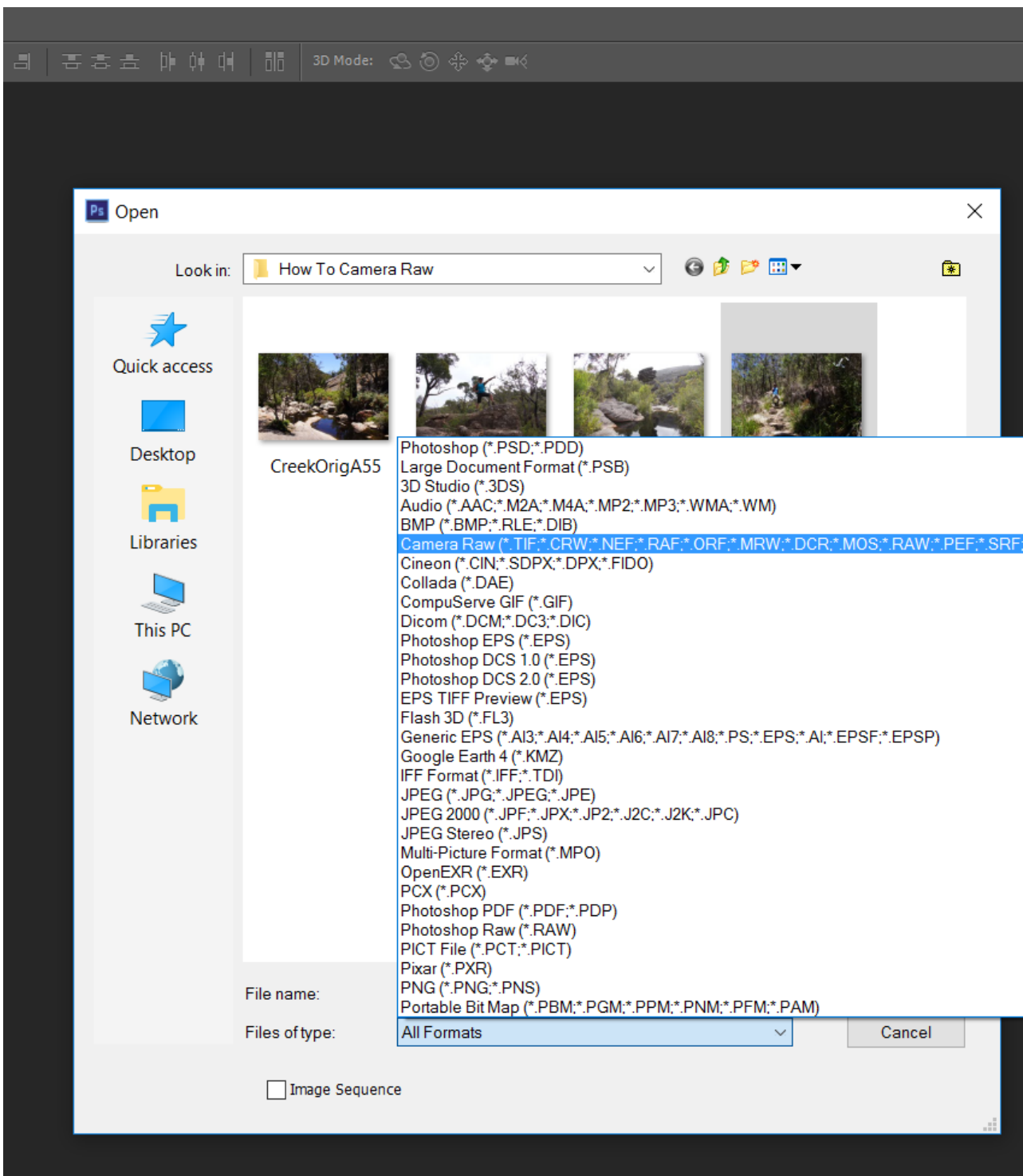Using Camera Raw in Adobe Photoshop

Camera Raw is a simplified version of Adobe Lightroom and comes free as part of Adobe Photoshop.
In this Lesson we show you how to Open Images in Adobe Camera Raw, directly inside Photoshop, rather than using Adobe Bridge or Mini Bridge. "Camera Raw" is similar to "Lightroom" and can be used to adjust highlights, shadows, vibrance, saturation, clarity, and white balance. "Camera Raw" is good for adjusting images that have too much brightness, or shadows or shade in them. This lesson covers Camera Raw 7.0 from CS6. The newer CC version has even more features, such as the Radial Filter, and the Dehaze effect for fixing washed out bright skies.
WARNING: DO NOT EVER PRESS THE ESC KEY IN CAMERA RAW, IT CLOSES YOUR IMAGE WITHOUT SAVING IT!

Opening a File in Camera Raw

In Adobe Photoshop CS6, Do **File > Open As** (not File > Open like you normally would), then in the "Files of Type" box, use the drop down list to change to "Camera Raw" as shown below:

Using Camera Raw in Adobe Photoshop

Make sure you mouse wheel scroll up and down the list and use "Camera Raw" and not "Photoshop Raw".
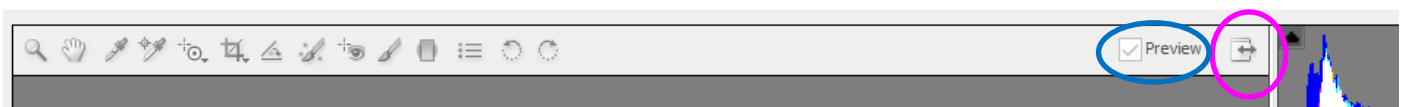
Your image will then Open in Photoshop inside the Camera Raw editor like this:
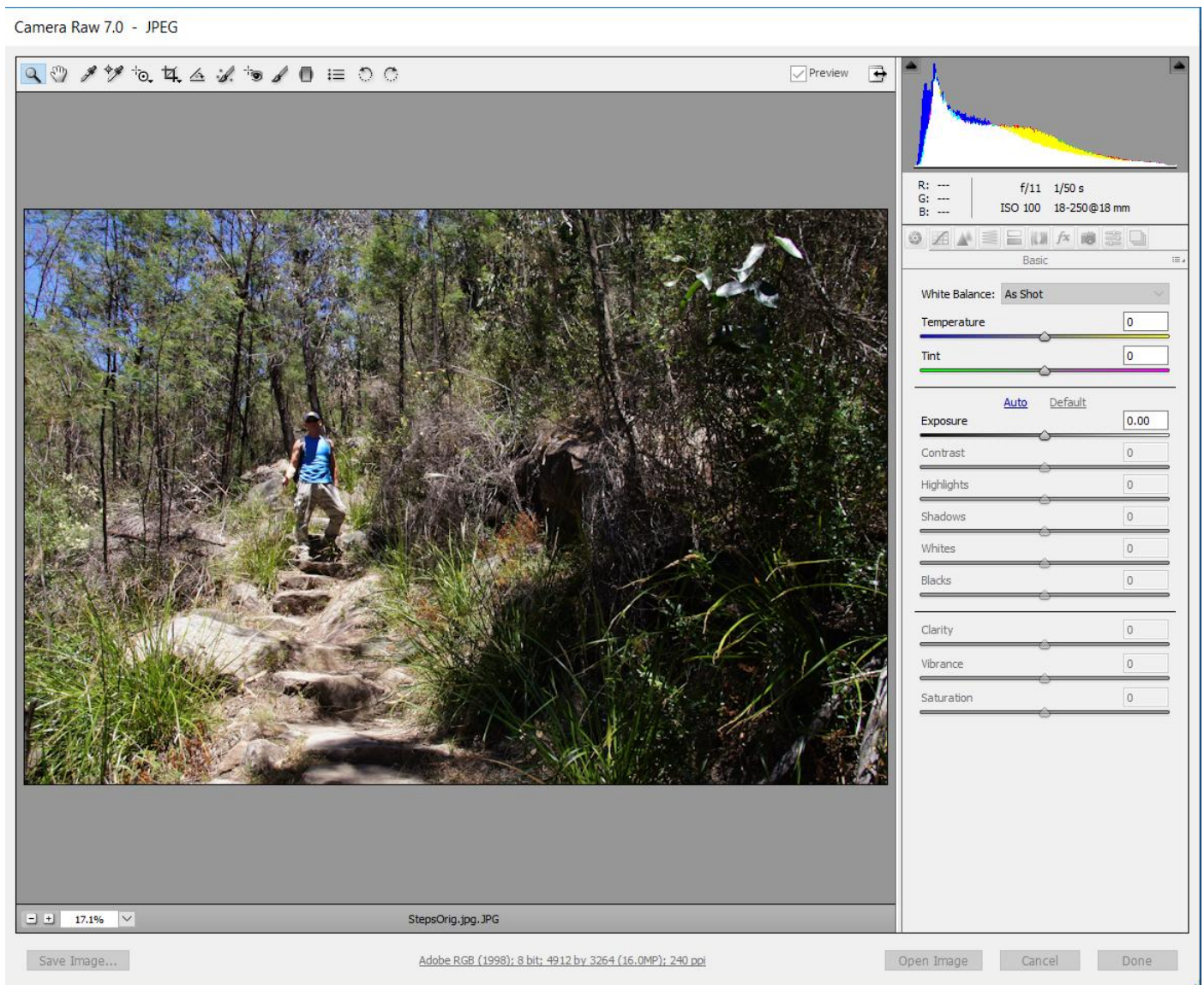
The above image is a JPG image that is very bright on the left hand side, and dark and shadowy on the right hand side. This can be seen in the top right hand histogram. We are going to use Camera Raw to correct this.

## Toggle to Full Screen and Back Again (and Viewing Camera Raw Changes)

Go Fullscreen by clicking the **Full Screen Icon** that is in between "Preview" and the Histogram as shown above.

(Ticking and unticking Preview shows before and after images, to see the Camera Raw changes you have made).

Using Camera Raw in Adobe Photoshop
Zooming in and Out

There is a Magnifying Glass Icon in the top left hand corner, but it only zooms in and not out. To zoom back out, use the magnification controls in the bottom left hand corner, and choose "Fit in View".
Or just use Ctrl+ and Ctrl- like we do for zooming in and out on web browsers.
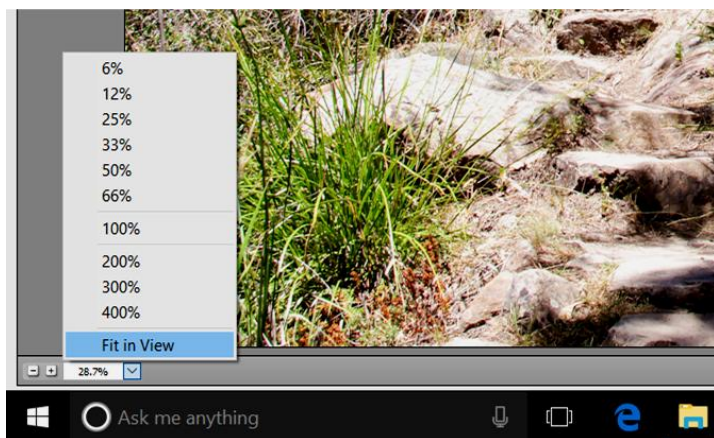
The Top Menu Icons

From Left to right these are the **Magnifier Zoom In**, The Hand **Moving Tool**, The **White Balance Tool** (first dropper). Note that we often do White Balancing on a Photo optionally at the end of processing, by dipping into an object in the image that should be white, and then it will go white and all the other colours will adjust accordingly.

The **Colour Sampler**, (the second dropper), allows you to click on a colour in the image and then supplies the RGB numerical values of that colour.

The 5th tool along is the "**Targeted Adjustment Tool**" . This tool changes your Histogram Curve or Saturation, etc but in specifically targeted areas of the image, such as the blue of the sky, or the green of the leaves. Eg. Place the target on a dark area and drag, and the whole image becomes lighter throughout when in Parametric Curve mode. Click and HOLD on the target icon to see all of the options. This is a great tool, and there is a video on it at this link:
Targeted Adjustment Tool Video: https://www.youtube.com/watch?v=OnyelYu_oIA

The next tool to the right is the **Crop Tool**, then after this the maths angle symbol is the **Straightening Tool**.

The Paint Brush with spots around it is the **Spot Healing / Clone stamp tool**. We will show how to use this tool later on to remove some big leaves by "healing" over the top of them using this tool.

Then we have the **Red Eye fixing tool**, followed by the **Adjustment Brush**, and the **Rectangular Graduated Filter**. Watch the following YouTube videos about these tools:

Adjustment Brush Video: https://www.youtube.com/watch?v=P-A70ncl9W4 (17 mins highly comprehensive)

Graduated Filter Video: https://www.youtube.com/watch?v=yi0A8eaBct0 (5 minute Lynda.com video on Sky)

3

Using Camera Raw in Adobe Photoshop

How to Open a Camera Raw Image in Photoshop (and Save the Image)

When you have finished making adjustments in Camera Raw, go out of full screen mode and click the "Open Image" button down at the bottom right hand corner to open the image in Photoshop. You can then make further Photoshop adjustments if you want to, and then save your image as a JPG using Photoshop.

Using the Adjustment Brush in Camera Raw
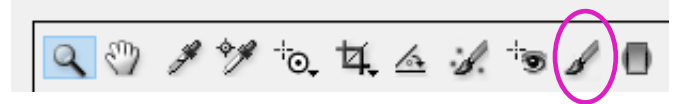
Watch the video below on the Adjustment Brush, and then use it on the "Beaches2400" photo to brighten up the lady on the left around her eyes and over her eyes. Add some highlights to the hair of both ladies, and also lighten up their teeth to make them whiter. (Eg, using the brush increase the Exposure by somewhere between 0.5 and 1.5)

Adjustment Brush Video: https://www.youtube.com/watch?v=P-A70ncl9W4   (17 mins highly comprehensive)

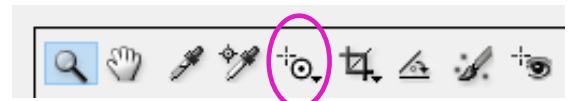|	
Before	**After**

The effect is very slight, the idea is to lighten up the eyes a little, and make the hair a little bit lighter.

