## CHAPTER 2: The Tools Palette

The Tools palette is a floating palette that contains tools that let you view, select and modify documents.
The palette is closed by clicking the close box in the top left corner. The Tools command in the Tools menu [Command-T] is a toggle which opens and closes the palette. Move the Tools palette by clicking on the title bar and dragging it to a new position. The Antialiasing command in the Tools menu is a toggle which turns antialiasing on and off for many tools.

## Additional Tools

Several additional tools are available in the pop-up menu in the upper right side of the Tools palette. When a tool is chosen, it appears above the pop-up pointer when the menu closes.
Tools can be re-arranged within the main tool display and between the display and the additional tools pop-up. See Editing the Tool Palette for more information.

Modifier Keys
Several shortcuts are available by using modifier keys.
Unless otherwise noted under the review for an individual tool, the following are common for all tools:
Shift: constrains the action of the tool to horizontal or vertical movement. Option: changes to the Eye Dropper tool.
Spacebar: changes to the Mover tool.
Spacebar-Command: changes to an enlarging Magnifying Glass.
Spacebar-Command-Option: changes to a reducing Magnifying Glass.
Many tools have features that appear at the bottom of the Tools palette when a tool is selected.

General Tools
The general tools are the Pointer, Mover, Magnifying Glass and Eye Dropper.

Pointer
The Pointer tool lets you move a selection without moving its contents. Clicking outside of a selection with the Pointer does not deactivate the selection; rather it repositions the selection centered on the mouse click. While the Pointer tool is selected, you can open the Mouse Coordinates palette by double-clicking on the Pointer tool.

## Mover

The Mover tool lets you scroll the document when it is too large to fit in the active window. An active selection is picked up and moved like a floating paste; it does not affect the background until deselected.

The three icons at the bottom of the palette control how the document is displayed. The left icon is Normal Window mode which displays all the standard Macintosh window elements as well as Color It!'s magnification pop-up and buttons.
The center icon is Full Screen mode. The document fills the entire screen (except the menu bar) if the view is large enough. If the view of the document is not large enough, a solid color background fills the rest of the screen. The right icon is No Menubar mode, similar to the Full Screen mode except the menu bar is hidden as well. Although hidden, the menu bar will appear when the mouse button is held down as you click in the menu bar area at the top of the screen.
(See Chapter 11, Window Menu for more information on these modes).
Double-clicking on the Mover zooms the window to fill the screen and resizes the document view to Fit. Double-clicking again changes the view to 1:1. Option + Mover drags an outline of a mask. This is useful for positioning when one document is the mask for another.

## Magnifying Glass

The Magnifying Glass tool lets you reduce or enlarge your view of the document.
Clicking and dragging the Magnifying Glass tool over a region fills the window with that region when the mouse button is released.
Double-clicking on the Magnifying Glass tool sets the document view to $1 x$ magnification.
Command + Magnifying Glass tool sets the document view to 1 x magnification and centers the click point in the window.
Option + Magnifying Glass tool sets it to reduction mode.

## Eye Dropper

The Eye Dropper tool lets you pick up a color from the document. When you select it, a color bar and an area selector feature is added to the bottom of the Tools palette.
Clicking in the document fills the bar with the color at the point clicked.
Clicking and dragging fills the bar with a gradient blending from the color where you first clicked to the color
where you released the mouse. The most recent color becomes the foreground, background or frame color depending upon the color region currently selected.
To create a unique set of colors, hold the Shift key down while you click or click and drag between multiple colors.
The graduated bar continues to divide into different subsets. You can select a total of 16 colors or graduated bands.
Clicking the Eye Dropper inside the color bar selects a specific color.
The contents of the color bar can be assigned to the Paint Is and Image Is color bars in the Paint Controls palette by choosing the Current Gradient command.

Clicking on the pop-up at the bottom right corner of the Tools palette changes the size of the sample area the Eye Dropper uses. The color value selected is the average of the pixels in the area chosen.
Double-clicking on the Eye Dropper displays or hides the Colors palette.
Shift + Option + Eye Dropper changes the to the Mover tool.
Selection Tools
The selection tools are the Shape Selection, Lasso, Magic Wand, Zap, Scissors, Crop, and Bezier.
All of the selection tools can be repositioned from the keyboard. Pressing an arrow key nudges the selection 1 pixel at a time. Shift-arrow nudges the selection 10 pixels.
Several of the selection tools (the Shape Selection, Lasso and Magic Wand) tools share the Grow/Shrink Selection
and Selection Calculator features.
The Grow/Shrink Selection opens a dialog box that lets you increase or grow or shrink the current selection
area by the percentage you set in the dialog box. As you move the mouse over the graduated bar, black pointers show the current range selected. The areas added or dropped from the current selection are only those containing the same color values as the current selection. Holding the Command key down selects only colors lighter than the current selection. Holding the Option key down selects only colors darker than the current selection. The Selection Calculator equals (=) button lets you make a new selection. The Plus (+) button or [Command] adds to
the current selection. The Minus (-) button or [Shift] subtracts from the current selection. Selecting with [Command-Shift] selects the intersection of the two selections.

