



# Adobe Photoshop CC update: Camera Raw 8.2

Welcome to the latest Adobe Photoshop CC bulletin update. This is provided free to ensure everyone can be kept up-to-date with the latest changes that have taken place in Photoshop (and those also applicable to CS6 users).

This bulletin describes the latest changes to Camera Raw. For a complete description of how to use these new Photoshop tools, with diagrams and step-by-step tools, I recommend you buy the *Adobe Photoshop CC for Photographers* book.

## Camera Raw 8.2

Camera Raw 8.2 has been released to coincide with the release of Lightroom 5.2. This version of Camera Raw is designed to do a number of things. Photoshop CS6 remains as a current shipping product sold as a perpetual license alternative for those Photoshop customers who don't wish to subscribe to the Creative Cloud and access the latest Photoshop CC program. Camera Raw support is to be continued for Photoshop CS6 users and this Camera Raw 8.2 release therefore offers support for the latest raw camera formats and lens profiles. Like Camera Raw 8.1, it continues to provide a bridge between that and the Photoshop CS6 program, allowing CS6 customers to open Lightroom 5 images that have been edited using the new adjustment options (such as Upright or Radial filters) via Camera Raw. If you are using Photoshop CS6 this means you can read files that have been edited using the latest adjustments, but you won't be able to edit settings that would otherwise be new to Photoshop CS6.

Meanwhile, Photoshop CC users will be able to access the features described over the following pages that are new to Camera Raw.

### New Camera Support in Camera Raw 8.2

- Canon EOS 70D
- Canon PowerShot G16
- Canon PowerShot S120\*
- Casio Exilim EX-ZR800
- Fujifilm FinePix HS22EXR
- Fujifilm FinePix HS35EXR
- Fujifilm FinePix S205EXR
- Fujifilm X-M1
- Leica C (Typ 112)
- Olympus E-M1\*
- Panasonic Lumix DMC-GX7
- Panasonic Lumix DMC-FZ70
- Panasonic Lumix DMC-FZ72
- Pentax Q7
- Pentax K-50
- Pentax K-500
- Sony DSC-RX100 II
- Sony A3000 (ILCE-3000)
- Sony NEX-5T

\* denotes preliminary support

## New Lens Profile Support in Camera Raw 8.2

Mount	Name
Sony	Sony E 35mm F1.8 OSS
Hasselblad	Hasselblad LF16mm F2.8
Hasselblad	Hasselblad LF18-55mm F3.5-5.6 OSS
Hasselblad	Hasselblad LF18-200mm F3.5-6.3 OSS
GoPro	GoPro Hero 3 Black Edition
GoPro	GoPro Hero 3 Silver Edition
GoPro	GoPro Hero 3 White Edition
Leica	Leica TRI-ELMAR-M 16-18-21 mm f/4 ASPH.
Canon	SIGMA 18-35mm F1.8 DC HSM A013
Canon, Nikon, Sigma	SIGMA 120-300mm F2.8 DG OS HSM S013
Nikon	SIGMA 30mm F1.4 DC HSM A013
Olympus, Sony	SIGMA 60mm F2.8 DN A013
Pentax, Sony	SIGMA 17-70mm F2.8-4 DC MACRO OS HSM C013

## Spot removal tool feathering

The spot removal tool now features a Feather slider. This allows you to modify the brush hardness when working with the spot removal tool in the clone or heal modes, applying either a circle spot or brush spot. This is interesting because while it has always been possible to adjust the brush hardness in Photoshop when working with the clone stamp tool, there has never been a similar hardness control option for the healing brush. This is because the healing brush and spot healing brush have always had an internal feathering mechanism built-in, so additional feathering has never been needed. Looking at what has been done here in Camera Raw the Feather slider control works well and is useful for both modes of operation. There is also another reason. With Lightroom 5 and Camera Raw 8, Adobe switched to using a faster healing algorithm in order to make brush spots retouching work speedier. However, as a result of this the blending isn't always as smooth as the previous algorithm used. This was one motivation for adding a Feather slider. At the same time, the Feather slider does appear to offer more control over the spot removal blending and can help overcome the edge contamination sometimes evident when using the spot removal tool in heal mode, but with a fixed feather edge. The feathering is applied to the destination circle spot or brush spot and the Feather amount is proportional to the size of the spot and bigger spots will use a bigger feather. For brush-type spots, you should think of this in terms of the thickness of the brush stroke (as opposed to the overall length). The Feather setting applied also remains sticky across Camera Raw sessions.

