just a little too dark. You can set your exposure percentage in the Options Bar for this tool.

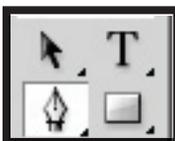


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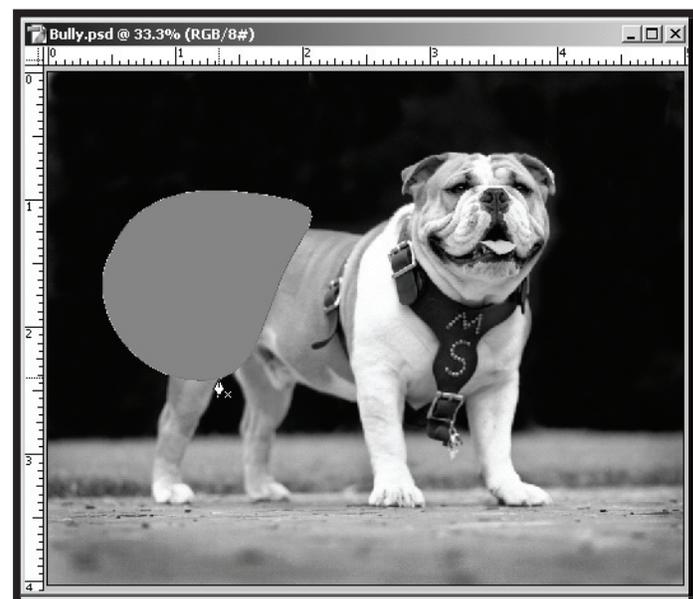
The Burn Tool

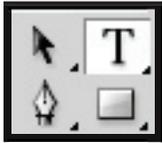
The Burn tool does the opposite of the Dodge tool. This tool takes exposure out of the image (darkens). It is good for toning down areas of the image that are too bright or overexposed. You can also set the exposure percentage in the Options Bar.



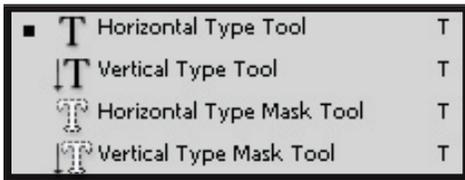
The Pen Tool

The Pen tool lets you create straight lines and smooth flowing curves with greater precision than is possible with the Freeform Pen tool. For most users, the Pen tool provides the best control and greatest accuracy for drawing.





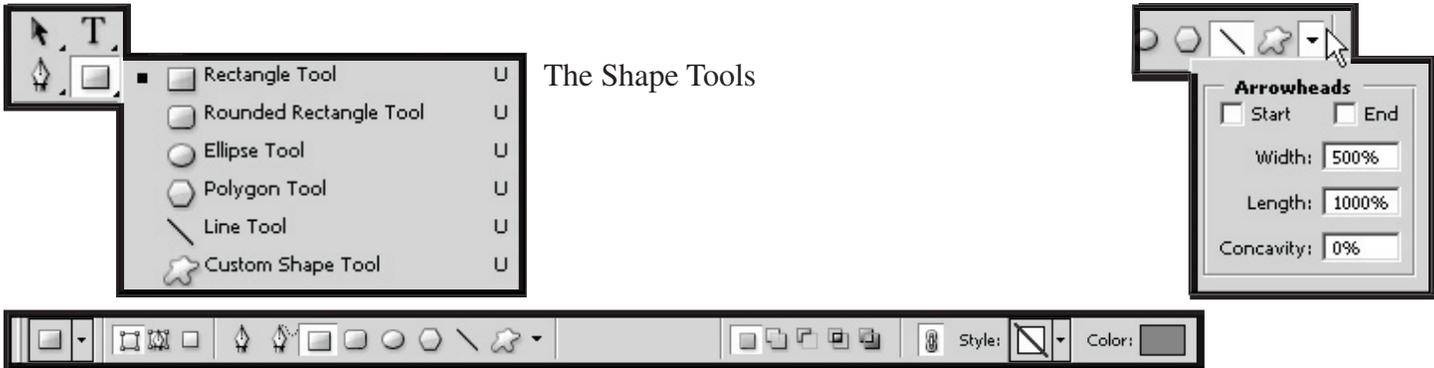
The Text Tool



The Text tool is used to incorporate text into your image or design. Click on the Text tool and click the mouse anywhere inside the image. In the Text Options Bar, specify the font, font size, font color, alignment, and apply text warping. Other Text tools are for creating vertical type and using text to mask an image. Your text appears in the image as well as a new layer in your Layers Window. If you select the text layer, you can use the Move tool to place the text where it belongs. To change the text style after it is already in the layer, select the type and make changes in the Options Bar.

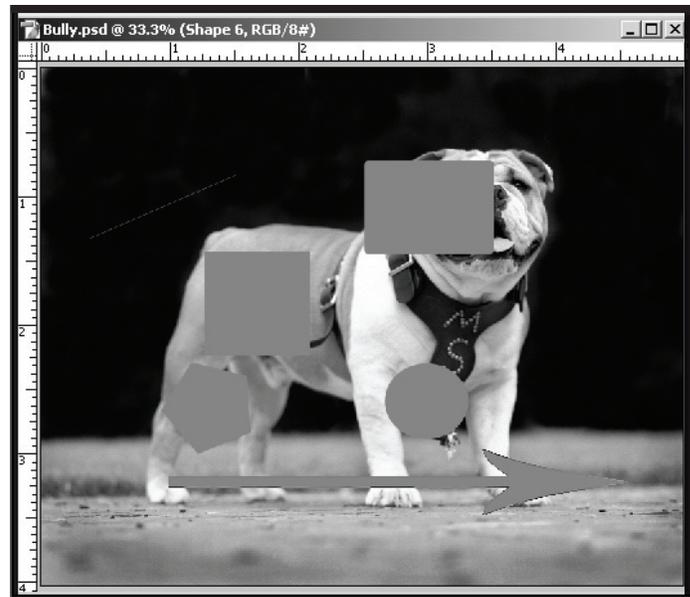


User Services

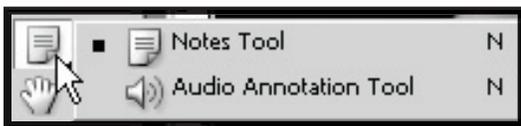


Adobe Photoshop makes it easy to add shapes to an image. You can draw them using a variety of Shape tools, or select from a large assortment of predrawn shapes. You can arrange vector shapes on separate layers for easy modification and overlay effects.

