

GET REAL

Fighting contrast in HDR photography with Lightroom or Photoshop

One of the most requested topics for my seminars is HDR, High Dynamic Range Imagery. The topic interests photographers because the technique of HDR allows them to take pictures that were impossible to make in the days of film. For those new to the concept, HDR is a technique for increasing the dynamic range of a photo, allowing the photographer to capture detail in both the highlights and the shadows of a contrasty scene.

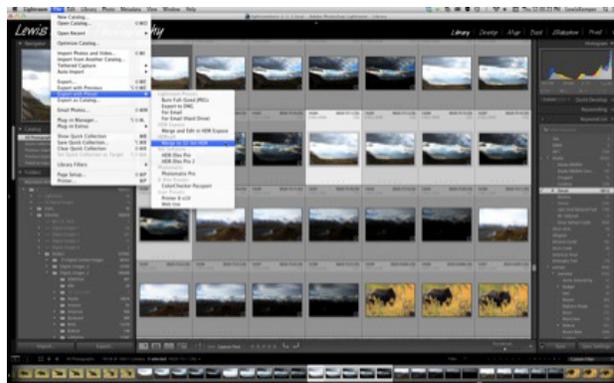
Since the beginning of photography, photographers have been fighting contrast. There is no medium that can capture, in one exposure, the tonal range we can see, not even digital sensors. For HDR photography, what is needed is to bracket a series of exposures, capturing detail in both the highlights and the shadows and then combine the best of each image to provide a full tonal-range image. In the past, the best way to do this and obtain realistic looking images was to use a program such as Photomatix Pro or Nik's HDR Efex Pro2. Now, great-looking HDR images can be processed using Adobe Camera Raw's ability to process 32-bit images. This means you can use either Lightroom or Photoshop CS6 (and higher) to process your HDR images with outstanding results. Getting realistic looking HDR images has been a challenge in the past, but not anymore.

In Lightroom, you need a program that can combine the individual exposures into a 32-bit tiff file. Two choices are the Merge to 32-bit plugin for PhotomatixPro from hdrSoft.com or the Merge to HDR Pro feature of Photoshop CS6 or higher. If you do not own either program you can buy the Merge to 32-bit plugin from hdrsoft.com as a stand-alone for only \$29! (Use the coupon code LewisKemper to get 15 percent off! It is case-sensitive, so use uppercase L and K.)

Frequently I am asked how many pictures are needed to make a good HDR. Unfortunately there is no one answer. It all depends on the contrast range of the scene. I have used as few as three and as many as nine depending on the light. But I always

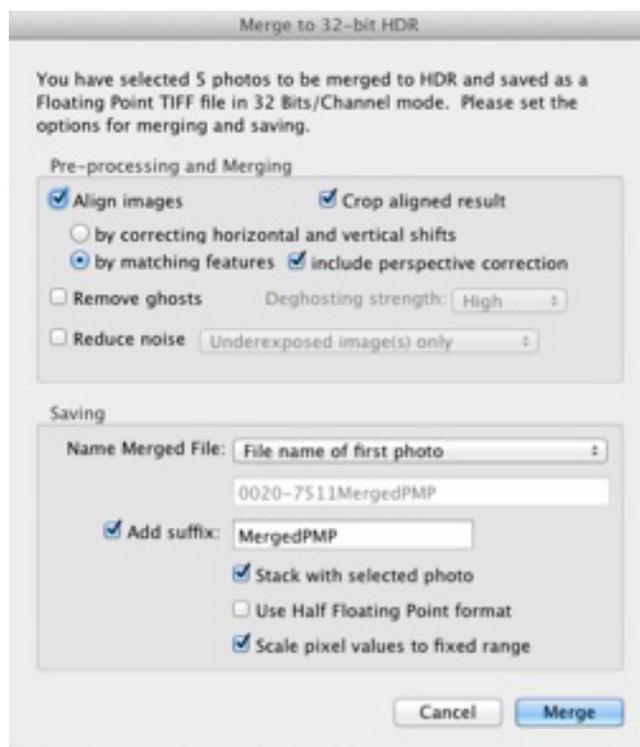
recommend you take more than you think you need. You do not have to use them all when processing the HDR image, but if you don't have enough to get detail in both the highlights and the shadows, you cannot go back and get more!