The "Before" start file is called Beaches2400.jpg in the resources folder.

Remember in Photoshop to use File > **Open As** and choose **Camera Raw** from the drop down list of file types.

**For images to practice with go to: www.photosbypassy.com/CameraRawImages**

Using the Targeted Adjustment Tool in Camera Raw

Watch the following video about making Targeted Adjustments, paying particular attention to the sections about adjusting up the Saturation of Blue Sky and Green Plants. **(First hold down on the Tool and choose "Saturation").**

Targeted Adjustment Tool Video: https://www.youtube.com/watch?v=OnyelYu_oIA

The following image of a baby Giraffe in Africa is a very washed out light colour, due to it being a very hot dry dusty day when it was taken by Photos By Passy at Kruger National Park in South Africa.
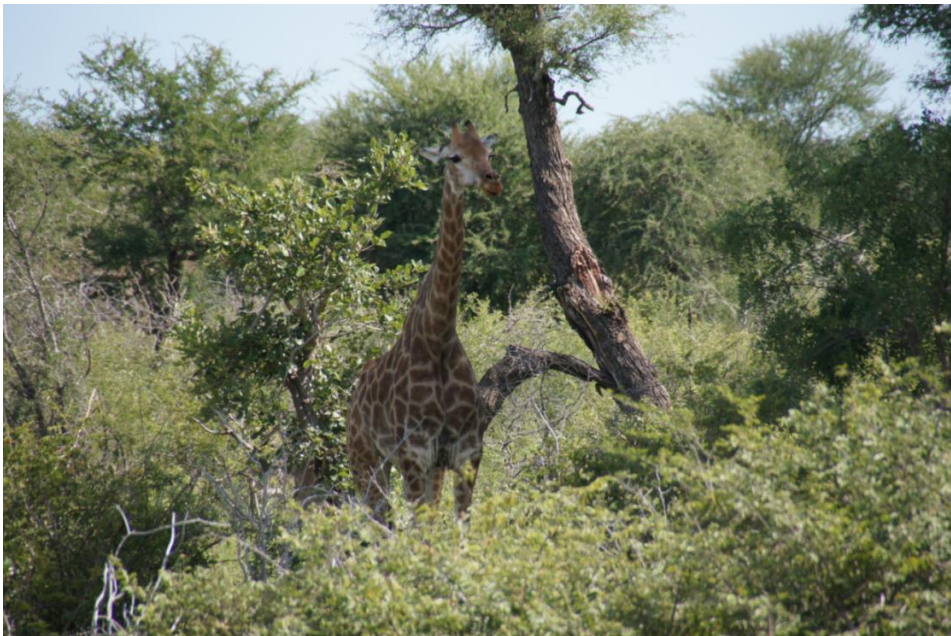

The start image shown here is "Giraffe2400.jpg" and can be found in the resources folder for this lesson.

Using the Targeted Adjustment Tool in Camera Raw, pump up the Saturation of the sky and the green plants to make an improved image with more "punch" like this one. (Click "Open Image" down the bottom of Camera Raw which will take the image into Photoshop where you can increase the Contrast.)
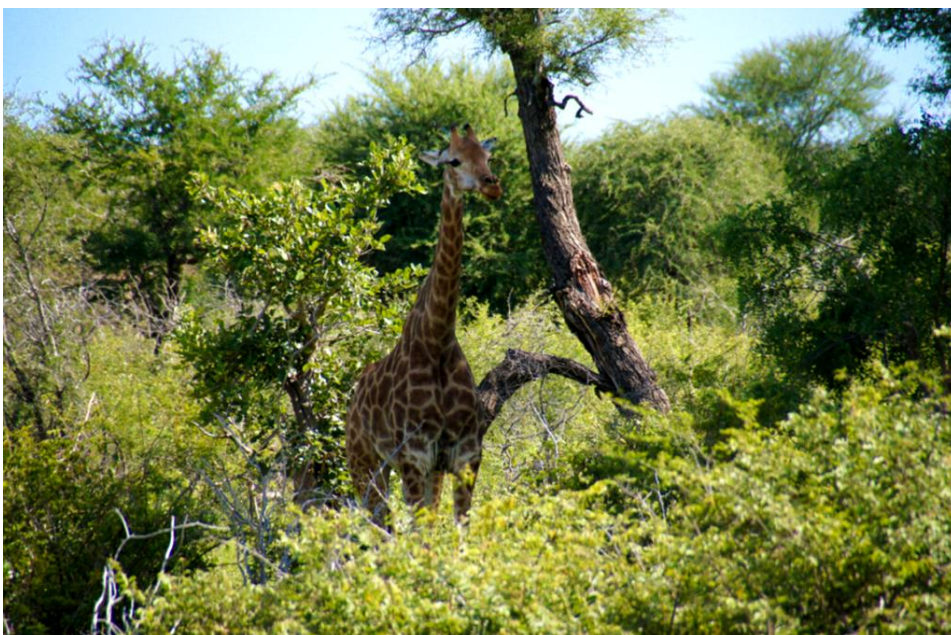
Using Graduated Filters in Camera Raw
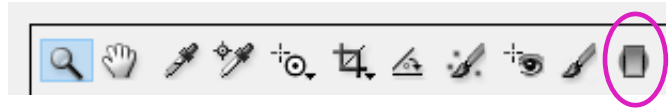
Watch the following video about applying a Graduated Filter to an image to improve the sky:
https://www.youtube.com/watch?v=yi0A8eaBct0

Apply a graduated Filter to the following image to lower the exposure in the sky and clouds.
Then use the Targeted Adjustment Tool to make the greens of the trees more intense, and the sky more blue.
Use the Adjustment Brush to paint over and make the distant mountains darker by lowering exposure.
Click on "Open Image" to take the image into Photoshop and use the clone stamp on the white quarry marks on the distant hills as well as adjusting Brightness and Contrast. Save the finished image.

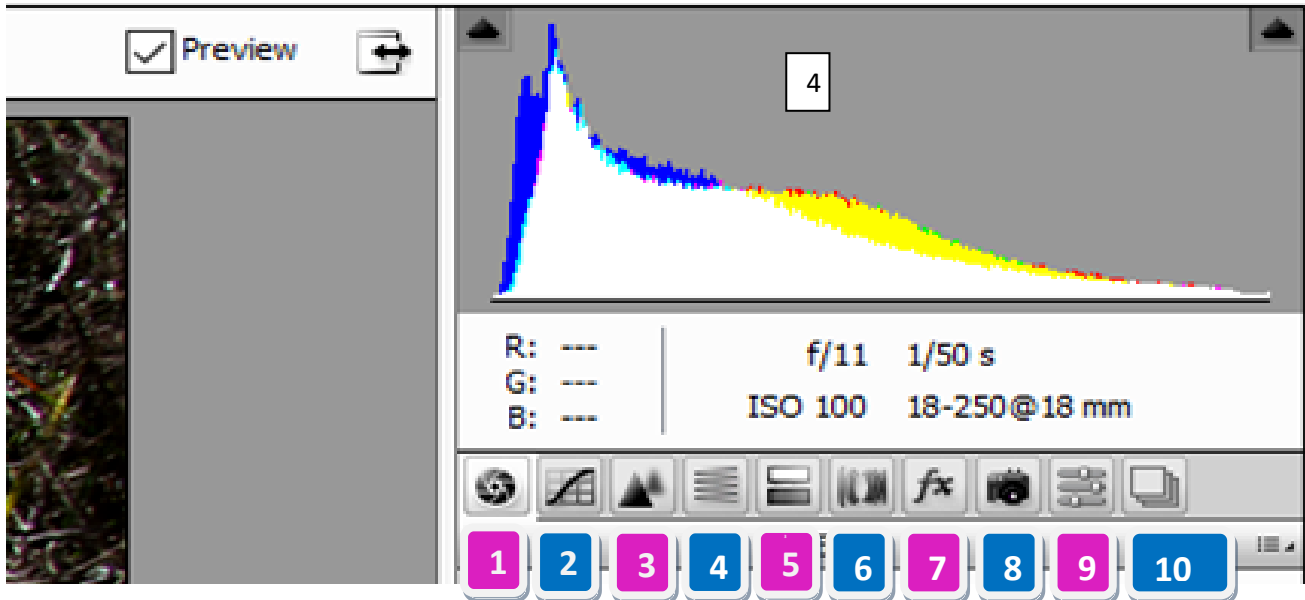**Before Image : "MaroondahDam3000.jpg"**

After Image

The Camera Raw Adjustments Panels

In the right hand side column of Camera Raw, there are several different panels:

1. The Basic Panel, where we start doing our first adjustments.

2. The Tone Curve Panel to darken or lighten problem areas, like using the Curves Panel in Photoshop.

3. The Sharpening Panel for adjusting and balancing sharpness and noise.

4. HSL (Hue Saturation Luminosity) and Grey Scale adjustments.

5. Split Toning for monochrome (eg. B&W Photos) to adjust the highlights and shadows separately.

6. Lens Corrections to correct lens Distortion, Vignetting, and colour fringe Chromatic Aberration.

7. The Fx Effects to add film grain, or dark vignette corners, and other special effects onto our images.

8. Camera Calibration for cameras that do more Greens and Blues in Landscape Mode than in Portrait.

9. Presets – Allows us to access any Camera Raw Presets that we have saved previously, or downloaded from the web.

10. Snapshots – we can take a snapshot of our settings, eg. Save the current settings in history, so we can go back to them later on if we want to.

These ten functions are covered in some of the examples we do below, as well as in some of the Videos that are listed near the end of this lesson.

Using the Camera Raw Adjustments Panels

The following image "PointingOrig.jpg" is a bit too dark, and the sky is very white with no blue in it.


The first thing we do is open the image in Camera Raw by using Photoshop CS6 and doing **File > Open As** (rather than normal Open) and make sure the file type we choose is "Camera Raw" in the scroll box, rather than Photoshop or any other file types. This will give us the following on our screen:
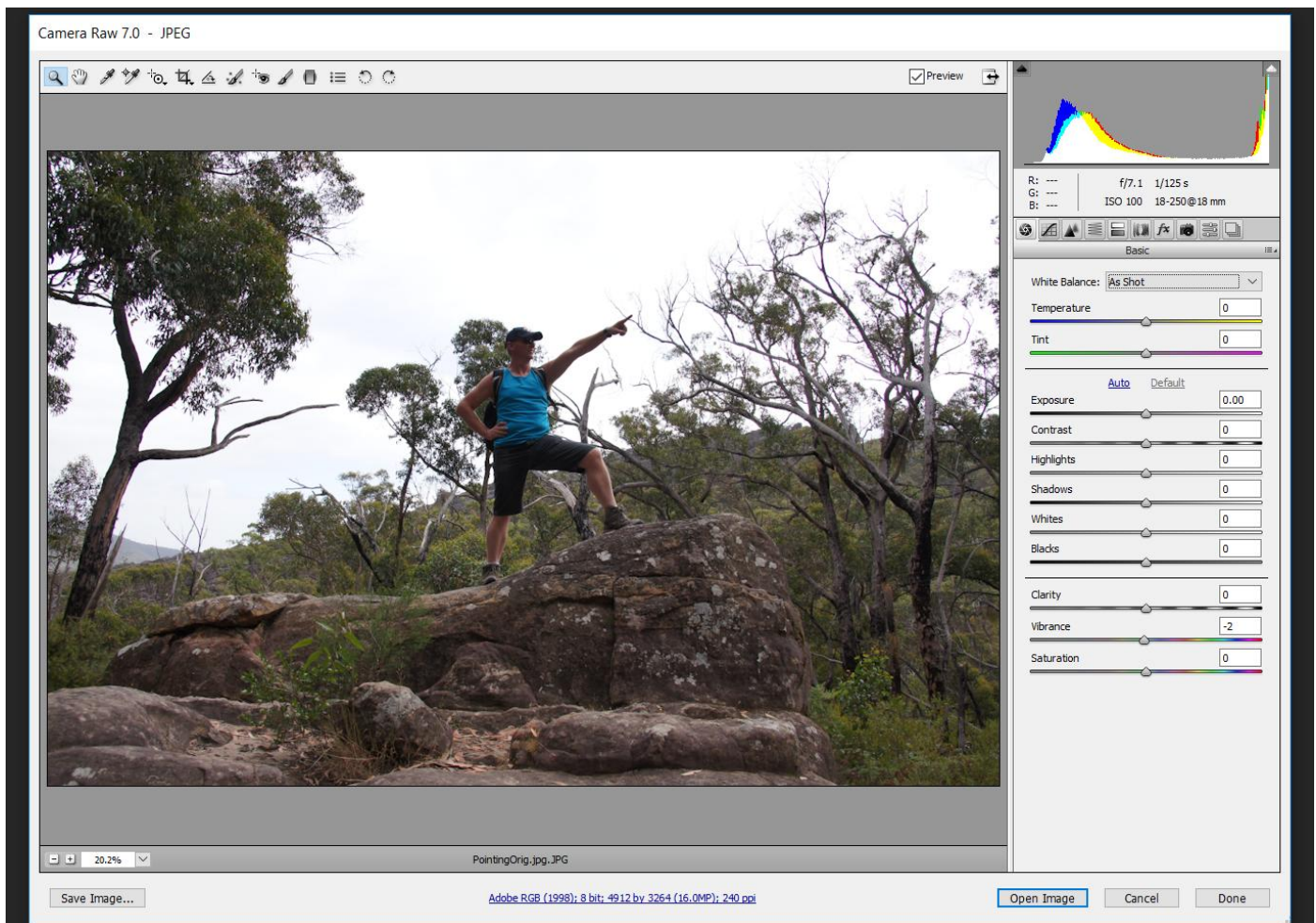
We are on the First tab in the right hand column, which is the "Basic" tab:

Using Camera Raw in Adobe Photoshop
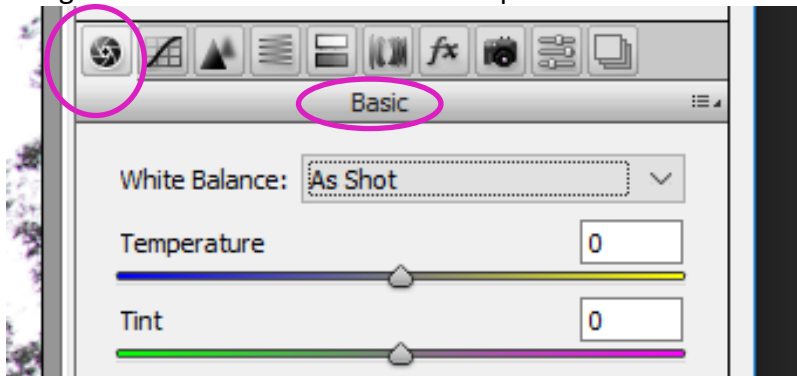
The Basic Tab gives a number of sliders we can adjust positive right, or negative left.
**Double click on any slider to make it return to the zero middle position.**

The first two sliders are for White Balance and we can slide them right and left.

