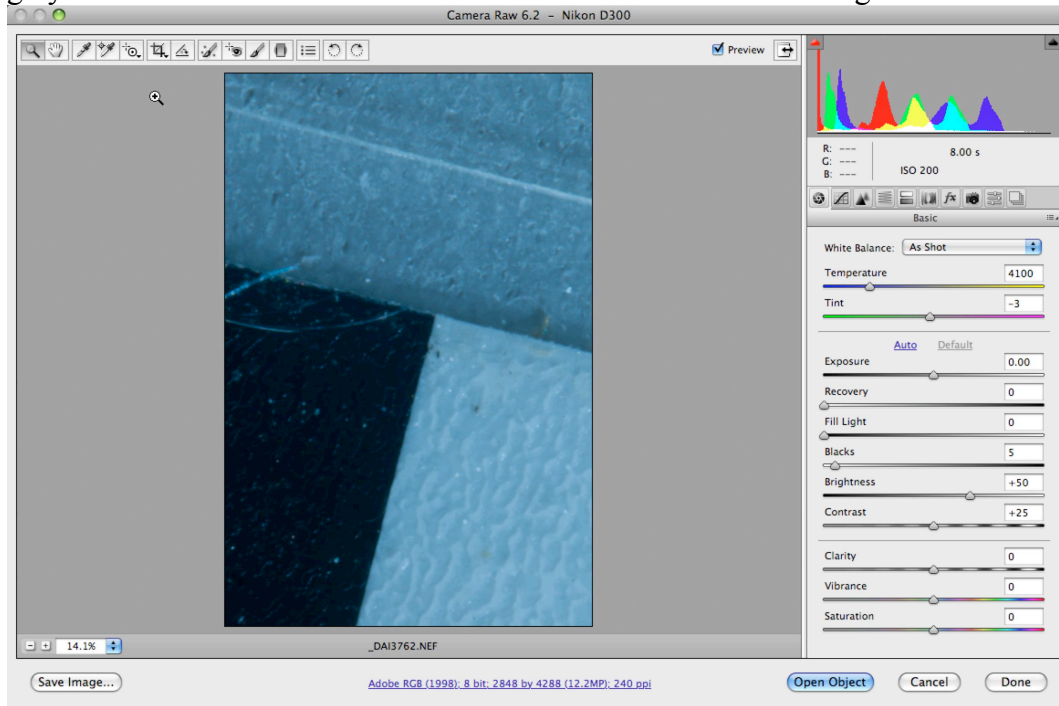
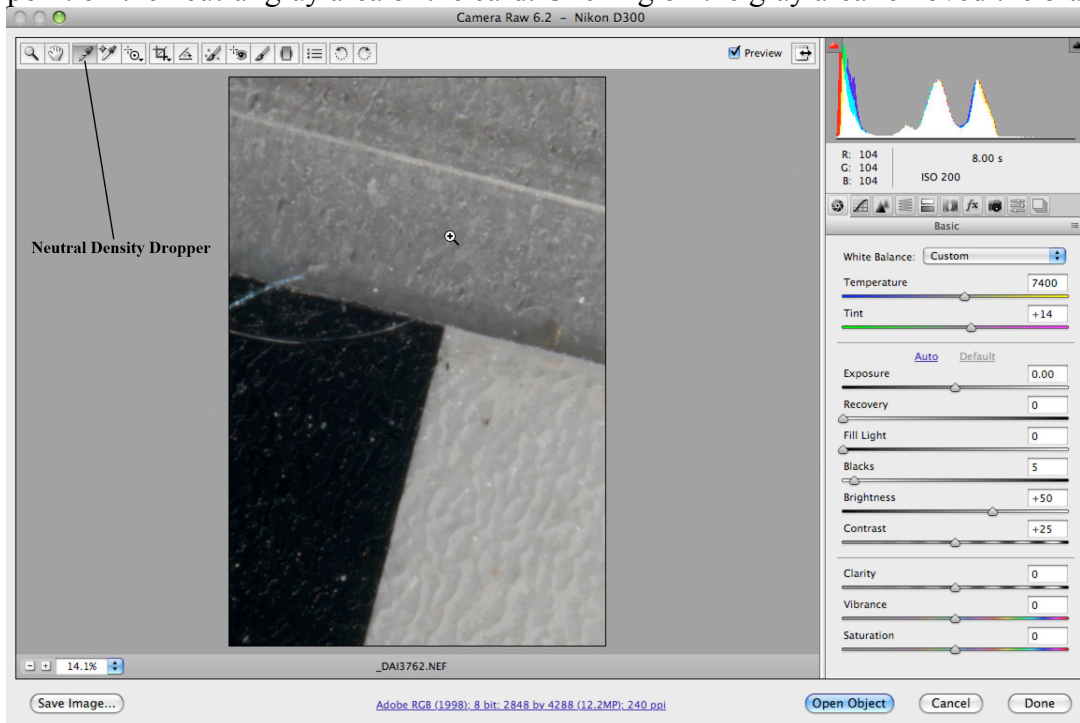