Shape Selection
The Shape Selection tool selects an area of a document. When this tool is chosen, the Grow/Shrink Selection and Selection Calculator (discussed above) and the Shape Selector appear at the bottom of the Tools palette. The Shape Selector offers eleven standard shapes and a custom shape option. Choose a shape by moving the cursor over the shape and releasing the mouse. The chosen shape then appears in the Tools palette.
Choosing the Custom Selection from the shape selector opens a dialog box that lets you set the size and some selection attributes as well as add completely customized shapes for the Shape Selection tool.
Select a shape from the Shape pop-up menu. All of the preset shapes from the shape selector are listed, and can be customized using the Constrain to Ratio (proportional width/height) or Fixed Size buttons. Enter numbers in the Width and Height textboxes for the ratio or fixed size to be used. The units pop-up menu next to the Width and Height textboxes lets you choose from pixels, inches, centimeters, picas or points.
To create a completely customized shape, make a selection in the document
using any of the selection tools. With the selection still active, choose one of the Shape Selection tools, hold down the Option key and double-click on the tool to open the Custom Selection dialog box.
Choose Selection from the Shape pop-up menu.The active selection in the document appears in the square to the right. Choose any of the other options, and click the OK button. The selection is now available as Custom in the Shape pop-up menu, and remains until the process is repeated to create another custom selection.
Checking the Draw From Center command draws geometric shape selections expanding outward from the starting point as the mouse is dragged.
Double-clicking on the Shape Selection tool toggles between the Select All and Select None commands.
Option + double-clicking on the Shape Selection tool opens the Custom Selection dialog.

Lasso
The Lasso tool lets you make a tight selection around an irregularly shaped object.
Color It! defaults to selecting light colors. Clicking on the Lasso Range pop-up lets you select from several modes.
In Normal mode, the Lasso will grab the entire contents of your selection.
Dark Colors mode
selects only darker colors; Light Colors selects only lighter colors.
Modifier keys permit precise control over the range of grays selected. The Option and Command keys change the
display to a graduated bar. Dragging the mouse over the bar selects all grays from black to that point with the Option key or from white to that point with the Command key. As you move the mouse, a pointer moves along the bar with a selection box indicating the
colors chosen. The Wrap Lasso Around Pixels in Range box displays the percentage and color values for the range selected. Release the mouse button when the range you wish is selected, and the Lasso will only select colors in that range.
The Grow/Shrink Selection and Selection Calculator features are the same as described at the beginning of the Selection Tools earlier in this chapter. Double-clicking on the Lasso tool toggles between Select All and Select None.

## Magic Wand

The Magic Wand tool is a very powerful and flexible selection tool. A single click on an document selects the area that has that color. Dragging the Magic Wand reads all of the colors it passes through and selects any contiguous areas with those colors.
Selecting the Magic Wand tool adds a Wand Sensitivity pop-up menu to the bottom left of the Tools palette that controls the range of colors selected when you click or drag the tool on a document (clicking on a color with a
$10 \%$ sensitivity selects all colors within $5 \%$ on each
side of the selected color). Low sensitivity expands the selected range of colors only a few levels; higher sensitivity adds more levels to those chosen with the tool. As you change the sensitivity, a black pointer shows the current level and a gray pointer the previous level.
The Grow/Shrink Selection and Selection Calculator features are the same as described earlier in this chapter.
Double-clicking on the Magic Wand toggles between Select All and Select None.

## Zap

The Zap tool deletes portions of a selection by clicking on them. Multiple regions can be deleted at one time by clicking and dragging a line through them.

## Scissors

The Scissors tool cuts unwanted portions of a selection. Once a portion is separated, the Zap tool deletes the portion from the selection.
To use the Scissors tool, click and drag through a selection to cut off unwanted regions. When the mouse button is released the selection is divided into separate regions. The Zap tool can then be used to delete regions.
With the Scissors tool selected, a Line Width feature appears at the bottom left of the Tools palette. Clicking on it opens a dialog box where the line width can be set. Moving the cursor within the left box resizes the line widths as you move. Holding down the Command key makes the sizing nonproportional. The width of horizontal and vertical lines are displayed in the box at the upper right.