There is also a Drop Down Box where we can choose "Auto" or "As Shot" by the camera, or "Custom" if we want to set the sliders to our own position. Open As camera raw the PointingOrig,jpg image, and play around with the Temperature and Tint sliders and see what happens. (There is also a WB Dropper on the top of screen next to the hand symbol. This can be used to dip into a white object we may have on the image and set White Balance.)

We have decided to use the "Auto" drop down setting for the image, which made the skin tones look a bit better.

The next group of Basic Sliders also have an "Auto" option on them:
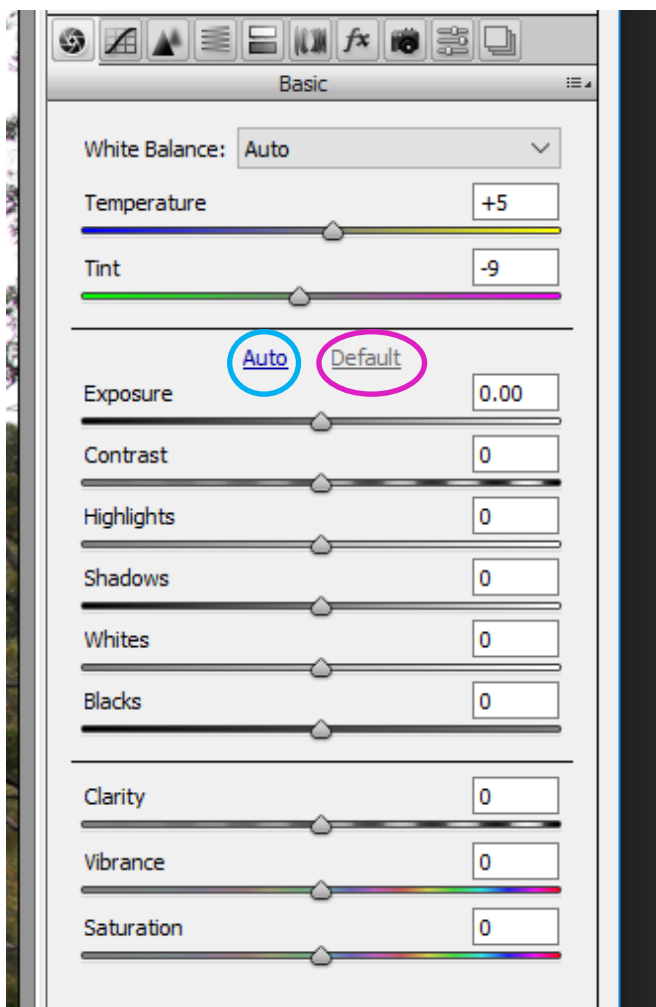
At the moment all of the sliders are at the zero middle position.

If we click on Auto, then Camera Raw will figure out all of the slider settings it thinks are best and move all of the sliders for us.

Click on "Auto" and see what happens to the "PointingOrig.jpg" image. When we tried this we noticed that blue sections started showing up in the previously white sky, and overall the image was improved.

If we now click on "Default" we should see all of the sliders return to their zero middle position.

We find it is often good to use "Auto" to get initial slider settings, and then further tweak and adjust them ourselves.

Using Camera Raw in Adobe Photoshop

Here is the image immediately after clicking the "Auto" option in the Basic Panel:
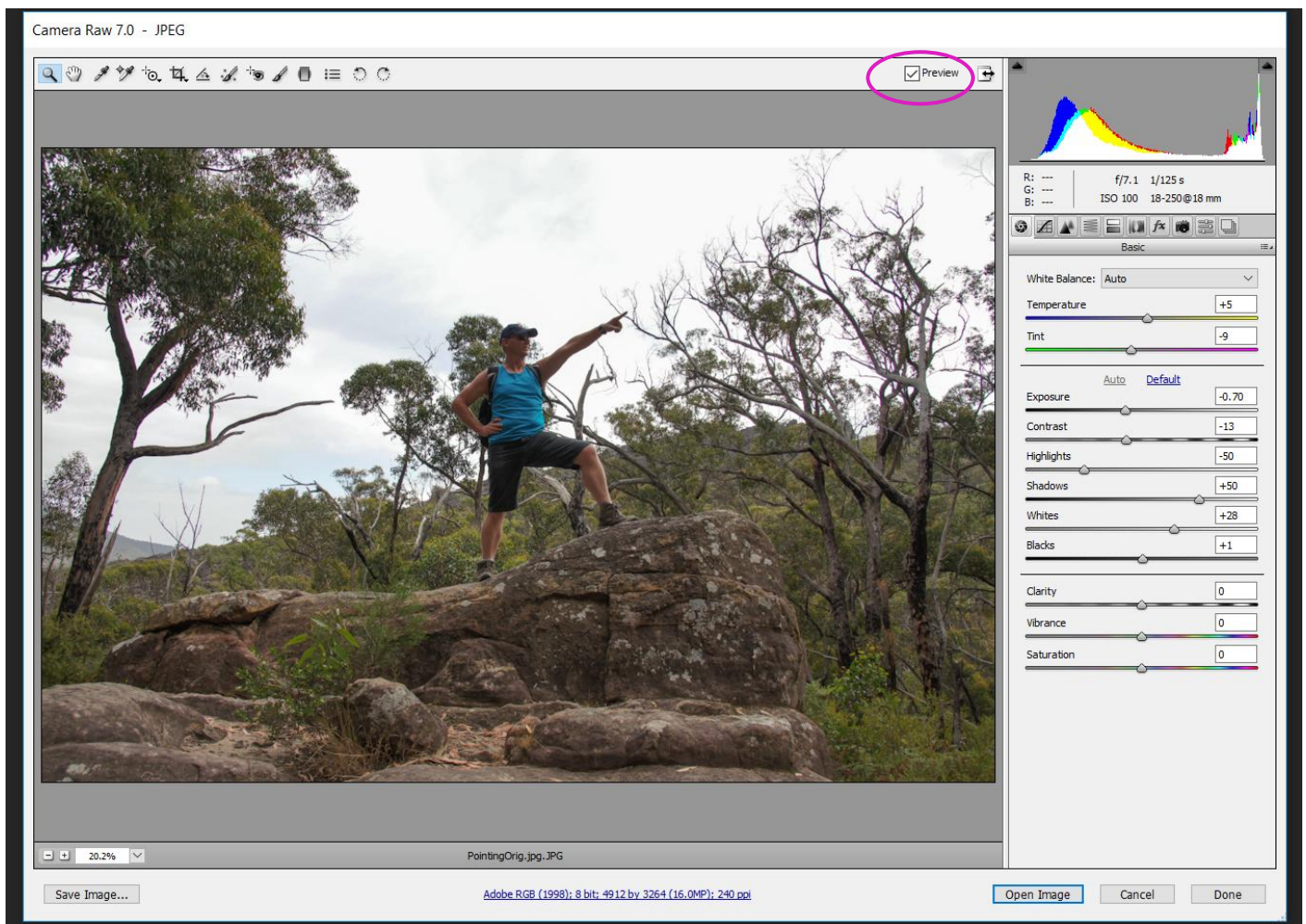
Remember that we can tick and untick the "Preview" check box at the top of the screen to see the before and after images at any time. This is a better method than going back to "Default" after we have made some adjustments.

See the Videos section of this lesson for Videos which go through the Basic Pane settings in detail.
Eg. Videos like:

Two useful things are that you can hold down the Alt key while sliding the whites and the blacks.

For example on the Whites slider, if we hold down Alt and slide all the way to the left, the screen goes entirely black. From this position we need to slide to the right until some coloured dots start appearing on the black screen. We usually stop at this point. If we keep going all the way to the right past this point, we will probably "blow out" the brightness highlights, and lose all of the blue in our sky and have too much white.

What we basically ended up doing was keeping most of the Auto settings Camera Raw did for us, but sliding the shadows a bit further to the right to (+80) instead of +50 to lighten things up a bit.

The last three settings on the Basic Pane are the
Clarity, Vibrance, and Saturation.

Clarity adjusts the Contrast up, while at the same time adding Sharpening. It is good to zoom in 100% down the bottom left hand corner to see exactly what the Clarity is doing.


10

Saturation increases the intensity of all of the colours at once if we slide to the right, and decreases the colour when we go to the left. If we go all the way to the left, all of the colour goes and we get a black and white grey image.

Vibrance also changes colour intensity, but what it does is look for colours that are dull, and only increases the intensity of those colours. Other colours which are already bright remain as they are. Vibrance tries to equalise the intensity of all of the colours, so it is kind of like "Smart" Saturation.

For our image we found that increasing the Clarity to +68 and Vibrance to +58 gave us a look that we liked:
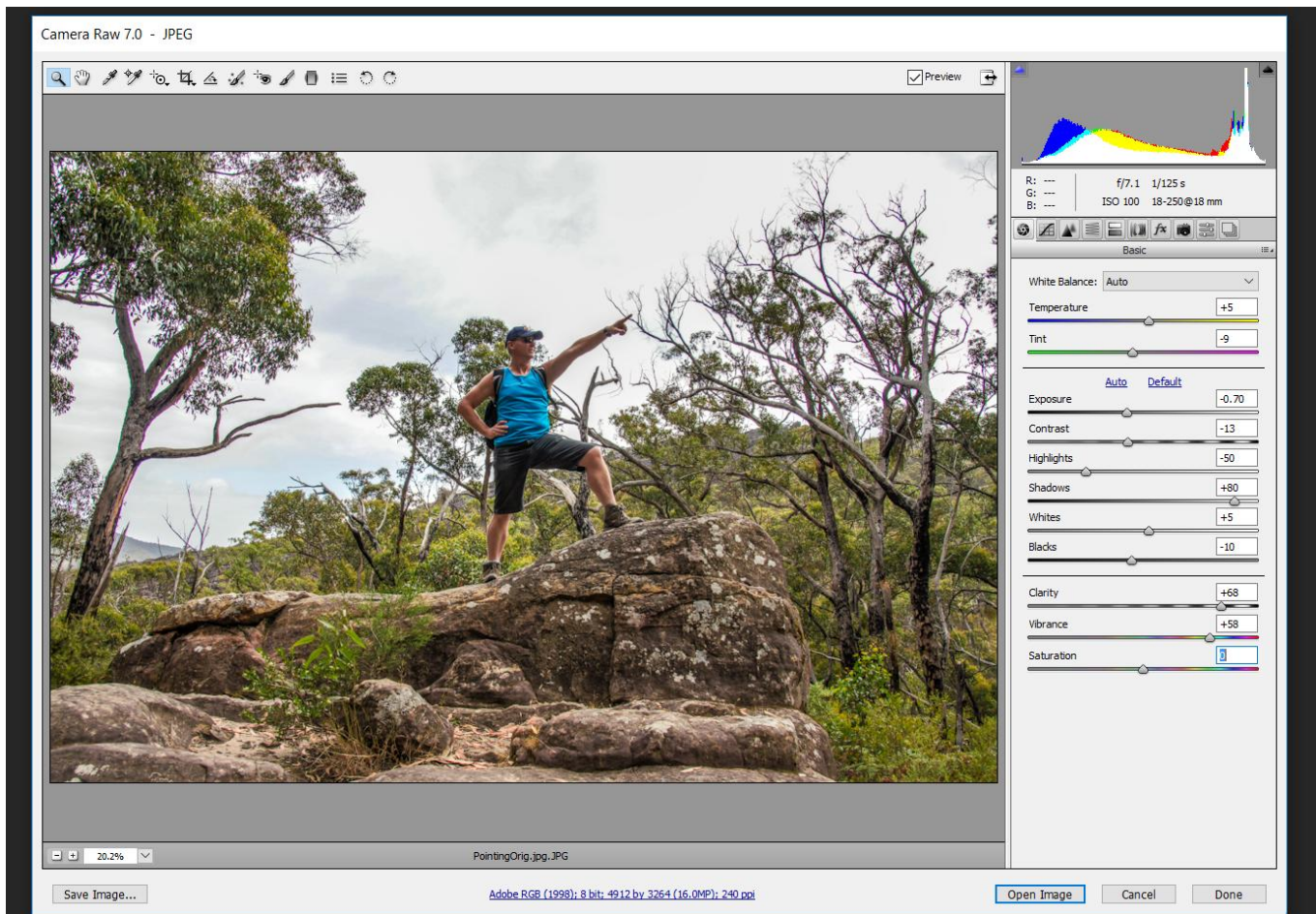
We found that these settings basically brightened up the Photo to make it look like the sun is shining, whereas the original photo we took was in overcast cloudy conditions without any sunlight. (Tick and Untick "Preview" checkbox at the top to see this, as shown below).
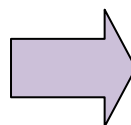
Using Camera Raw in Adobe Photoshop

Using Camera Raw is great for shots taken in dull cloudy conditions, which look dark and a bit lifeless straight out of the camera.

