

A Lightroom – Nik Dfine 2/Viveza 2 Workflow – Graham Cam

In the June newsletter, I wrote on the attributes of the free Google Nik software package. The complete Google Nik Collection is an effective set of post-processing plug-ins for Adobe® Photoshop® and Adobe Photoshop Lightroom®. Hence this tutorial is designed primarily for those members who use Lightroom and Photoshop. By now you should have downloaded the Google Nik suite to either Lightroom or Photoshop. Readers of the June newsletter will recall that Dfine 2 provides amazingly simple control of contrast and colour noise reduction in digital images and that Viveza 2 enables selective adjustment of colour and tonality in images at the pixel level without requiring the user to create complex masks and selections.

As part of the June article I summarised the benefits of the U-point technology and how a few optimally positioned control points in Viveza 2 could make a significant difference to a distracting background. In this follow-up article, I have selected two dissimilar images and take you through a more detailed workflow for Lightroom and Nik. The target audience for this and subsequent articles is Entry and Intermediate level photographers, especially those who do not post-process their images and would like to have more confidence to do so. These tutorials do rely on the reader being prepared to undertake a degree of personal tuition, utilizing the resources that are provided at the end of each tutorial. As an educator, I will not provide a recipe for you to follow as this will not progress your understanding of the software or workflows discussed. A recipe will in most cases improve your images but not your understanding, which is critical if you are to progress to the next level of improvement, not to mention comprehending the full range of possibilities that can be applied to improving your images.

Before we start let's re-cap U-point technology and why use Viveza for selective adjustments rather than Lightroom? Masks for local adjustments can be created in Lightroom and a 'feathering' effect can be applied to the mask, but the masks are not seamless. The U-Point technology however, creates a mask based upon pixel similarity and thus more closely approaches a seamless 'luminosity mask', a topic for another article. For now, consider a mask drawn in Lightroom as having a defined border with a degree of feathering you apply, to try and hide the edge of the effect. A control point in Viveza, on the other hand, is a simplified luminosity mask. The mask is applied to pixels of similar luminosity (brightness) and as such there is no distinct border and adjustments are seamless i.e., you will be not detect an edge effect. How to apply control points is discussed in the June article and should be reviewed before proceeding.

Further, here is a link to an excellent 7 minute Google tutorial that illustrates how to apply and use control points: <https://www.youtube.com/watch?v=4cLAudm5yXg>

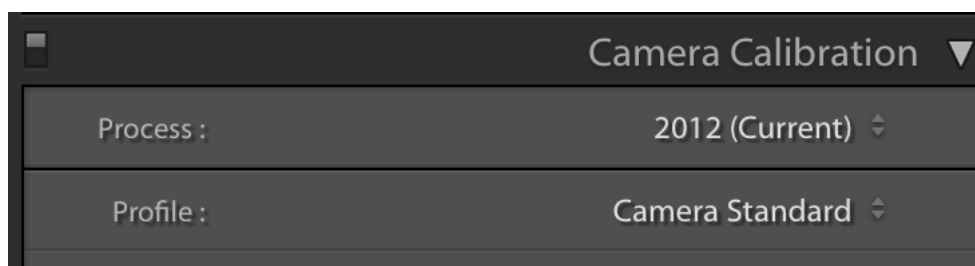
Now that you are familiar with U-point technology, let's examine in detail its application to bird photography. The first image in this tutorial is that of a Spotted Catbird, which was captured at Paluma, QLD in harsh mid-morning light. The sunlight was coming from the high right of the subject and whilst the larger part of the subject and log were partly shielded from this harsh light, there were highlights on the wing and left leg of the bird, as well as on the log itself. The background was primarily in the shadows but with selective highlights from the sunlight shining down through the canopy. Not an ideal time of the day to capture images with such a high dynamic range to contend with, but often we have no choice when photographing birds.

This first image is the original RAW capture with no post-processing and sharpening reduced to zero.



Nikon D500, 80-400mm@400, ISO 500, 1/200s, f7.1, with VR, SB-910 Speedlight for fill flash.