Crop
The Crop tool deletes any areas of a document outside of the current selection. Only the portion within the selection is left as the entire document. After selecting the tool, click on the document and drag to create the selection. Grow handles are placed at the corners of the selection. Click on one of the handles and drag to resize the selection. Moving the cursor inside the selection changes it to a scissor. Clicking crops the document to the selected area.
Double-clicking the Crop tool opens the Crop Options dialog box. You can crop the document to a specific size by entering values in the Width and Height text boxes. Select pixels, inches, centimeters, picas or points from the
pop-up menu at the upper right. Enter a value in the Resolution text box and choose pixels per inch or centimeters per inch from the pop-up menu. If no value is entered in the Resolution text box, the document's present resolution will be used.

## Bezier

The Bezier tool lets you draw an outline with straight segments and smooth curves to create a selection.
Click to set the first point, then click at a different point to connect a straight line with the previous point. Clicking and dragging creates a curved line. To close the selection, click again on the first point. To make the closed outline a selection, click inside the outlined area.
Curved online points also have control handles that control the curves.
Moving the control handles adjusts the curves.
The modifier keys change the way online points and control handles are adjusted. Holding down the Command and Option keys adds another point when clicking on the Bezier line. Selecting an online point with the Command key held down moves the online point.
Selecting a control handle with no modifier keys snaps both control handles to points on a single line with the same length. Selecting a control point with the Command key held down snaps both control handles to points on a single line but maintains the previous lengths. Selecting a control point with the Control key held down permits the single control handle to be moved independently.
The Grow/Shrink Selection and Selection Calculator features are the same as described at the beginning of the Selection Tools earlier in this chapter.

Brush Tools
The brush tools are the Paint Brush, Eraser, Pencil, Air Brush, Blur, Sharpen, Stamp, Smudge, Lighten and Darken.

Paint Brush
The Paint Brush tool applies paint and is used to retouch a document. The first two features that appear at the bottom of the Tools palette when Paint Brush is selected-the Brush Type and Brush Size—are common to most of the brush tools: Paint Brush, Air Brush, Blur, Sharpen, Stamp, Smudge, Lighten and Darken.
The Brush Type pop-up menu contains the different brushes available. The current brush has a square outline around it, and the outline follows the cursor as you move it over the different brushes. To select a different brush type, move the cursor over it and release the mouse button. The solid black brush shapes indicate tools that are not antialiased.
When you click on the Brush Size pop-up (second from the left), a box appears where the brush size can be set. Moving the cursor within the upper left box resizes the brush size as you move. Holding down the Command key makes the sizing non-
proportional. The width and height of the brush is displayed in pixels in the box at the upper right.
When you click on the the Brush Opacity pop-up menu (third from the left) a box opens that controls the transparency of the paint. As you change the opacity by moving the cursor over the bar, a black pointer shows the current
level and a gray pointer the previous level. The percentage readout changes to indicate the current opacity.
Double-clicking on the Paint Brush shows or hides the Brush Options palette. The Brush Options palette lets you set several controls for a brush at one time. As you click on the buttons for each box, the slider at the top changes to reflect the setting for that option. The Opacity functions the same as the Brush Opacity pop-up described above. As you move the button on the slider, the values in the pop-up menu in the box change.
You can add predefined values by clicking on the pop-up and choosing Other... which opens a dialog box where a new value can be typed in the text box. Checking the Add to list checkbox adds the value to the pop-up menu listing.
Add or delete values to the list by choosing Edit... from the pop-up. A dialog box opens with a scrolling list. Click on a value in the list and the Remove button to delete. Typing a new value in the text box and clicking the Add button adds the value to the list.
The Gradient option adjusts the overall level of antialiasing for the brush tools. The amount can be selected with the slider or with the pop-up using the Edit... or Other... choices described above.
A heavy gradient (100\%) creates a harsh edge. A low gradient creates a smoother edge. A 0\% gradient antialiases from the center in a linear manner. The Spacing option adjusts the spacing of the paint/retouching effect in percent from 0\% to $999 \%$. The amount can be selected with the slider or with the pop-up using the Edit... or Other... choices described above.
The greater the spacing selected, the more space between the areas where a brush applies paint. A spacing of $0 \%$ means that the computer does its best to keep up with the mouse. However, if you move the mouse too fast, holes appear in the stroke.
The Repeat option adjusts (in seconds) how quickly Color It! applies paint to the document. A higher repeat rate results in a faster application. The amount can be selected with the slider or with the pop-up using the Edit... or Other... choices described on the previous page.
The Fade option adjusts the type and distance of a brush stroke fade. The top pop-up menu lets you select a distance in inches for a fade.
The bottom pop-up menu lets you select from seven different types of fades. When a pressure sensitive device such as the Wacom or Calcomp tablet is connected, a Tablet option appears at the bottom of the Brush Options palette. The pen may be used just like a mouse for pointing, selecting, and dragging.
When used with the Paint Brush, Air Brush, Blur, Sharpen, Stamp, Lighten, Darken or Smudge tools the stylus pressure can be used to vary tool characteristics such as thickness, opacity, repeat rate or spacing through the pop-up menu.
The Heavier and Lighter commands control the opacity for the Paint Brush or Stamp, the intensity of the Blur, Sharpen, Lighten or Darken and the flow of the Air Brush. The Wider and Thinner commands vary the size of the Paint

