

Understanding the Saturation Mask

Before actually using the Saturation mask, it's worth taking a brief look at it to get an idea of the information it contains. Looking at the original image and the Saturation mask side by side makes it's pretty clear how this mask works (*Figure 15*). Areas of high saturation, i.e. color purity, are white or very light on the mask. The red and yellow in the word "GRILL" and the yellow in the French fries are good examples. While it's more difficult to tell when looking at the image, Photoshop has also determined that the words "OPEN 7 TO 7" are also composed of relatively pure colors as seen by their lightness in the mask. Photoshop already knows the saturation level of every pixel as was seen when the Color Picker was discussed in the *Introduction*. Creating the mask is the way to access to this valuable information, which may not be obvious when looking at the image.

Areas of unsaturated color in the image appear very dark in the mask. Unsaturated colors are the grays and washed-out colors, which, by definition, are less intense and less pure. The background of the sign, the gray post, and the gray-green trees are examples of unsaturated colors.

Figure 15



Original image.



Saturation mask.

But there are also lots of middle grays in the mask—the sky for example and the word "Gearhart." In fact, there's a whole range of gray tones in the mask with enough variation so that it's easy to make out the original image. A mask, as was discussed in the [Luminosity Masks tutorial](#), is graphical representation of a selection. The "white reveals, black conceals" rule applies to all masks. Applying this to the saturation mask means that an adjustment through the mask would affect the saturated colors (the light areas of the mask) the most and the unsaturated colors (the dark areas) the least. The amount of adjustment that occurs through the middle gray tones of the mask will depend on their gray value. Light grays allow more adjustment to occur and dark grays allow less.

This gradation of tones in the Saturation mask leads to one of its most important properties: **the selection described by this mask is completely self-feathering with respect to the original color image.** Since the mask was created from the image itself, it is a perfect continuous-tone grayscale rendition of the color image's saturation levels. This means that all saturation adjustments through the mask will blend perfectly and continuously across the entire frame. There will be no selection lines or obvious edges. The mask insures that even extreme adjustments to saturation will merge seamlessly from one pixel to the next.

So just like with Luminosity masks, which provide self-feathering selections of tonal values, the Saturation mask provides a self-feathering selection for saturation values. It's a little difficult to think of saturation in the same manner as brightness and contrast, but that's where the Saturation mask brings us. It might be a concept that's not immediately obvious, but it will hopefully become clearer as we start using the masks.