In Lightroom using the Photomatix Merge to 32-bit plugin, you select the images you want to use. And then go to the File > Export with Preset > Merge to 32-bit HDR.



Export with Preset

Once you do that you get the following dialog box from Photomatix:



Photomatix Merge Dialog

In this box I select to align my images even if I have taken all the images on a tripod, and I choose the matching features since this includes the perspective correction that may be applied in Lightroom. If there was movement in my images, such as clouds coming through, branches swaying in the wind, etc., then I would check the Remove Ghosts box and select a Deghosting Strength. I do not use Reduce Noise here since the noise reduction I choose in the Lightroom Develop module will be applied. I choose to name the merged file after the first image in the stack (you can choose other options) and I add the suffix of PMP (PhotomatixPro) to the file name so I can easily identify my 32-bit images. I recommend checking the Scale Pixel Value to Fixed Range box for best results.

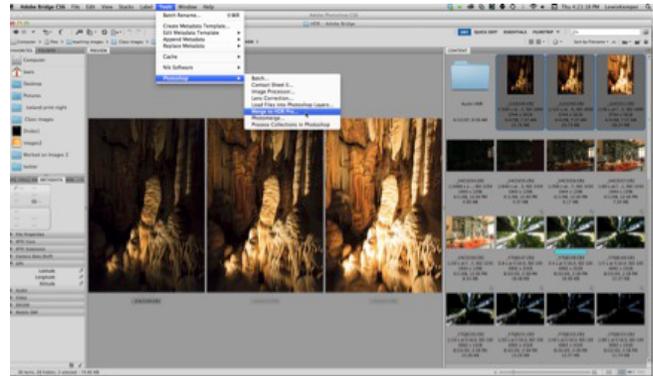
When you select the Merge button, Photomatix begins to create the 32-bit tiff image. This image will show up (in this case) right next to the first image in the sequence. (If you don't see your merged tiff file, it may be because you are only viewing the previous import in Lightroom. Make sure you select All Photographs in the left column.) Once the image shows up in the Library, select the images and go to the Develop module where you will now be able to use all the familiar tools to process your images.



Using Develop Module to tone map image

The process differs a little if you are using Photoshop. Photoshop has its own HDR capabilities, but they are not the greatest. Still, you can use Photoshop to align and create your 32-bit image and then do the tone mapping within Camera Raw. It just takes a few more steps than doing it with Lightroom.

To start the process in Photoshop, select all your images in Bridge so you can see them, and then go to the menu under Tools and select Photoshop > Merge to HDR Pro.



Choosing images within Bridge

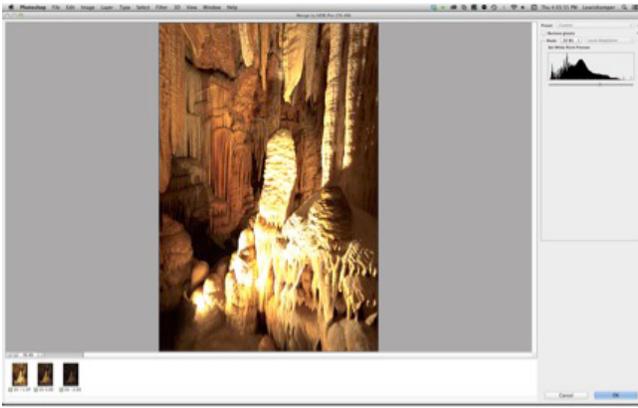
Photoshop will then begin the process of aligning and combining the images. When that process is complete, you will see the familiar Photoshop HDR dialog box. It looks like this.



Photoshop HDR dialog box 16-bit (default)