You can hold down the **Shift** key as you use the square bracket keys to control the feather setting. Use **Shift** + **]** to increase the feathering and **Shift** + **[** to decrease. You can also hold down the **Shift** key as you right-mouse click and drag left or right to dynamically adjust the Feather amount.

You can nudge both the destination and source circle/brush spots using the keyboard arrow keys. Use the **⌘** key (Mac), or **ctrl** key (PC) + arrow to nudge a destination circle or brush spot more coarsely and use **⌘ alt** (Mac), or **ctrl alt** (PC) + arrow to nudge more finely. Use the **⌘ Shift** keys (Mac), or **ctrl Shift** keys (PC) + arrow to nudge a source circle or brush spot more coarsely and use **⌘ Shift alt** (Mac), or **ctrl Shift alt** (PC) + arrow to nudge more finely.

Finally, when you hold down the **⌘ alt** (Mac), or **ctrl alt** keys (PC) and click in the preview and drag to adjust the cursor size, the size value is now reflected by the Size slider.



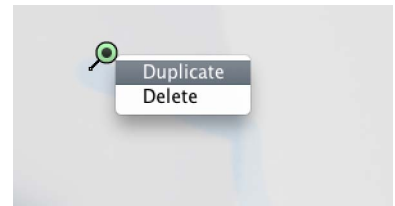
**Figure 1** The panel controls for the spot removal tool.

## Auto Find behavior

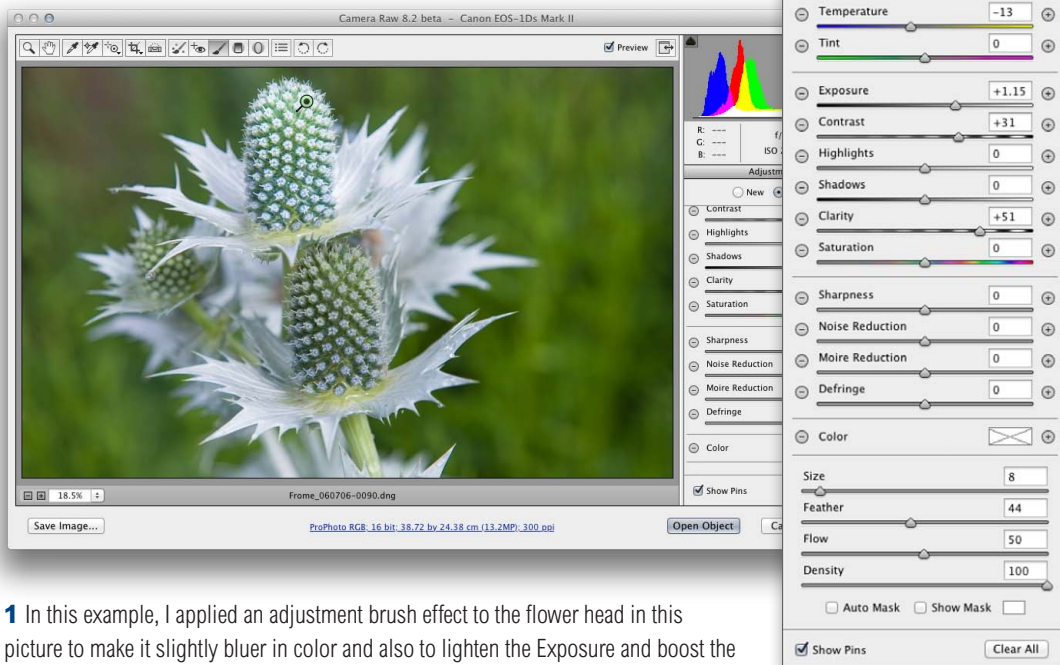
The auto find source aspect of the spot removal tool is now able to cope better with textured areas such as rocks, tree bark and foliage. It now also takes the applied crop into account. This means that if a crop is active the spot removal tool will give preference to sourcing areas within the cropped area rather than outside. Basically, if an image is cropped Lightroom carries out two searches for a most suitable area to clone from: one within the cropped area and one outside. Preference is given to the search inside the cropped when computing the auto find area. If somewhere outside the cropped area yields a significantly better result, then that will be used instead.