This image is converted in Adobe Lightroom CC 2017 and as matter of course I select Camera Standard in Camera Calibration in the right-hand Lightroom panel. The reason I do this is that Nikon did not share its RAW conversion algorithms with Adobe, and images lack a degree of contrast, clarity and vibrance when converted using Adobe Standard. Selecting Camera Standard will produce an image virtually identical to the image's RAW conversion in Nikon NX-D.



Lightroom CC panel showing selection of Camera Standard for RAW images.

The next step is to review the image at 100% in Lightroom to establish that the eye is sharp, and then move on to the bill and feather detail in the head. Reviewing the histogram confirms that neither the blacks nor the whites extend past 0 and 255 respectively; in other words, the blacks are not under-exposed and the whites are not 'clipped' (over-exposed to pure white). There are hot-spots in this image but I know that with the correct treatment they can be adequately dealt with. Technically the image is worthy of further consideration.

Now to the overall composition. The bird is well positioned in the image, the characteristics of the species are clearly depicted, the log has character and the background is neither overly busy nor bright. My view is that it is an image of sufficiently high quality to continue with post-processing. At 100-200% I now carefully review the amount of noise in the background, both in the shadows and the highlights. There is a very small degree of noise in both as is expected from a crop sensor, although the D500 sensor in most scenarios generates an image with minimal digital noise. If I were printing this image I would ignore the small amount of noise. For this exercise and for digital

projection/display I will apply a very small amount of noise reduction. Determining the noise level in the bird proper is far more difficult because of the feather texture, which works in one's favour and reviewing the even-coloured bill shows virtually no digital noise.

For this exercise, I have chosen to use Nik Dfine 2 to remove the small amount of noise and to show you how easy this is, I open the image in Dfine 2 (which has previously been uploaded to Lightroom as an integrated application), by selecting Photo/Edit In/Dfine 2 in Lightroom. A new window opens in Dfine 2 and I allow the software to automatically select the areas of noise, ensuring that Dfine 2 does not select any area of the catbird. There is a window at the bottom of Dfine 2 which enables you to view the before and after noise reduction. Being satisfied with the overall result I click save and the image is then returned to Lightroom.

The images below compare only the detail in the head of the bird to show that reducing the noise has not diminished the sharpness in the critical parts of the image.



*Upper image - before noise reduction, lower image - after noise reduction.
Note the fill flash has yet to be removed from the bird's eye.*

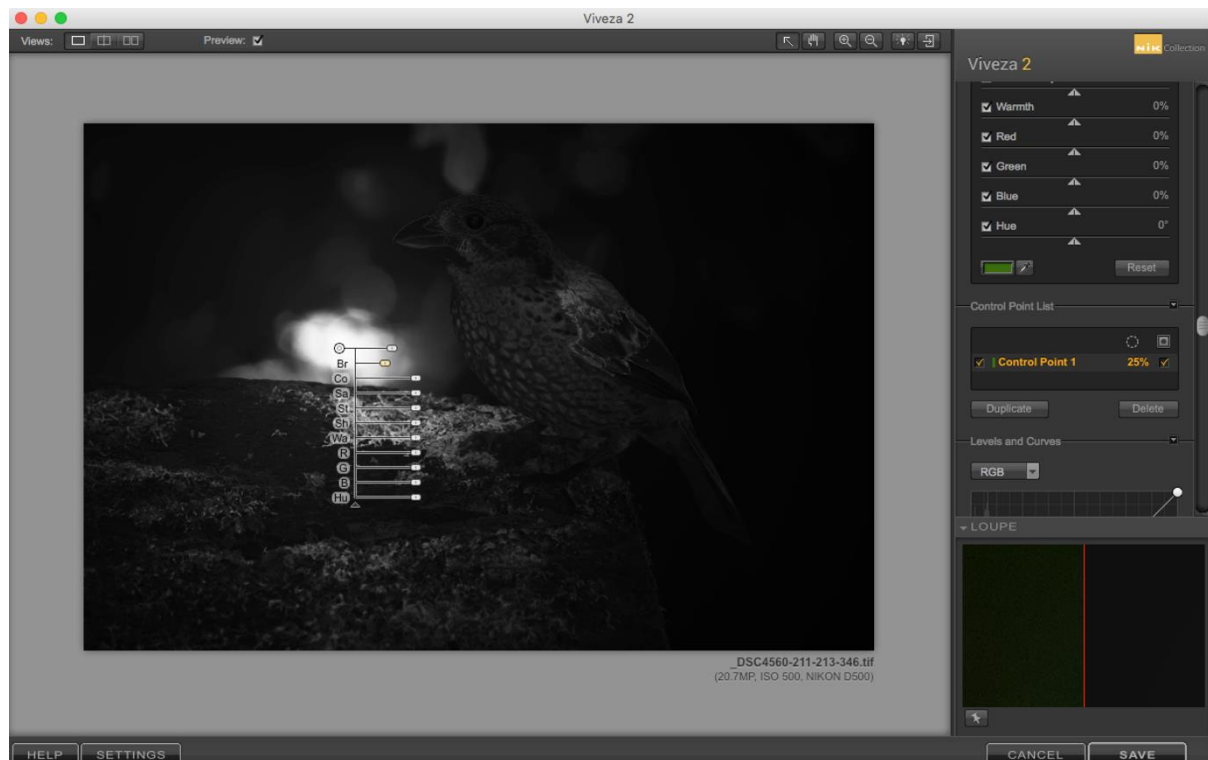
The next step is to make several global adjustments in Lightroom. For this image, I applied Exposure -20; Contrast +10; Highlights -50 (until the detail in the wing feathers was clearly observed); Clarity +20; Vibrance +10 (optional). No adjustments were made to the Tone Curve.

