

## Restore Those Midtones

### *Using Layer Blends to Fix Severe Contrast Problems*

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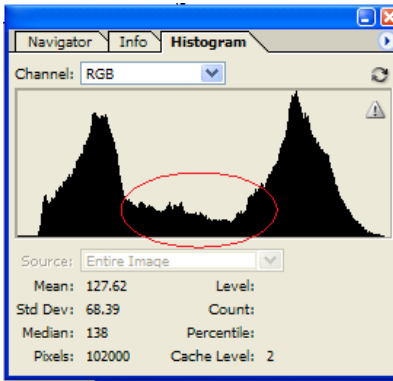
Overcast light can be glorious for photography. A bright, overcast day provides natural light with soft, even shadows or no shadows at all. Then there's the overcast light that comes with dreary, rainy weather. Take a picture on those days, and the result will likely be a dull, flat image.

The image in *Figure 1* is a typical example of the contrast problems that can plague us on a dreary, overcast day. My wife and I spent ten days in Scotland in May/June and the weather was against us the entire trip. I shot my images with confidence, exposing for the midtones. As long as I did not burn out the highlights or stop up the shadows, I was confident I could restore "pop" to the images with a little help from Photoshop.



**Figure 1.** A dreary day along the Bay of Firth, Fife, Scotland.

The histogram for the seaside image in *Figure 1* tells the story. There is plenty of information in the shadows and the highlights and a lot less in the midtones.



**Figure 2.** A “bimodal” distribution of pixels usually results in a flat, boring photograph.

We typically aim for a photograph with a nice “bell curve” shape to it: one with lots of information in the midtones, plenty in the quarter and three-quarter tones, and less in the shadows and highlights. In this case, we need to increase the information in the midtones without losing details in the shadows or the highlights. We need to pull the clumps of information at the ends of the histogram in toward the center.

Radical transformation with Levels or Curves is not a good solution in this case. They would very likely introduce severe posterization. Three shots from a tripod, bracketing them at something like one stop overexposed, one stop underexposed, and correctly exposed would offer the possibility of a composite image that combined brightened midtones without burning out the sky. A graduated neutral density filter would have provided a similar effect. I did not take three shots of the image, and I did not use a graduated neutral density filter. Neither was necessary in this case.

Digital SLR images have a dynamic range that is comparable to color slide film. Approximately two stops over/under proper exposure. If you do not burn out the highlights (admittedly, very easy to do with most DSLRs) or stop up the shadows, you have considerable leeway when you get the image into your digital darkroom. While the image is muddy and flat, there are no burned out highlights or stopped up shadows evident in the histogram in *Figure 2*. By using a combination of Screen and Multiply blend modes, those two clumps of pixels can be brought closer together, increasing midtone contrast.



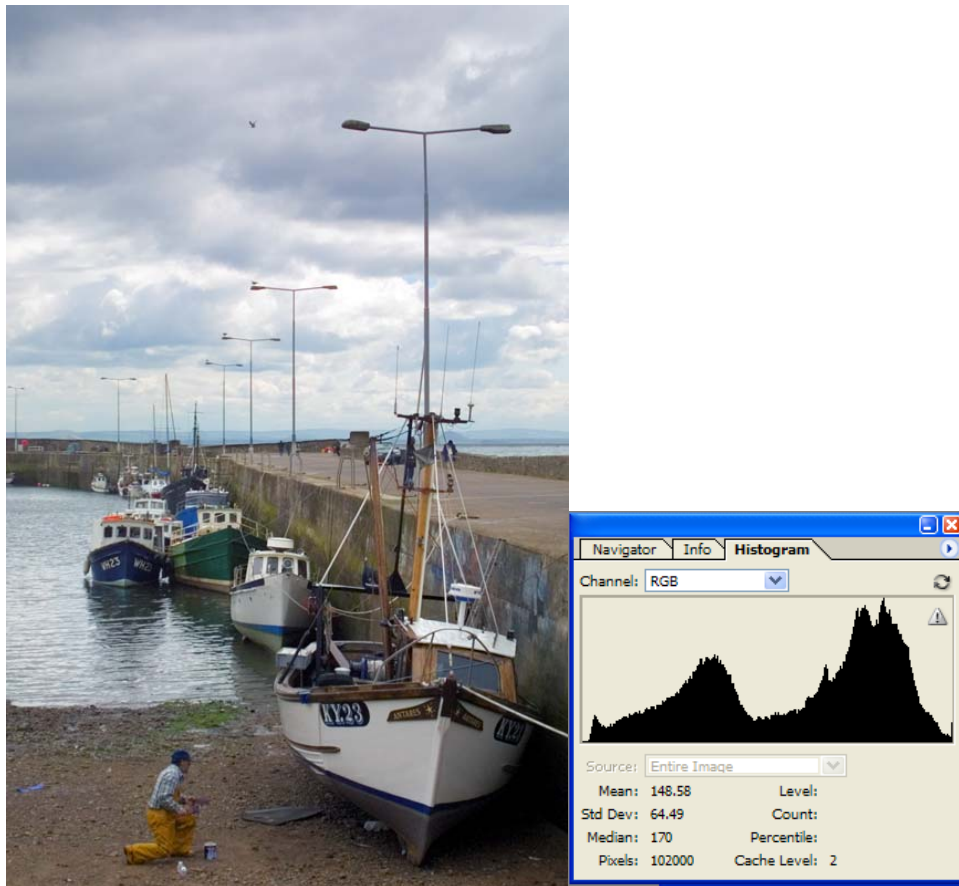
**Figure 3.** First things, first. After adjusting the neutrals.