## Adjustment brush

Refinements have been made to the adjustment brush tool, bringing it more in line with the behavior of other localized adjustment tools in Camera Raw. When you add a brush adjustment you can click on the pin and drag to relocate the applied adjustment. There is a contextual menu for the brush pins (right-click on a pin to reveal), which allows you to duplicate a selected adjustment or delete (see Figure 2). There is also a new shortcut ( $\text{⌘} + \text{alt}$  + drag [Mac],  $\text{ctrl} + \text{alt}$  + drag [PC]), which you can use to clone an adjustment brush pin. Click on a brush pin with the above key combo held down and drag.

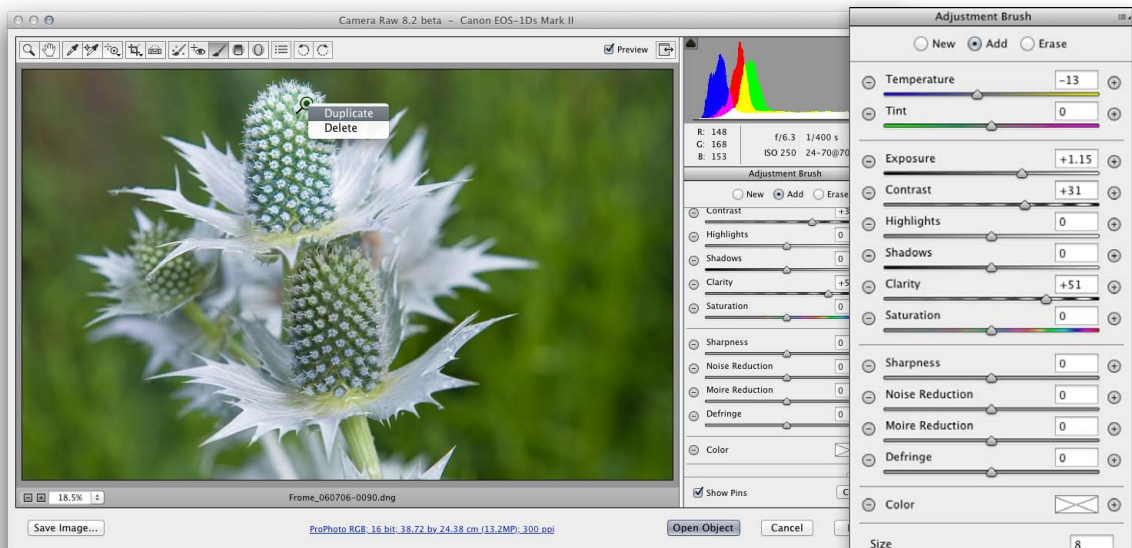


**Figure 2** The adjustment brush contextual menu.

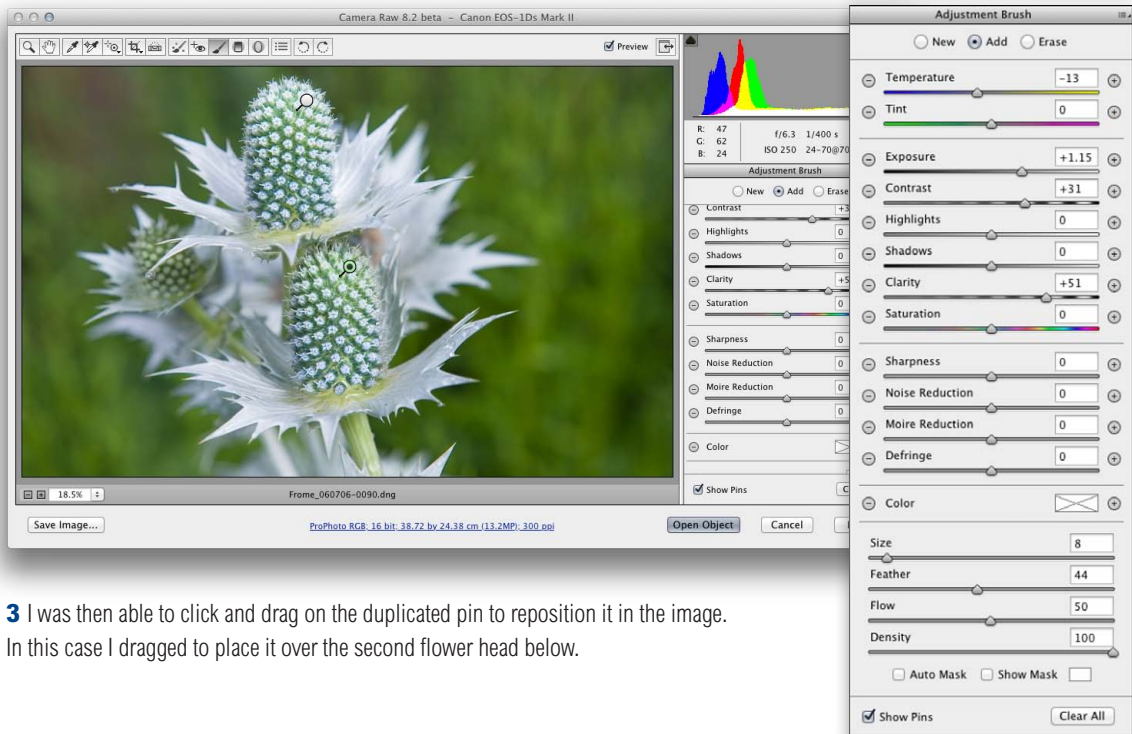


**1** In this example, I applied an adjustment brush effect to the flower head in this picture to make it slightly bluer in color and also to lighten the Exposure and boost the Contrast plus Clarity settings.





