Movie 2

Camera Raw Image Processing

Closing Bridge as you open

If you hold down the ⌥ alt key as you double-click to open a raw image, this will close the Bridge window as you open the Camera Raw dialog.

Opening JPEGs via ACR in Bridge

As well as the Photoshop File Handling preference: 'Prefer Adobe Camera Raw for JPEG files', there is also a Bridge Thumbnails preference: 'Prefer Adobe Camera Raw for JPEG and TIFF Files'. When this Bridge preference option is checked, thumbnails generated in Bridge will instruct Bridge to open JPEG and TIFF images via Camera Raw. But any thumbnails that were generated while this option was switched off, will mean that these JPEG and TIFF images will not open in Camera Raw, but open via Photoshop instead (even though you had the 'Prefer Adobe Camera Raw for JPEG files' switched on in the Photoshop File Handling preferences). One way to resolve this is to make sure that both options in Photoshop and Bridge are checked and use the Tools ➪ Cache ➪ Purge Cache command to clear the thumbnail cache settings for a particular folder. This action will zap any previously generated thumbnail cache settings and force Bridge to generate new thumbnails, and these thumbnails will have the desired preference of opening the JPEG and TIFF files via Camera Raw. And in case you are wondering, this is my attempt to provide a simplified summary of the official guidelines on Bridge/Photoshop Camera Raw JPEG/TIFF file opening.

Working with Camera Raw and Bridge

The mechanics of how Photoshop and Bridge work together are made as simple as possible so that you can open single or multiple images or batch process images quickly and efficiently. Figure 1 summarizes how the linking between Bridge, Photoshop and Camera Raw works.

Central to everything is the Bridge window interface, where you can browse, preview and make selections of which images you want to process. The way most people are accustomed to opening images is to select the desired thumbnail icon (or icons) and either double-click, use the File ➪ Open command, or the ⌘O ctrl O shortcut. The way things are set up in Bridge, all of the above methods will open the selected raw image (or images) via the Camera Raw dialog hosted by Photoshop (if the image is not a raw file, it will open in Photoshop directly). Alternatively, you can use File ➪ Open in Camera Raw... or use the ⌘R ctrl R shortcut to open the images via the Camera Raw dialog. In these instances, Bridge will host Camera Raw and allow you to perform batch processing operations in the background without compromising Photoshop's performance. If the 'Double-click edits Camera Raw Settings in Bridge' option is deselected in the General Bridge preferences, Shift double-clicking will allow you to open an image or multiple selection of images in Photoshop directly, bypassing the Camera Raw dialog.

Opening single raw images via Photoshop will be quicker than opening them via Bridge. Opening multiple images via Photoshop will take about the same time, but Photoshop will consequently be tied up managing the Camera Raw processing. The advantage of opening via Bridge is that Bridge can process large numbers of raw files, while freeing up Photoshop to perform other tasks. And you can toggle between the two programs. So for example, you can be processing an image in Camera Raw while you switch to viewing another image in Photoshop for comparison with the one you are editing in Camera Raw.

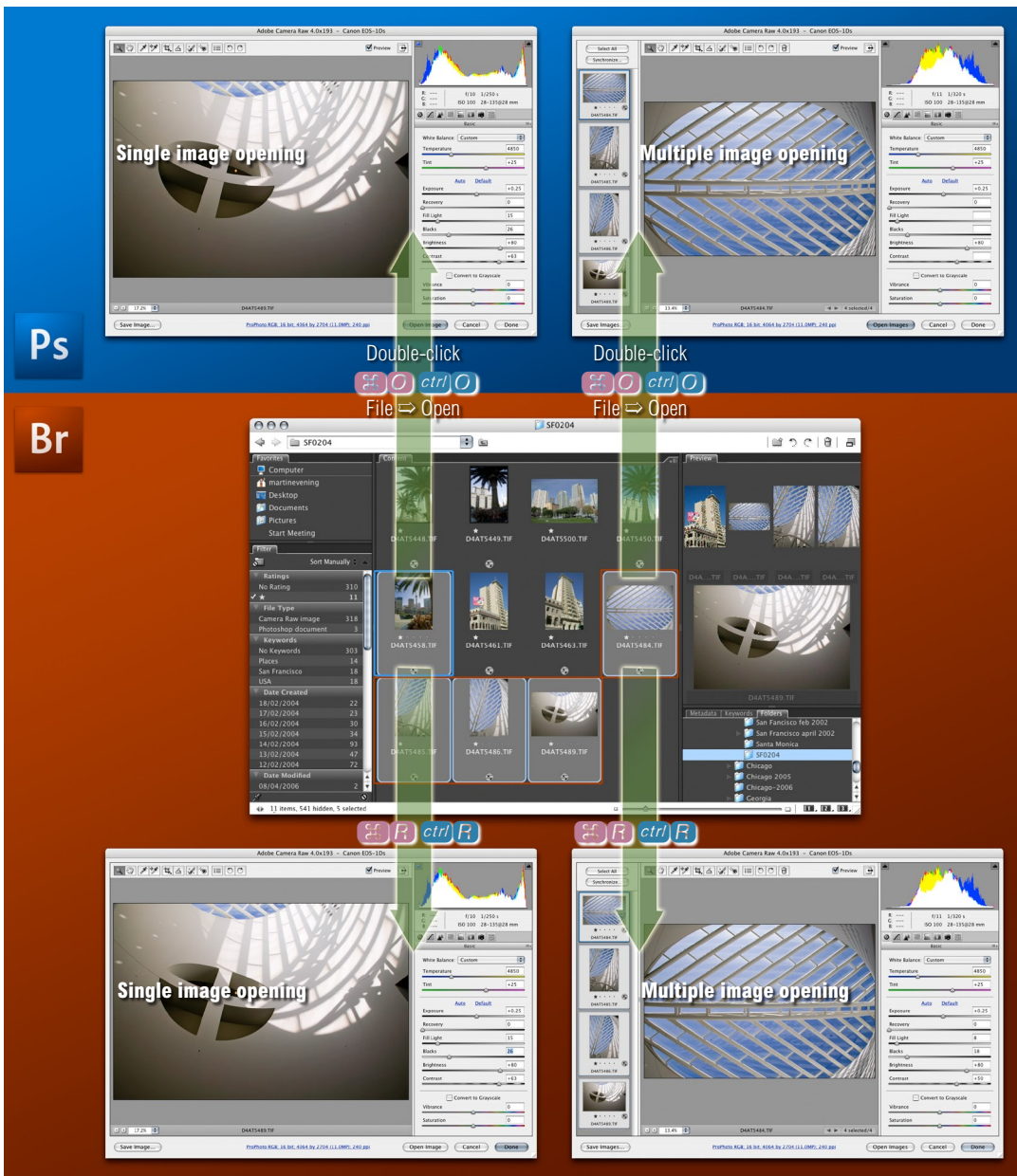**Figure 1** You can open single or multiple images via Camera Raw hosted by Photoshop, using a double-click, File ⇨ Open or ⌘ O ctrl O. Photoshop is ideal for processing small numbers of images. If you use ⌘ R ctrl R, Bridge will host the single or multiple Camera Raw dialog. Opening via Bridge is better suited for processing large batches of images in the background.

Deleting images

As you use Camera Raw to edit your shots, the Delete key can be used to mark images to be sent to the trash later. This will place a big red X in the thumbnail and can be undone by hitting Delete again.