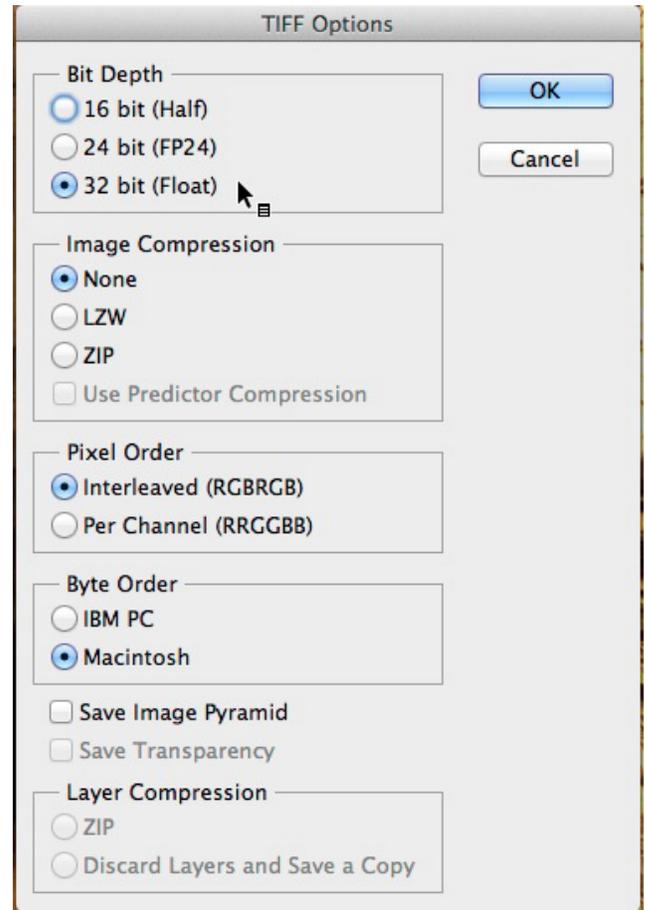
By default the HDR dialog box is set to 16-bit for processing within Photoshop. The secret here is to change the mode to 32-bit.

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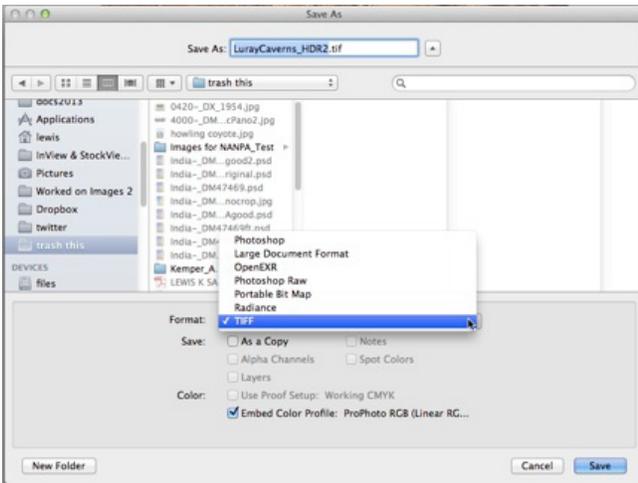
Photoshop HDR dialog switched to 32-bit

Once you change the mode, select OK and Photoshop will create the 32-bit image for you. When you get to this point, and the images create a need to do a Save As command, then save the file to your hard drive. But make sure when you do the Save As, you change the format from Photoshop to tiff.



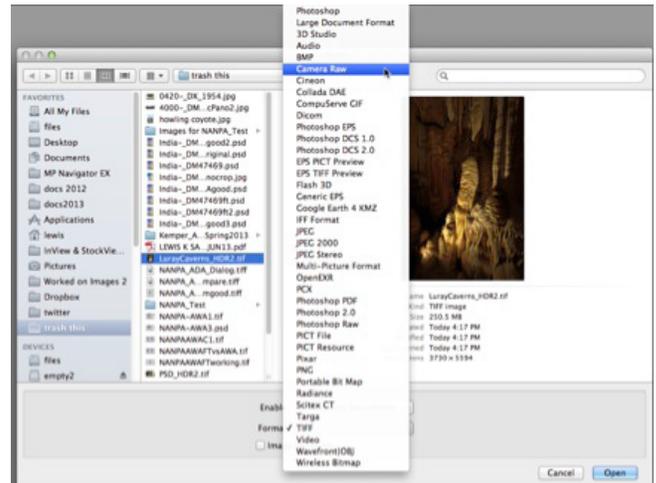
Tiff 32-bit float

Once that 32-bit tiff image is saved, then you need to open that image in Photoshop using Camera Raw. To do that, go to File > Open and this time make sure the Format is Camera Raw.



Change the Format from Photoshop to tiff

When the tiff dialog box opens, make sure that it is set to 32-bit float (it should be).