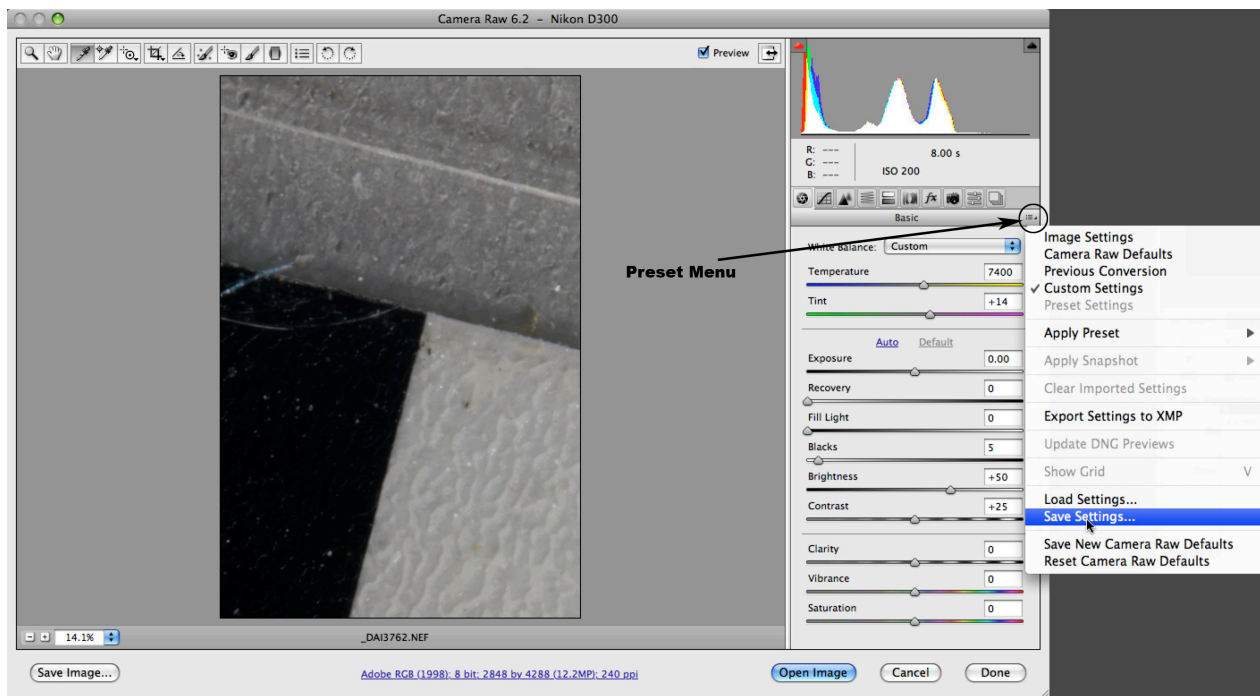
If the same light setup is used for all exposures, only one correction is required with a gray card. Below is an ACR close-up image of the WhiBal gray card where the black, white and neutral gray areas meet. There is an obvious blue cast that needs correcting.



The White Balance Tool icon was selected and a dropper cursor allowed for the placement of a point on the neutral gray area of the card. Clicking on the gray area removed the blue cast.