Image browsing with Camera Raw

In multiple view mode, the Camera Raw dialog also be used as a magnified view image browser. You can match the magnification and location across all selected images to check and compare details, inspect them in a sequence and apply ratings to selected images.
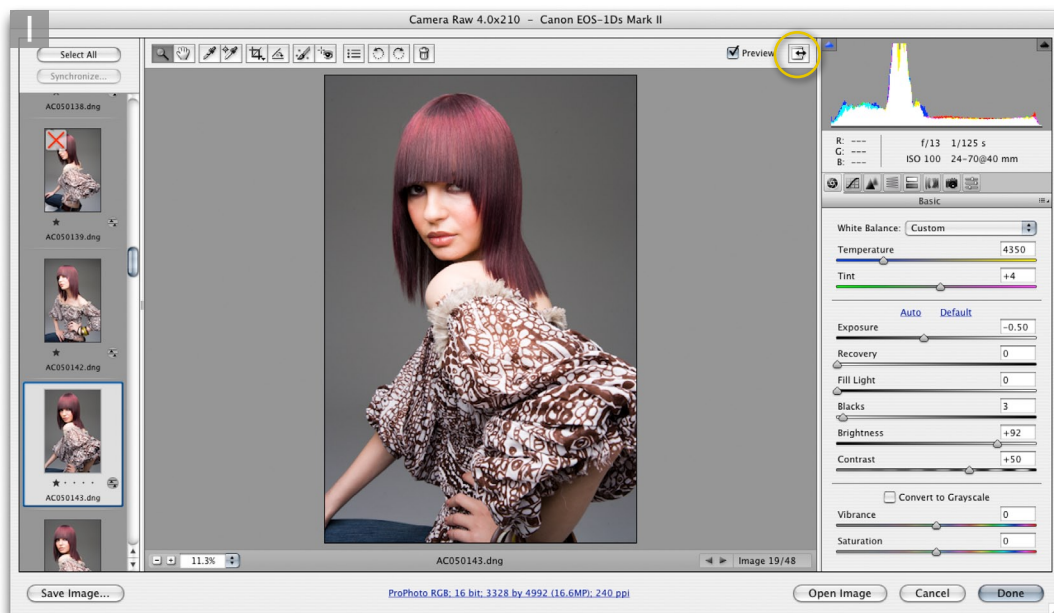
Selecting rated images only

If you ⌘ ctrl-click on the Select All button, this will select the rated images only. This means that you can use the ratings to first select the images you are interested in editing and then use the above shortcut to make a quick selection of just these images.

1 If you have a large folder of images to review with a sequence of images, the Camera Raw dialog can be configured to provide a synchronized, magnified view of all the selected pictures. The dialog is shown here in a compacted mode, but you can click on the Full Screen mode button (circled) to expand the dialog to fill the screen.

2 I clicked on the first image in the sequence and clicked on the Select All button. I then used the zoom tool to magnify the image. This action will synchronize the zoom view display for all selected images in the Camera Raw dialog. You can also use the hand tool to synchronize the scroll location for all the images.

3 Once this has been done you can deselect the thumbnail selection and then start inspecting the photographs. This can be done by clicking on the file navigation controls or by using the ← → keyboard arrow keys to progress through the images one by one. You can then mark your favorite pictures by using the usual Bridge shortcuts: ⌘ > ctrl > will progressively add more stars to a selected image. ⌘ < ctrl < will progressively decrease the number of stars.
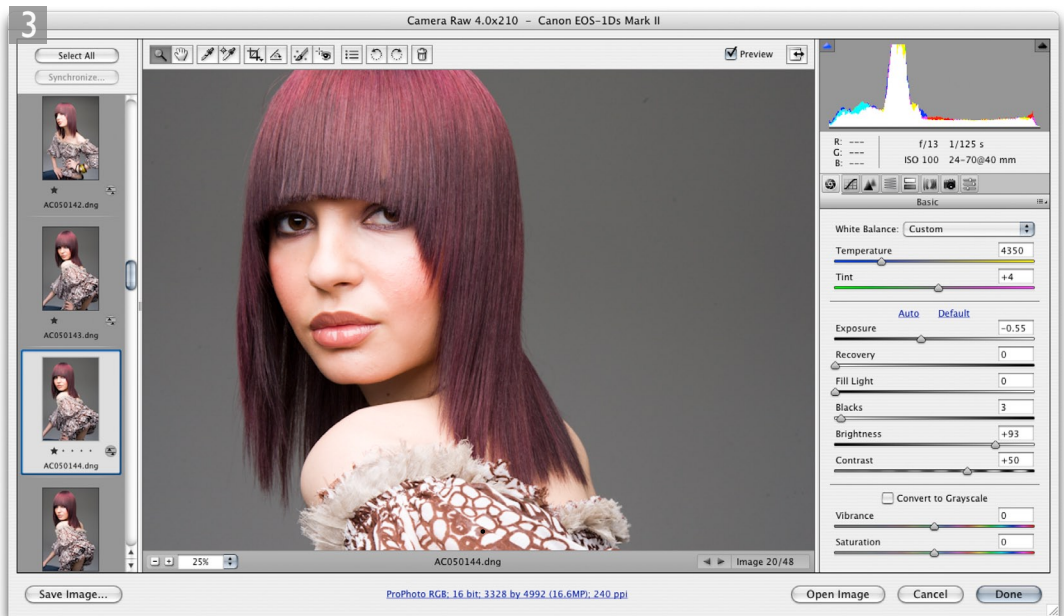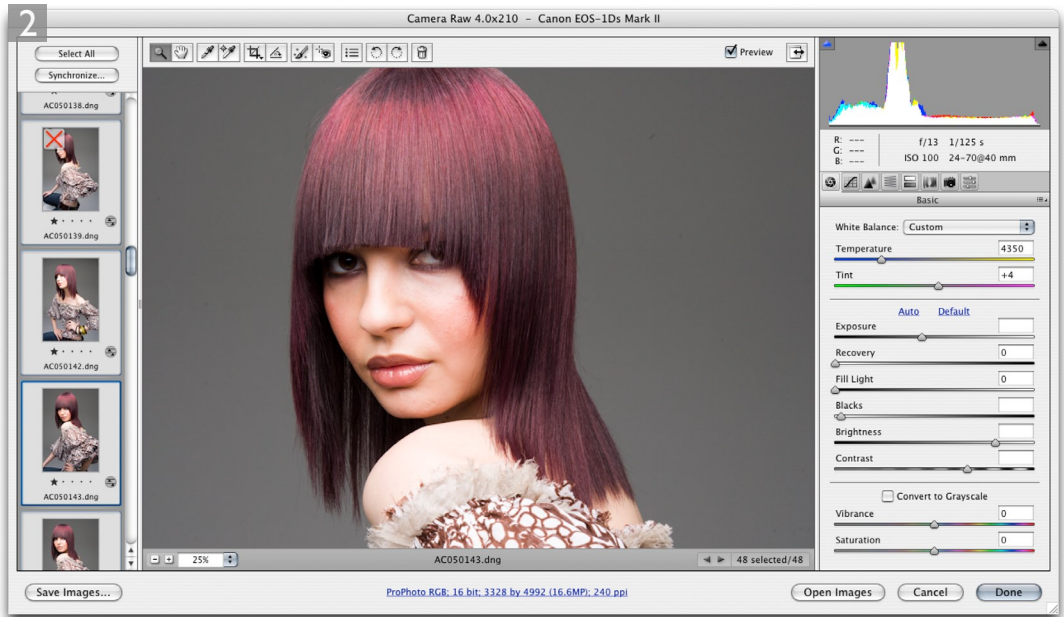
Client: Anita Cox. Model: Jennifer Muller @ Nevs.

Auto tone adjustments

Camera Raw has the useful ability to apply auto tone corrections. Just click on 'Auto' any time you want to auto correct an individual image, or use the ⌘ U ctrl U shortcut. You can also have Auto set as a Camera Raw preference (see Figure 2). When this is checked, any image that has not been processed in Camera Raw yet, will automatically have the auto tone setting applied to it. But any images you have previously edited using Camera Raw will remain as they are.

Auto tone works really well on most images, such as outdoor scenes and natural lit portraits. But it works less well on photographs that have been shot in the studio using controlled lighting. In these instances it can be something of a nuisance and is best left switched off.

Camera Raw cache size

The Preview cache is used to store all the thumbnail and preview data as compressed images in a central location. Bridge and Camera Raw use this data to populate the previews. If you have enough free hard disk space available, you may want to increase the size limit for the cache, or choose a new location to store the central preview cache data.