**2** For this next step I used a right mouse click on the brush pin to reveal the contextual menu shown here, where I selected the Duplicate option.



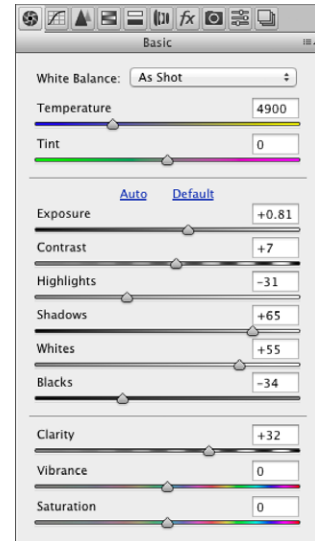
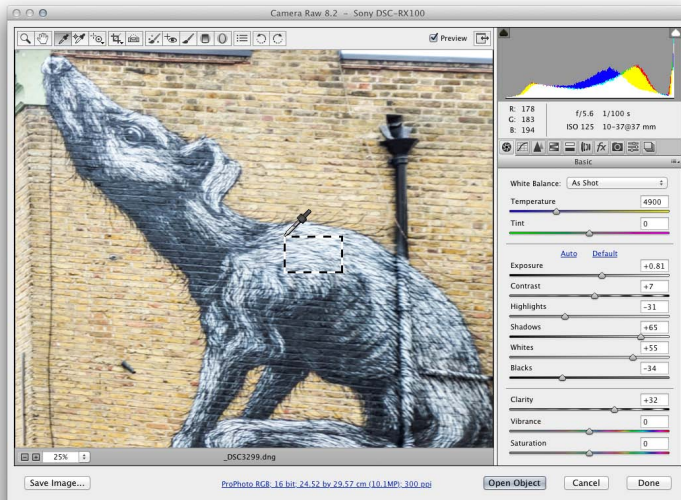
**3** I was then able to click and drag on the duplicated pin to reposition it in the image. In this case I dragged to place it over the second flower head below.

## Eyedropper tool refinement

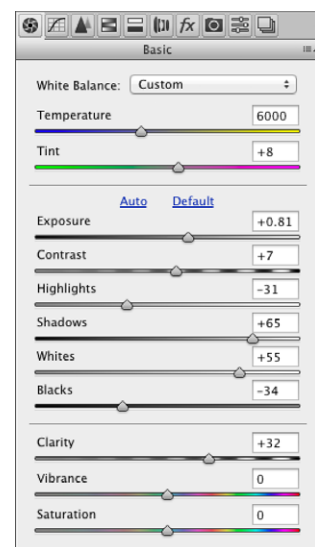
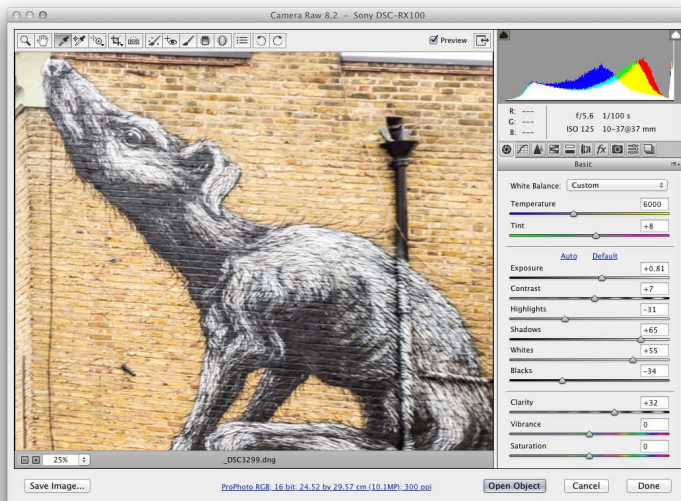
The eyedropper tool now features a “rectangle mode” when white balancing an image. Just click-and-drag with the eyedropper tool to define a rectangular pixel area. As you release the mouse, Camera Raw uses all the pixels within the marked rectangle to set the global white balance. This can be particularly useful for measuring white balance from a textured surface, such as in the example shown below.

