Making Difficult Selections with the New Refine Edge Options

by Photographer Raymond Klass

In this article, I will be presenting some tips for making difficult selections using Photoshop CS5s new selection techniques. By using a combination of tools and the re-designed Refine Edge dialogue box, selecting areas with fine detail has been made much quicker and easier.

For this exercise, I will be taking the sky from one image and moving to another. We will first need to isolate the undesirable sky, remove it, and position the new sky into place. The most difficult and time consuming part of the process is isolating the undesirable sky – in the selected windmill image, there are jagged branches, holes in the windmill blades, and lots of fine detail that needs to be precisely masked to make this manipulation work. This is precisely what the new refine edge dialogue will make easier.

Step 1. I've opened 2 images in Photoshop, and arranged them as layers in the same document. I've placed the image with the sky we'll be removing above the image with the sky I want to use instead. This way, when we remove the cloudy sky, the sunrise sky below will show from underneath.

Step 2. The first step in removing the sky is to begin by making a quick selection that encompasses the majority of what we want to remove. The sky is a pretty uniform gray, and so I'll be using the Magic Wand to make an initial selection. Remember that this initial selection doesn't need to be perfect. We'll be refining it throughout the process.

The Magic Wand works by selecting pixels of a certain similarity – the tolerance setting controls how close in color and tone the pixels must be for Photoshop to include them within the selection. The larger the tolerance, the further apart in color and tone pixels can be for Photoshop to consider them close enough to select. For this exercise, I'll be using the default tolerance of 32.
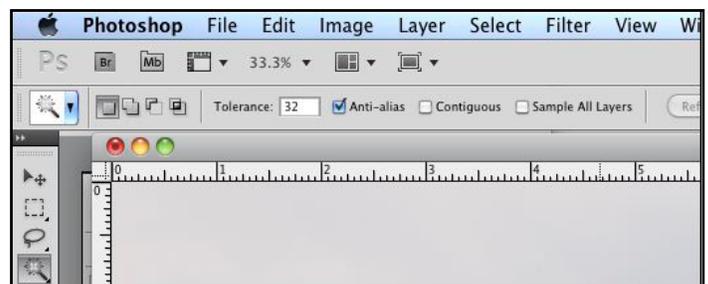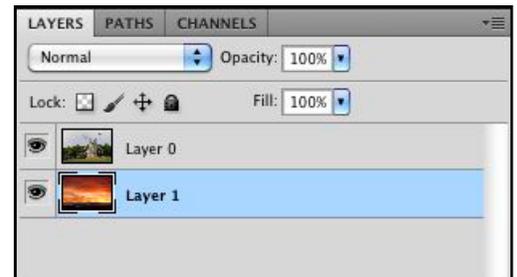
The second option that we'll be adjusting before using the tool is the check box that reads Contiguous. You will want to de-select this option. By de-selecting the option, you are telling Photoshop that the pixels it selects need to be related in color and tone, but they do not need to be directly next to each other. The reason you'll want to uncheck this is so that Photoshop will select the pixels in the inside of the windmill blades, which are part of the sky, but are physically separated by the wooden pieces.


Make sure that the upper layer with the undesirable sky is selected (highlighted blue in the layers panel) – if it isn't, click on the layer to highlight it. With our Magic Wand options set, simple take the Magic Wand, and click on an area of the sky that looks like it represents the sky well. By this, I mean an area that is neither the brightest nor darkest, but is somewhere in the middle. The wand should do a good job of selecting the majority of the sky; we'll refine the selection in the steps to follow.
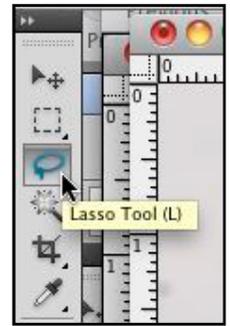
Step 3. It appears Photoshop has selected a majority of the sky, but it has also selected some areas that shouldn't be selected. To eliminate these, we'll use the Lasso tool. Select the Lasso tool from the tool bar, and click the Subtract From Selection option at the top of the tool options bar. This will subtract anything you draw a loop around from the current selection. Simply loop the areas Photoshop has selected that are not part of the sky. In my example, there are a few spots on the lower blade Photoshop thought were sky, so I will use the Lasso to eliminate these areas from the selection.
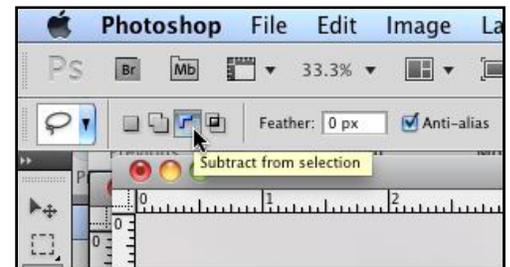
Step 4. With the sky selected, I want to let Photoshop know that the sky is the area we don't want to keep. To do this, I will need to invert the selection – this will result all the areas other than the sky being selected. Photoshop needs to know which area I will be keeping, so by inverting the selection, Photoshop will know to remove any area not selected – in this case, the sky. To invert the selection, click the Select menu, and choose Inverse.
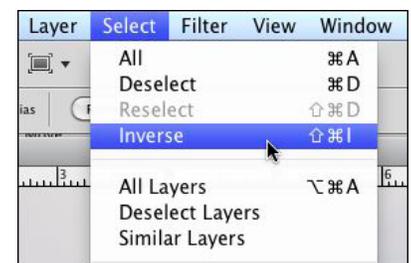
Step 5. With the rough selection finished, we will take the next step to refine the edge and create the composite. You should still have the lasso tool selected – if not, go ahead and click on any selection tool in the tool bar. At the top option bar, you should see a large button labeled Refine Edge. Click on this button to bring up the Refine Edge Dialogue box.