These "Basic Panel" adjustments are all we are going to do in Camera Raw for this shot, and so all that remains now is to use the "Open Image" button at the bottom to Open the image up in Photoshop so that we can then save it to ready for the Web as a 2048 pixels wide JPG.

The Open Image button has 3 options, we usually Shift click it to Open as a "Smart Object" as explained in the next section below.

The Open Image Button – Camera Raw to Photoshop Switching

Most people just click the "Open Image" button at the bottom right hand corner, to finish up in Camera Raw and take the image into Photoshop. However, we are better off hovering the mouse over the button and then **hold down the Shift key while clicking the button to Open our image in Photoshop as a "Smart Object"**.

Eg. At the last step where we take it into Photoshop using the "Open Image" button, if we hover over this "Open Image" button there are Alt and Shift key options about how we take it into Photoshop. We have found that the best option is to Shift and click the button to get a "Smart Object" that we can reopen as Camera Raw anytime later on in Photoshop.

Using Shift and Opening as a Smart Object means that it all looks normal in Photoshop, but whenever we double click the Thumbnail image in the layers panel in PS, it takes us back into Camera Raw to make additional changes. This is our best option, to be able to go back into Camera Raw at any time.

Improving Bright Sunlight and Shade

The following image is very washed out because the camera has overexposed the top half due to the dark shade in the bottom half.
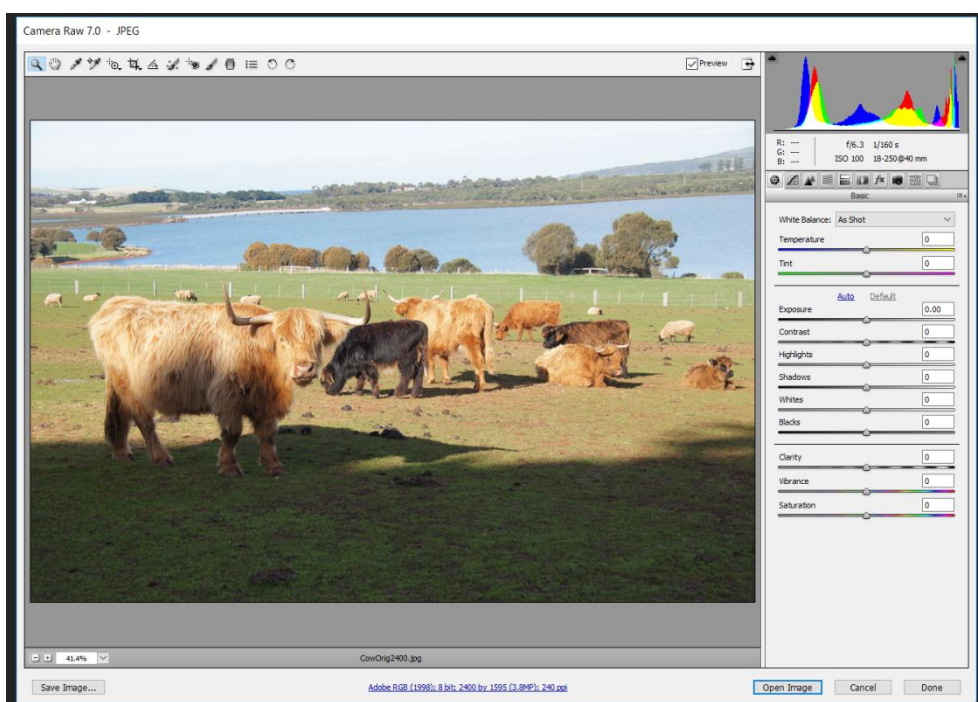
Using Camera Raw in Adobe Photoshop

By doing **File Open As** Camera Raw and then using the **Basic Panel** we have managed to greatly improve the original cow photo. <u>See if you can do something like this to the original cow image.</u>
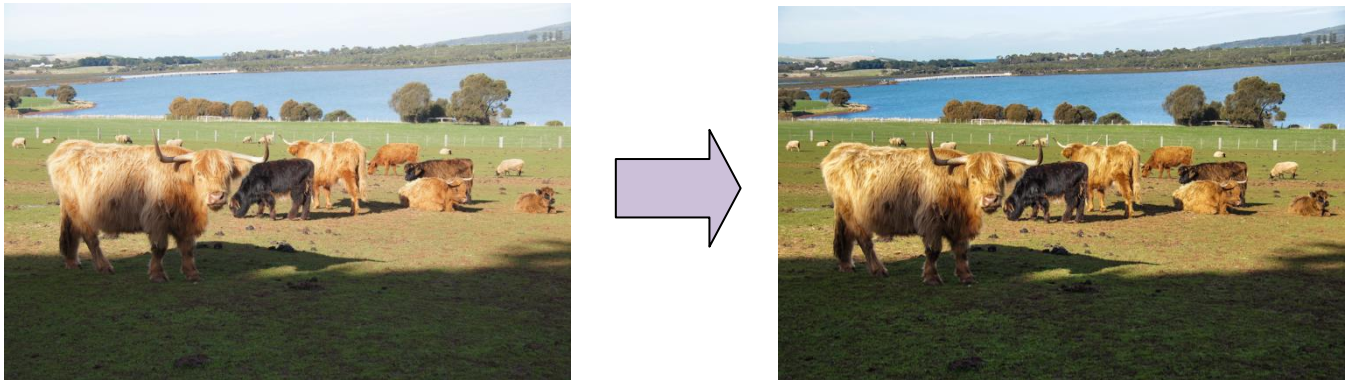

Replacing the Sky

The original Pond image is very dark and dull with a flat white sky. First we used Camera raw to brighten the image up and sharpen the rocks. We also used the adjusting brush to make the background mountains stand out more.

We took the image into photoshop and saved it as a JPEG. We opened the JOG, unlocked the background layer, and did our best to magic wand out the sky, but had lots of issues getting around the tree leaves.

We then made a new layer and did **File > Place** on the BlueSky background image. The trees were still a problem and so we did our best with the eraser tool to remove them all. The finished image is not great, but this method would probably work a lot better with a sea sky horizon image.

The other issue is that there is still a grey sky reflection in the pond water. Here is a better example of fake sky:
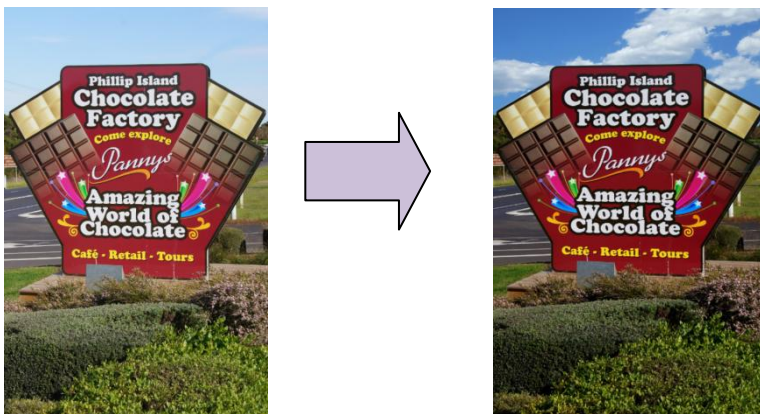
Improving Car Shots

In this image taken at a Car Show, the grass around the car is too bright in the sunlight. We can use a the GRADUATED FILTER in Camera Raw to create a filter onto the grass areas to the side and front of the car and then dull the grass down as shown in the settings below:

Note that we had to turn the filter around so that red is at the top and green at the bottom, and then drag the green side of the filter right off the screen, as well as going onto the red dashed line and angling the filter:

Using Camera Raw in Adobe Photoshop

The effect is to create shade onto the bright grass, which is similar to making a vignette effect so that the car is highlighted better in the image.
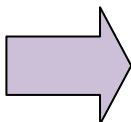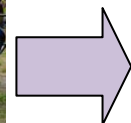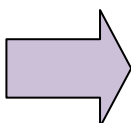

Here are some more Car Show images that have graduated gradient filters added to the grass area near the car.

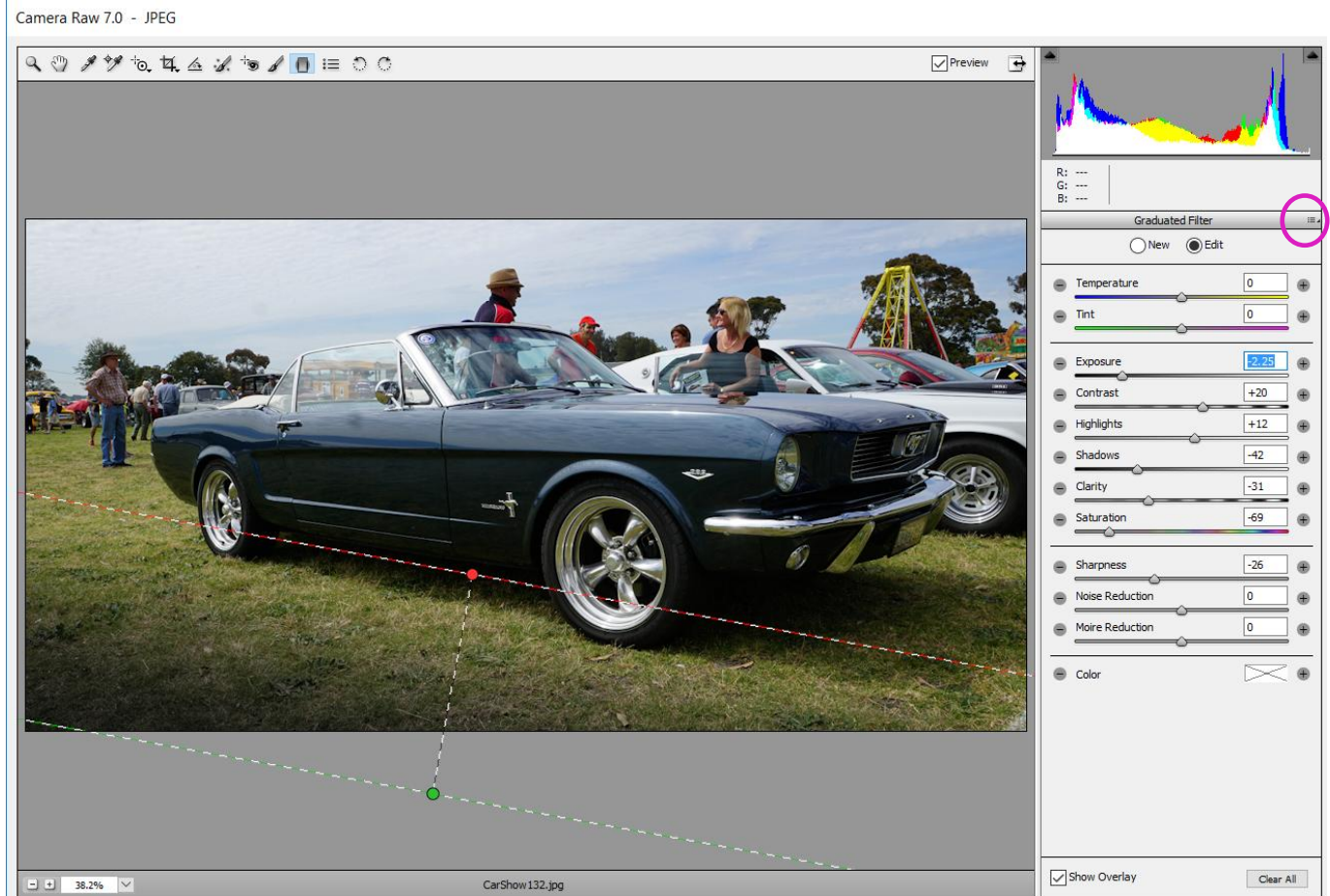The effect is subtle and only slightly noticeable, but does improve the image.
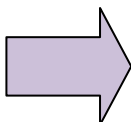
In the above image of the orange car, the effect might be a little bit too much.

## Creating a Tool Preset (Save Settings for Top Menu Tools)

Our Gradient Filter for Car Images seems to work well with the following settings:

We want to save these settings as a "Preset" so that when we open another car image, we can apply the same settings for the graduated filter as our starting point.

To save these current slider settings as a preset, all we need to do is head back up to the menu in the upper right corner of the panel and click **New Local Correction Setting**.