Brush, Air Brush or Stamp. The Farther and Closer commands vary the spacing of the tool selected (this overrides the setting in the Spacing option). The Faster and Slower commands vary the repeat rate (this overrides the setting in the Repeat option). This works best with the Air Brush to control the frequency of spray.
The command name indicates the direction in which the variable will change as you increase the stylus pressure (for example, greater stylus pressure with Wider selected produces a wider stroke as you paint).

Note: Each tool saves its own tablet settings between uses.
The percentage setting represents the sensitivity of the stylus. A sensitivity of $50 \%$ means that each change in pressure will result in a corresponding change in the current option. At low percentages, greater pressure is required for even small changes in the option chosen. At high percentages, even small pressure changes result in a large change in the option. The amount can be selected with the slider at the top of the palette or with the pop-up using the Edit... or Other... choices discussed under the Opacity option.

Note: While tablet sensitivity controls the pressure sensitive options, the tablet threshold (usually set in a control panel) sets the pressure level at which the pen begins to respond. Any pressure level applied below this threshold will be ignored by the tablet.
If you are working with a tablet but the Tablet option does not appear, check your connections and the tablet's control panel. If the tablet is turned off or the settings are incorrect, a warning message appears at the bottom of the palette. Once the tablet is turned back on or readjusted, the Tablet option box will display.
The Paint Controls command opens a palette that controls paint, paste and filter operations.
The Paint Range area of the palette can be hidden by clicking on the small level icon on the right side of the palette.
The Mode pop-up menu controls the effect the operation has on the document. The slider determines the percentage of the effect. Normal covers the document with the colors added.
Blend blends the colors you are adding with the document. For paste operations, the slider adjusts the image in real time. For paint and filter operations, the slider must be set before the operation is performed. Add lightens the colors you are pasting, painting or filtering to the document. For paste operations, the slider adjusts the image in real time. For paint and filter operations, the slider must be set before the operation is performed. Subtract darkens the colors you are pasting, painting or filtering from the document. For paste operations, the slider adjusts the image in real time. For paint and filter operations, the slider must be set before the operation is performed.
The Paint Is and Image Is pop-up menus let you select from several different
options:
The All Colors command uses every color in the Colors palette. Selecting All Colors for both operations performs a normal paste, filter or paste operation. The Current Gradient command uses the colors in the Colors palette gradient. The gradient is created when you drag the Eye Dropper tool across the image or when you drag the Eye Dropper from one color to another in the Colors palette.
Clicking the color bar in the Equal To command opens the standard Apple color picker, where you can choose any color you wish. The colors in the image which are equal to the one selected will be affected by the operation to be performed.
Clicking the color bar in the Not Equal To command opens the standard Apple color picker, where you can choose any color you wish. The colors in the image which are not equal to the one selected will be affected by the operation to be performed.

