Getting Selective

Many photographers only use tools that allow them to adjust the complete digital image. They adjust the image as best they can, making compromises about color balance, for example, when certain areas of the image cause problems. The sky might be too magenta, but it can't be adjusted further because then the rest of the image looks too green. These adjustments are all about compromise rather than control.

One of the many ways to exercise greater control over the image is to create selections so that adjustments can be targeted to specific areas of an image. The first step, of course, is creating a good selection. This can involve using the tools built into Photoshop, as well as using some specialized techniques that allow you to build a selection from the contents of an image. Once a good selection is made, the selected areas can be modified independent of the rest of the image, which provides a great deal of control over the final result.

The Basic Tools

The Marquee tools aren't tremendously useful for most photographic images, because they only allow you to create rectangular or elliptical selections. These certainly have their place, but don't offer maximum control in selecting particular areas of an image you wish to optimize.

The Lasso tools are a bit more helpful, although some effort can be required to get a good selection. The Polygonal Lasso tool is only helpful for making selections comprised of straight lines, which isn't too many images when you're primarily involved in nature photography. The Magnetic Lasso tool can be very helpful for creating rough selections, but it doesn't offer great precision. I think of the Magnetic Lasso as a good way to make a very rough selection quickly, but you'll then need to fine-tune the selection using other tools. The standard Lasso tool is very flexible, but requires that you draw the selection by hand. This can be both tedious and time-consuming, so isn't a favorite option. The process is much easier if you use a tablet such as those offered by Wacom (www.wacom.com), but because you're drawing the selection by hand it is still a chore.

The Magic Wand

When the Magic Wand tool lives up to its name, it is a wonderful tool indeed. Unfortunately, much of the time it doesn't seem quite so magical. I think much of the problem is that photographers expect too much of it. They'll spend a great deal of time trying to find the perfect Tolerance setting and the perfect location to click on so they can say they made the selection with one click. Never mind that it took them hours to find the right Tolerance and pixel to click on in order to achieve that one-click selection. Instead, I recommend keeping the Tolerance setting slightly lower than needed, and building up the selection in stages by using the Add to Selection option on the Options bar (or holding the Shift key as you click on additional areas to add to the existing selection). This allows far more precision as you build up the final selection. Don't forget that you can change the Tolerance setting for every click of the Magic Wand tool, so that you can gradually build up the selection as you get closer and closer to the edge of the area you wish to select.

Help With Layers

Another option for the Magic Wand tool that seems to be seldom used is the ability to "Use All Layers" when using this tool. With this option selected, all layers on the Layers palette will be considered when you click on an area to sample in the image. Without this option set, only the currently active layer will be considered when creating a selection with the Magic Wand tool.

The great thing about the "Use All Layers" option for the Magic Wand tool is that it allows you to better control what pixels will be selected. For example, you can create a new adjustment layer to exaggerate contrast in the image, so that the areas you need to select will stand out better. You could also make adjustments to saturation and color balance in the image to make the job of the Magic Wand tool easier, yielding better results. Because these exaggerated adjustments are created on an adjustment layer, you can simply throw them away when you're finished creating a selection. Next time the Magic Wand can't quite select the pixels the way you want it too, see if exaggerating differences among pixels in the image using an adjustment layer can be used to help out. See Illustration 1.

Color Range

The Color Range selection tool is one that doesn't seem to get much use. It functions very much like the Magic Wand tool, so is relatively easy to understand if you have worked with the Magic Wand.

The Color Range dialog box allows you to use an eyedropper to click on an area of the image you'd like to select. The Fuzziness setting in the dialog box allows you to adjust the sensitivity of the Color Range selection. This control behaves similar to the Tolerance setting for the Magic Wand, with an important difference. The Tolerance setting for the Magic Wand tool helps determine what range of pixel values will be included in the final selection. The Fuzziness setting, on the other hand, determines how "fuzzy" the edge of the selection will be. In other words, the higher the Fuzziness setting, the more pixels will be selected overall, but they will only be partially selected outside the initial range of pixels. Therefore, the effect is that of a feathered edge on the final selection.

In general, rather than using a high Fuzziness setting, it is best to add multiple sample points to the range of colors being selected, to create a larger selection. This is done by using the "plus" eyedropper to click on additional areas in the image to add to the selection. For example, if selecting a sky you may need to sample the blue sky along with the white and gray portions of clouds in the sky. This will build up the range of colors that the Color Range command will select, with the Fuzziness effectively determining the amount of feathering applied to the final selection.

The Selection Preview option in the Color Range dialog box allows you to preview the selection in the full image rather than the thumbnail view of the dialog box. This is largely a matter of preference, although I generally prefer to use the Black Matte or White Matte options, depending on the brightness of the selected area. I use Black Matte for bright areas, and White Matte for dark areas. See Illustration 2.

Channel Basis

Another great technique is to build a selection from a channel. First, go to the Channels palette and click on each of the color channels in turn to see a grayscale version of that channel. Decide which channel has the best contrast defining the area you want to select. Then drag that channel down to the New Channel button at the bottom of the Channels palette. Select Image > Adjustments > Levels from the menu, and enhance the contrast of the area you want to select by moving the black and white points in. You want to move them in very far, exaggerating contrast along the edge of the area you want to select, so that the full image will consist of only black or white. Then click OK to apply the change.

The idea is that all areas on this duplicate channel that are white will be selected, and all black areas will not be selected. For example, let's assume we're trying to select the sky, so we have maximized contrast along the horizon. We may end up with white spots in the area below the horizon, meaning they will be selected. Since we don't want them selected, we'll want to make them black. Simply use the Brush tool to paint those areas with black. Likewise, you can paint with white in areas that you want selected to help ensure all required pixels get selected.

When you are finished optimizing this duplicate channel, simply hold the Ctrl key (Command on Macintosh) and click on the thumbnail for this channel. A selection will be created defining the areas that were white, with black areas not selected. You can inverse the selection after creating it if needed by choosing Select > Inverse from the menu. When you're finished with Channels, click on the RGB thumbnail to return to your full-color image with the selection active. See Illustration 3.

Saving Selections

Once you've put the effort into creating your selection, it is a good idea to save it. Simply choose Select > Save Selection from the menu and give the selection a name that will make sense to you. This selection will be saved as part of the image file, so you can retrieve the selection at any time by choosing Select > Load Selection from the menu and choosing the saved selection by name.

Making Selections Useful

A selection doesn't do you any good by itself, but it becomes incredibly powerful when making adjustments to your images. Once you have a selection active, create a new adjustment layer and it will automatically be masked based on the selection so that changes will only affect the areas that had been selected. This opens up a whole world of flexibility when adjusting your images, with no limits except your skill at creating the selections in the first place. That skill, of course, comes with practice.

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About Tim Grey...

Tim enjoys sharing information about digital imaging as much as he enjoys learning it in the first place. Tim publishes an almost-daily [Digital Darkroom Questions](#) (DDQ) e-mail service that provides a forum for photographers to have their questions related to the digital darkroom answered. He is editor of *The Digital Image*, a quarterly journal published by [George Lepp](#). He also teaches courses to help photographers master the digital darkroom at the [Lepp Institute of Digital Imaging](#).

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