Arrowheads can be added to the lines when using the Line tool by clicking on the inverted arrow next to the shapes on the Options Bar. Specify if you want the arrowhead to be at the start or the end of the line. You can also manipulate the shape of the arrowhead by changing the width and length percentages.



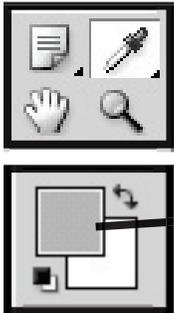
The Annotation Tools



A note or audio annotation icon marks the location of an annotation on an image. When you move the pointer over an annotation icon and pause, a message displays the author's name. You use the icons to open notes or play audio annotations. You can show, hide, or move the icons, and edit the contents of notes.



The Eyedropper Tool



The Eyedropper tool is used to select an individual color from within an image. For example, you can add text in your image that is the same color as another element in the image. Or you can select the color of the existing sky so that you can paint in it with the exact color. Click on the desired color in the image and that color will appear as your foreground color.

The Zoom Tool



The Hand Tool



The Hand tool is used for moving around in your image if you are zoomed in very close. The Hand tool will move your image around in its window. You can also use the hand in the Navigator palette to the right of the screen.

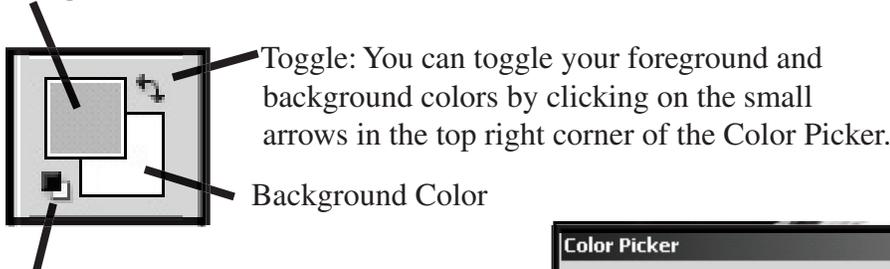


The Zoom tool works the same as the Navigator palette, except you click to zoom in with the Zoom tool, and click with the Alt key to zoom back out.

User Services

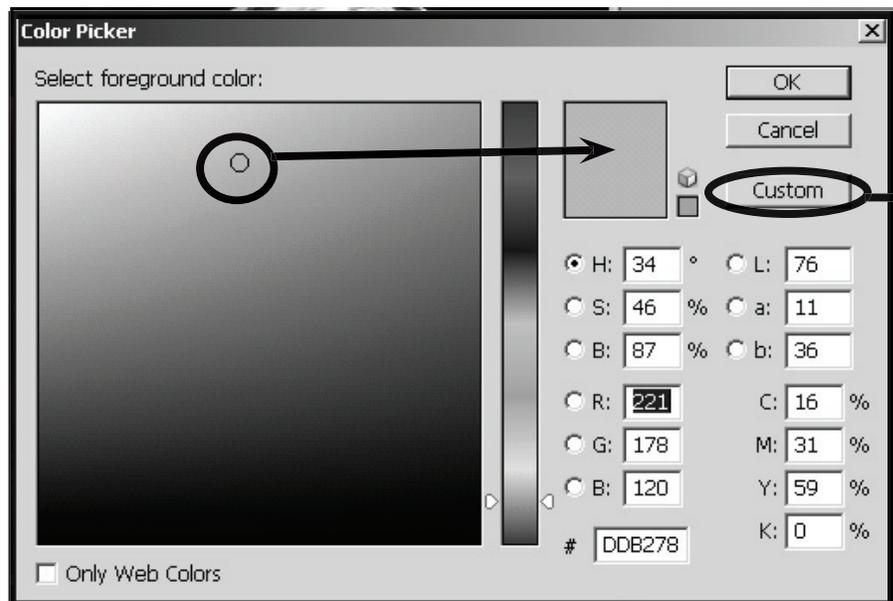
The Color Picker

Foreground Color



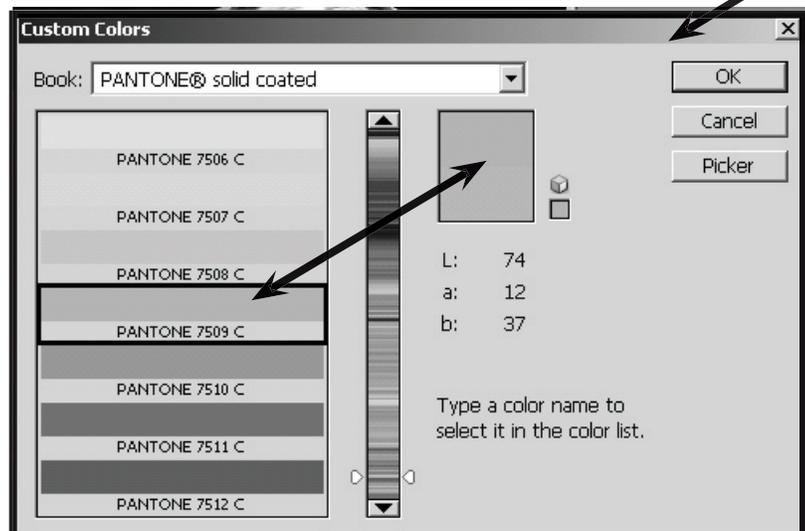
Click on the “mini” boxes in the lower left corner to get back to pure black and pure white colors.

You can pick colors through the color and swatch windows or the Color Picker. To open the Color Picker, click on the foreground or background color box. The Color Picker will open.