Camera Raw preferences

The Camera Raw preferences can be opened by choosing Bridge CS3 ⇨ Camera Raw Preferences... clicking on the Open Preferences button in the Camera Raw dialog, or using the ⌘ K ctrl K shortcut while in the Camera Raw dialog. Let's look at the General section first. I suggest you have the Camera Raw image settings saved as sidecar '.xmp' files. If the XMP data cannot be stored internally within the file itself (such as is the case with a DNG file), this will force the image settings to be stored locally, accompanying the files. The image sharpening can be applied to the previews only, should you wish to preview your adjustments with sharpening turned on, but without actually sharpening the output. The reason for this is because you might want to use a third party sharpening program in preference to Camera Raw's sharpening.

In the Default Image Settings section, you can set various behaviors. When 'Apply auto tone adjustments' is switched on, Camera Raw will automatically apply an auto tone adjustment to all new images it encounters. The 'Apply auto grayscale mix when converting to grayscale' refers to the HSL/Grayscale controls, where Camera Raw
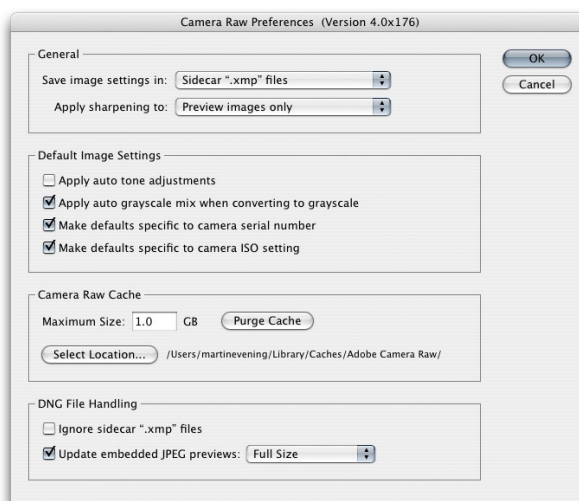

Figure 2 Camera Raw Preferences dialog.

will apply an auto slider grayscale mix adjustment when converting a color photograph to black and white (the auto slider settings are in fact determined by the white balance setting). The next option allows you to make any default settings camera-specific. Basically, there is an option in the Camera Raw options menu that will allow you to save a particular set of Camera Raw settings as a new default setting to be used every time Bridge or Camera Raw encounters a new image. This option will make these settings specific to the camera serial number. This can be particularly useful for ensuring that the correct Camera Calibrate panel settings are applied automatically, based on the serial number of the camera used. Similarly, the 'Make defaults specific to camera ISO setting' will allow you to save a default setting for specific ISO values. This means that when you adjust the Detail panel settings, these can also be saved as the default settings for a particular ISO setting. And when both this and the previous option are checked, you can effectively have in Camera Raw, multiple default settings that will take into account the combination of the camera model and ISO setting.

Basic panel controls

The Basic controls are best approached and adjusted in the order you find them. The White Balance refers to the color temperature which essentially describes the warmth or the coolness of the lighting conditions. Tungsten lighting has a low, warm color temperature, while daylight has a higher, more blue color temperature. If you choose to shoot in raw mode it does not matter how you set the white point settings at the time of shooting, because you can decide later which is the best white balance setting to use. The white balance setting will normally default to using the 'As Shot' white balance setting embedded in the raw file metadata at the time the image was taken. This might be a fixed white balance setting that is used on your camera or it could be an auto white balance made at the time the picture was shot. If this is not correct, you can try mousing down on the White Balance pop-up menu and select a

DNG file handling

Camera Raw and Lightroom will embed the XMP metadata in the XMP header space of a DNG file. Therefore there is no need to use sidecar files to read and write XMP metadata when sharing files between these two programs. However, some third-party programs may create sidecar files for DNG files and the DNG preferences can be set to ignore "xmp" sidecar files when reading DNGs. If this is checked, Camera Raw will not be side-tracked by data in sidecar files that accompanies a DNG file, unless of course, you want Camera Raw to read this data.

DNG files contain embedded previews that will represent how an image will look with the current applied Camera Raw settings. When the Update embedded JPEG preview is checked, this will force the previews in all DNG files to be rebuilt based on the current Camera Raw settings, overriding previously embedded previews.

Camera Raw white balance

Camera Raw was designed by Thomas Knoll, one of the original creators of the Photoshop program. Thomas has cleverly used two profile measurements, one made under tungsten lighting conditions and another done using daylight balanced lighting and used these to calculate the white balance adjustment between these two white balances and then extrapolated the data to calculate the white balance going to extremes either side of these measured values.

Color temperature

In the world of traditional color photography we basically had just two color temperature choices when choosing a film emulsion: daylight and tungsten. Daylight film for outdoor photography and studio flash was rated at 5500 degrees Kelvin and Tungsten at 3200 degrees Kelvin. These absolute values would rarely match the lighting conditions you were shooting with, but they would enable you to get roughly close to the appropriate color temperature of the light you were using in either a daylight/strobe lighting or indoor/tungsten light setting. One could then fine-tune the color temperature by using filters over the camera lens or color gel filters over the lights themselves.

preset setting that correctly describes the white balance that should be used. Alternatively, you can simply adjust the Temperature slider to make the image appear warmer or cooler and adjust the Tint slider to balance the white balance green/magenta tint bias. But the easiest way to do this is to select the white balance tool and click on an area that is meant to be an off-white color (you will notice that as you move the tool across the image, the RGB values will be displayed just below the histogram).

The image tonal adjustment controls are next. These allow you to make further adjustments to the way the raw image data will be interpreted when it is converted and opened in Photoshop. It is important to note here that with raw files, the raw data exists in a linear gamma space. This is because camera sensors have a linear response to light and the unprocessed raw files exist in what is referred to as a linear gamma space. Human vision interprets light in a non-linear fashion, so one of the main things a raw conversion has to do is to apply a large gamma correction to the original image data to make the correctly exposed,
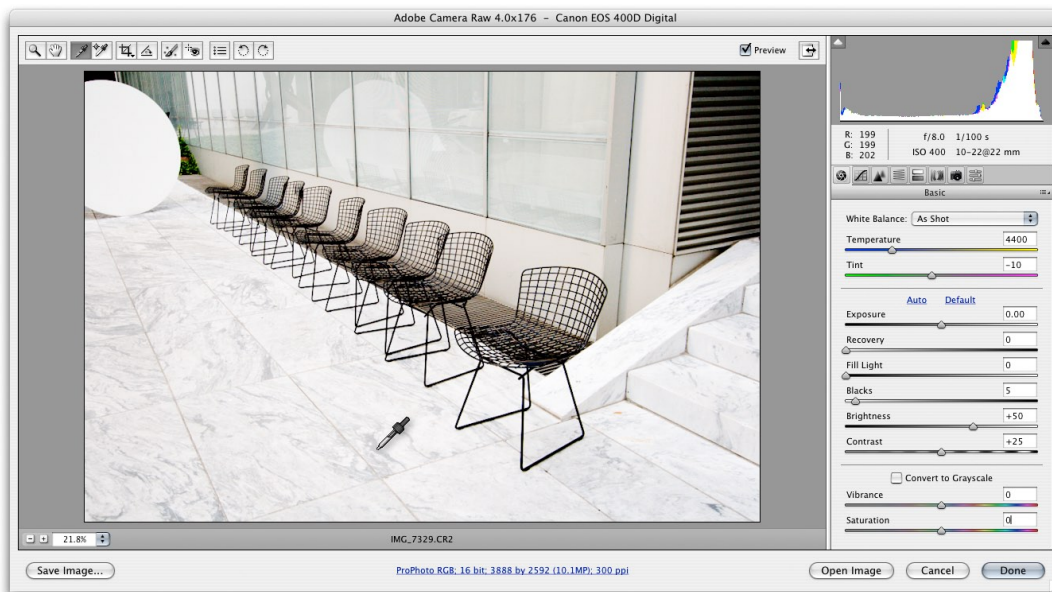

Figure 3 Setting a white balance with the white balance tool.

raw image look correct, the way our eyes would expect to perceive the scene in an image. So the preview image you see in the Camera Raw dialog presents a gamma corrected preview of the raw data, while the adjustments you apply in Camera Raw are in fact being applied to the raw, linear data. The reason I mention this is to illustrate one aspect of the subtle but important differences between the tonal edits that can be made in Camera Raw to raw files and those that are applied in Photoshop where the images have already been 'gamma corrected'. Note that in the case of non-raw files, Camera Raw has to temporarily convert the image to a linear RGB space to carry out the calculations.