No sharpening is applied until the last step.

The image was then further edited in Nik Viveza 2. Employing control points to target specific areas in the image rather than global adjustments, I primarily selected highlights in the background and reduced their brightness. I also reduced the brightness in the tree trunk on the bottom right of the image and in the mossy area in the foreground. Similarly, the highlights created on the bird's leg and foot and the mossy area to the right of the bird's leg were reduced using additional U points (as shown).



By selecting the appropriate check box on the right-hand panel of Viveza 2 you can view the area defined by a control point and make it larger or smaller and thus more global or specific. Even greater specificity is achieved by moving the control point to adjacent pixels until the desired area of influence is achieved. Below is the bright green area in the middle of the image that has been defined by one of the control points for editing.



Whilst Viveza made a significant difference to the distracting elements in the background there were one or two leaves that I still found distracting and I chose to remove them in Photoshop by selecting Photo/Edit In/Adobe Photoshop 2017. Applying the Content Aware tool set to Structure 1, Colour 5, I set about reducing the impact of these distracting elements. For those of you who have not used the Content Aware tool, I suggest you access the Adobe tutorials for this tool. This is an invaluable tool for minor edits, in particular annoying branches and the like.

In the image below, I have introduced 4 bright dots to indicate areas of the vegetation which I have partially removed using Content Aware. These edits make the bird stand out more in the image rather than one's eye focusing on highlights and other distracting elements.



You may ask why I didn't remove the brighter green leaf area in the centre of the image along with the circular elements above. The answer is that the Viveza 2 control point did a much cleaner job by just reducing the brightness in this area of the image. The second part of the answer is that some green in the background compliments the bird's plumage and provides continuity in the image.

At this stage I was happy with the overall results but still felt that the mossy foreground, whilst out of focus and a minor element in the overall composition, still lacked contrast. Thus, I subtly applied the graduation filter tool to the lower 25% of the image.



Whilst not immediately obvious except at 100%, the eye highlight from the fill-flash is an element that I prefer to remove. In some images, it can be quite 'off-putting'. There are several ways to do this in Photoshop and Lightroom; in this image the Spot Removal tool achieved an acceptable result.