You can click the mouse inside of the large gradient color box to pick colors and variations of colors. Photoshop will give you all of the color information to the right of the color windows. Use the slide bar in the middle to change colors. Click on the Custom button to view custom colors and their associated swatches.

In the Custom Colors dialog box, choose from several books of colors. Use the slide bar in the middle to change colors. Click OK once you have chosen a color or click Picker to go back to the other Color Picker. The chosen color is now loaded in the toolbar for use.



It is always frustrating when a great photograph is ruined when a person's eyes turn out to be bright red. Photoshop offers an easy way to remove the redness and return our loved ones back to normal.

1. Open a file to work on. From the main menu, choose File and then Open.

2. Look in the Temp folder located on the Desktop of your lab computer.

Select the file named "red_eye.jpg"

3. Click on the Zoom tool. Then click inside the image to zoom your view closer to the red eyes of the subject.

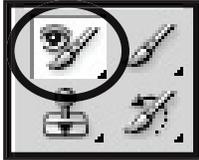


Red-Eye Exercise



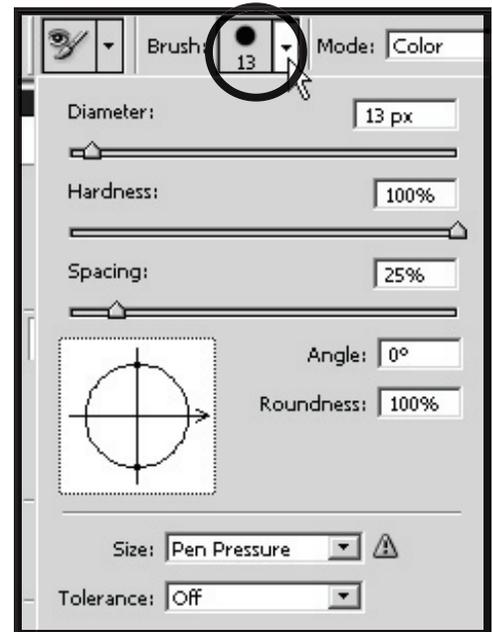
User Services

4. Choose the Color Replacement Tool. It is a hidden tool located behind the Healing Tool, which looks like a bandaid.

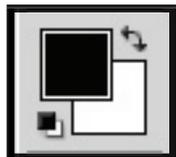


5. Choose a brush size from the top options menu.
6. Make sure the options in the top menu are set to the following:

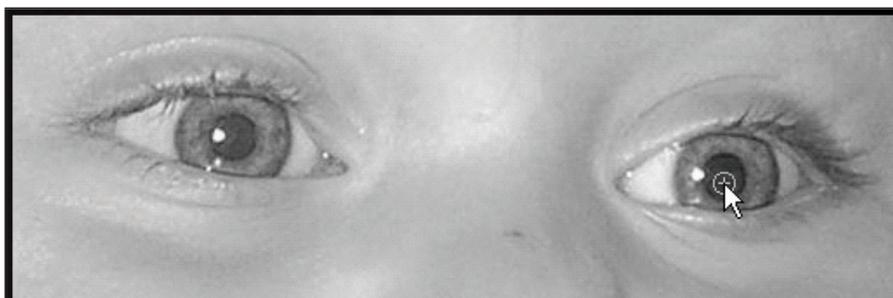
Mode: Select Color
Sampling: Once
Limits: Discontiguous
Tolerance: ~30%



7. Choose a color to use as a replacement. Today we will just use the color black. You can also choose a color that is similar to the person's natural eye color.



8. With the Color Replacement tool, begin to click on the red areas of the eyes to replace the color. If your brush size is too large, change to a smaller one.



9. Double click on the Zoom tool to quickly zoom back out to check your results. The eyes should now be a more natural color and no longer blazing a fiery red.



10. Save your image.

What exactly IS the red eye effect?

Red eyes in photographs occur when the picture is taken with a photographic flash. The light of the flash occurs too fast for the iris of the eye to close the pupil. The flash's light illuminates the blood-rich retina at the back of the eye, resulting in a red appearance.

User Services

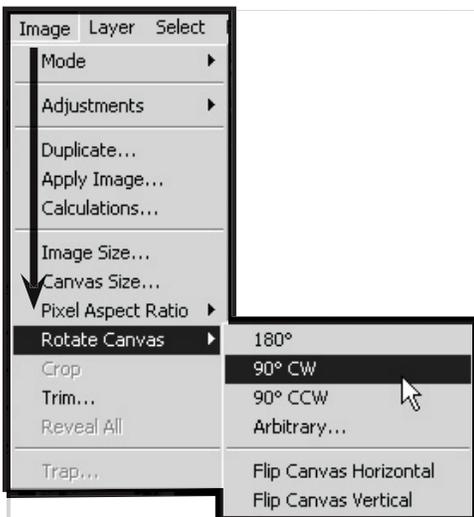
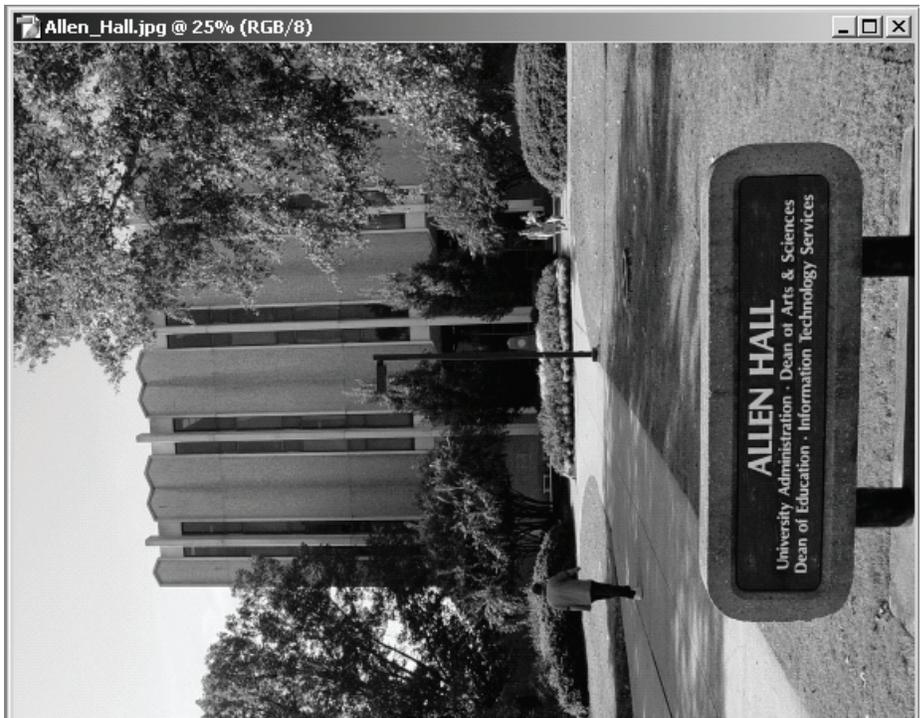
1. First, open an image that we have taken with our digital camera. Different cameras have different ways of transferring images to the computer. Consult your camera's instruction manual for the correct method.

