

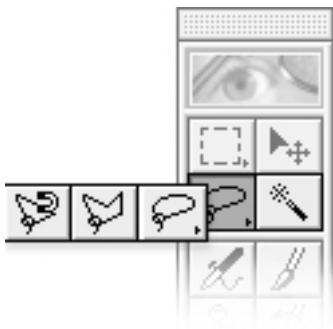
BY Ben Willmore

Photoshop

INSTANT EXPERT

Selection Tools, Part II

In this second installment of "Photoshop Instant Expert," we will continue to establish friendly terms with Photoshop's selection tools, this time, the Lasso and the Magic Wand, two of the essentials. Mastering them is critical to your success in Photoshop. Learn them like the back of your hand. Love them like your own. These tools control precisely where your image will be changed when you paint, apply a filter, or make an adjustment. And when you use them in conjunction with other features and keyboard commands, Lasso and the Magic Wand become even more powerful.

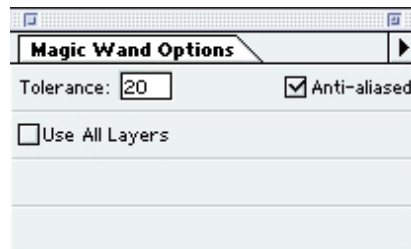


From right to left: Magic Wand, Lasso, Polygonal Lasso, Magnetic Lasso.

Magic Wand Tool

The Magic Wand tool is used to make selections based on color. You first specify the range of colors you would like to select (known as the Tolerance) and then click on the color

you would like to have selected. To access the Tolerance setting, double-click on the Magic Wand tool to open its Options palette. A Tolerance setting of 10 would select all of the colors that are 10 shades brighter or darker than the one you click on.



The Tolerance setting determines the range of colors Photoshop will select.

The main problem with this tool is that it doesn't always deliver the selection you want with the first click. But if you know a few choice keyboard commands, it becomes much more useful.



A single-click with the Magic Wand doesn't always deliver exactly what you expect.

First, if you hold the shift key while clicking, Photoshop will add to the current selection, so you can

click multiple times to expand the area that is being selected. Each time you click with the Magic Wand, you can use a different Tolerance setting.



By shift-clicking with the Magic Wand (in this case three times with a tolerance of 70 and twice with a tolerance of 20), you can add more areas to the selection to achieve the desired result.

You'll probably find that even when you shift-click, you'll be wanting to change the Tolerance setting quite a bit. You can quickly do that by pressing return/enter, entering a tolerance number, and pressing return/enter again. Or, instead of typing the number, you can use the up and down arrow keys to increase or decrease the tolerance setting; remember to press return/enter first to highlight the setting.

Often, you'll find that the background of an image is much simpler to select than the subject of the photo. When that is the case, you can use the Magic Wand tool to select the background and then choose **Select>Inverse** to get the opposite of what you originally selected.



To select these objects, I used the Magic Wand to select the background, then chose **Select>Inverse** to extract the subject.

If there is more than one object in a photograph, you might need to

refine your selection by using a neat little keyboard command. By holding down the shift and option/alt keys at the same time, you can trace around an area to limit the current selection to that area alone.



I dragged around the area I wanted to select (top) while holding shift and option/alt. Result of intersecting the selection (bottom).

The Magic Wand can also be a real help when you crop an image that contains a white background. There is usually no good reason to keep extra white space in your images. The white area just makes your file size larger and it isn't used when printing. If you visually crop the image using the Crop tool, it is too easy to unwittingly cut off the edge of a shadow.

Try this technique to remove extra white space: First, double-click on the Magic Wand tool in the toolbox, then set the Tolerance to 0—that should force it to select only the exact color you click on. Now click on an area that you know is pure white. If you are not sure where to click, open the Info palette and look for an area that reads 0C, 0M, 0Y, 0K or 255R, 255G, 255B (these figures indicate pure white). Next, choose Select>Inverse and then turn on the rulers by

choosing View>Show Rulers (cmd/ctrl-R). Now, drag out a guide for each side of the image and move them until they snap to the edge of the selected area.



Make sure you have guides placed for each side of the object before you use the Crop tool.

Finally, use the Crop tool to create a cropping rectangle that is the same size as the rectangle created by the four guides (it should be easy, because the Crop tool will snap to the guides).

If you have a background with noise, you will often end up with "twinklers," single pixel areas that are not selected. If that happens, choose Select>Modify>Smooth and use a setting of 1. That should rid you of the dreaded twinklers.



Apply the Select>Smooth command with a setting of 1 to rid your selection of single pixel selections (a.k.a., "twinklers").

If you ever find that the Magic Wand is not acting properly, there's a good chance that another option is in the way. Double-click on the Eyedropper tool and make sure the

Sample Size pop-up menu is set to Point Sample. Otherwise, the Magic Wand will take an average reading of the area around where you click, instead of looking at only one pixel.



Left: Point Sample. Right: 3x3 Average.

If you are working on a multi-layered document, you might notice that the Magic Wand is sensitive to only the active layer, and ignores the information on the others. If you would like this tool to see all the layers instead of just the active one, turn on the Use All Layers checkbox in the options palette (in Photoshop Version 4.0 and earlier, this feature is named Sample Merged).