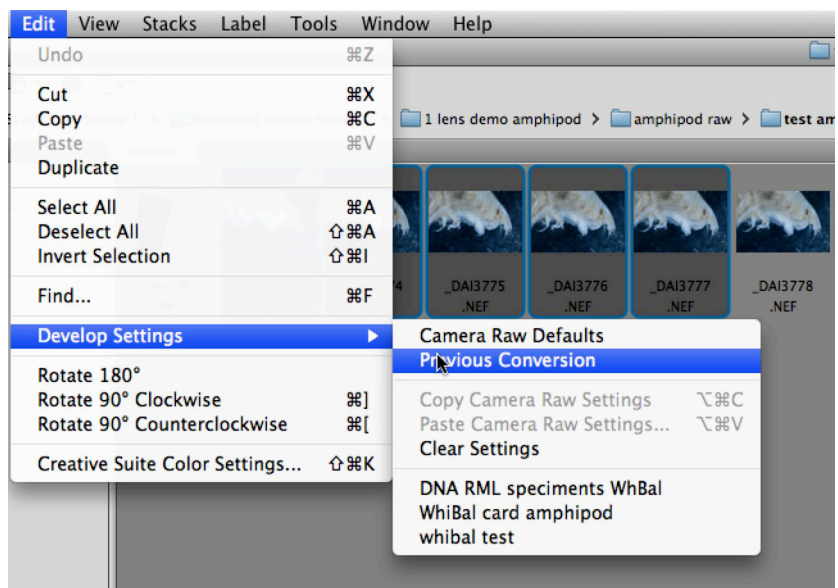


After correcting the color temperature with the “White Balance Tool” other images photographed with the same light source can be corrected using the same white balance correction. This can be done in several ways either in ACR or Adobe Bridge. In ACR, the Preset Menu is located by clicking on a tiny arrow with a column of lines in front. For some reason Adobe has chosen to make a cryptic icon for this important menu. If you are using the same light source repeatedly for photographing animals it is best to use “Save Settings” to create and store the color temperature profile for future use. In this case the color correction was saved as a preset called “WhiBal card amphipod.” When opening new files (you can open several files at once in ACR) use “Load Setting” to use the same profile. Or, you can click on “Previous Conversion” to use the color correction of the gray card if you have not changed the color temperature or previously used another color profile.

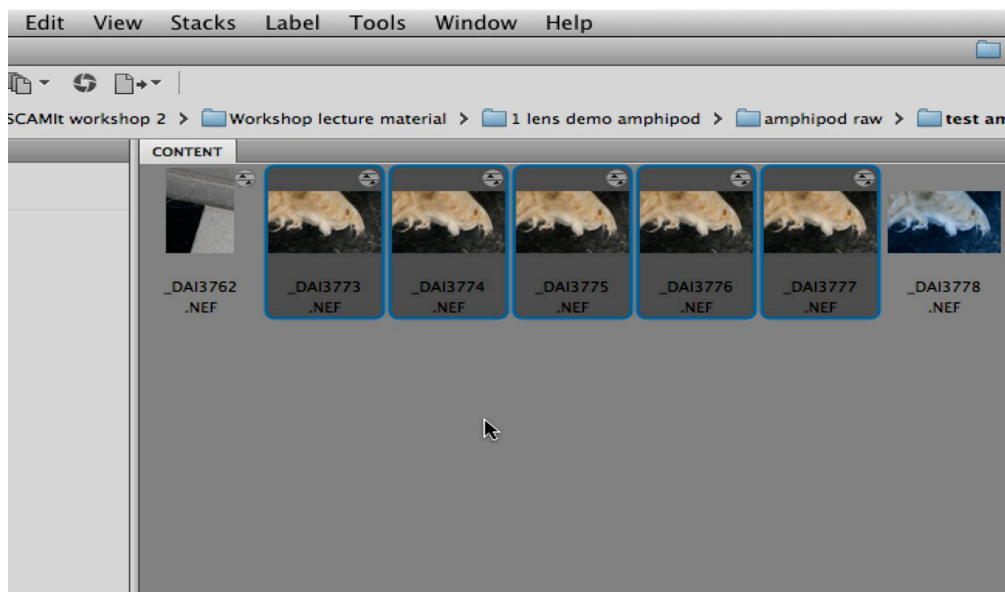


Adobe Bridge can also be used to correct multiple images at once. In the Edit menu select “Develop Settings.” There are three methods for correcting multiple images at once.