Once we do that, the **New Local Correction Preset** dialog box will appear, and we name our Preset and Click OK:
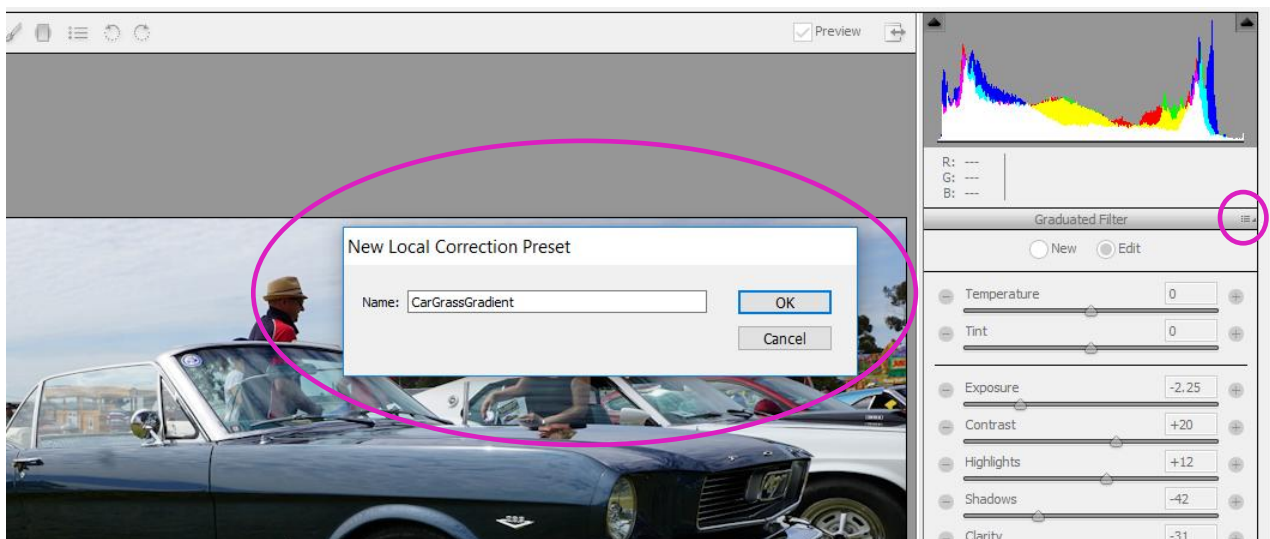
Using Camera Raw in Adobe Photoshop

If we now click back onto the top right hand corner of the Graduated Filter sliders box, we should now see that a Preset is listed called "CarGrassGradient.

Now when we open a new image in Camera Raw, and click on the top menu tools at Graduated Filter, the Filter can be set to "CarGrassGradient" settings, and then we can drag the filter out with these settings and apply it quickly:
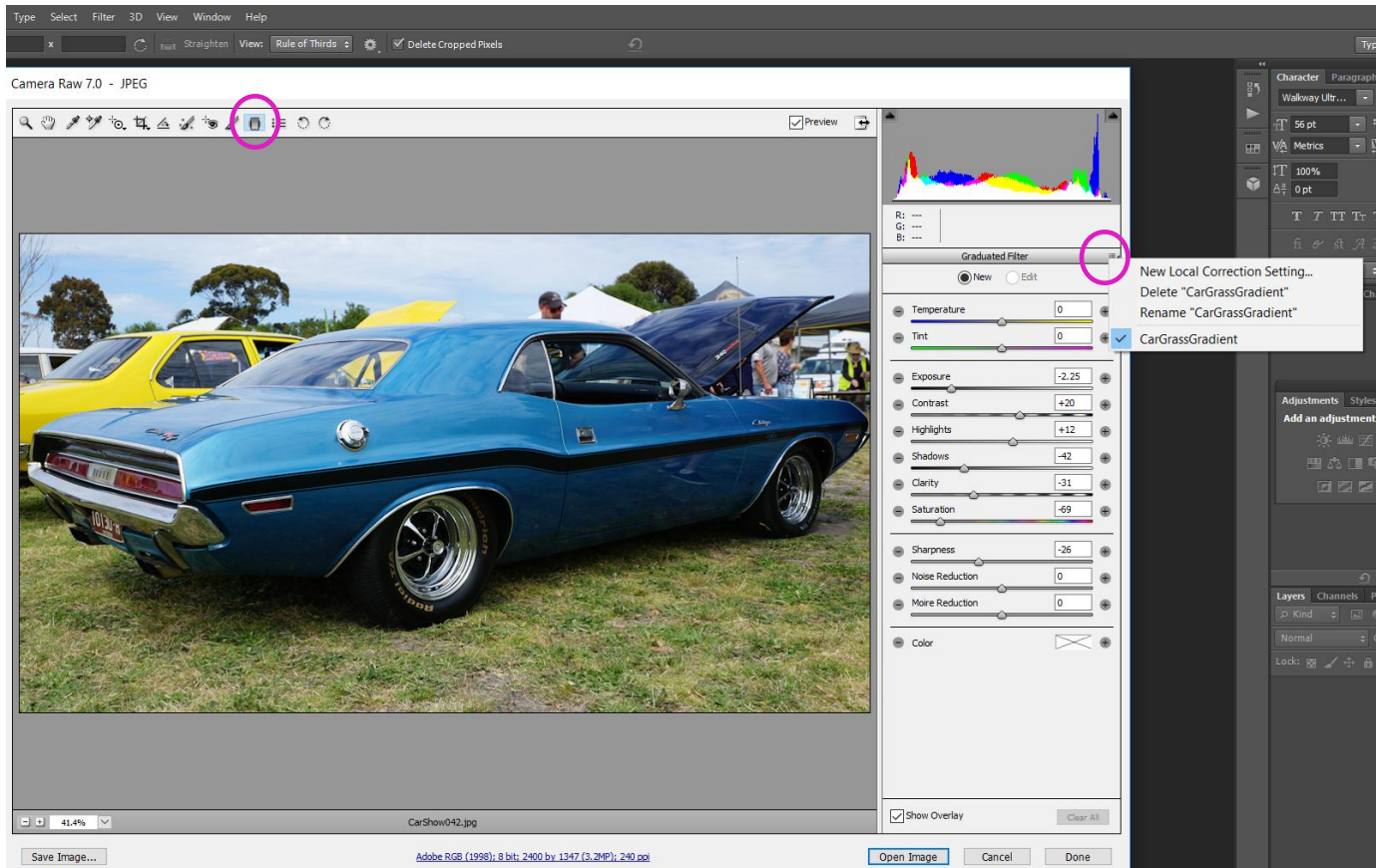
The only issue is that we do have to rotate the filter around 180 degrees, because we want to go light to dark and so the red side of the filter needs to be on top:

Using Camera Raw in Adobe Photoshop

Making Tool Presets this way works for all of the Tools across the top Menu Bar, eg. Graduated Filter, Adjustment Brush, (and the Radial Filter in newer versions of Camera Raw).


Saving Camera Raw Basic Settings

In a similar way to saving a "Preset" for a Tool like the Graduated Filter, we can also save a particular sliders set of Basic Settings in Camera Raw.

Here we have made some slider settings to make a de-saturated retro looking image:

We can save these settings to a Preset, by clicking on the very top right of the Basic Panel as shown above, and then from the drop down list choose Save Settings:
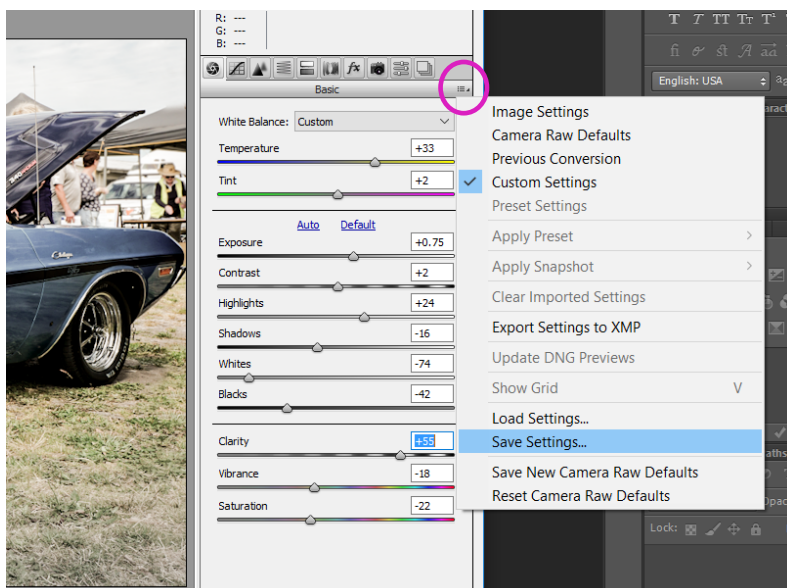
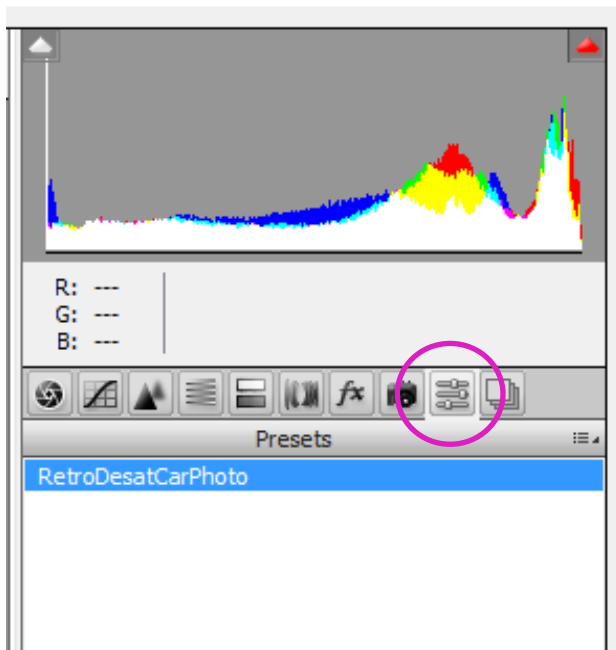Using Camera Raw in Adobe Photoshop

We can then choose to save some of the settings or all of the settings; most times we pick "All Settings"
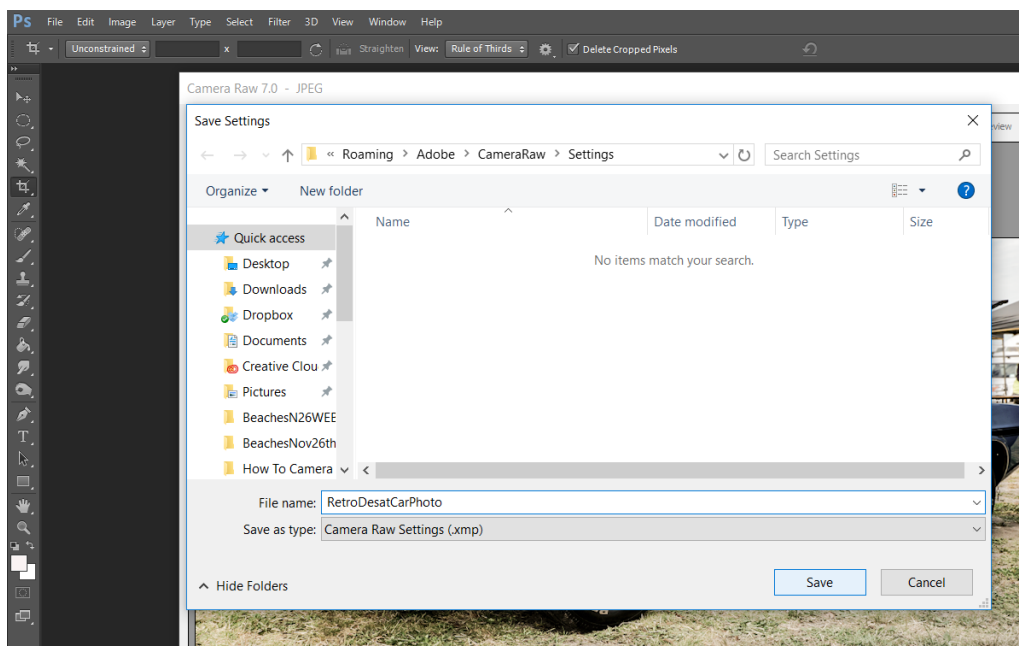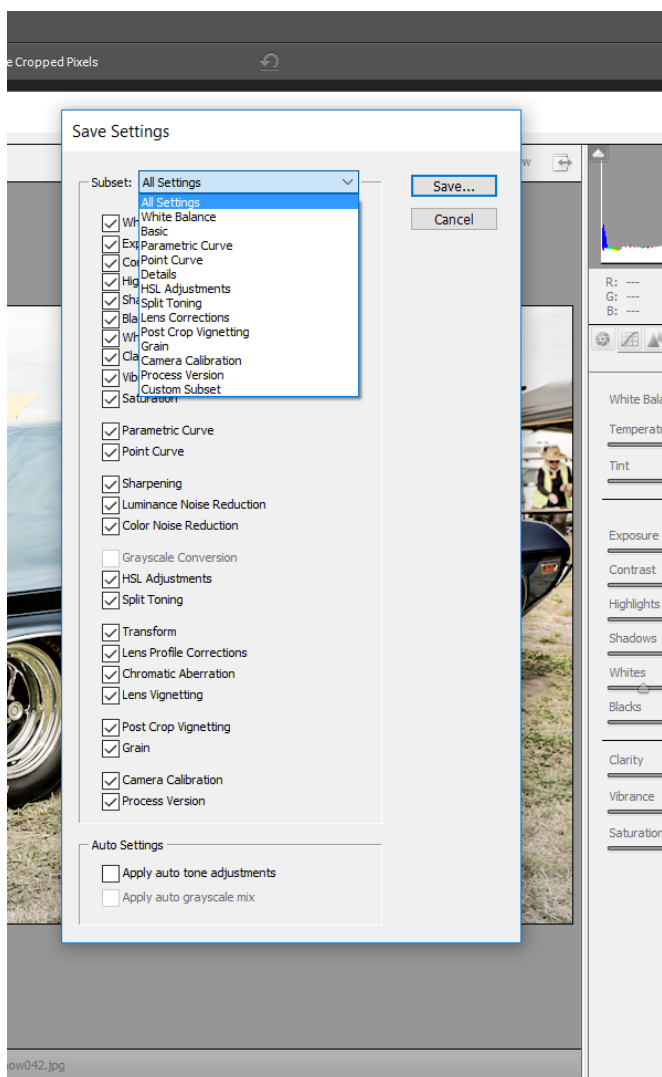
We then set a name such as "RetroDesatCarPhoto" and save the .xmp file.