## Single-clicking with the eyedropper

The single-click behavior of the eyedropper tool is still available though and remains unchanged.

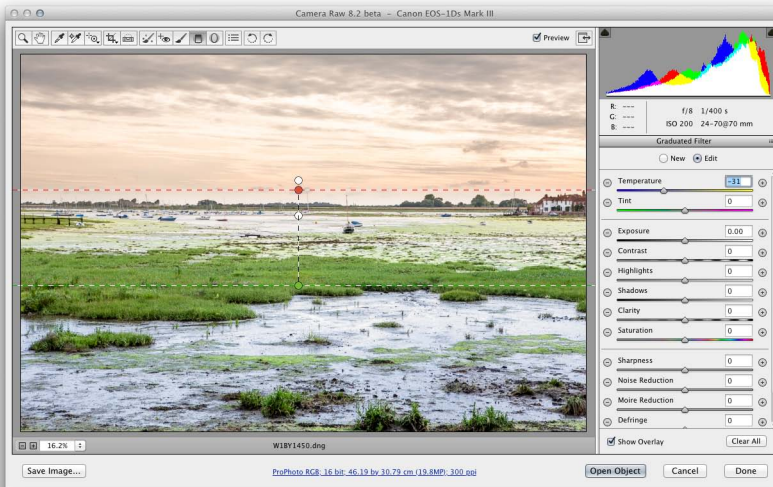


1 I opened this image in Camera Raw 8.2, which currently shows the “As Shot” white balance setting. I selected the eyedropper tool and marquee dragged to sample the pixels within the area shown here to set the white balance.

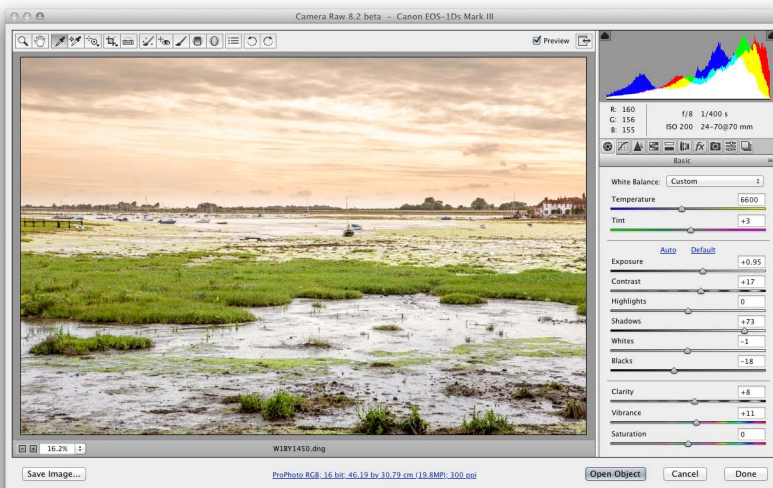


2 Here you can see the white balance corrected result.

Another improvement is the way the eyedropper tool is now smarter and takes into account locally applied white balance adjustments. For example, if you used the graduated filter to apply a warming white balance, when you click with the eyedropper tool it takes the localized Temp or Tint adjustments into account to ensure the pixels where you click are neutralized.



**1** In this example, a cooling Temp adjusted graduated filter had been applied to the image.



**2** When I selected the eyedropper tool and clicked on the bottom half of the image it calculated a new white balance adjustment that took into account the locally applied white balance adjustment.