Before you blend layers, it is best to take care of more immediate problems. *Figure 3* is the result after adjusting the white point, black point, and gray point for the image. The white boat hulls have a more pleasant appearance. A saturation boost also added a little more “pop” to the image. The image is still dark. We’ll take care of that problem next.

The solution is to composite the original and two copies of the image. One copy will use a Screen blend to lighten the midtones, and the second copy will use a Multiply blend to add emphasis to the clouds. This will have a similar effect to compositing a bracketed set of images containing an overexposure (Screen layer), an underexposure (Multiply Layer), and a correct exposure (original image).

The Screen blend mode acts like shining light through a layer. It opens up the tones in the image. The image in *Figure 4* is the result of creating a new layer and then setting the Blend to “Screen” at 100% opacity. You can reduce the opacity if a little less brightening is required. If more brightening is needed, you can stack additional Screen layers. Each will progressively lighten the image.

The trick is not to lighten the entire image. In this case, we want to lighten everything but the sky. The Screen layer was combined with a layer mask to isolate the changes to everything below the horizon.



**Figure 4.** Adding a Screen layer open up the midtones.

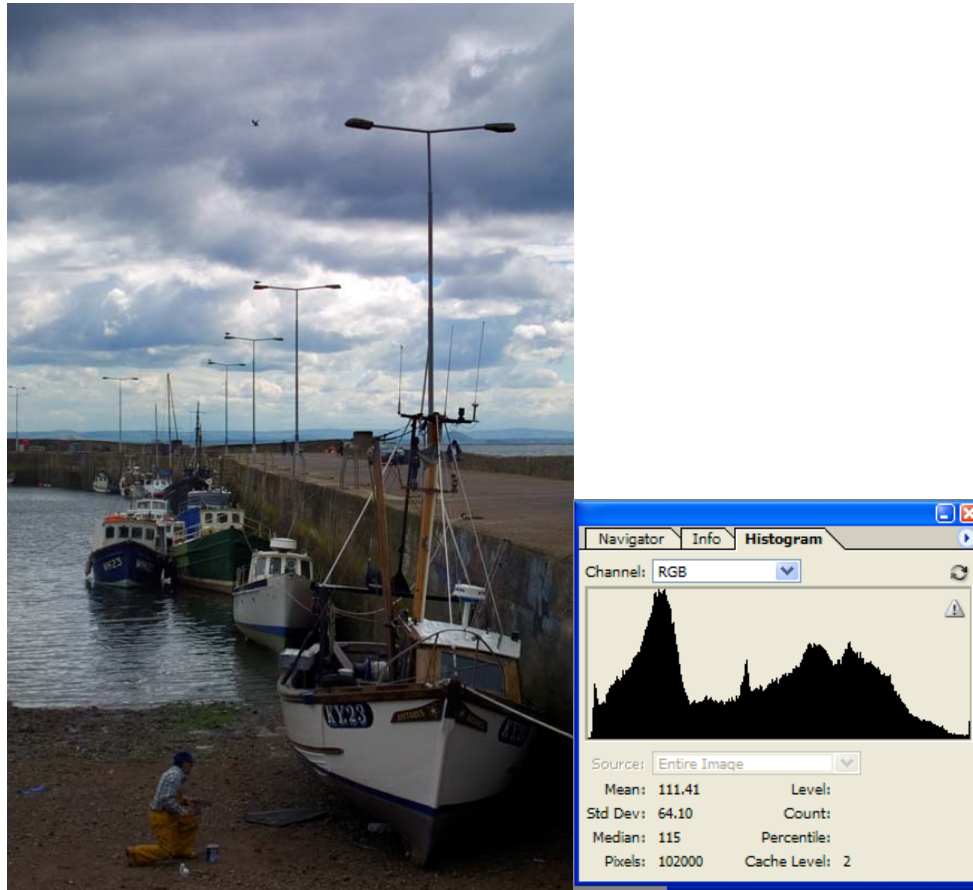
Creating masks is a topic itself worthy of several tutorials. In this case, I considered the separate RGB channels and decided the Blue channel isolated the sky better. An extreme Levels adjustment added contrast to the mask. Black and white paint touched it up.



**Figure 5.** Mask for isolating the sky from the rest of the image.

The opening of the midtones is evident in the histogram after the transformation. Pixels down in the shadows and quarter tones are pulled up towards the center of the histogram. The midtone contrast can still stand improvement, but we'll wait until we punch up the details in sky. A final Curves tweak can improve the midtone contrast.