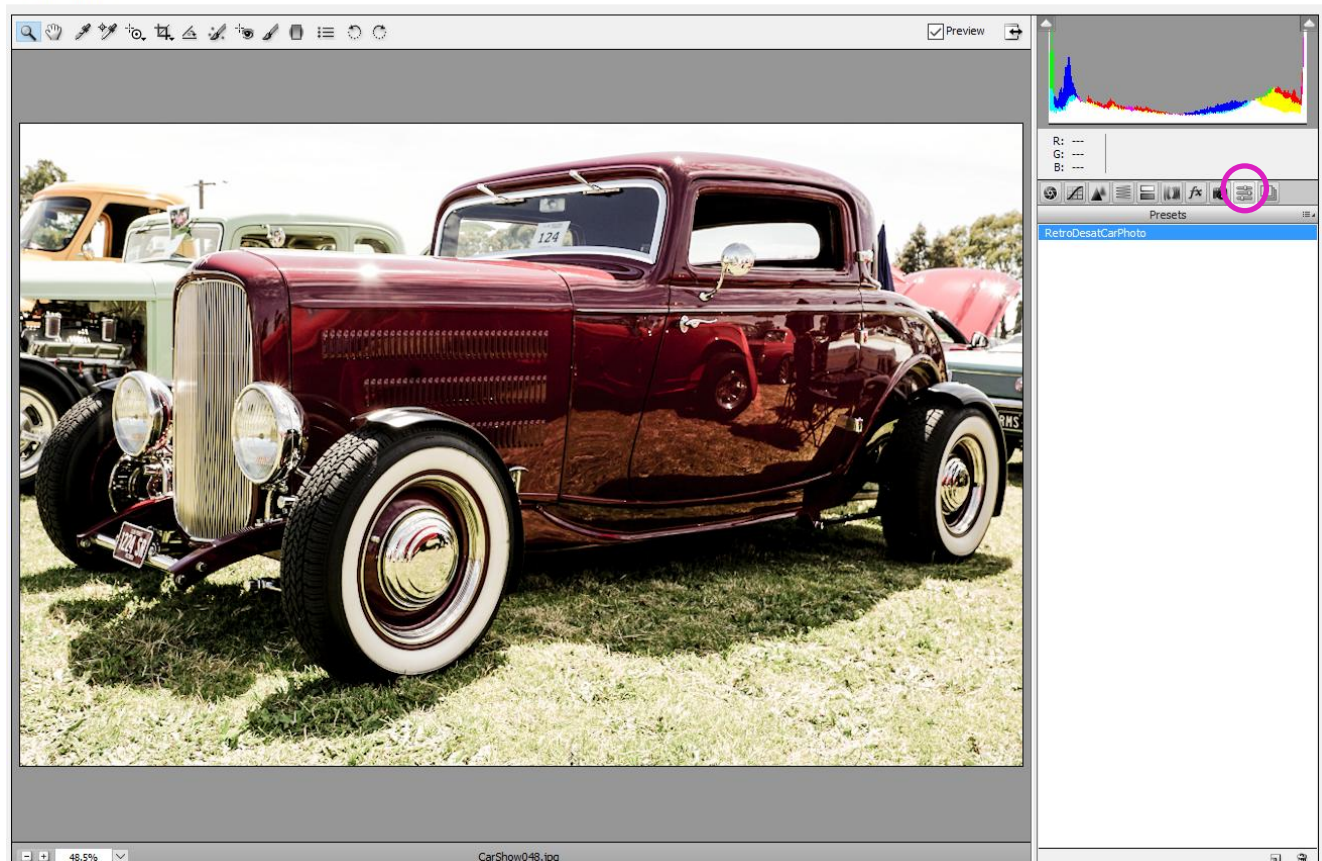Using Camera Raw in Adobe Photoshop

If we now click on the Presets tab, we will see that our settings have been saved:

Applying a Saved Preset to Other Images

All we have to do is open another image in Camera Raw, then click on the Presets tab, and then click on the Retro Preset we saved, and instantly our image gets all of that Preset's Camera Raw settings applied:
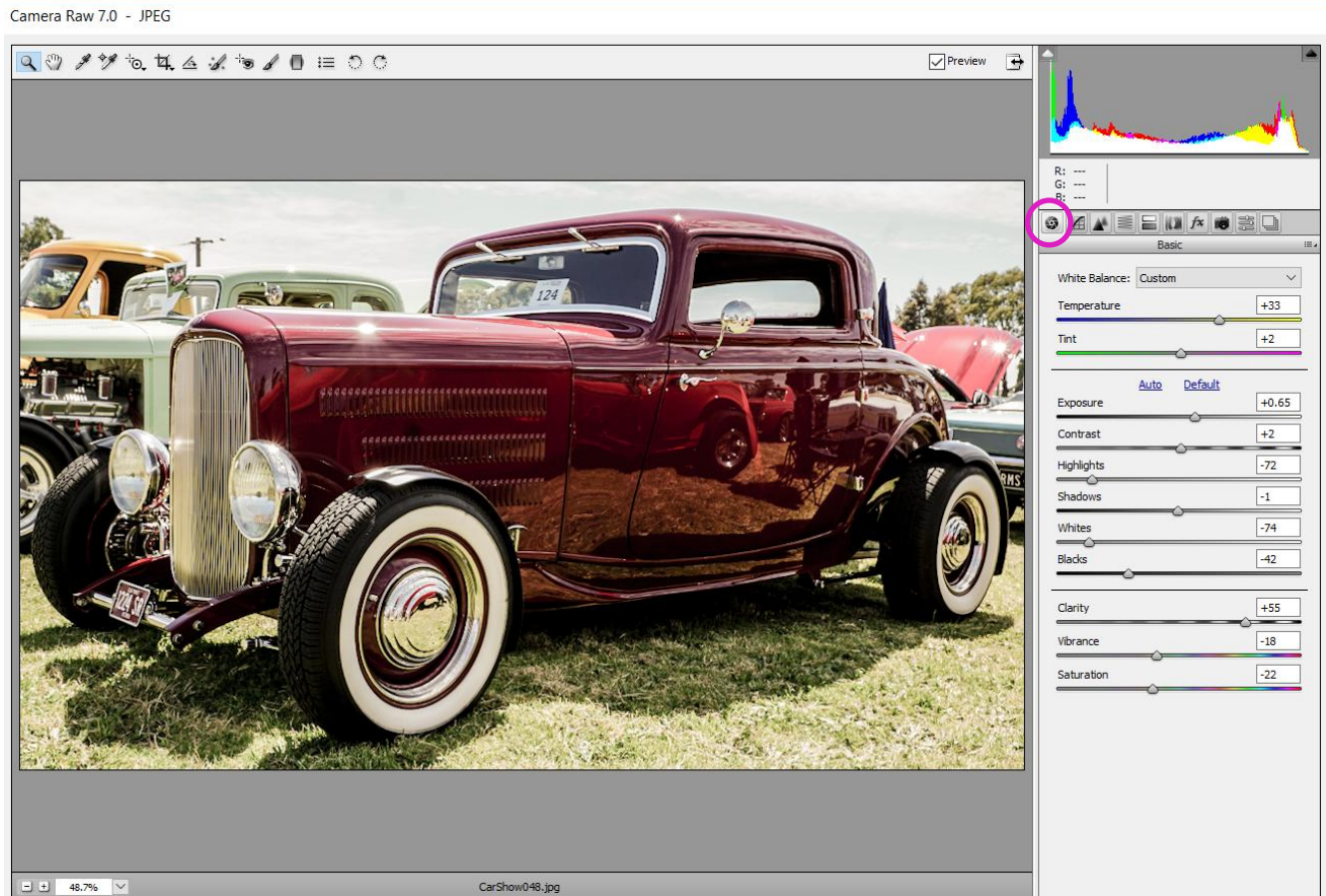
Using Camera Raw in Adobe Photoshop

Once we have the Preset applied, we can then click back onto the Basic Panel and make changes if we want to.

The above image was a little bit too bright and white, and so we did adjust a couple of sliders, and do some cropping, but it was much faster than starting from the original image with no settings on it.

The original image looked like this:

Using Camera Raw in Adobe Photoshop

Trying out our Preset on a few different cars, we found that every image needed some slight tweaking, but this was done is less than 30 seconds by mainly adjusting the Exposure slider and the shadows in most cases. It was much faster than trying to open an original full colour image and trying to go retro from the very beginning.

Free Camera Raw Presets

There are free Presets available on the Web, as well as some pay for presets, just Google "ACR Presets" or "Adobe Camera Raw Presets".

We did try getting these free Presets: http://photoshopcafe.com/freepresets

These all downloaded and unzipped okay to a folder containing ".lrtemplatefile" suffixed files, which sounds suspiciously like they are for Lightroom rather than Camera Raw.

In Camera Raw, we went to the Presets tab, then clicked the right hand corner and tried to load in these settings. We could not load any of them in because none of them were .XMP files. So the free presets were not for Camera Raw, even though the website said we could sign up and get free presets. ☹ ☹ ☹

We then tried getting free Presets from ON1 (which is a rival company to Adobe?) and these did seem to unzip to XMP files: https://www.on1.com/free/camera-raw-presets/

We could apply these settings painfully one at a time by going onto the Presets tab, and then clicking in the top right hand corner, and doing "Load Settings". It would be much better if we could somehow install these .XMP files permanently into Camera Raw. This can easily be done, as shown in the next section. ☺

Installing Downloaded ACR Presets

To find the file path to install them to, open up an image and in Camera Raw on the Presets tab, click on the right and do Save Settings, then click on the folder path it is showing to see the full path: eg.
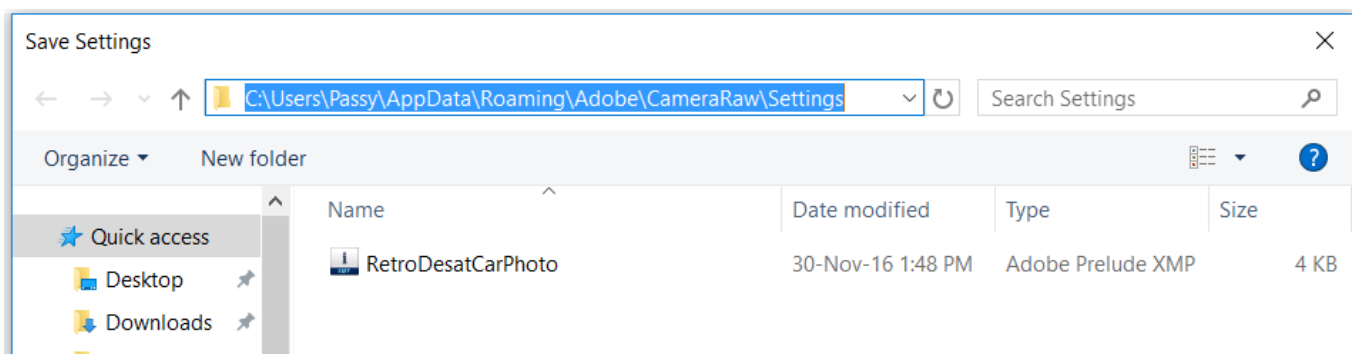
Using Camera Raw in Adobe Photoshop

If we copy our downloaded .XMP files to this same folder, then they should come up as available presets everytime we use Camera Raw.