Grow and Similar

Photoshop's Grow and Similar commands work much like the Magic Wand tool. But instead of clicking and having Photoshop look at a single pixel to determine the color you want, Grow and Similar allow you to start with a selection, and then expand it to include colors that are similar to what is already selected. This can be immensely useful when the area you would like to select varies a lot or contains multiple colors. Both Grow and Similar use the Tolerance setting that is specified in the Magic Wand options palette.

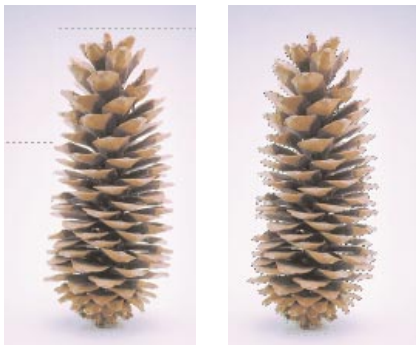
Select>Grow will select only areas that are continuous—as if the selection is a big rubber band that stretches across colors similar to the ones already selected, but it cannot break apart into multiple selections. If you need to select areas that are spread out (not touching others), then you'll want to use Select>Similar instead.



Start by making a selection that includes most of the colors you would like to have selected.



Specify the Tolerance setting you would like to use, then choose **Select>Grow**.



Left: Simple selection that includes the general colors desired. Right: Result of choosing **Select>Similar**—even the areas in the middle of the object were selected.

Lasso Tool

The Lasso tool is used to create free-form selections. All you need to do is click and drag across your image, drawing any shape; when you let go of the mouse button, that shape becomes selected. It is important to create a closed shape; otherwise, Photoshop will close the shape for you by drawing a straight line from where you released the mouse button to where you started the selection.

The Lasso tool is a great backup when other selection tools won't deliver the desired result. It allows



Left: The mouse button was released without creating a closed shape. Right: Photoshop closes the selection with a straight line.

you to do it the “manual” way by tracing around what you want selected.



The Magic Wand tool would not do a good job on this image, because the subject is too similar to the background. I'd switch to the Lasso tool.

I recommend that you zoom-in on your image before using the Lasso so you can really see what you're doing. At first you'll run into a little problem—you can no longer see the entire object you are attempting to select. Adobe added a wonderful feature in Photoshop 5.0 that takes care of this. You can hold down the spacebar and drag to scroll around your image while you are in the middle of making a selection (but don't let go of the mouse button, or else Photoshop will finish the selection for you). You can even zoom-in and out on your image using standard keyboard commands—BUT, Photoshop does not keep the cursor over the same spot on your image, so remember that you can seriously mess up your selection if you do that.

The Magic Wand tool doesn't always deliver perfect results, but that doesn't mean you can't use it to give you a start, which you can later refine with the Lasso tool.



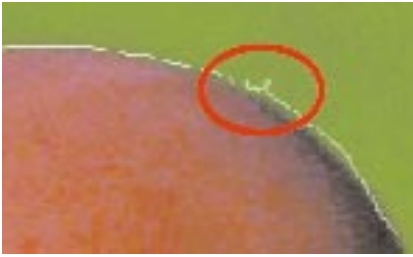
After shift-clicking five times with the Magic Wand tool, I switch over to the Lasso tool to fine-tune the results.

Whenever you let go of the mouse button, Photoshop assumes that you would like to finish the selection that is in progress—that is, unless you hold down the option/alt key. Then Photoshop assumes you would like to create a straight line segment. While the option/alt key is held down, each click creates another straight line segment. If you would like to go back to creating a free-form shape, just start to drag again.



Hold down the option/alt key before you release the mouse button to create a straight segment in your selection.

Whenever I'm forced to use a mouse to select items with the Lasso tool (I'm very big on graphics tablets), I inevitably run out of space on the mouse pad and have to lift the mouse and shuffle it back to the middle of the mouse pad to continue. Well, as you know, it is next to impossible to lay down the mouse without moving it a little bit, and if it happens while you're using the Lasso tool, it can really botch the selection.



It's difficult to avoid accidentally moving the cursor when you run out of space on your mouse pad.

To prevent this from happening, hold down the option/alt key while you trace around the object. That way, you can let go of the mouse button while you move it to the middle of your mouse pad, and then reposition it where you want it, and begin dragging again. Photoshop simply thinks you want a straight line, but the secret is to never click away from where you released the mouse button. It sounds more complicated than it

is. Just give it a whirl and you'll see what I mean.

Polygonal Lasso Tool

When you need to select objects with mainly straight edges, you'll want to switch the Polygonal Lasso tool. With this tool, you click in multiple areas and Photoshop connects the dots with straight lines. To create a freeform shape, you'll need to hold down the option/alt key and then drag. To finish your selection, either click where you started the selection or double-click on your image.

In the next installment of "Photoshop Instant Expert," we'll explore the ingenious Magnetic Lasso tool. Once you've tried it, you won't be able to live without it. In the meantime, be sure to check out all the free tips I provide on my Web site: www.digitalmastery.com. ◀



The Polygonal Lasso tool was used to select the windows. I would need to option/alt-drag to select the curved windows at the top of the room.

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