The Exposure slider is used to set the overall brightness, so that the photograph looks 'correctly exposed'. Unlike previous versions of Camera Raw, you don't have to worry about setting the exposure too bright or clipping the highlights, because the Recovery slider can be used to help preserve details in the highlights. If you hold down the ⌥ *alt* key as you drag the Recovery slider you will get to see a threshold mode preview, which can often make it easier to determine the optimum setting. The Blacks slider is a little less critical, but again I find it useful to hold down the ⌥ *alt* key to obtain a threshold mode preview display to help determine the point where the shadows just clip. The Fill Light kind of (but not exactly) matches the behavior of the shadow amount slider in the Shadow/Highlight image adjustment dialog. Dragging Fill Light to the right will add more lightness to the dark tone areas lightening the shadows. You can overdo things, because if you apply too much Fill Light you may knock back the contrast too much. The primary goal is to apply a first step tonal correction to set the overall brightness, the highlight clipping, the shadow point and shadow tone detail. From here you can either use the Basic panel Brightness and Contrast sliders to modify the photograph, or use the Tone Curve panel controls, which in my view, offer a more versatile method for fine-tuning the image tone contrast.

Highlight recovery

The Camera Raw Recovery slider cleverly utilizes the highlight detail in whichever channels contain the best recorded highlight detail and thereby boost the detail in the weakest highlight channel. There are limits as to how far you can push a Recovery adjustment, but one may be able to recover as much as a stop of overexposure. Camera Raw can sometimes use extra tricks such as ignoring digital gain values used to create higher ISO captures.
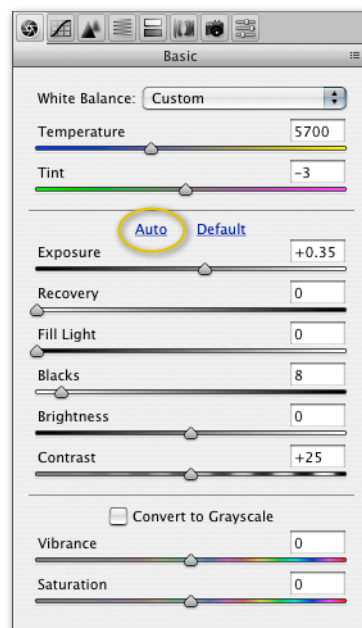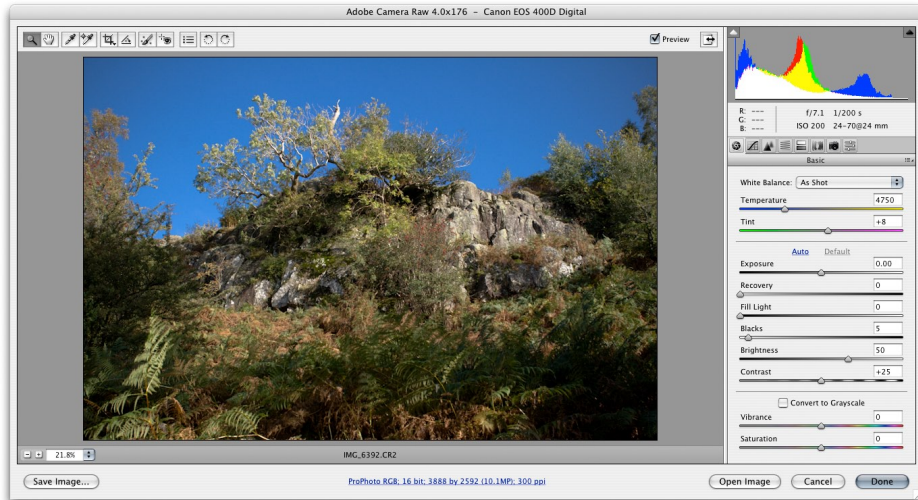

Figure 4 The Camera Raw Basic panel controls. Clicking Auto will apply an auto adjustment and clicking Default will apply the default Camera Raw settings (which will differ according to whether you are editing a raw or non-raw image). ⌘ *U* *ctrl* *U* can also be used to apply an Auto setting.

Basic image adjustment procedure

1 This shows a raw image as viewed in the Camera Raw dialog, using the default settings in the Basic panel. One way to quickly optimize an image is to click on the Auto button. If you want to reset all the settings you can do so by double-clicking on the individual sliders, or by clicking on the Default button.
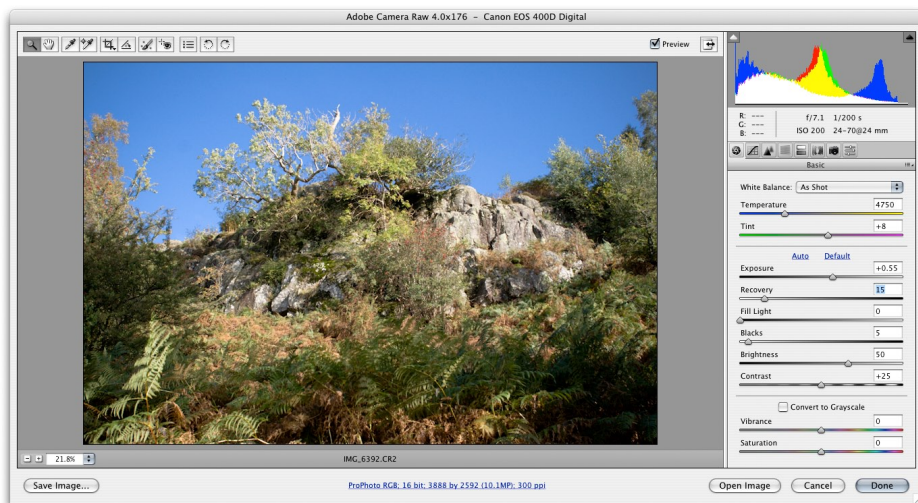
2 In this example I adjusted the Exposure to make the photograph look lighter and achieve what looked like the best visual brightness. You don't have to worry about blowing out the highlight detail, because you can use the Recovery slider to restore any highlight detail that may be clipped (but without destroying the exposure effect).

3 The next step was to optimize the shadows. I used the Blacks slider to set the clipping point for the shadow detail and after that I used the Fill Light slider to lighten the darker areas of the photograph such as the bracken in the foreground. Note that as you adjust the Recovery and Blacks sliders, you can hold down the ⌥ alt key as you drag to see a threshold view of the image, which can help you determine how far to drag to set the correct amount of clipping.
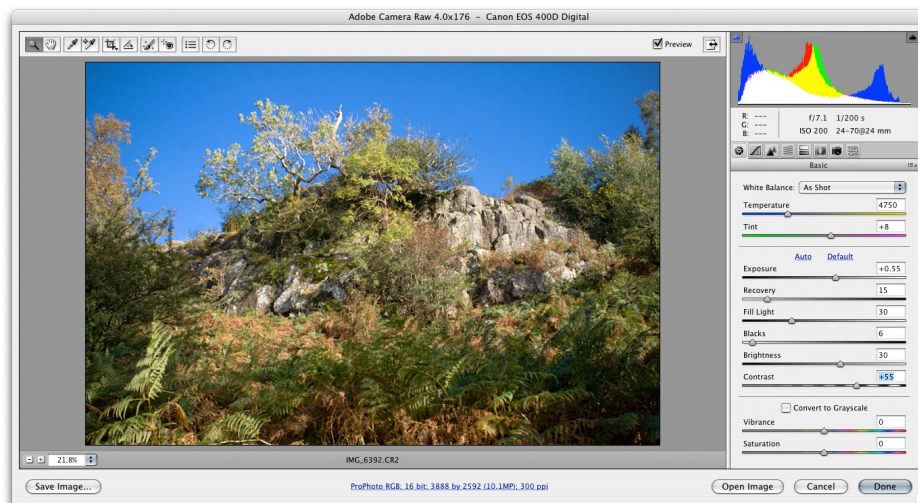

4 And last of all, I used the Brightness and Contrast sliders to fine tune the tonal balance of the photograph. It is important that you use the Basic adjustment controls in the order suggested here, instead of adjusting the brightness first and then tweaking the Exposure afterwards.