Once the images are on your computer, from the main menu, choose File and then Open.

2. From the Temp folder on the Desktop, choose the file named, DSC02468.jpg.

When images are from a digital camera, the files are named in numbers.

3. The image is side-ways because the digital camera was physically turned to get a vertical image.



4. Rotate the image by going to the main menu and choosing Image, then Rotate Canvas, then 90 degrees CW (clockwise).

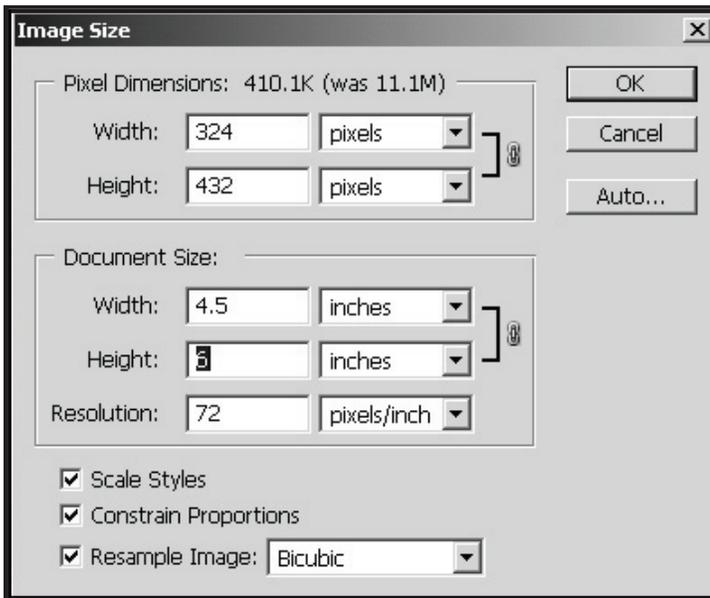
The image will be rotated.



Digital Images for Email

User Services

- To size the image, go to the main menu and choose Image and then Image Size. A box will open. This box provides the image dimensions in pixels as well as inches. The physical file size is also noted at the top of the window. This image is 11.1 megabytes in size. It is physically a little over 23 inches by 31 inches.



When Constrain Proportions is clicked ON, the height and width measurements adjust automatically as the other is changed.

Click Constrain Proportions OFF when you need to force an image to be a specific size.

- This large image size is good for printing enlargements, but 11 megabytes is enough to clog anyone's email inbox. We can now size the image down so that it is a smaller file size and easier to email or place on the Web.

Type in the following dimensions to resize the image:

Resolution: 72 dpi

Height: 6 inches

The width should have adjusted automatically in proportion to the height setting. Click OK.

Resolution is the amount of pixels or dots per each inch in an image. The more pixels, the higher the resolution. The higher the resolution, the higher the image file size. For emailing and posting to websites, images should be sized at 72 dpi (dots per inch) (also pixels per inch). For images that are to be published, the resolution needs to be at 300 dpi minimum.

User Services

7. Now we are ready to save the image in an efficient way to minimize file size without losing quality. Photoshop CS has advanced features to help in doing this.

From the main menu, choose File and then Save For Web.

8. The Save for Web window will open across the entire Photoshop window. It will have a preview of your image in the middle.

You can adjust the settings at the right side to get the image size that you need. The preview will show you how the image will look saved at those settings.



In the lower left hand corner of the Save For Web window, Photoshop displays the file type, size, and download time on the Internet.

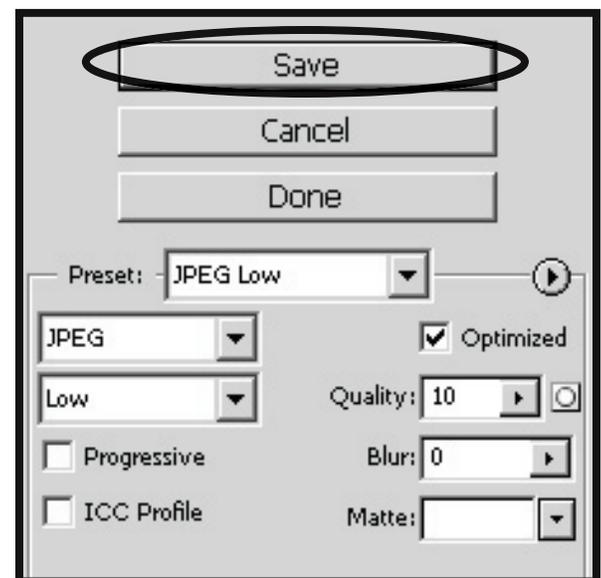


9. Once you click OK in the Save For Web window, Photoshop will then ask you where to save the image with the settings you have selected.

Once the image is saved, the windows close and you are back in Photoshop, looking at the image still in its original state.

When you “saved for web,” you saved a copy of the image file.

Now your image is ready to be emailed or posted to the Internet.



1. Open a damaged image to work on.
From the main menu, choose File and then Open.

2. Look in the Temp folder on the Desktop of your lab computer.

Choose the file
“Bully_damage.jpg.”