1. If a white balance correction was just performed in ACR hold down the Shift or Control key and select all images that need correction. Select “Previous Conversion.”
2. Or, you can select “Copy Camera Raw Settings,” select images for correction, and select “Paste Camera Raw Settings.”
3. And, the final option on the menu is to select the saved presets (located below “Clear Settings”). In this case I would select “WhiBal card amphipod” that was created in ACR.



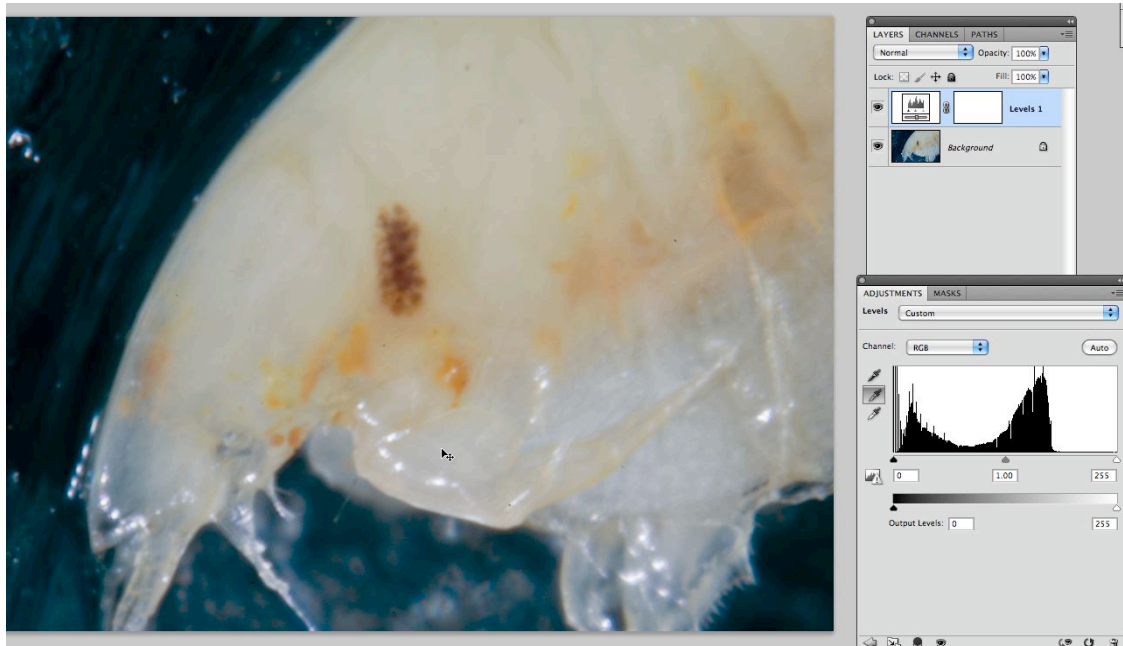
Note the icons with a circle and arrows in the top right corner of the image thumbnails. These icons indicate a correction was made to the raw files. These images are now corrected for color temperature. Note that the last uncorrected image still has a blue cast.