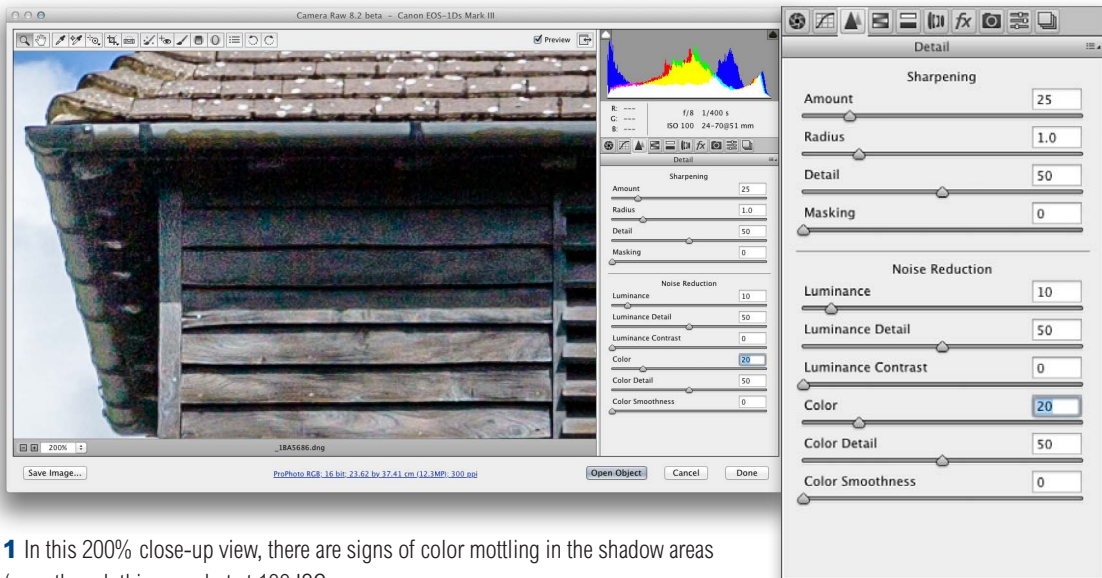


## Detail panel

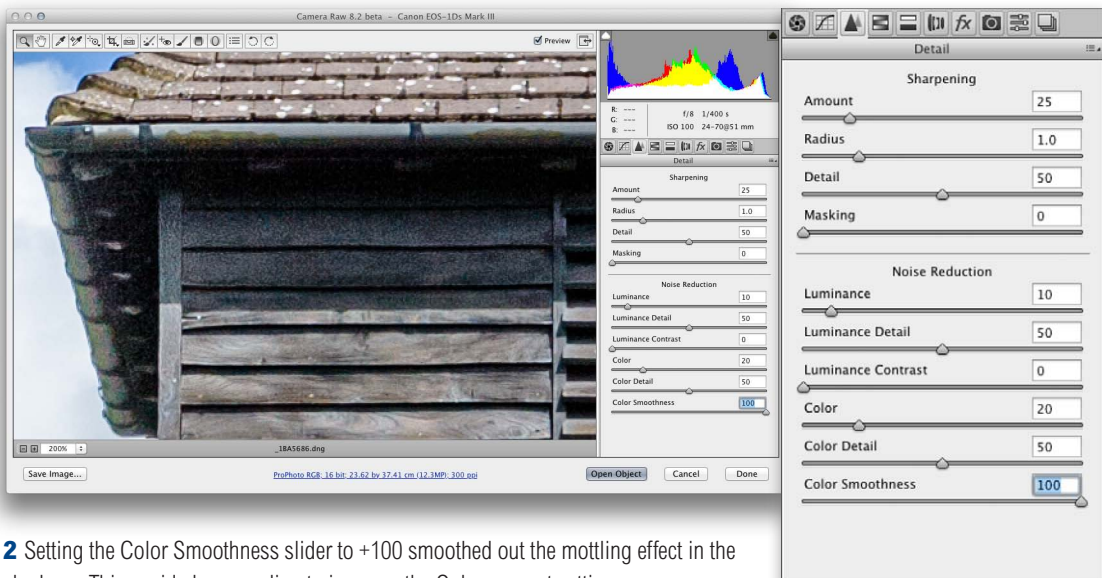
The Detail panel now offers a Color Smoothness slider in the Noise Reduction section. This can be used to help deal with color mottling artifacts (or large colorful noise blobs). These are usually caused by low frequency color noise and can be present in low as well as high ISO images, especially in the shadow regions. The default setting is 50. Dragging to the right can help make these disappear, though this will, at the same time, cause the image to appear smoother.

## Canon sensors

The example shown here was shot using a Canon EOS 1Ds MkIII camera at 100 ISO. I deliberately lightened the shadows to reveal the problem highlighted here. Canon cameras will benefit most from this feature. The latest Nikon sensors have much better noise characteristics.