3. Choose the Zoom tool.

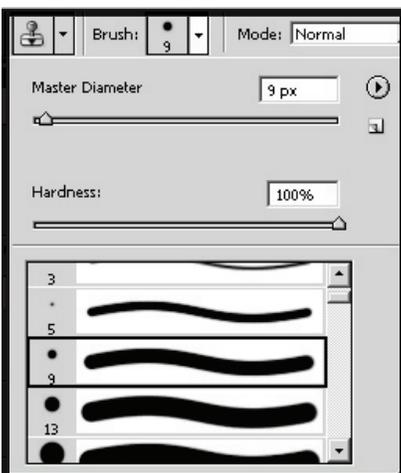
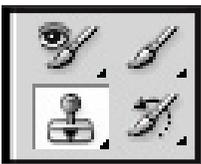
Zoom close to a flaw in the image by clicking on the image.

(To zoom out, hold down the ALT key on your keyboard and click with the Zoom tool.)



User Services

4. Now choose the Clone Stamp tool. This tool allows you to copy areas of an image. You must set the tool to tell the computer where you will be copying from. Do this by first placing your mouse over a good section of the image near the flaw. Then hold down the ALT key on your keyboard and click ONCE. Let go of the ALT key and begin painting over the flaws.



6. Slowly paint over the flaws with the Clone tool.

Retouching takes patience and practice.



The Healing tool can also be used to repair damage. This tool allows you to effortlessly remove dust, scratches, blemishes, wrinkles, and other flaws. It smooths as it copies, whereas the Clone tool only copies the parts of the image.

Use both tools (they work the same) to see which one gives you better results!

Creating a Banner for the Web



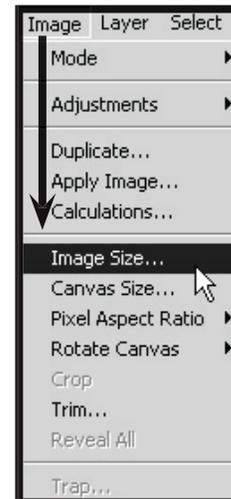
User Services

1. Open the image file named drill_field.jpg from the Temp folder on the Desktop.



2. First resize the image so it will fit into the banner we are creating for a fictitious website.

From the main menu, choose Image and then Image Size.



3. Make the following settings:

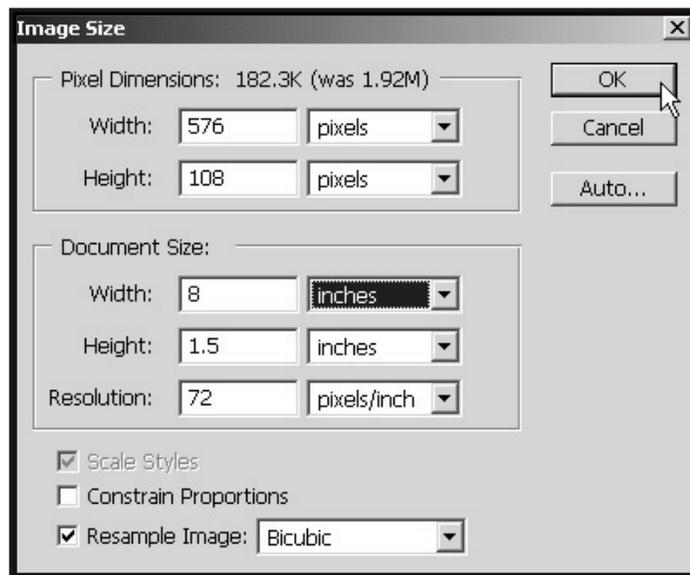
Click OFF Constrain Proportions.

Resolution: 72 dpi

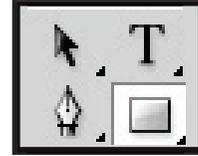
Width: 8 inches

Height: 1.5 inches

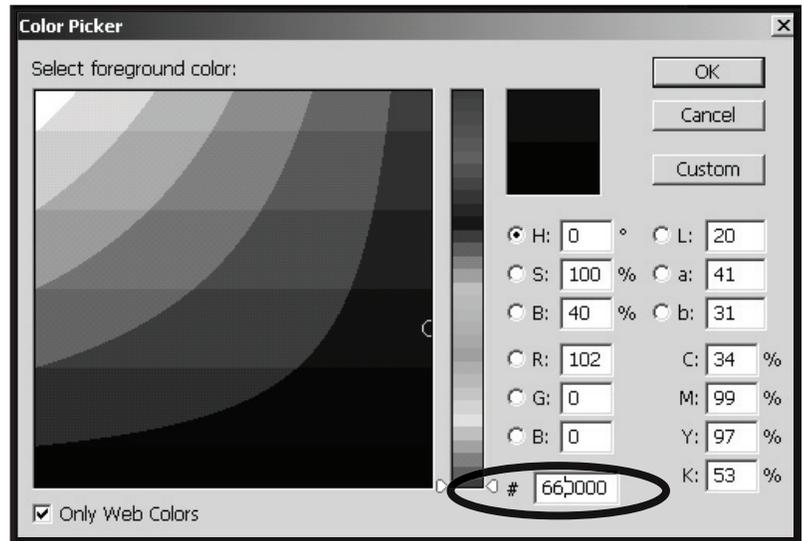
Notice how the file size has changed



4. We will now add a rectangle shape to serve as a background against which we will place text. From the tool bar, select the Rectangle tool.



5. Choose the color for the Rectangle to be. Go to the Color Picker and choose the Web Hex Color: #660000 (maroon).

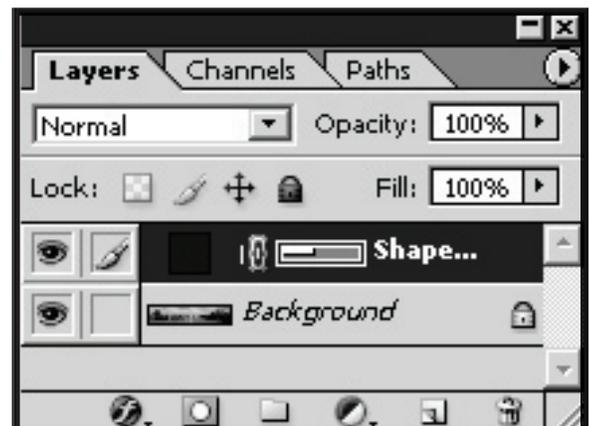


6. Draw a rectangle shape on the Drill Field image that only covers about half of the image.



7. You should notice that a new layer has automatically been created for the square object.

If you do not see your layers panel, go to the main menu under Window and choose Layers.