Negative vibrance and saturation

Not all of us want to turn our photographs into super-colored versions of reality. You can use the Vibrance and Saturation sliders to apply negative adjustments too. If you take the Saturation down to -100, this will convert an image to monochrome. This used to be how one went about making black and white renderings from Camera Raw (you can now use the HSL/Grayscale panel instead). But negative Saturation and Vibrance adjustments can be used to produce nice pastel colored renderings.

Vibrance and Saturation

A Vibrance slider has been added to the Camera Raw basic controls and this can apply what are described as non-linear color saturation adjustments, which means colors that are already brightly saturated in color remain relatively protected when you boost the vibrance, compared to the colors that are not so saturated, which receive a greater saturation boost. The net result is a saturation control that allows you to make an image look more colorful, but without the attendant risk of clipping those colors that are saturated enough already. Try opening a photograph of some brightly colored flowers and compare the difference between a Vibrance and a Saturation adjustment. You should notice how extreme saturation adjustments will soon cause the brighter colors to clip. The other thing that is rather neat about the Vibrance control is that it has a built-in skin tone protection filter which does quite a good job of not letting the skin tones increase in saturation as you move the slider to the right. In Figure 5, I boosted the Vibrance to +45, which boosted the colors in the dress, but without giving the model an unnaturally 'vibrant' suntan.
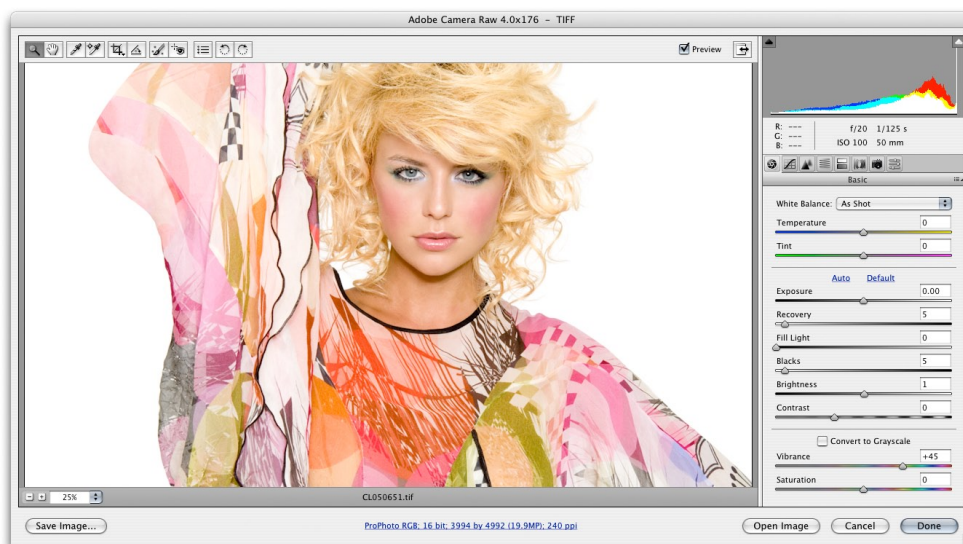
Client: Clipso. Model: Carina @ FM   **Figure 5** Boosting colors using the Vibrance control in the Basic panel.

Tone Curve panel

The Curve panel control is a fine-tuning control that is applied to the image in combination with the initial adjustments made in the Adjust panel controls. In the Point curve editor mode, the default setting uses a Medium Contrast curve which applies a moderate increase in contrast, that arguably matches the default contrast applied by most cameras when they carry out their on-board processing to produce a JPEG image. So this default setting combined with the auto settings will probably produce the 'snappiest' looking results. But it is just a default and it is quite simple to turn the curve off by setting it to Linear and this can become your new default. The Parametric curve editor mode provides a new mechanism for editing the tone curve shape, where instead of clicking to add points and dragging them, you use the slider controls to control the curve shape, which judging from responses so far, photographers generally find this method much more intuitive to work with.
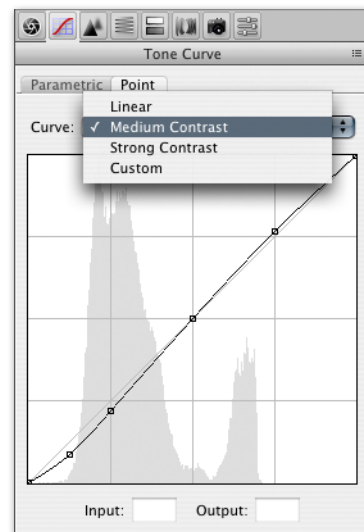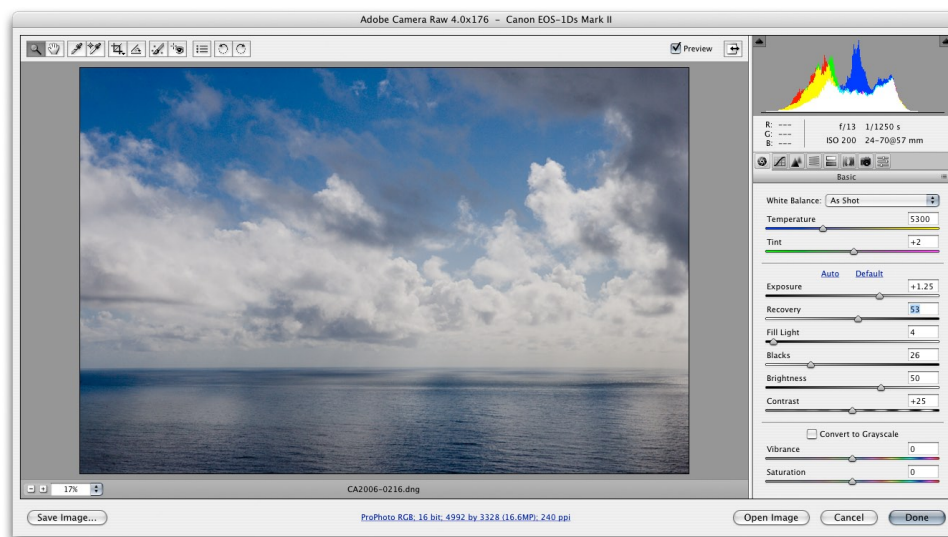

Figure 6 The Tone Curve panel, shown here in Point Curve editor mode and displaying the basic ACR curve preset settings.

1 In this first example, the image tones were adjusted using the Basic panel controls to produce an optimized range of tones that were ready for further enhancement. I could have used the Brightness and Contrast sliders next, but the Tone Curve panel provides a simple yet effective interface for manipulating the contrast and brightness.