Correcting Colorcasts in Photoshop Elements

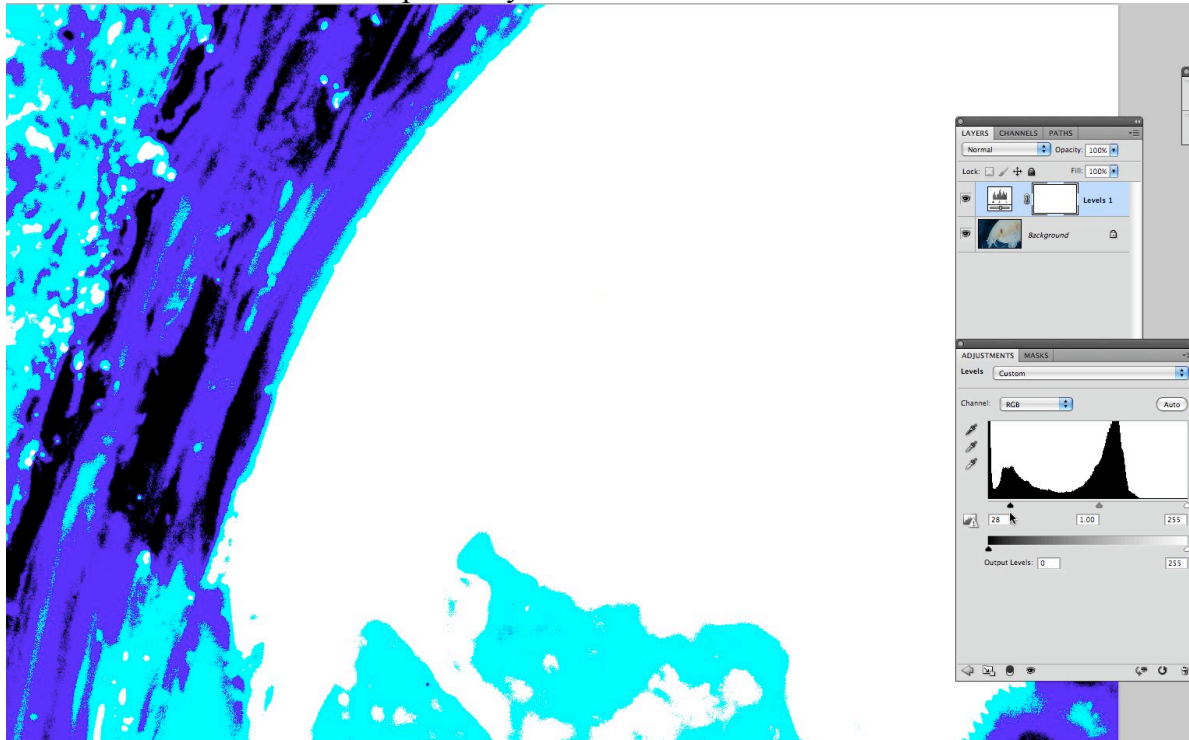
Many SCAMIT members are using Photoshop Elements and do not have Adobe Bridge. However, Photoshop Elements 8 and 9 can now open and process raw files in ACR. In the Editor go to File → Open As → Camera Raw. You can open JPEG, TIFF or raw files. However, ACR in Photoshop Elements is limited to three tabs for editing. For more information go to http://help.adobe.com/en_US/PhotoshopElements/8.0/Win/Using/WSED455A53-50C9-4159-A622-72DA26C63286_WIN.html

Colorcasts can also be corrected using a “Color Balance” adjustment in Layers in Elements or full versions of Photoshop. To correct for the blue cast in the image of *Eyakia robusta* below use the yellow-blue slider and move it towards the yellow until the cast is gone. To make an adjustment with a “White Balance Tool” click on the Levels icon to create a levels layer. On the left side of the histogram there are three eyedroppers. Click on the middle dropper to activate it. The cursor becomes an eyedropper. For this image a neutral gray area exists below the eye, on the rostrum and on the gnathopods. An area just below the eye was selected and the color was corrected.



Additionally, you can use the black and/or white eyedroppers to help remove colorcasts if the image contains areas of pure black or white. For example, the black eye dropper was selected for this amphipod image. The Alt/Option key was held down while clicking on the black slider in

the levels histogram causing low brightness values to appear. All other areas became white. Moving the black slider to the right revealed any areas of pure black where the brightness values were zero. In this image the black background contained areas of pure black. Much of the colorcast was removed after clicking on a black area to the left of the amphipod's head. The white dropper works the same way with areas of pure white. You can turn on the Info palette under the Windows pull-down menu and verify the brightness levels. Pure black areas have values of zero for red, blue and green. Areas where the value is zero for only one or two colors of the RGB spectrum will appear as a different color such as cyan or purple in this image. Areas of pure white are 255, and neutral gray areas are around 128 for all three colors. Holding down the Shift key and clicking on the black area will leave a small circle or target for the eyedropper. Hold down the Shift and Alt/Option keys to remove it.



If there are not distinct neutral gray or pure black or white areas, you can use the Levels (or Curves) adjustment layer to remove a cast by changing the default setting from RGB to a color or opposing color of the cast. In this case you would select blue, and move the center slider (gamma slider) to the right or left until the yellow cast disappears.