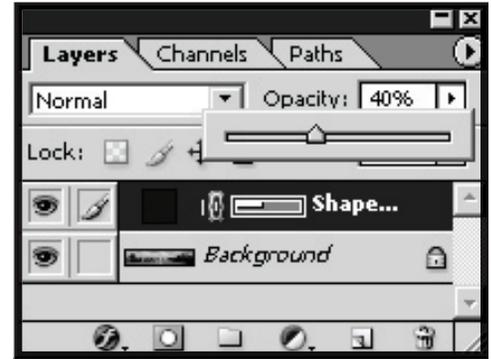
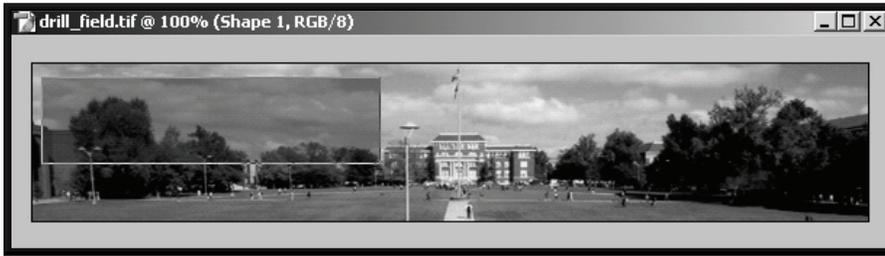


Creating a Banner for the Web



User Services

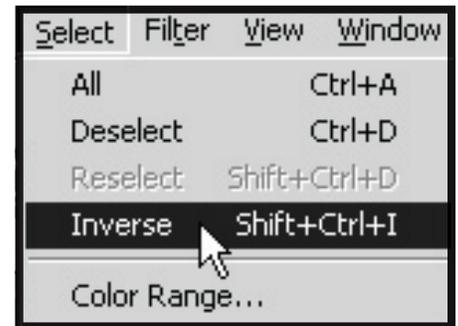
- In the Layers window, make sure you are on the square shape layer. Adjust the Opacity slider bar to 40%. This will make the square shape more transparent.



- We will now add the MSU Wordmark to the banner. Open the file called msu_wordmark_reversed.tif.
- Using the Magic Wand tool, click on the black background area of the wordmark image.



- The black background should be selected. Now we have to make sure that we include all of the black areas in our selection. Go to the main menu and choose Select and then Similar. This will select all of the black areas in the image.



- Now that the black background is selected, go to the main menu and choose Select and then Inverse. This reverses the selection area so we are now selecting the white letters of the MSU wordmark.



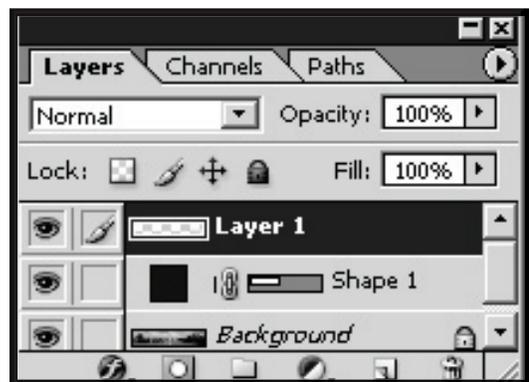
Creating a Banner for the Web

User Services

13. Now go to the main menu and choose Edit and then Copy.
14. Go to the banner image we have been working on (make sure it is the active image) and select from the main menu, Edit and then Paste.
15. Now we must scale the MSU wordmark down a little. From the main menu choose Edit and then Transform and then Scale.

A box will appear around the wordmark. Hold down the Shift Key on your keyboard as you drag a corner of the wordmark to scale it in proportion.

Double click inside the box when you are finished, or press Enter so that Photoshop can perform the scale. Also notice that it is in a separate layer in the Layers window.

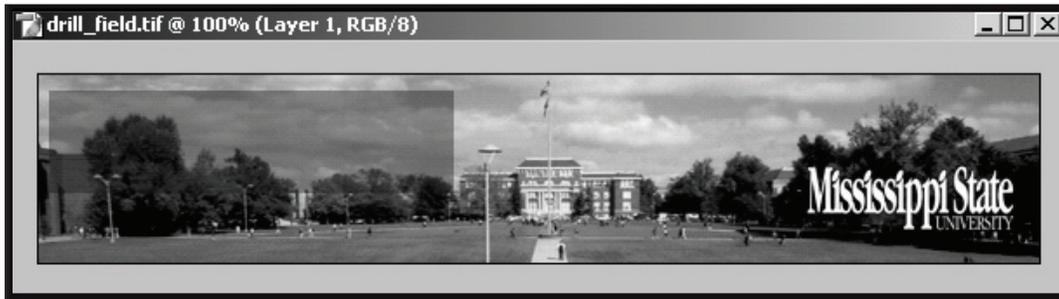


Creating a Banner for the Web



User Services

16. Using the Move tool, move the wordmark to the right side of the banner and place it over the dark trees.



17. Using the Text tool, click in the image to add the text: Welcome to Mississippi State University. Make sure you have the color white selected in the Color Picker.



18. When using text, do not forget to set your Text Options in the top bar of the Photoshop window. Choose your own font, size, alignment, etc.