We had to restart Photoshop for the changes to take effect, but this did result in a great set of Presets from the ON1 free file, that give some really interesting effects kind of like a big set of Instagram filters:
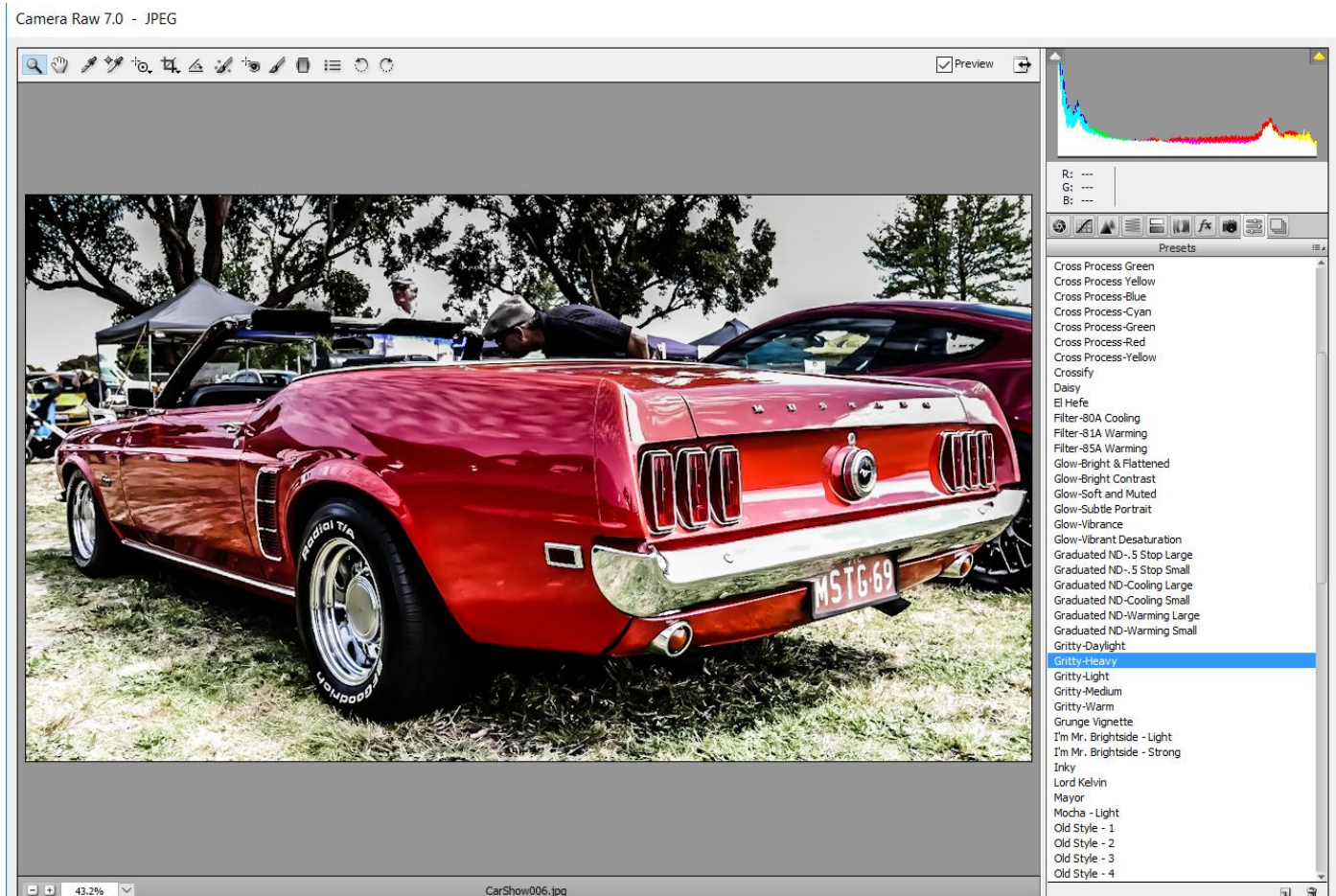
The "Gritty Heavy" preset as shown above gives this nice high contrast HDR type effect.

And like any Preset, we can click back onto the adjustment tab and make changes, such as removing the max sharpness by taking the Clarity slider down to zero which creates this glow dreamy effect:

This great set of 107 free presets is from ON1 at this link: https://www.on1.com/free/camera-raw-presets/

Using Camera Raw in Adobe Photoshop

Snapshots (Versus Presets)

We can make settings save points while we are experimenting around with a Photo, these are called "Snapshots".

If we make some more changes and do not like them, we can then return the settings back to the last Snapshot we did. So a Snapshot allows us to return to a previous editing point on our current image, and is not something we have saved as a preset that we could use on lots of other images.

To find out how to use Snapshots, see the 3 minute 29 mark of the following video:

https://www.youtube.com/watch?v=D5AeX_c1kXw

Basically "snapshot" is the multiple rectangles icon to the right of the Preset Tab icon, and you then click the new folder icon down the very bottom right hand corner next to the trash can icon to take a snapshot.

Using the Healing Tool

As a final example we will return to the image we showed at the beginning of this lesson and use the healing/clone tool as well as a graduated filter to fix some aspects of the image.
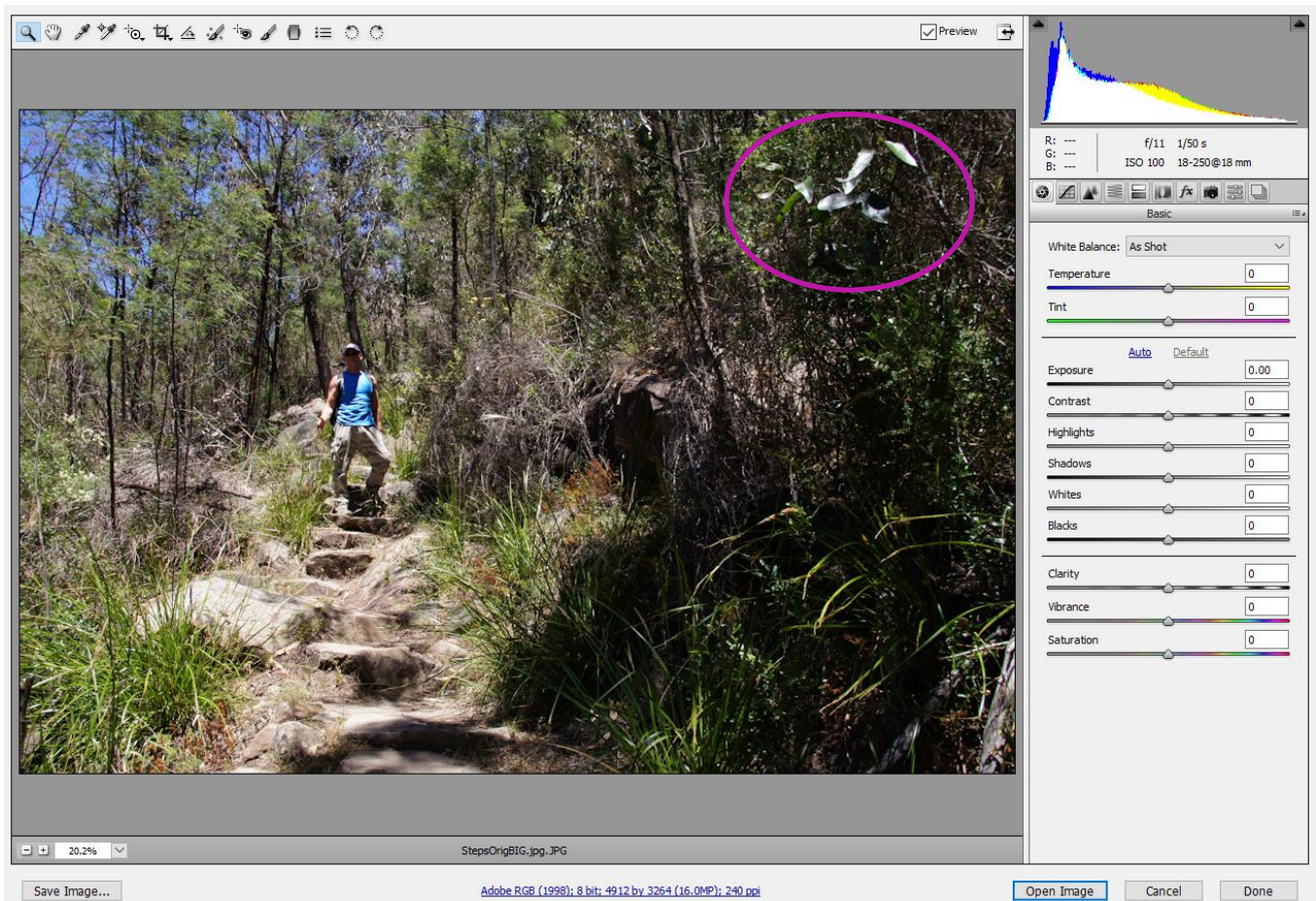

This photo has lots of shade on the right, and bright sun making the rocks look white on the left.
There are also some large shiney leaves we need to copy and paste heal/clone over the top of to remove them.
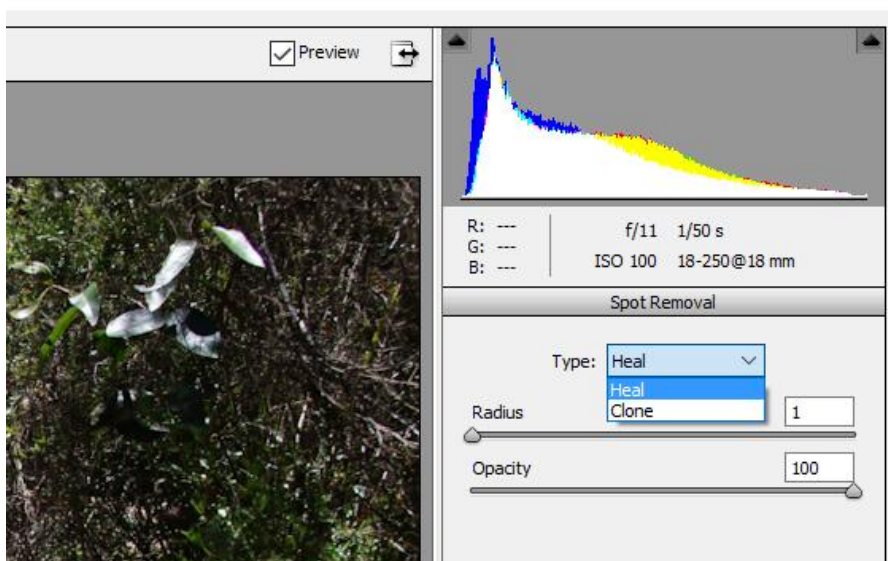
Using Camera Raw in Adobe Photoshop

First we will use the healing tool to remove the large shiney leaves.

The Paint Brush with spots around it is the Spot Healing / Clone stamp tool. We will use this tool to remove those annoying big shiney leaves by "healing" over the top of them.
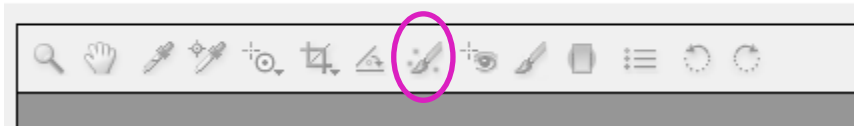

When we click onto this tool we get options in the right hand corner where we will choose "Heal" and then adjust the brush size radius to 15 and leave the Opacity on 100 so the brush is not see through at all.

This tool is a little tricky to use. We get two circles produced that we can move around. The Green Circle is the source we are copying from, and the Red circle is the target where we want to copy and blend to.
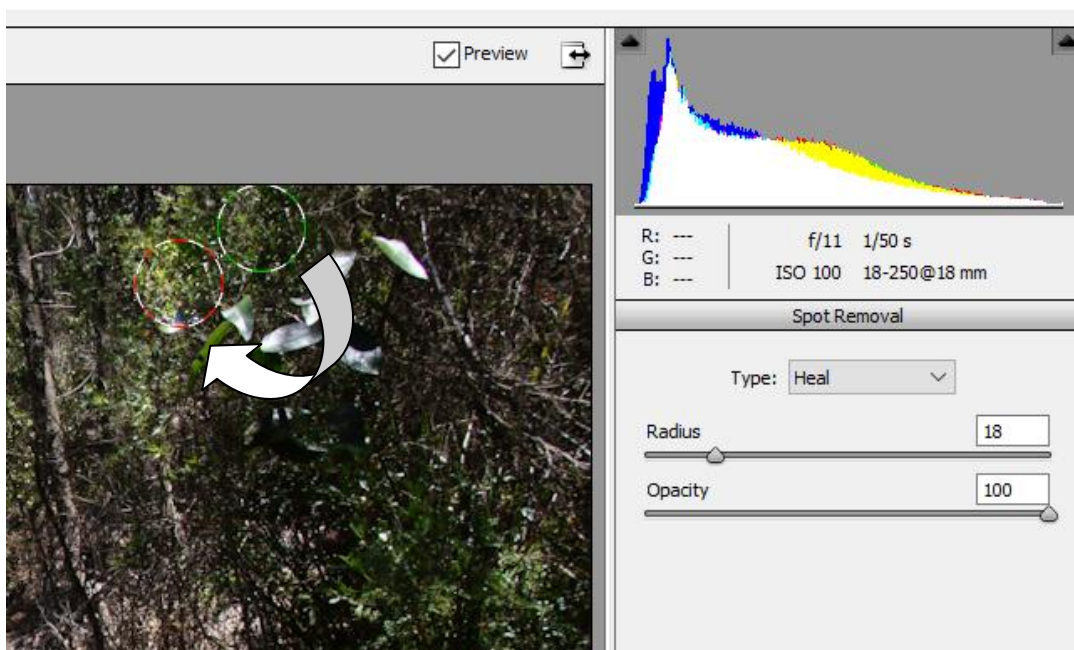
Using Camera Raw in Adobe Photoshop

By moving the red circle to where a big leaf is, and then moving the green circle to some small leaves to copy in there, we can eventually copy and paste over all of those big shiney leaves.

To go off the tool and back on click on the hand symbol on the top menu, and then back onto the paint brush with spots again.

The technique is to get onto the paintbrush, and first click on a big leaf you want to remove.
Camera Raw will automatically set the green source circle and copy over the leaf, but if you do not like the auto selection, then grab and move the green circle yourself with the mouse to use your own selection. Click on the hand symbol to get out of the brush tool. Then go back onto the brush again, and keep going until it is finished.