**1** In this 200% close-up view, there are signs of color mottling in the shadow areas (even though this was shot at 100 ISO).



**2** Setting the Color Smoothness slider to +100 smoothed out the mottling effect in the shadows. This avoided me needing to increase the Color amount setting.

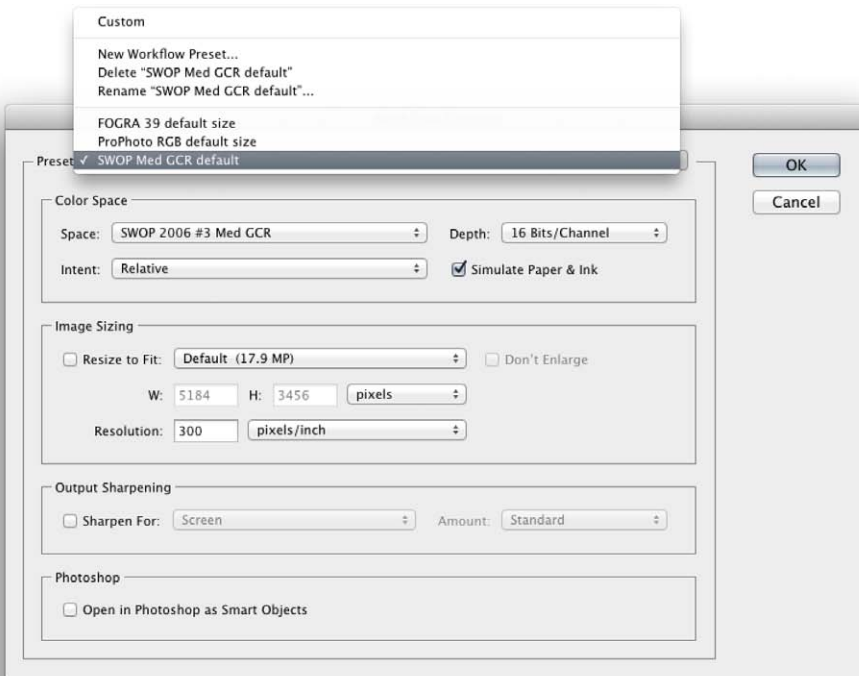
## Workflow Options dialog

The Workflow Options dialog has been further enhanced in this latest Camera Raw update. In the Image Sizing section (Figure 3) there is now a Percentage menu option, meaning that you can now specify a percentage to resize an image by.



**Figure 3** The Image Sizing section of the Workflow Options dialog now features a Percentage option.

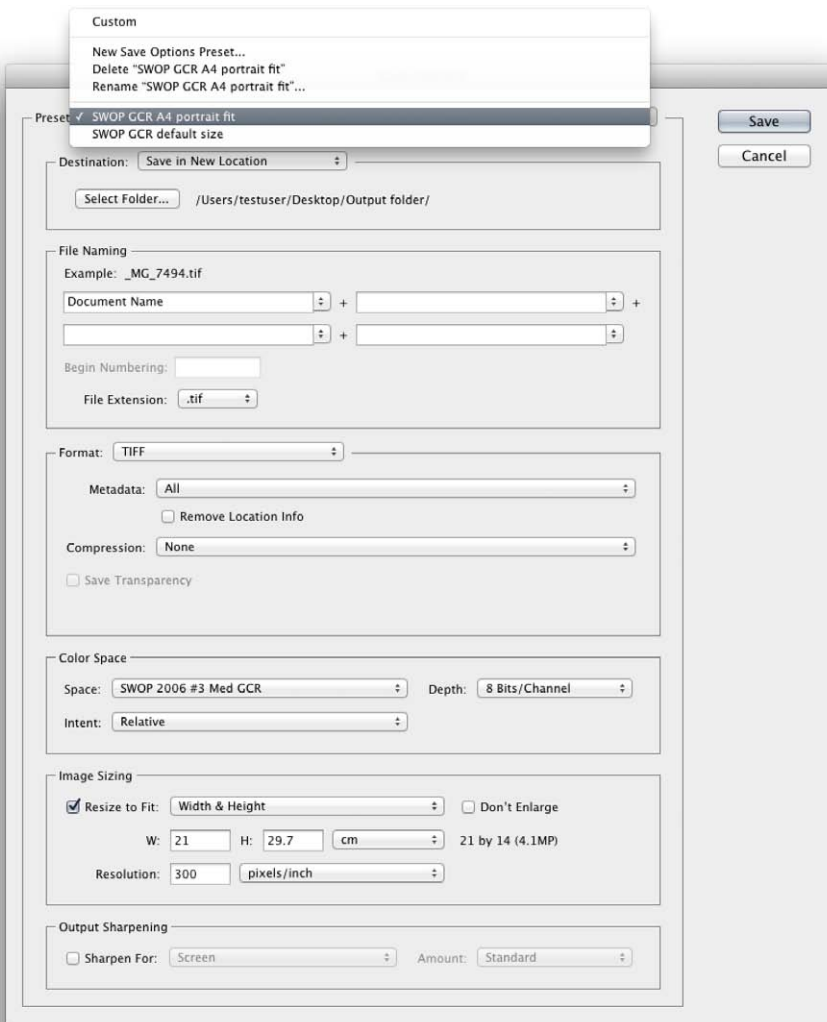
The Workflow Options dialog now allows you to save presets. In Figure 4 you can see the Workflow Options dialog configured to use a SWOP Medium GCR profile as the preview space using a Relative Colorimetric rendering intent and saved as a preset setting. This now allows you to quickly switch between different workflow options settings, which can also be accessed by right mouse-clicking the Workflow options.