Step 6. At the top of the box that appears, you will see a drop down menu labeled View Mode. Click on this menu, and choose the option titled On Layers (L). This option will allow you to see the image with the sky masked out, revealing the underneath sunrise image. The composite should be starting to take shape – in the next steps, we'll further refine the edge details.

Step 7. The next section down, Edge Detection, is perhaps the most exciting new feature with the redesigned Refine Edge dialogue. This area controls where Photoshop looks for edge detail, and is used to define exactly where the transition between the area to hide and the area to leave behind is. There are three main components of the section.

The Smart Radius checkbox allows Photoshop to change the width of the edge area based on whether it detects hard or soft transitions. This can be helpful if the detail in your image varies between soft, long transitions, and hard edges. This isn't the case for this image, so I would leave it unchecked.

The Radius slider is a manual way for you to define the width of the area in which Photoshop looks for the edge. The larger the number, the wider the area Photoshop inspects. This can be a good thing – think of the area at the top of the trees, where the sky might be somewhat higher in some areas, then lower in other, as the edge isn't smooth. It can also be a bad thing, as a larger radius in this image confuses Photoshop as to whether the blades of the windmill should really be masked or not. In this case, it results in Photoshop partially hiding the blades, and this isn't a great solution.

The last part of this section, the brush on the left hand side, is a manual way for you to tell Photoshop where the transition between the sky and foreground occurs. This is the best solution for this image – the key here is to use a big brush to paint a wide swath around the tree areas, but leave the blades untouched. This results in the best of both worlds – where the difficult fine details of the trees are properly selected, and the hard edges of the wooden blades remain.