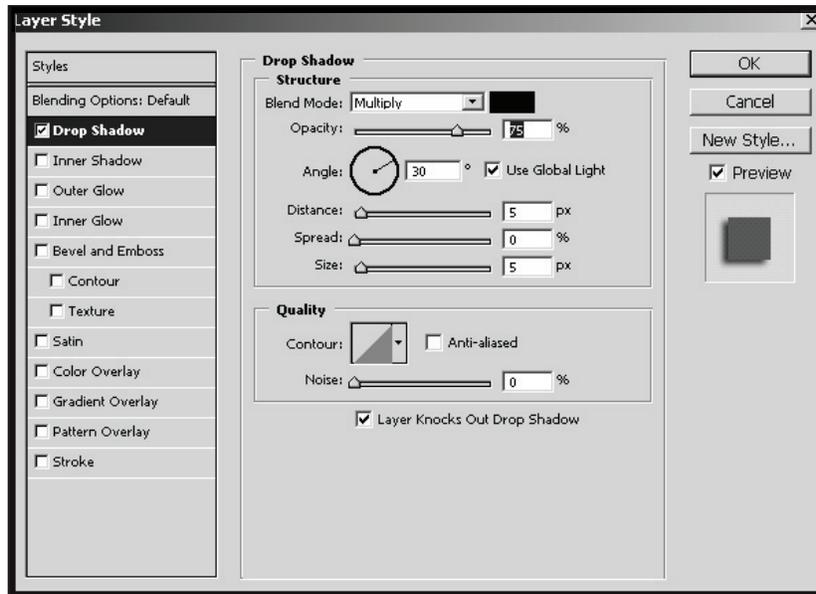
19. You will notice that the text is in its own Layer in the Layers window.

With the text layer selected, click on the small Layer Style Button at the bottom of the Layers window. Choose an effect.

When you choose an effect, a window will open with all of the effects available.



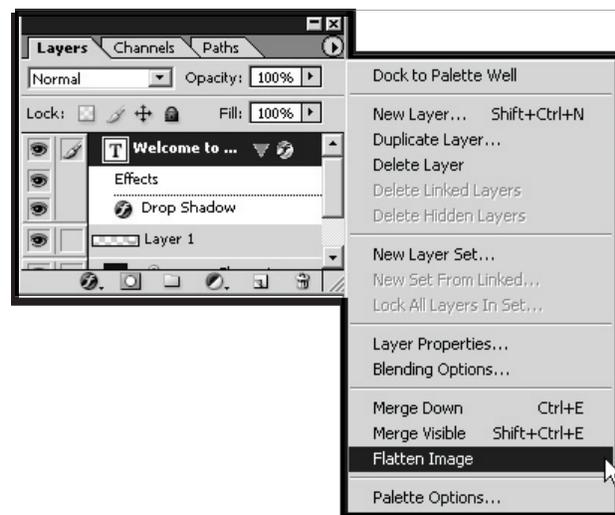
20. The Layer Style window will open with MANY options for text effects. Try different effects and see the change in the text as you do it. You can also apply Layer Styles to any other layer in the project.



21. Now we must flatten the layers in the image to prepare for saving for the Web.

In the upper right corner of the Layers window, click on the small circle that has an arrow on it. Choose Flatten Image from the menu that will open.

Remember, once you flatten an image and save it, there is no way to get the layers back.