The final step was sharpening and cropping the image in Lightroom. Reviewing the image at 100% I was convinced that the default Sharpening settings were adequate. The final crop applied to an image is an important element in showcasing the overall composition. A mistake made by many members is to crop too tightly to make the bird as large as possible. It is important to give the bird 'space' in which to move, which in this image means more room on the left than the right. Initially I cropped as below but immediately realized that there was too much black on the log blending

into the dark negative space in the upper left. My preference is to include a portion of moss at the top of the log to balance the foreground colours and to provide a little more space on the left of the bird, which balances the darker negatives space left and right, as depicted in the middle image. The lower image is the same crop of the original image for comparison with the edited image.



Initial crop of edited image



Final crop of edited image



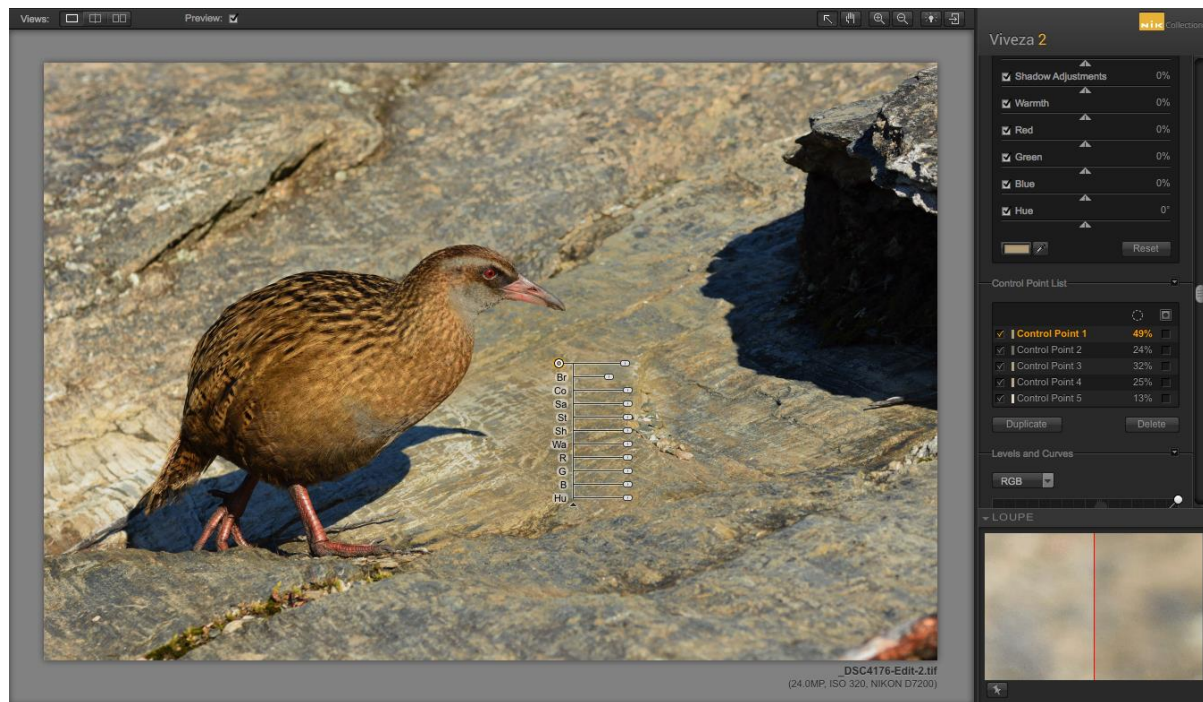
Same final crop applied to original image.

The second image in this tutorial is that of the rare New Zealand Buff Weka. This bird, along with several other breeding pairs, is confined to isolated islands where predators such as stoats have been eliminated and constant monitoring of predators is undertaken. Visits to these areas are restricted and, as in the catbird image, I was confronted with harsh mid-morning light, and a bird moving quite quickly and erratically against a backdrop not of my choosing. The unedited RAW image below does not convey the bright rock background as displayed on an LCD/LED screen or through digital projection. The image is neither over-exposed nor under-exposed but the reflective qualities of the rocks and the selective areas of bright highlights do not lead to a pleasing image.

