## **Restore with Filters**

Rejuvenate old photos by removing grain and sharpening them



Grain, dust and scratches often spoil old images. While there are many retouching tools for cleaning up and restoring family memories, when it comes to removing noise and unwanted artifacts then Photoshop filters is the place to turn.

- 1. Open the image in Photoshop and begin by duplicating the Background layer. Ctrl/click on the layer and select Duplicate, renaming it Background Copy. Filters are applied directly to layers, so it's important to keep your original image intact.
- 2. The Noise filters are all grouped together under Filters>Noise. There are four reduction filters and one filter for adding noise. Select Reduce Noise. This filter offers advanced options for targeting specific areas of noise in an image.
- 3. In the Reduce Noise menu, select Advanced to view Noise in each of the three-color channels; namely Red, Green, and Blue. Select Green and increase Strength to 9 and Preserve Detail to 20%. Hit OK to apply and then rename this new layer NoiseFilter\_ColorChannel.



4. Duplicate the layer and name it Reduce Noise Filter. Select the same filter, but this time apply the effect to the entire image. Set the Strength to 9 and Preserve Detail to 20%, then hit OK. Again, duplicate the new layer in preparation for the next step.



5. The Median filter reads pixels with a specific radius and then blends the luminance of those pixels by calculating an average. A side effect of the filter is that the image looks blurry, and so this step is saved for last to smooth out any additional noise left behind by the previous filters.



6. The Median filter has only one setting: Radius. Using the image preview box, calculate how far you can push the Median without excessively compromising the sharpness of the image. In this image, the Radius is set to 2 pixels.



- 7. Hit OK and rename the layer Median Filter to separate the effects that have been applied. The image is now free from noise but, as a result, it's fairly blurry. Next, we'll show you how to sharpen it up.
- 8. Select Image>Mode>Lab Color. A dialog box will appear and ask if you want to flatten the image, so select Flatten. In the Channels palette (Windows>Channels), select only the Lightness channel but make sure all the others are visible too.



9. From the Filter menu choose Sharpen>Unsharp Mask. The amount by which you can push the settings depends on your image. Here, the Amount is set to 150%, the Radius to 6 pixels and the Threshold to 2.



- 10. Go back to the Image menu and select Mode. Now change the Node back from Lab Color to the standard RGB. If you look in the Channels palette then you'll see that the Red, Green, and Blue are all restored as the three isolated values.
- 11. Finish off the effect by adding a couple of adjustment layers to brighten up and balance the image. Go to Layer>New Adjustment Layer and select Curves. Lighten the image by bringing up the Midtones and creating a slightly rounded curve.



12. Add a second adjustment layer by selecting Layer>New Adjustment Layer, choosing Hue/Saturation this time. Increase Saturation by a value of 15 to bring out the colors and draw attention to the recovered detail in the image.



Original

Edited