Step 8. One of the other exciting advancements in the dialogue is the Output box at the bottom, which offers an innovative Decontaminate Colors option. I clicked this here, and slide the
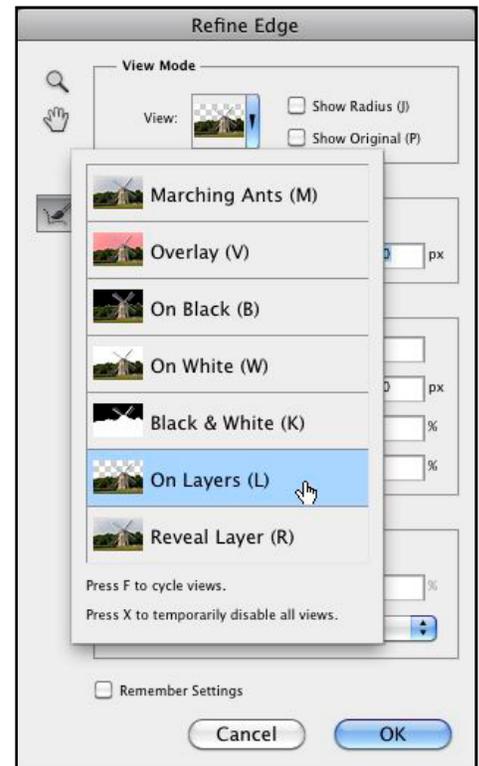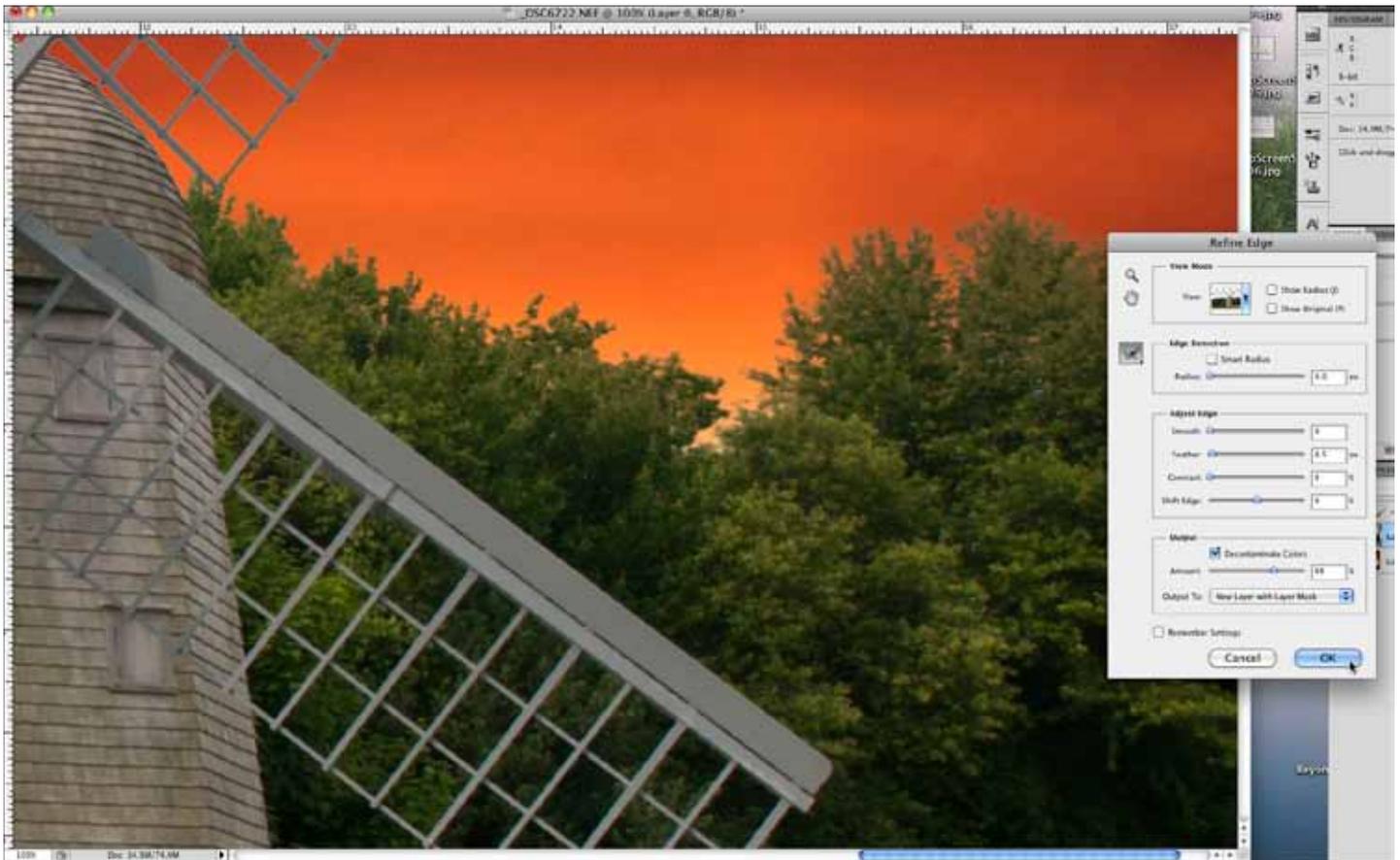
amount to the right to increase the effectiveness. This option is helpful in this image for the transition between the trees and the sky, as it makes sure any place where the sky color or color fringing has crept into the trees is turned green. This helps to make sure the edges of the transition between the 2 images look natural. It also provides a nice option – to output the result to a New Layer With Layer Mask. This way the original layer is left intact and the final image is still editable, should you decide to change it at a future date.

Step 9. With these options set, the last step is to zoom into the transition areas and make sure the border between the images doesn't look unnatural – like a cutout. One adjustment that can help with this is a slight bump of the Feather slider – I used .5 pixels for this image. It gives just a hint of softness to the transition as might occur with the natural movement of leaves and trees.

You're finished with your composite work. To top off the image, you might consider adjusting tone and color in the composite image so that the feel of the 2 images better match each other. The key to success with the Refine Edge dialogue is to allow Photoshop to do what it does best, make small decisions about the complicated edge of a selection. By telling Photoshop exactly where to look for this transition with the Radius, you can control how the program picks and chooses which areas are included, and which ones aren't. Happy selecting!