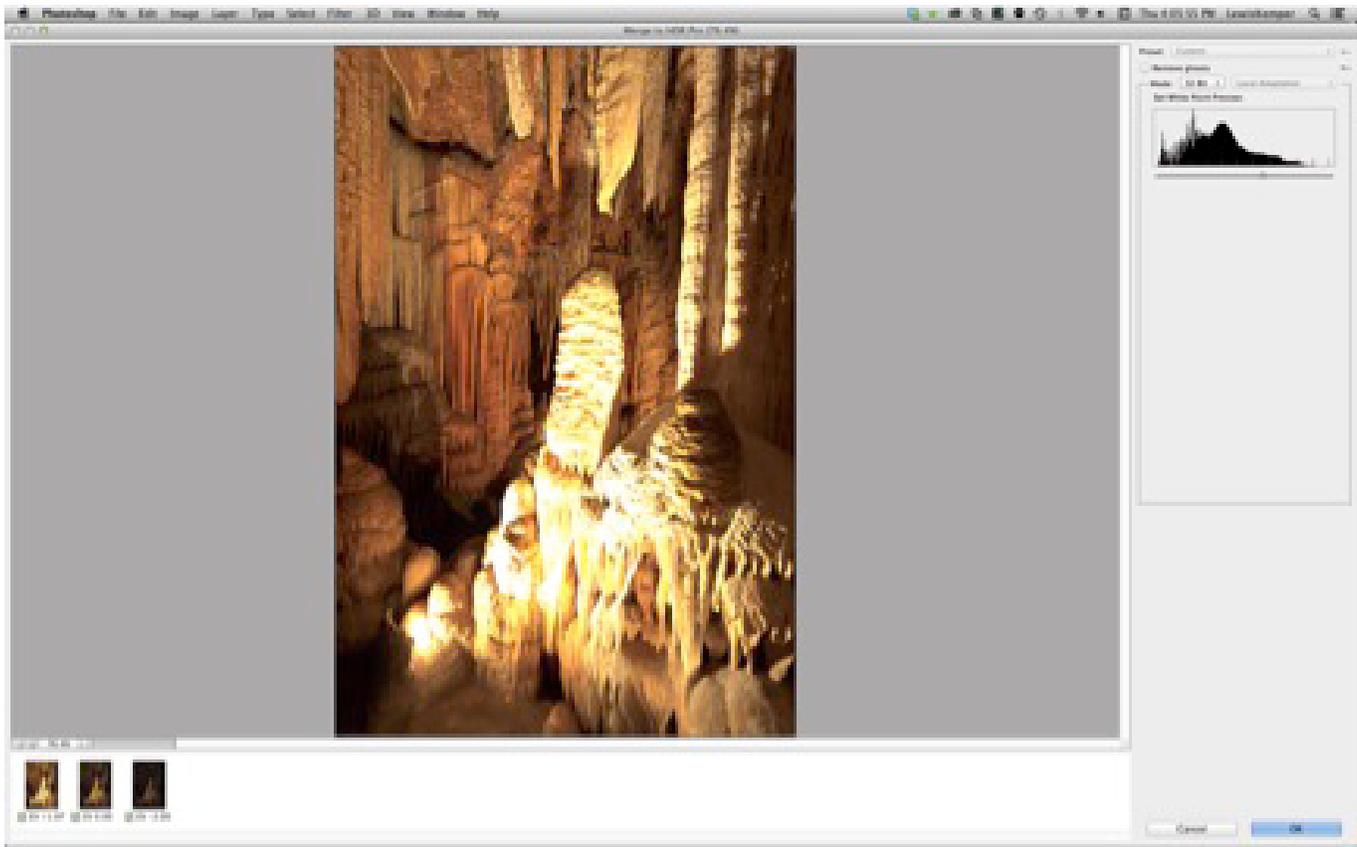


Changing Format from tiff to Camera Raw

Once you open the image in Camera Raw, you will be able to use all of your familiar controls to process your image.

So if you're like me and you like to produce realistic looking HDR images, give one of these a try. ↻

Go to <https://www.fisheyeconnect.com/workshop/3043/creating-realistic-hdr-images.aspx> to take Lewis Kemper's workshop on creating realistic HDR images with Lightroom, Photomatix Pro, Photoshop and Nik HDR Efex 2



Processing the image in Adobe Camera Raw