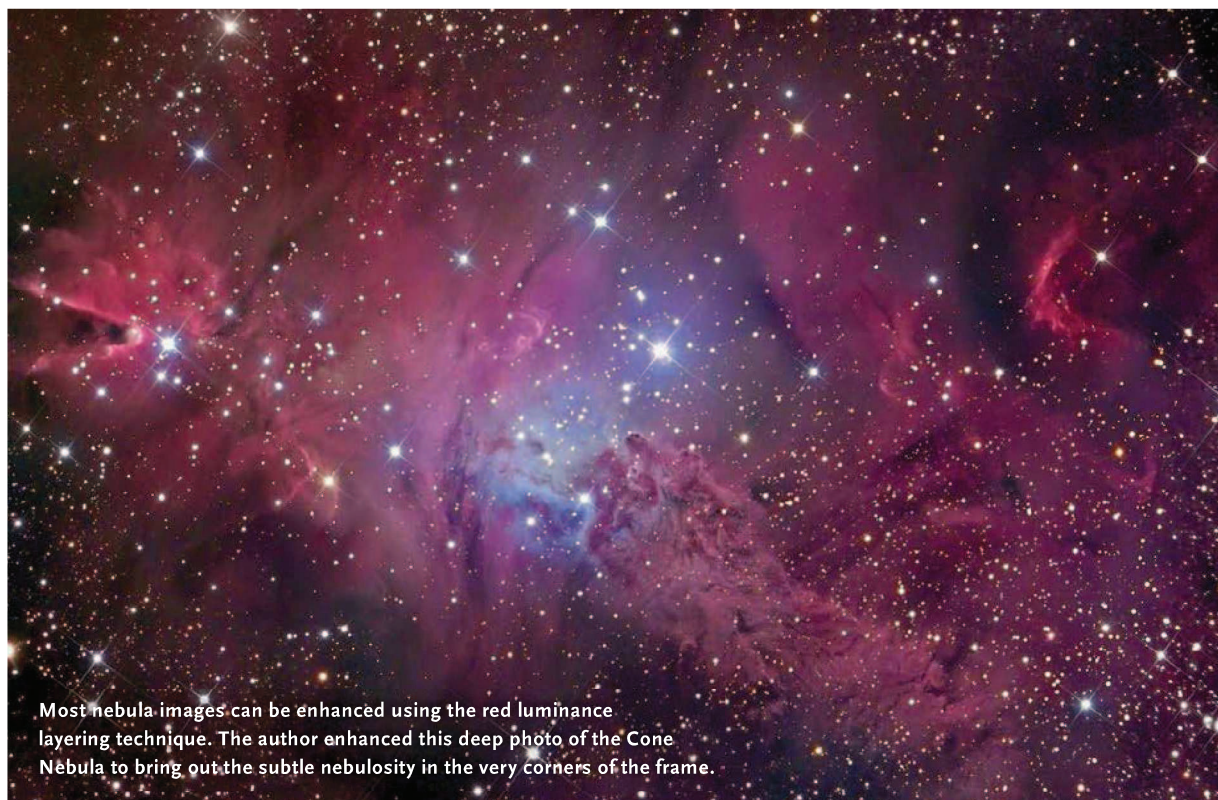




Most nebula images can be enhanced using the red luminance layering technique. The author enhanced this deep photo of the Cone Nebula to bring out the subtle nebulosity in the very corners of the frame.

parts of my image while avoiding the dark background regions. The brighter areas in your red luminance image will translate into more vivid colors in your final result. Once you're satisfied with your adjustments, save the processed red luminance image.

Recombining Channels

Before combining the images, you'll need to open the unenhanced red image and make two additional copies of it. Use these three copies to simulate the H β and H γ in each of the color channels of the original result to retain a natural color balance when the red luminance is applied. To do this, you'll need to reinterpret each copy of the red channel to the respective color it will modify. Select Color / Interpret – Mix Color, and change one of the copies to blue, the second to green.

Next, using Special Functions / Combine Images Using / Blend Mode, Opacity, and Masks, you can start to build your new enhanced image by placing the original RGB image on the bottom of the image tree in normal mode, opacity 100%, and the processed grayscale luminance above it. Simply click OK in the Combine Images Setup window, and in a few moments, your list of open images will appear in the Combine Images dialog window.

ImagesPlus combines image layers from the bottom up, so ordering your images here is important to the final result. Click on the RGB image in the list and at the bottom left, select the Bottom button. This moves the image to the bottom layer. Make sure your red luminance file is on top and the three faux color channels are in the middle.

Your image will appear as grayscale at this point because we have to change the blending mode on each

layer. The unenhanced original RGB image at the bottom will remain the same, with its blending mode set to Normal with 100% opacity. To change the level that each enhanced red will contribute to each color, select Overlay for the red, green, and blue layers. Next, adjust the Opacity slider for each of these enhancement channels — I use 60% for the red, 20% for the green, and 27% for the blue, though you can adjust these until you're pleased with the final blend.

Finally, select the red luminance layer and change the Blend Mode to luminosity. Watch as the results finally come together. The detail contained in the luminance layer translates to each of the layers beneath it. This is the key to getting the stretched and sharpened appearance into the final combined image.

You can lower the opacity level of the red luminance to blend the layers to your liking. Once you're pleased with the result, you'll need to click the Flatten button at the bottom right to complete the action. Now you can boost the color saturation or brightness if necessary before saving the final result. Comparing this to the original image shows remarkable improvement with more colorful detail, all from the same source data.

Whether you already take astrophotos or are the new owner of a DSLR or OSC camera dreaming about future astronomical vistas, red luminance layering is a technique that can expand the use of your camera and help produce stunning results just by using data already available in your color images. ♦

Edward Henry images the night sky from his private observatory in rural northwest Wisconsin.