13

2 Over in the Tone Curve panel I selected the Parametric curve option and by dragging the Highlights slider to the right and reducing the Lights slider a little, I was able to increase the contrast in the sky.
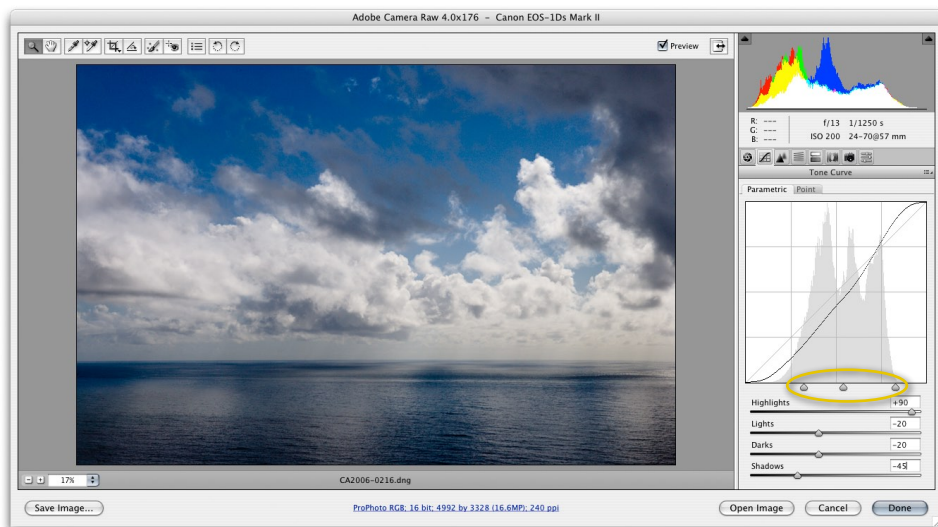
3 I then adjusted the Darks and Shadows sliders to add more contrast in the dark regions of the photograph. But in addition to this I fine-tuned the scope of adjustment for the Tone Curve sliders by adjusting the positions of the three tone range split points (circled).

Image effects using the Point Curve editor

If you switch to the Point curve editor mode, you can edit the curve shape manually. This makes it possible to edit previously applied point curve settings, but you can also use the point curve to create special effects like the black and white solarization effect shown below.
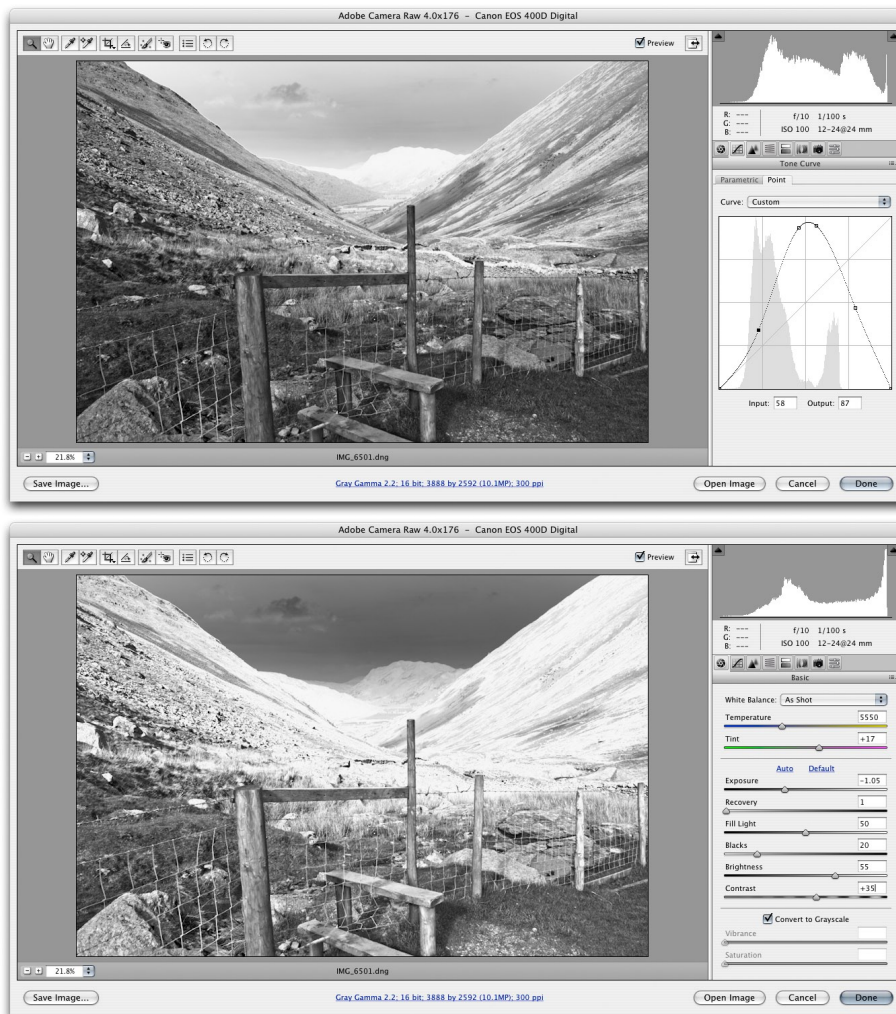

Figure 7 In this example, I created an inverted 'V' curve shape via the Point Curve in the Tone Curve panel. I then switched to the Basic panel and used the tone controls there to further modify and vary the effect.

15

Other noise reduction methods

I would recommend that you also consider using the Reduce Noise filter in Photoshop as a method for reducing heavy image noise artifacts.

Camera Raw JPEG sharpening

If you shoot using the JPEG mode, your camera will have already sharpened the capture data. And in general, if you are opening a JPEG or TIFF image via Camera Raw it would be safe to assume that the image should have already been presharpened. Now in Camera Raw it is always possible to sharpen any image, but in the case of JPEGs and other non-raw images, the default setting is wisely set to zero. This is because in nearly every case only you should decide when to apply Camera Raw sharpening. It is not something you want to see applied by default.

Detail panel

The Detail settings allow you to make improvements to the smoothness and sharpness of the raw conversion and compensate for any color noise. To make a proper judgement when using any of the detail slider controls, you should preview the image at 100%.

I sometimes prefer to leave Camera Raw processed images unsharpened and carry out the presharpening in Photoshop (as described in the previous chapter). But even if you don't intend to sharpen in Camera Raw, it is nonetheless useful to see sharpening applied to the preview images in Camera Raw as this will help you make better judgements when making tonal and contrast edit adjustments. If you mouse-down on the small triangle next to the Camera Raw settings you can open the Camera Raw preferences shown back in Figure 2 and set the sharpening so that it is applied to the preview images only and then leave the Detail Sharpness setting at 25%.

Mind you, I have grown to appreciate the Camera Raw sharpening as a basic capture sharpening method and reckon it is worth promoting to readers as a simpler way to presharpen images. The single slider control in Camera Raw is certainly a simpler concept to get to grips with!