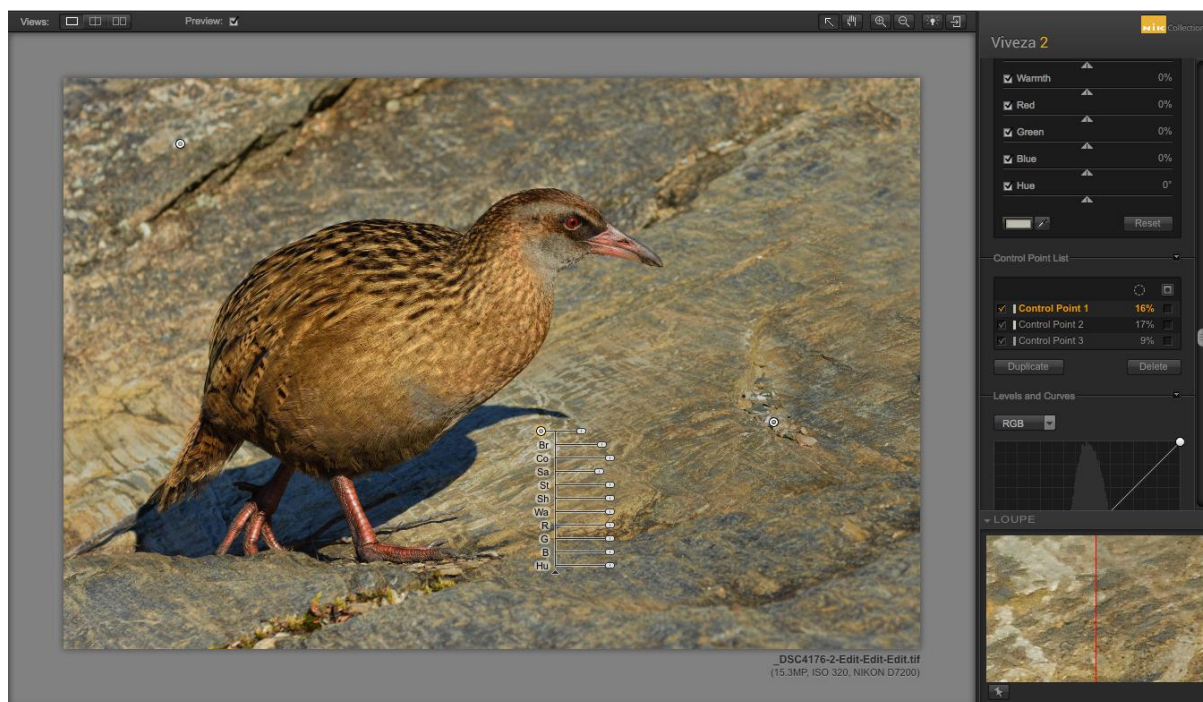


Nikon D7200, 80-400@112mm, ISO 320, 1/640s, f8, with VR.