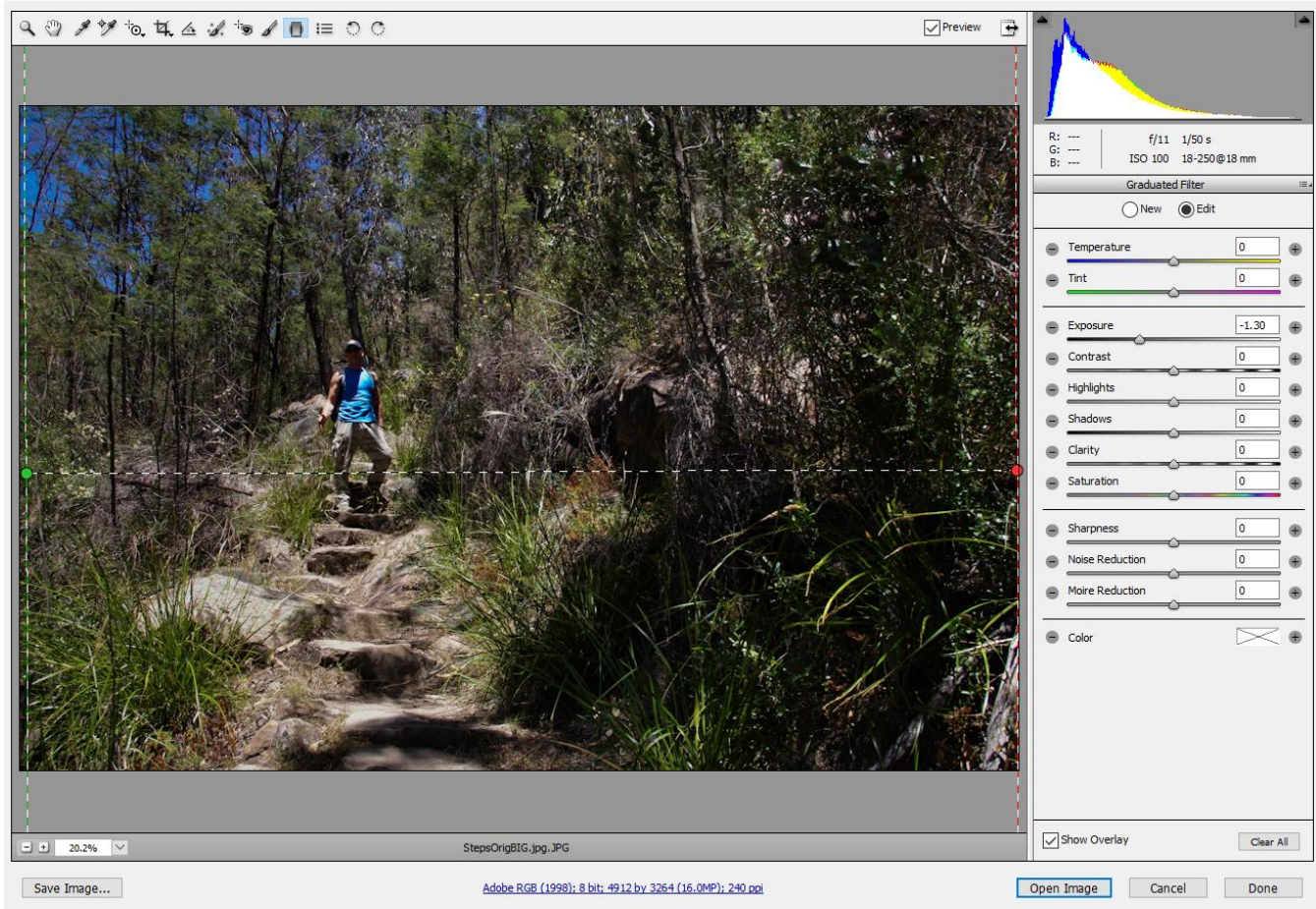**WARNING: DO NOT PRESS THE "Esc" KEY IN CAMERA RAW, IT CLOSES YOUR IMAGE WITHOUT SAVING IT!**
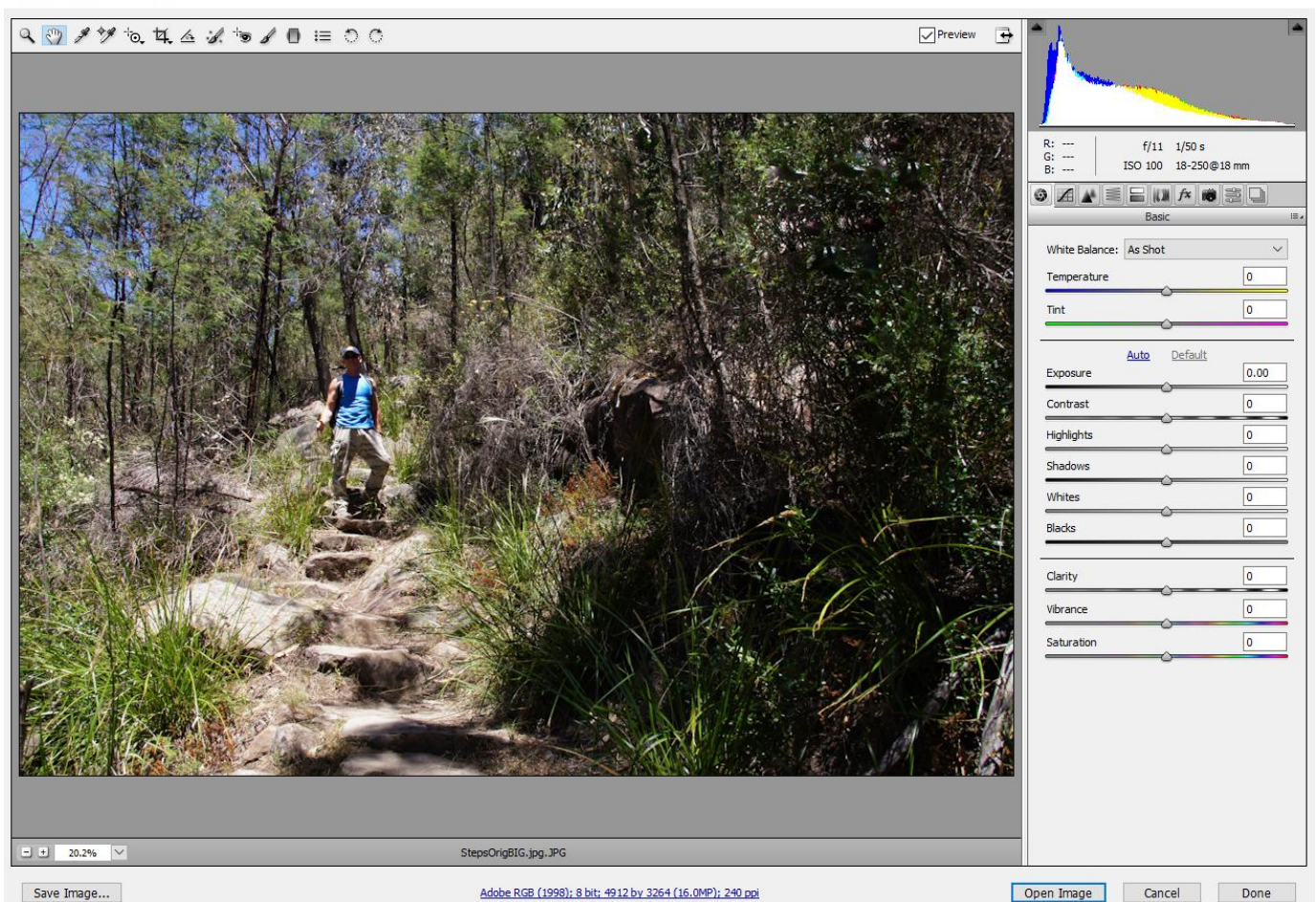
Now we just need to do a sideways graduated filter to try and make the left hand side a bit darker:

Using Camera Raw in Adobe Photoshop

As shown above the only adjustment we make is drop the exposure down to -1.30 which will make the green dot end go darker. Click on the hand symbol to exit the graduated filter tool.

To finish off we adjust up the Basic Tab exposure, shadows, whites, etc until we have an image we are happy with.
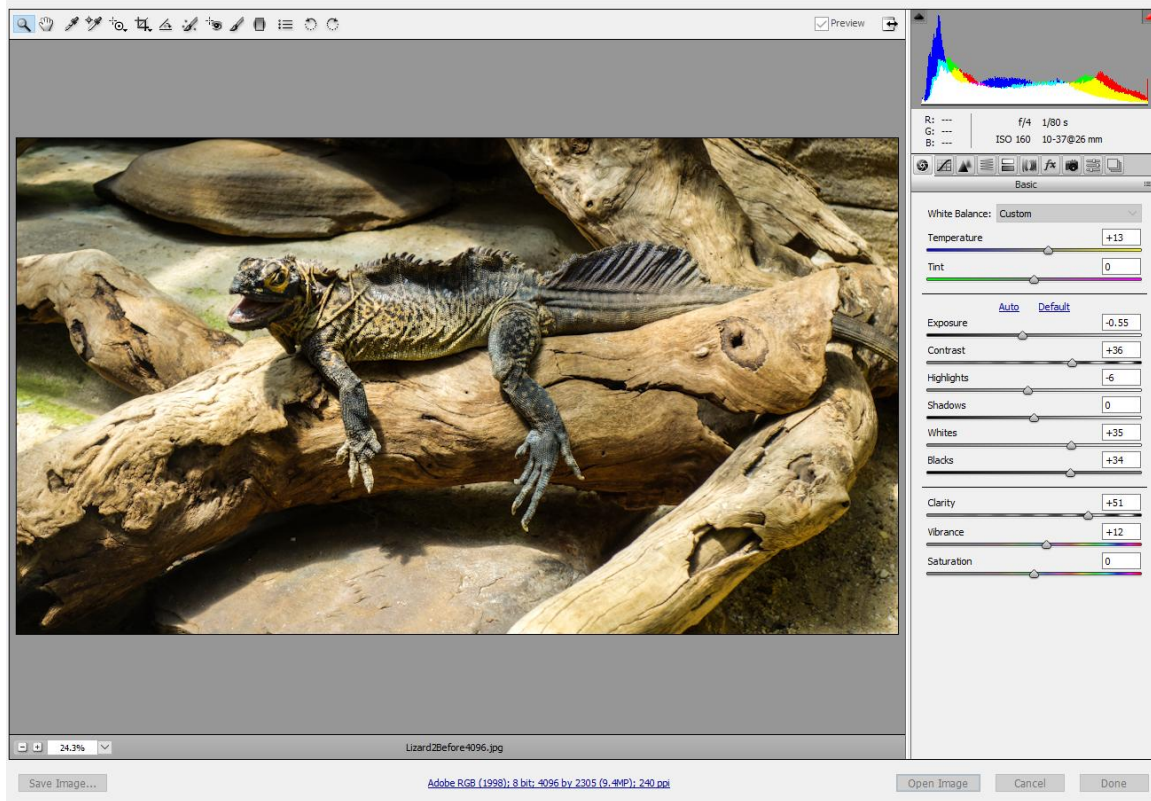
Then we can crop the image, take it into Photoshop, Resize it and save it for the WEB.

Using Camera Raw in Adobe Photoshop

Adjusting Shots Taken through Glass

The following zoo animals have been adjusted in Camera Raw, and the adjustment brush then used with the exposure turned up to remove shadows that were on them, and make their eyes and faces stand out.

The Lizard's head was originally in a dark shadow, and the overall image was pale from being photographed through glass.

Camera Raw used to intensify the colours and the Adjustment Brush set to increased exposure to paint over the head and lighten up the face to be clearly visible.
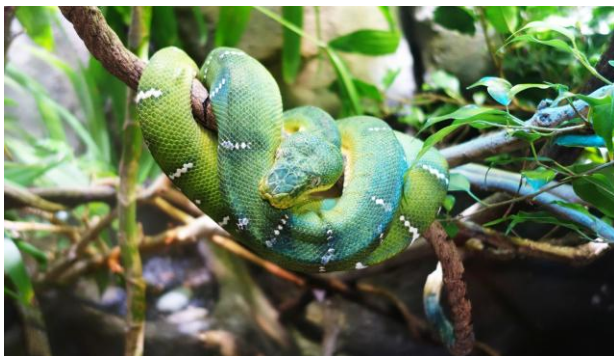
The HSL panel was also used to reduce Blue and Aqua on the snake and leaves, adjust brush used to darken leaves.

Videos about Camera Raw 7.0

Here are some of the best YouTube videos we found about using Adobe Camera Raw.

First up is an official Adobe 7 minute video about using Camera Raw on a dark and gloomy image, and really bringing the light and colours up to create something quite spectacular:

https://www.youtube.com/watch?v=LPiCZ0mUjQ0

The following 12 minute video from Lynda.com is good, except near the end where the quality of the image they are working on becomes quite grainy. Goes through fixing Exposure, Highlights, and Shadows, on the Basic Panel really well in the first part of the video:

https://www.youtube.com/watch?v=aYY8hlvndfo

The lady who made this next video has a very American voice, but her 30 minute video does give a very comprehensive overview of all the adjustments that can be made in Camera Raw, particularly for Landscape Photos:

https://www.youtube.com/watch?v=0uUa15pjPlY

This 15 minute video is okay and shows how to touch up a dark sand dunes image using Camera Raw:

https://www.youtube.com/watch?v=K6Kc3xolcbw

Five minute video specifically on the Basic Panel **Clarity, Vibrance, and Saturation**:
https://www.youtube.com/watch?v=8VAULisFcMg

Great 10 minute video all about the **Targeted Adjustment Tool**: https://www.youtube.com/watch?v=OnyelYu_oIA

Video showing the basics of using a **Graduated Filter**: https://www.youtube.com/watch?v=yi0A8eaBct0

Video showing how to apply **Multiple Angled Graduated Filters**: https://www.youtube.com/watch?v=92F34UiO0Qc

Video showing the **Clone / Heal Brush** in Camera Raw: https://www.youtube.com/watch?v=tTfFqhaT_TY

The Clone Tool (paint brush with spots around it) is also called "The Spot Removal Tool" and here is a video about using the Tool to remove Spots: https://www.youtube.com/watch?v=yZQ0sONpHkA
In this 5 minute tool, Camera Raw is actually accessed using the Filter Menu in Photoshop, but this only works in the latest Photoshop CC. In earlier versions of Photoshop we have to use File > Open As on the original image.

Camera Raw Presets and Snapshots seven minute video: https://www.youtube.com/watch?v=D5AeX_c1kXw

End of Lesson