**Figure 4** The Workflow Options dialog showing the new Presets menu.

## New Save dialog

Along with refinements to the Workflow Options, the Save dialog has also been updated. This allows you to combine the ability to preview a document in Camera Raw using a profiled color space with the ability to export using the same color space. The new options are at the bottom. When saving as a rendered TIFF, PSD or JPEG, you can select the desired color space and choose an image sizing setting that is independent of what has been set in the Workflow Options dialog. You can also choose to apply output sharpening when saving. Once configured you can save these settings as a preset.



**Figure 5** The new Camera Raw Save dialog.

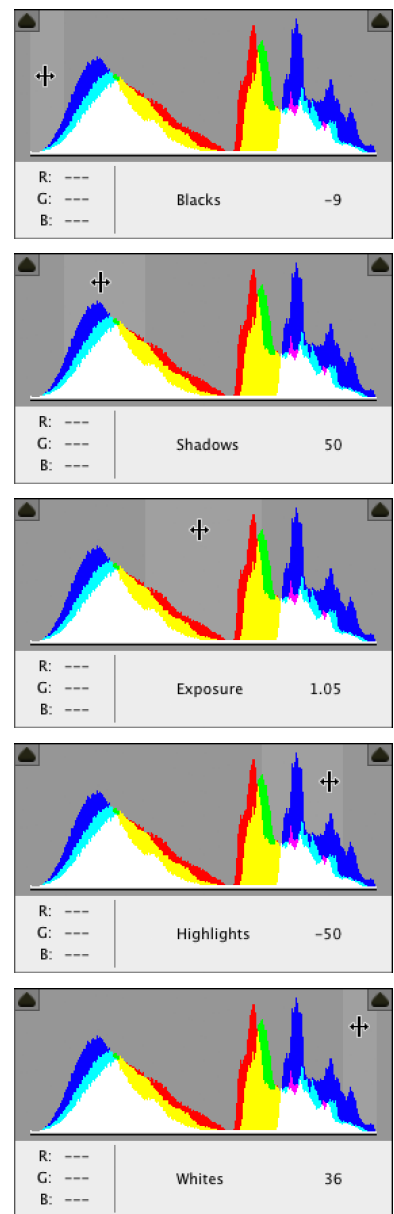
## Interactive histogram

The Histogram is now interactive, meaning that you can click on the histogram directly to apply basic tone adjustments. More specifically, it allows you to click and drag to adjust the Blacks, Shadows, Exposure, Highlights and Whites settings. If using Process 2003 or 2010, it allows you to adjust: Blacks, Fill Light, Exposure and Recovery.

Now, I have to say this feature was introduced early on to Lightroom 1.0 and seemed an interesting innovation at the time. It has to be said that the zones referenced in the histogram are not actually an accurate representation of the tones that are being manipulated. I think in the end that it is just as easy to click and drag on the sliders in the Basic panel. Where this is advantageous is if you are working in one of the other panels, say the Tone Curve panel. It means you can access these Basic panel tone controls at the same time without having to switch panel views.

## Auto Exposure

Auto Exposure has also been improved, making it more consistent from image to image, as well as being more consistent across different image sizes that have been set in the Workflow options. For the most part the Auto Exposure results will appear to produce the same result, but with over-bright images the auto setting result will be noticeably tamer.



**Figure 6** The new interactive histogram.