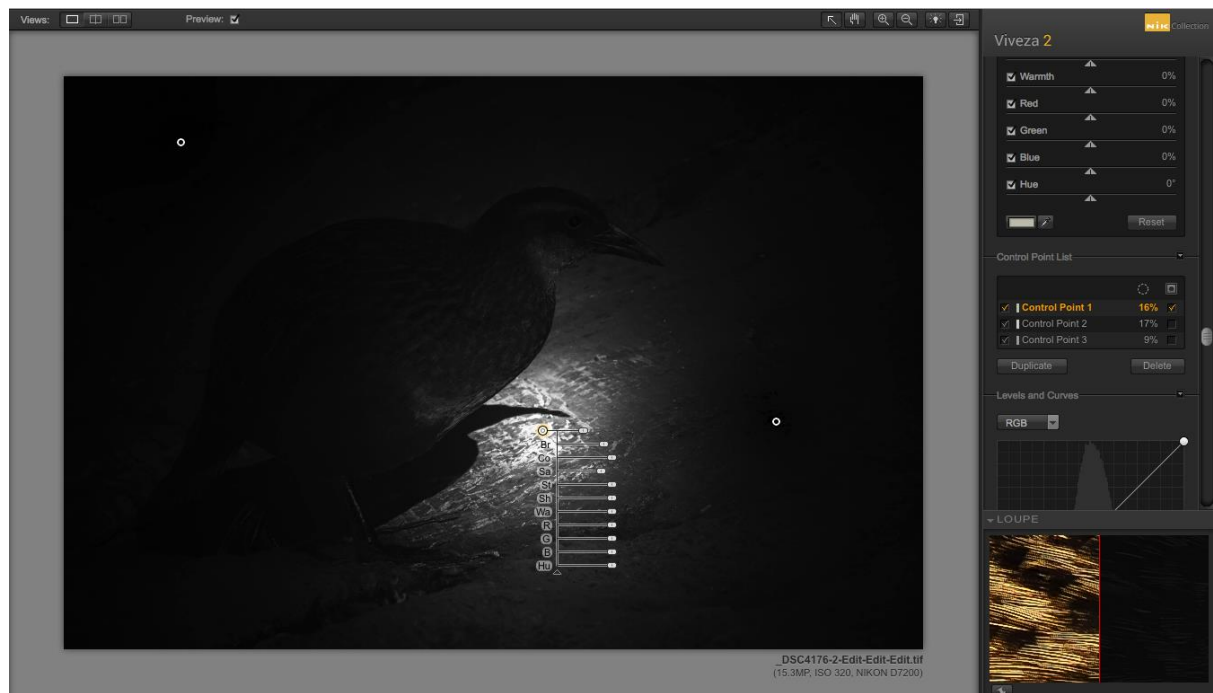
As in the image of the Spotted Catbird, overall composition and technical qualities were assessed before proceeding with post-processing. After reviewing areas of the image at 100% I determined that noise reduction was not required. My efforts would concentrate primarily on the background. In the image below I have placed 5 control points in carefully selected positions, and adjusted the radius of the effect in order to reduce the brightness of the background. Selective placement is chosen by applying the mask to the image and observing the areas influenced by the control point. The control point is moved by placing the mouse cursor on the control point circular target and moving it to adjacent pixels until the optimal coverage is achieved. This step was repeated for all control points ensuring that there was minimal to no effect on the bird itself. There is now more contrast and definition in the back ground overall but there are still unpleasant highlights to the right of the bird's breast, around the bird's tail and in the top left-hand corner.



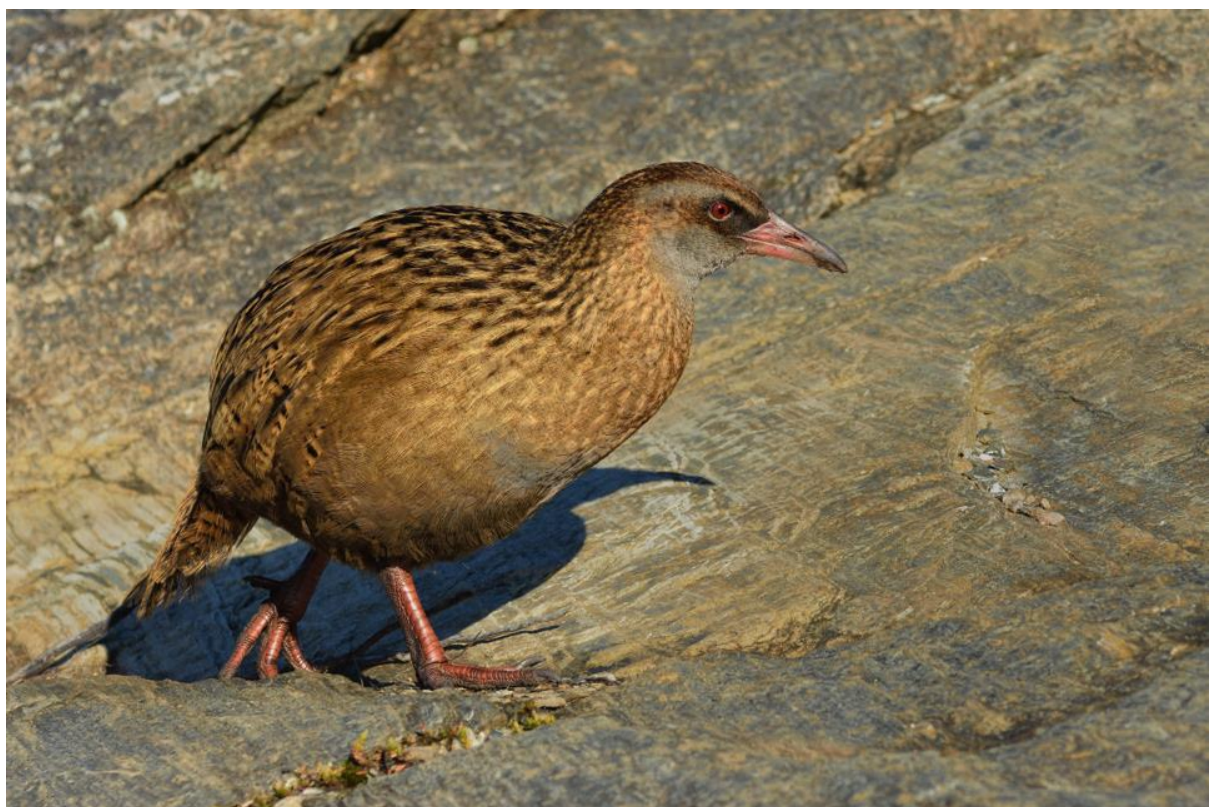
To reduce these highlight areas, I applied a further set of 3 control points as shown below, targeting just the brightest pixels. In this example I have reduced the brightness and the contrast sliders on the control point immediately adjacent to the bird's breast.