Whenever you shoot using a high ISO setting on the camera, you will almost certainly encounter noise and the Luminance and Color Noise Reduction can be used to improve the appearance of images that suffer from such noise artifacts. The Luminance slider can be used to smooth out the physical clumpiness of the noise artifacts while the color noise reduction can soften the color and get rid of the colored speckles. The noise will vary a lot from camera to camera, so it is hard to give out any specific settings advice. Figure 8 shows the settings used on a fairly grainy capture that was shot using the camera's maximum 400 ISO setting. For the most part you can safely set the color noise reduction to maximum, but not if the photograph you are editing contains a lot of blue information, such as an underwater photograph. As you can see in Figure 9, too much color noise reduction can significantly soften the edge detail in a photograph.
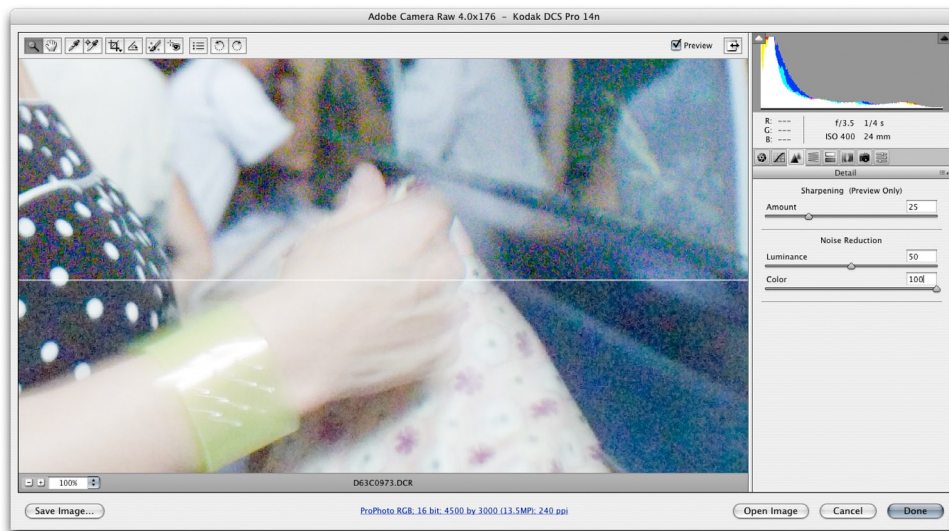
Figure 8 The Camera Raw Detail panel controls. The preview is shown here divided in two. The top half shows the before image and the bottom half the preview with the luminance smoothing and color noise reduction applied.
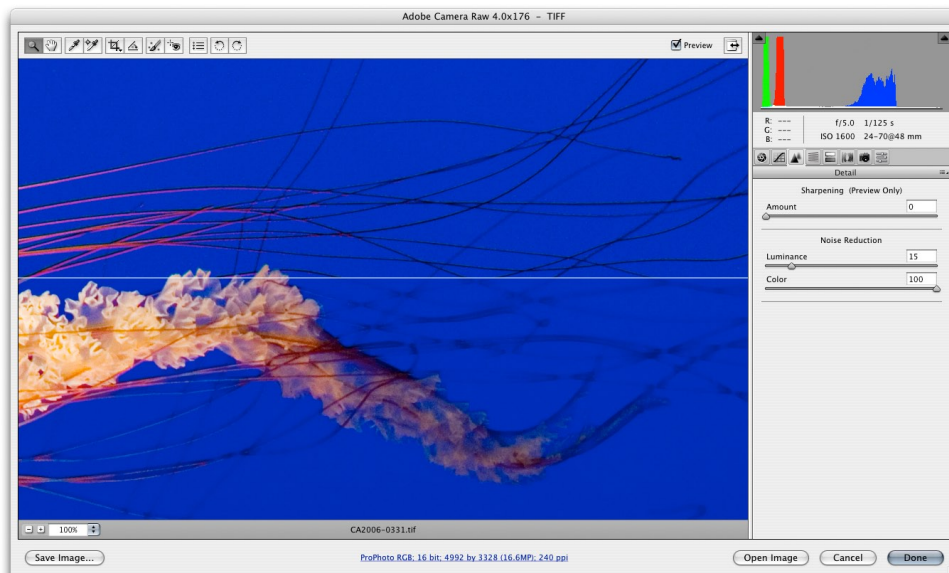

Figure 9 With an underwater subject such as this, you should be wary of applying excessive noise reduction. In the bottom half view you can see how this can lead to blurring of the image detail.

HSL color controls

The choice of color ranges for the HSL sliders is really quite logical when you think about it. We may often want to adjust skin tone colors, but skin tones aren't red or yellow, but are more of an orange color. And the sea is often not blue but more of an aqua color. Basically, the hue ranges in the HSL controls are designed to provide a more applicable range of colors for photographers to work with.

HSL/Grayscale panel

The HSL/Grayscale panel is a new addition to Camera Raw 4. The HSL controls provide eight color sliders with which to control the Hue, Saturation and Luminance. These controls are similar to the Hue/Saturation adjustment in Photoshop, but in many ways better, because from my experience I find that the controls are more predictable in their response. For example in Figure 10, I used the Luminance controls only to darken the blue sky and add more contrast between the clouds and the sky, plus I lightened the grass and trees slightly. Do this in Hue/Saturation and you will find that the blue colors will tend to lose saturation as you darken the luminosity. You will also notice that the slider colors have departed from the traditional additive and subtractive primary colors of red, green, blue, plus cyan, magenta, yellow, rather that match the color model used in conventional color tools. The color controls in the HSL panel are based on colors that are of more actual relevance when editing photographic images.

Figure 5.10 In this example, the HSL/Grayscale panel was used to add more cloud contrast to the sky by darkening the Aquas and Blues sliders.

Camera Raw black and white conversions

If you check the Convert to Grayscale box, Camera Raw will make a black and white, 'Grayscale Mix' version of the image, that is produced by blending the image's color data to produce a monochrome rendering of the original. Clicking 'Auto' will apply a custom setting that is based on the White Balance setting used in the Basic panel, and if you click 'Default', this will reset all the sliders to zero. You can also manually drag the sliders to make certain colors in the color original lighter or darker. And the beauty of this is that the overall tone brightness and contrast will not fluctuate much as you do this. This makes it easy to experiment with different slider combinations. If you want the sky to be darker, you would do as I did in Figure 11 and drag the Aquas and Blues sliders to the left. I would also suggest that you switch over to the Basic and Tone Curve panels to make continued adjustments to the White Balance and tone controls as this can have a strong bearing on the outcome of the grayscale conversion.

Grayscale Mix tips

You might also like to try adjusting the Vibrance or Saturation before you click on the Convert to Grayscale box, as this can help produce stronger contrast results. You might also like to experiment with an alternative grayscale mix technique, where you set all the HSL Saturation sliders to -100 and then adjust the HSL Luminance sliders. This method offers a different type of slider response and you may prefer the results you get. You will also have full interactive control with the Vibrance and saturation, where interestingly, a negative vibrance can actually enhance a darken luminance adjustment.

Figure 11 In this example, I clicked on the Convert to Grayscale button and made some custom slider adjustments to increase the sky contrast.

Color image split toning

Although the Split Toning panel appears to be an extension of the Grayscale Mix, the Split Tone controls are just as useful for working on color images. Later in this book I will be describing how to create a color cross processing effect in Photoshop, but the Split Toning controls described here can produce identical results, but with much less hassle. In fact I would say that there are quite a few Photoshop tips and tricks where Camera Raw is taking away the mystery of how to use Photoshop and making everything simpler and easier to accomplish directly within Camera Raw.

Split Toning panel

After you have used the HSL/Grayscale panel to convert a photograph to black and white, you can the use the Split Toning panel to colorize the image. The controls in this panel will allow you to apply one color to the highlights, another color to the shadows and then use the Saturation sliders to adjust the intensity of the colors. This is how you create a basic split-tone color effect. There is also the Balance slider, which will allow you to adjust the midpoint of the split tone. For example, in Figure 12, the photograph I was applying the split tone to was a high-key image and it was therefore more appropriate to offset the balance slider so that the blue shadow tone would register more in the shadows. Without such an adjustment the shadow color would have barely registered. The HSL/Grayscale and Split Tone controls are incredibly versatile. Bear in mind these will work equally well with non-raw images and make the new Black and White image adjustment in Photoshop almost completely redundant.
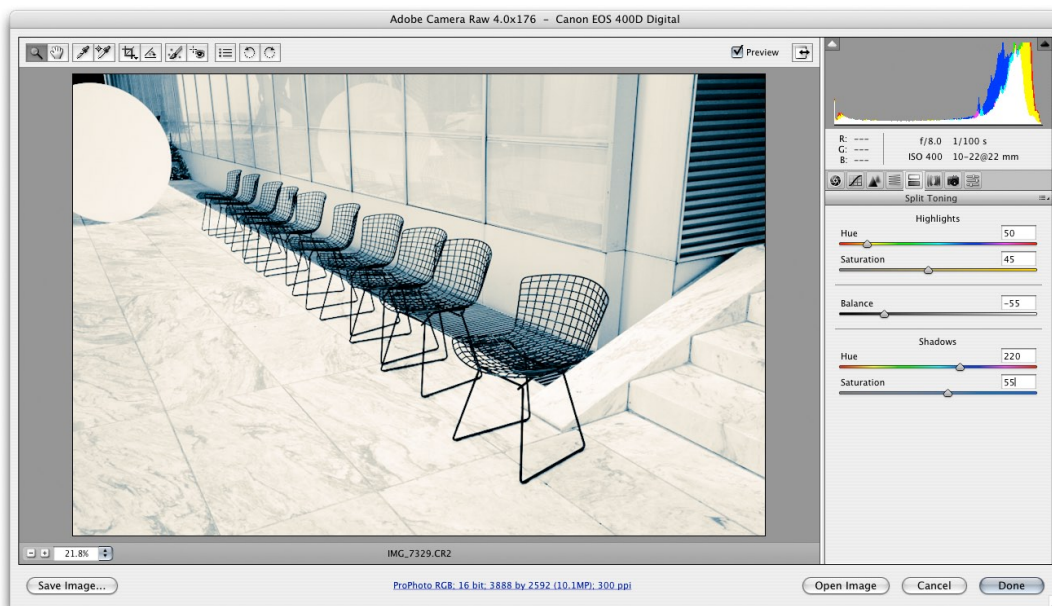