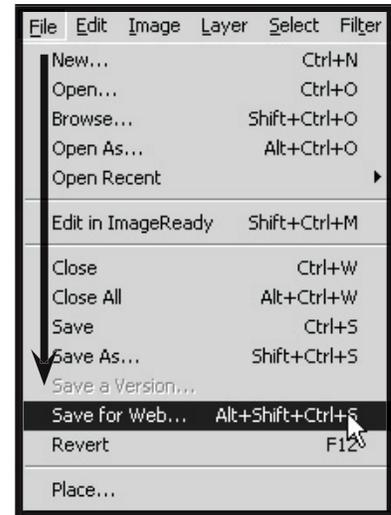


Creating a Banner for the Web

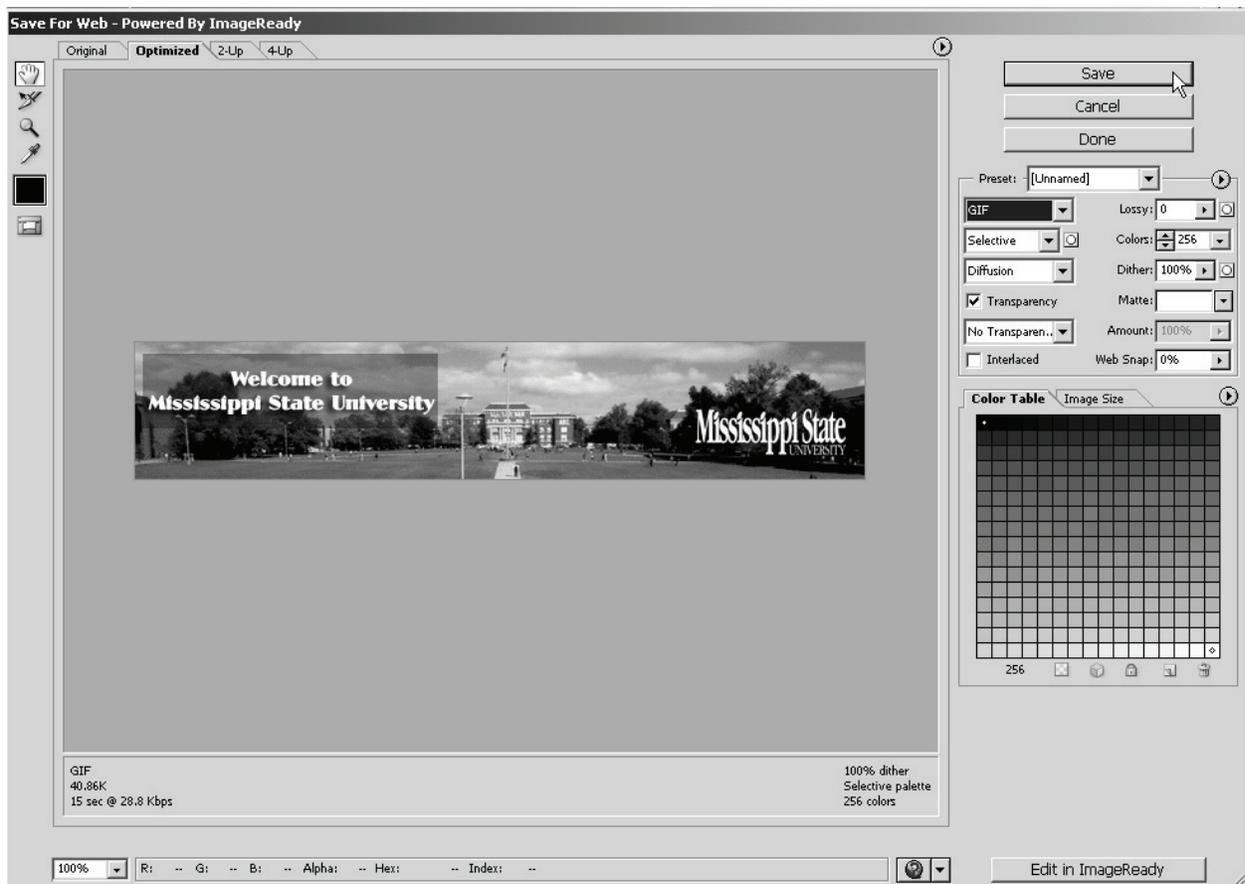


User Services

22. The image is now ready to save. From the main menu, choose File and then Save For Web.



23. A very large window will open with a preview image of the banner. There are several options for saving the image. We will save it as a JPG file. Note that as you change settings, Photoshop tells you the Internet download time of the image if it were saved at the current settings. Click Save when ready.





Creating a Banner for the Web

User Services

24. Save the image in the Temp folder on the Desktop. Name the image web_banner.

25. The image is now ready to be incorporated into a Web page.



PowerPoint Slides

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Introduction to Adobe Photoshop CS

Information Technology
Services

Technical learning, service, and research through an advanced information technology environment.



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Digitizing Equipment

Getting Images into Your Computer

- ▣ Flatbed Scanners
- ▣ Slide Scanners
- ▣ Digital Cameras
- ▣ Video Capture
- ▣ Photo CD



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Scanner Slide or Flatbed

- ▣ A peripheral that converts a physical object (usually something printed on paper) into a digital graphics file.



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Resolution

Resolution is how fine the detail is on a screen or printout.

Types of Resolution

- ▣ Image resolution
- ▣ Bit resolution
- ▣ Monitor resolution
- ▣ Output resolution



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Image Resolution

- ▣ Refers to the spacing of pixels in an image
- ▣ Measured in pixels per inch (ppi) or dots per inch (dpi)
- ▣ Higher the resolution, more pixels in the image
- ▣ 72ppi = 5184 pixels in a square inch
- ▣ 72 pixels high x 72 pixels wide = 5184



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Other Resolutions

- ▣ Bit resolution
 - Also pixel depth. Measurement of the number of bits of stored information per pixel. Determines how much color information is available for each pixel
- ▣ Monitor resolution
 - Defines the number of dots or pixels per unit length of output. Commonly measured as dots per inch.
- ▣ Output resolution
 - The number of dots per inch that the output device (printer, imagesetter) reduces.

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Bit Depth

Bits = Colors

- 3 bit = 8 colors
- 4 bit = 16 colors
- 5 bit = 32 colors
- 6 bit = 64 colors
- 7 bit = 128 colors
- 8 bit = 256 colors



256 colors

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Bit depth drastically affects file size

- 24 bit color
16 million colors
1.55 MB
- 8 bit color
256 colors
516k
- 8 bit grayscale
256 shades of gray
516k
- 1 bit
64k

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Resolution and File Size

- ❑ The **file size** of an image is proportional to its resolution
- ❑ Images with high resolution have greater detail and result in higher file sizes.
- ❑ Web graphics only need to be 72 dpi (monitor resolution). This is a means of security for you and your images.

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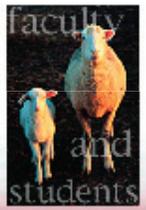
File Types

- ❑ **.PICT**
 - Widely used among Macintosh graphics
 - Intermediary file format for transferring documents between applications
- ❑ **.TIF or .TIFF**
 - Tag Image File
 - Popular bit-map graphic file format
- ❑ **.BMP**
 - Bit-mapped image
 - Contains one color channel

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File Types

- ❑ **.JPEG**
 - **J**oint **P**hotographic **E**xperts **G**roup
 - A universal standard for the digital compression and decompression of still images for use in computer systems
 - File format used for **photographic** images, especially those to be placed on the Internet

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File Types

- ❑ When you save a file as a .jpg you have the option of saving it as a low, medium, high, or maximum quality.
- ❑ This will affect file size, but viewing on the Web shows no noticeable differences.



PowerPoint Slides

User Services

 **File Types** Mississippi State

- ❑ **.GIF**
 - **G**raphics **I**nterchange **F**ormat
 - An extension for **graphic** files in a format developed by CompuServe
 - File format used for **graphic** images, especially those to be placed on the Internet

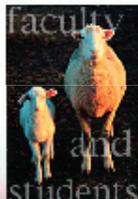
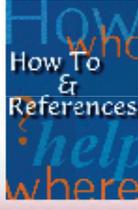
 College of Agriculture and Life Sciences  **LECTURE**

 [CAAS](#) [A&L](#) [Email](#)

 **Create Your OWN Graphics** Mississippi State

- ❑ Scan in images and manipulate them by adding text or combining images.

Use images as clickable buttons

faculty and students **ARIZONA AGRICULTURE**

 **Taking Graphics from the Web** Mississippi State

- ❑ Beware of the Copyright!
- ❑ Find an image on the Web.
- ❑ Right mouse-click on the image and "save file as".
- ❑ Save the file to your computer.
- ❑ Incorporate the image into your web page.

 **World Wide Web** Mississippi State

- ❑ **AEE Courses on the Web**
 - www.ais.msstate.edu/AEE/courses.html

 **AEE 8303**  **AEE 3313**  **AEE 3303**



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