## The Eraser

The Eraser tool wipes away the image leaving only the background color. Two features appear at the bottom of the Tools palette when the Eraser is selected. The left feature lets you select either a square or round shape. The current shape has an outline around it.
The pop-up menu on the right side lets you select a size for the Eraser. The current size has an outline around it. The Eraser Size dialog lets you select a size for the tool by moving the cursor over the shape you wish.
Double-clicking on the Eraser erases the entire document, leaving only the background color.
Option + Eraser acts as an un-erase tool, returning
the erased area to its state before the last operation was performed.
Pencil
The Pencil tool changes selected pixels to the foreground color.
Two features appear at the bottom of the Tools palette when the Pencil is selected. The left feature lets you
select either a square or round shape. The current shape has an outline around it.
The pop-up menu on the right side lets you select a size for the Pencil. The current size has an outline around it. The Pencil Size dialog box lets you select a size for the tool by moving the cursor over the shape you wish. Double-clicking on the Pencil tool toggles between $1 x$ and $8 x$ views of the document. The $8 x$ magnification makes pixel editing with the Pencil easier.

## Air Brush

The Air Brush tool sprays the current foreground color on a document. Selecting the Air Brush tool adds a number of pop-up features to the bottom of the Tool palette. The Brush Type and Brush Size pop-ups are described under the Paint Brush tool earlier in this chapter.

The Spray Options pop-up adjusts the Flow and Repeat Rate of the tool. Entering a higher Flow setting applies more paint to your document. A lower Flow setting allows more of the document to show through. The Repeat Rate adjusts (in seconds) how quickly paint is applied to the document. As you change the settings by moving the cursor over the bars, a black pointer shows the current level and a gray pointer the previous level. The percentage readouts change to indicate the current settings. Double-clicking on the Air Brush displays the Brush Options palette. Shift + Option + Air Brush changes to the Eye Dropper tool.

Blur
The Blur tool smooths or blurs the document. Selecting the Blur tool adds a number of pop-up features to the bottom of the Tools palette. The Brush Type and Brush Size pop-ups are described under the Paint Brush tool earlier in this chapter. The Blur Intensity pop-up opens a Blur Intensity chart that adjusts the intensity of the tool as Light, Medium, or Heavy. The heavier the setting, the larger the sampled region of the document used in the blur process.
The smoothing effect of the tool does not accumulate as you make multiple passes over the same region-the smoothing is applied only once. To increase the smoothing effect release the mouse then press and drag over the region again.
If you want a finer adjustment, open the Brush Options palette and use the Intensity option to change the percentage. The amount can be selected with the slider or with the pop-up using the Edit... or Other... choices described under the Paint Brush section earlier in this chapter.
Double-clicking on the Blur tool displays/hides the Brush Options palette. Shift + Option + Blur changes to the Eye Dropper tool.

Sharpen
The Sharpen tool enhances edges to bring out detail. Selecting the Sharpen tool adds several pop-up features to the bottom of the Tools palette. The Brush Type and Brush Size pop-ups are described under the Paint Brush tool earlier in this chapter. The Sharpen Intensity pop-up opens a Sharpen Intensity dialog box that adjusts the intensity of the tool as Light, Medium, or Heavy. The heavier the setting, the larger the sampled region of the document used in the sharpen process.
The sharpening effect of the tool does not accumulate as you make multiple passes over the same region-the sharpen is applied only once. To increase the sharpening effect release the mouse then press and drag over the region again.
If you want a finer adjustment, open the Brush Options palette and use the Intensity option to change the percentage. The amount can be selected with the slider or with the pop-up using the Edit... or Other... choices described under the Paint Brush section earlier in this chapter.
Double-clicking on the Sharpen tool displays the Brush Options palette.

Shift + Option + Sharpen changes to the Eye Dropper tool.

## Stamp

The Stamp tool paints a copy of a document from a point you choose anywhere else in that document or in another document.
Selecting the Stamp tool adds a number of pop-up features to the bottom of the Tools palette. The Brush Type and Brush Size pop-ups are described under the Paint Brush
tool earlier in this chapter. The Stamp Operation pop-up opens the Stamp Operation dialog box with several choices.
Clone Relative and Clone Aligned allow you to select a region of a document by holding down the Option key and clicking on the portion of the document you want. You can also select a portion of another document. When painting begins, a copy of the selected image is painted on top of the current image. Clone Relative paints a copy of the selected
image from the exact location you first selected, and each paint operation starts anew from the point set with the Option key. Clone Aligned aligns the image that you are painting with the original image and locks the copied image to the point where you begin painting.
The Snapshot commands differs from the Clone commands in that an image of the entire document is taken when the Snapshot commands are first applied. Unlike the Clone commands, any subsequent painting does not reflect changes made by the earlier Snapshot painting-the original image is still available for painting.
Last Undo returns the stamped area to its state before the last operation performed. Last Saved returns the stamped area to its state before the last save.
Double-clicking Stamp opens the Brush Options palette.
Option + Stamp and clicking sets the reference point for the Stamp tool.