Figure 12 Here is an example of the Split Toning panel in action.

Lens Corrections panel

The Lens Corrections controls can help correct some of the optical problems that are associated with digital capture. If you inspect an image closely towards the edge of the frame area, you may notice some color fringing, which will be most apparent around areas of high contrast. This is mainly a problem you get with cheaper lens optics used on some digital cameras. The Chromatic Aberration controls should be used with the preview image set to 100% and can help remove any visible color fringing. The Red/Cyan Fringe adjustment works by adjusting the scale size of the red channel relative to the green channel and the Blue/Yellow Fringe slider will adjust the scale size of the blue channel relative to the green channel. The chromatic aberration controls are also available in the Lens Correction filter.

Figure 13 If you hold down the ⌥ alt key as you make adjustments to the Red/Cyan Chromatic aberration controls you can hide the Blue/Yellow color fringing. Do the same with the Blue/Yellow Chromatic aberration controls to hide the Red/Cyan color fringing.
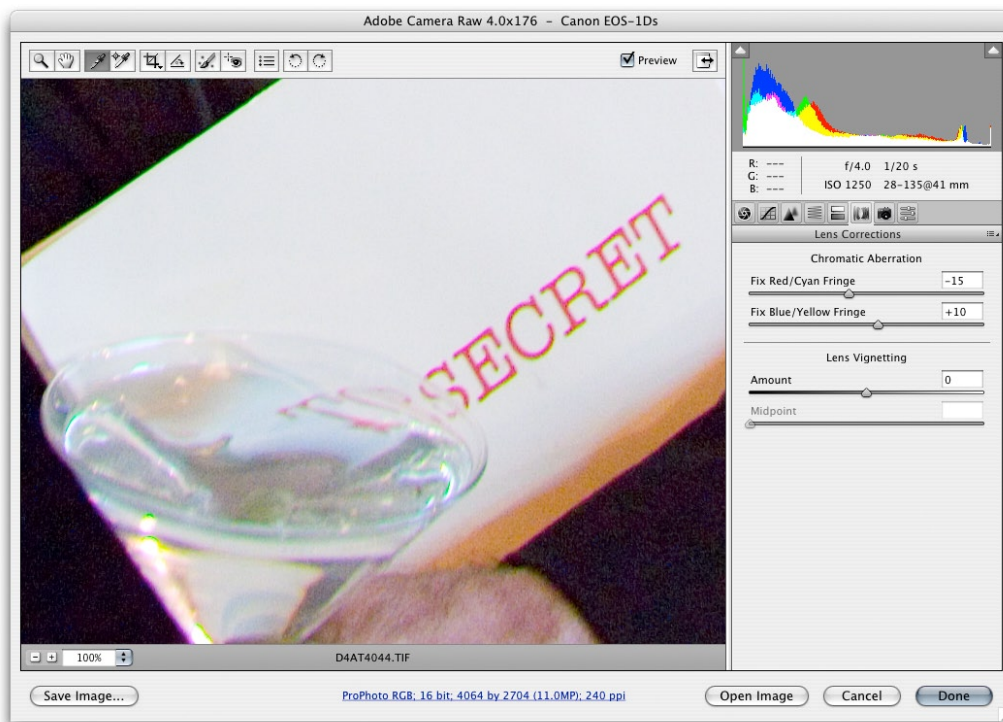

Figure 14 The Camera Raw Lens Corrections panel controls.

Vignette control

With some camera/lens combinations you may see some brightness fall-off to occur towards the edges of the picture frame. This will result in the corners being more darkly exposed compared to the center. This is a problem you are more likely to encounter with wide angle lenses, and you may notice the deficiency if the subject features a plain, evenly-lit background. The Amount slider can be used to correct for this by lightening the corners relative to the center of the photograph and the Midpoint slider can be used to offset the fall-off. As you increase the Midpoint value, the exposure compensation will be accentuated more towards the outer edges. Or, you can use the Vignette controls to create a darkening vignette effect as is shown below.
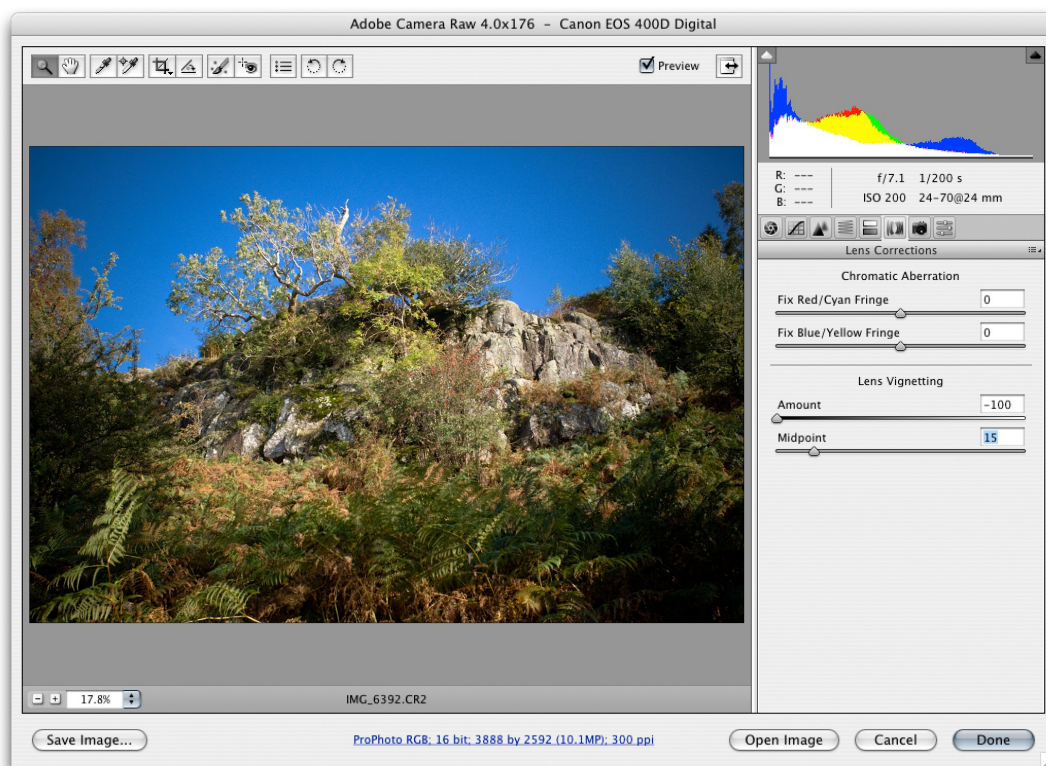
Figure 15 The Camera Raw Lens Corrections controls were used here to deliberately darken the corners of the photograph.