The sky in the original image has lots of interesting detail. It adds a lot to the feel of the image. A Multiply layer will give more body to the clouds. It will also make the rest of the image a lot darker unless we use a layer mask.

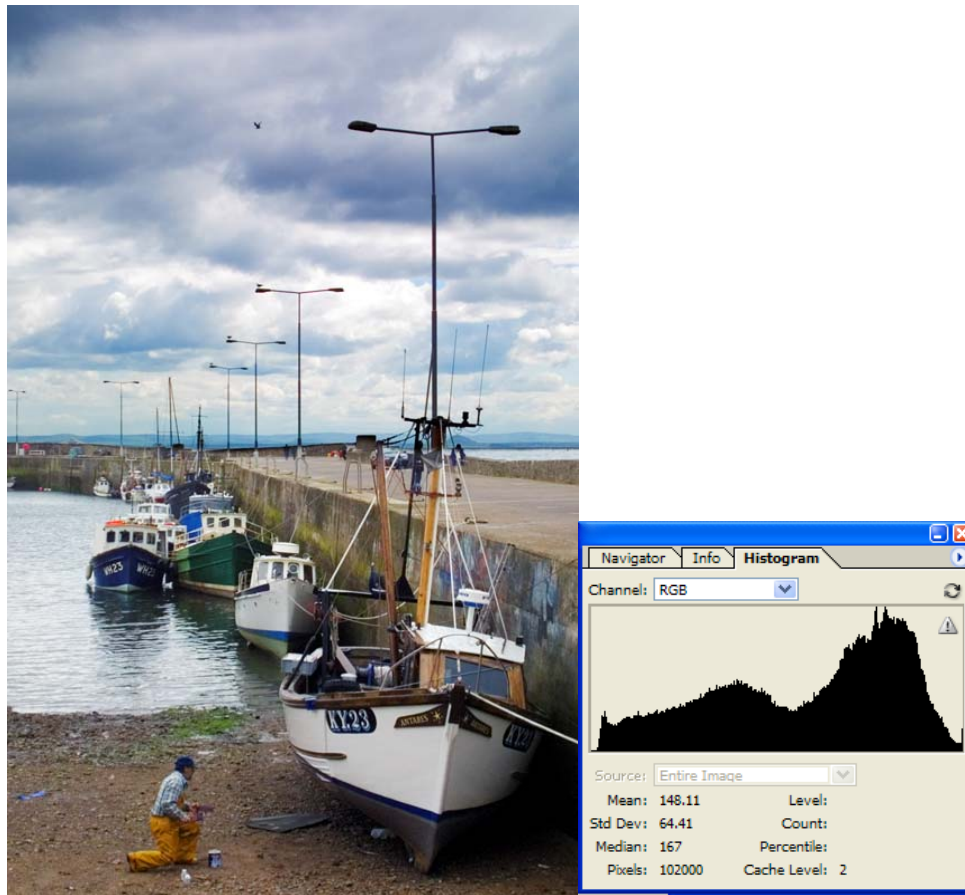


**Figure 6.** Multiply blend adds emphasis to the clouds.

The layer mask for the Multiply layer is the inverse of the mask for the Screen layer, with just one important difference. To avoid an obvious edge effect when the Screen and Multiply layers are combined, the mask for the Multiply layer was contracted by 3 pixels and feathered 1 ½ pixels.

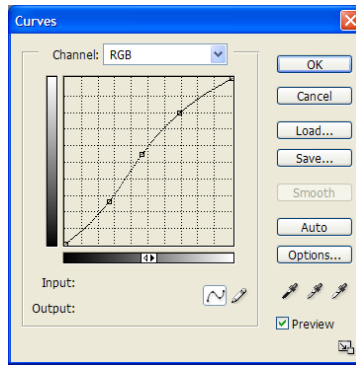
100% opacity for the Multiply layer resulted in too strong an effect. The opacity of the layer was reduced to 85%. You can dial in just the amount of darkening you desire. The histogram showed improvement on the right side after the Multiply layer was added.

Combining both a Screen layer and a Multiply layer simultaneously moves the shadows and quarter tones and the highlights and three-quarter tones toward the midtones. This provides more information in the midtones, resulting in better contrast overall.



**Figure 7.** The combination of Screen and Multiply layers improves image contrast.

The histogram in *Figure 7* shows considerable improvement. The center of the histogram has a lot more body. We're not quite done yet. The dynamic range of the data is good now. The histogram stretches from extreme shadows to bright highlights without burning out significant detail or stopping up the shadows. Now that we have more midrange information to work with, we can apply a Curves adjustment to improve the contrast even more.



**Figure 8.** Curves adjustment to tweak the midtone contrast.

### ***Much Better!***

Using a Screen layer and a Multiply layer added a lot. They converted a rather disappointing, flat and boring picture into an interesting seaside image with a lot of color and plenty of contrast.



**Figure 9.** That's a lot better! A Curves tweak and sharpening add the final touches.

The technique is easy to apply, once you grasp the fundamentals of “punching up” the middle of the histogram with a combination of a Screen layer and a Multiply layer. Most of the effort goes into creating a pair of layer masks to limit precisely where you want to affect the image.