The Great Photoshop Layer Migration
How to transfer the layers and layer masks
from a small master image to a larger version

When creating a master image file, I generally advise people to always work on the largest size image their camera is capable of capturing (the "native" resolution of the camera), or on a scan that is created at the largest size they can envision printing that photo. But sometimes I don't always follow my own advice. Usually, this occurs when I am first exploring the possibilities that a particular image offers, or when I am traveling and working off my laptop, where conserving disk space is always an issue. A smaller file not only takes up much less space, but it is also faster to work on and serves as a "proof of concept" to let me see if the path I am exploring looks promising. If it does, and I want to keep the work I have already done, then I employ a useful technique to transfer the adjustment layers and layer masks from the master image that was created from a smaller file to a larger version. This saves me from having to reconstruct the master file from scratch.

Note: This technique does not work with all layered documents and I cover those exceptions at the end of this article.

Cropping Embargo

One of the essential components in this technique is that the image has not been cropped from its original size. The reason for this cropping embargo is that, in order for the layers and layers masks of the original master file to line up perfectly in the larger version, they have to be the same size.

If you are working on a digital camera raw file, you can use the cropping tool in Lightroom or Adobe Camera Raw, which will ensure that any new version of the original will have the same aspect ratio and will therefore have the same pixel dimension once the smaller file is re-sized to the larger file's dimension. A crop applied once the image is in Photoshop makes this more difficult. This is one reason why I prefer to crop my images much later in the process.

Technique

1 Open up the smaller version of the master file.

2 Next, open up a new version of the original image. If it is from a large size scan, then open the original scan, If it is a raw file then open it up at your camera's native resolution (i.e., the largest size available from your camera). For the most flexibility in terms of tonal overhead, choose 16-bit in your raw processing software.

3 Double check the pixel dimensions and resolution on the larger version of the original image (choose Image > Image Size) and make a note of them. Then switch to the smaller master file and using the Image Size dialog, re-size it so that it shares the same pixel dimension and the same resolution. The quality of image detail due to resampling is not something that you have to worry about since you will only be transferring adjustment layers and layer masks.

4 If the larger version of the original image is 16-bit, then make the now re-sized master version (the version that was originally smaller) the same bit depth by choosing Image > Mode > 16 Bits/Channel. This is not a step we're doing for quality purposes, since we will only be transferring the adjustment layers. We're just doing it ahead of time since Photoshop would ask us to do it anyway when the layers are transferred.

5 Place the images into Standard Screen Mode (View > Screen Mode > Standard Screen Mode) and arrange them so you can see both document windows. Make the original master file active (the one you just re-sized). In the Layers palette, click on the top layer in the palette and then shift click on the layer immediately above the Background layer (**Figure 1**).

6 Click and hold on these selected layers in the Layers palette and then drag them over onto the large version of the original image (**Figure 2**). Hold the **Shift key** down (very important!) and release the mouse button.

NOTE: The use of the **Shift** key here ensures that the imported layers will be centered over the destination image. Since both files share the same pixel dimension, the new layers and their layer masks will align perfectly in the new file. For the alignment to take place you need to release the mouse button first, and then the Shift key.
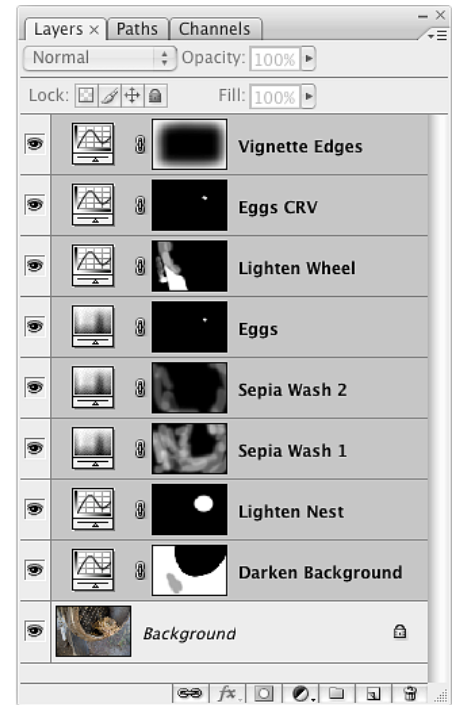

Figure 1: All of the adjustment layers and layer masks are selected as a group in the Layers palette.

Exceptions

This technique works best for copying layer data that is composed of **adjustment layers and soft-edged layer masks**. Pixel-based dodge and burn layers, such as those that use the Overlay or Soft Light blending modes can also be transferred since they do not contain critical detail.

Any layers that contain important image detail, such as those used for retouching or collage, will need to be redone in the larger file since the initial re-sizing process is likely to produce unacceptable softening of sharp details. Hard-edged layer masks may also have to be remade depending on how precise they need to be.
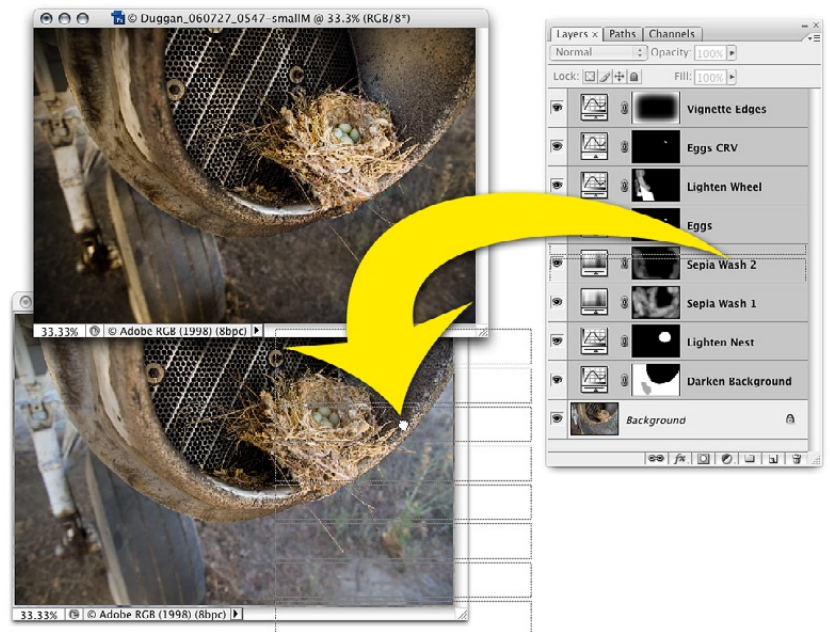

Figure 2: Dragging the selected layer stack from the initial master file (from a small original image) onto the full-sized version of the original image. Keeping the Shift key down during this process will ensure that the layers are placed in perfect alignment over the new image.