The duplicated image below illustrates that by checking the mask box (highlighted in orange), I can observe the specific pixels which will receive the greatest effect of the adjustments. The greatest effect is applied to the brightest (whitest) pixels, less to the grayed pixels and none to black pixels.



In the cropped version of the image below, you can clearly see that the brightest pixels in the rocks have been further reduced in brightness i.e., more 'burning' applied to these pixels. At this stage I was reasonably happy with the overall image but I chose to apply one more control point (not shown) to the bird's lower abdominal plumage to bring out a little more detail in the shadow areas. Comparing this edited image with the original (lower image) I think you will agree that the edited image is a far more pleasing image and the results are quite dramatic when viewed on screen.





If you look carefully you will notice that I have 'pulled a swifty' on the cropped image. In the original image above the harsh light has thrown a longer than desirable shadow of an overlying rock on the lower rock surface (upper right). Cropping the shadow from the image meant there was less room for the bird to move to the right and so I further edited the image in Photoshop. Using the Clone Tool, I painted over the shadow with several targeted clones of the rock, using the same texture, sharpness and tonal range to 'follow' the rock structure and extend the background to the right. I think you will agree that the edits applied to this image, particularly the background, are worthwhile; these took less than five minutes to complete.

In reference to using the Clone Tool, for some members this may be a revelation, it may also be a disaster in waiting. For images submitted to competitions we note that minor distracting objects may be removed and this could be achieved either by using Content Aware and/or Cloning. Minimal use of these techniques is permitted BUT you must acknowledge that you have done so. Ideally, such edits should also be acknowledged in the 'Comments' field when submitting an image to any gallery (except Slides) in our digital library (see my article on Image Submissions in this edition of the newsletter).

Finally, this tutorial should provide a deeper understanding of a Lightroom - Viveza 2 workflow and the power of the free Nik software package that is easy to understand and apply to your photography. I trust this article will stimulate you to use Nik Viveza 2 in your workflows.

Remember, learning starts with you taking the challenge and then persistence until competency is achieved. Then comes the champagne ;-)

Resources:

The Google Nik Collection can be downloaded from this link: <https://www.google.com/nikcollection/>

Interested in learning more about Lightroom? Martin Evening is one of the key beta testers for Lightroom. Join Peachpit Press and wait for their weekly specials with 20-50% off books and ebooks and then purchase this must-have treatise by Martin on Lightroom CC. <http://www.peachpit.com/store/adobe-photoshop-lightroom-cc-lightroom-6-book-the-complete-9780133929195>

Content Aware Patch and Move: <https://helpx.adobe.com/photoshop/using/content-aware-patch-move.html>