

Post-processing Top Tips: Part 2 – Glenn Pure

In last month's newsletter 'tip', I covered the four critical things that should be done to any photo before it is uploaded to BLP or elsewhere. One of those things is to make lighting adjustments to the RAW file to fix clipped shadows and highlight and make detail in those areas more visible. For space reasons, I didn't explain the process for doing that in the last newsletter. I'm going to run through that here. While each RAW processing software package will be different, they should all contain the same basic tools. So I'm going to use the Canon RAW processing software, purely as an example.

The image I'm using as an example is shown in Figure 1 and it has a number of problems, notably over-exposure and blown highlights. There are three key controls. The first is the overall exposure or brightness slider. This affects bright, dark and mid-tone areas of the image equally. Use it to get the overall brightness of the image roughly right. The other two key controls are the black point and the white point. You will also notice highlight and shadow sliders but I'll get to those in a minute. Any tonal information that doesn't fall between the black and white points is discarded when a JPG or TIF file is created from the RAW file. So these points are set to so that clipping of tonal information doesn't occur - at least not in the parts of the image you care about. Fortunately, popular RAW software like the Canon software and Adobe Camera Raw (ACR) incorporates clipping warnings that can be turned on so you can see where and how much clipping is occurring. There are two warnings: one for shadow areas and one for highlights and they usually work by shading the clipped areas a particular colour. In the Canon software I'm using, the clipped shadow areas are shown in blue and clipped highlights in red.



Figure 1. Left panel shows the unedited original RAW image. It is over-exposed and has some highlight clipping around the top of the bird (see Figure 2). The right panel shows the final result after lighting adjustments.

Any highlight or shadow areas where you wish to see some detail (normally most or all of the bird and parts of the background) must not show any clipping. This is why JPGs recorded by the camera are a problem. They use an average setting for black and white points that will often discard the tonal information that you'll need later to recover those highlight and shadow details. Once the black and white points are adjusted, then the

shadows and highlights sliders can be used to recover detail specifically in the shadows and highlights. Figures 2 to 5 illustrate the process in sequence.

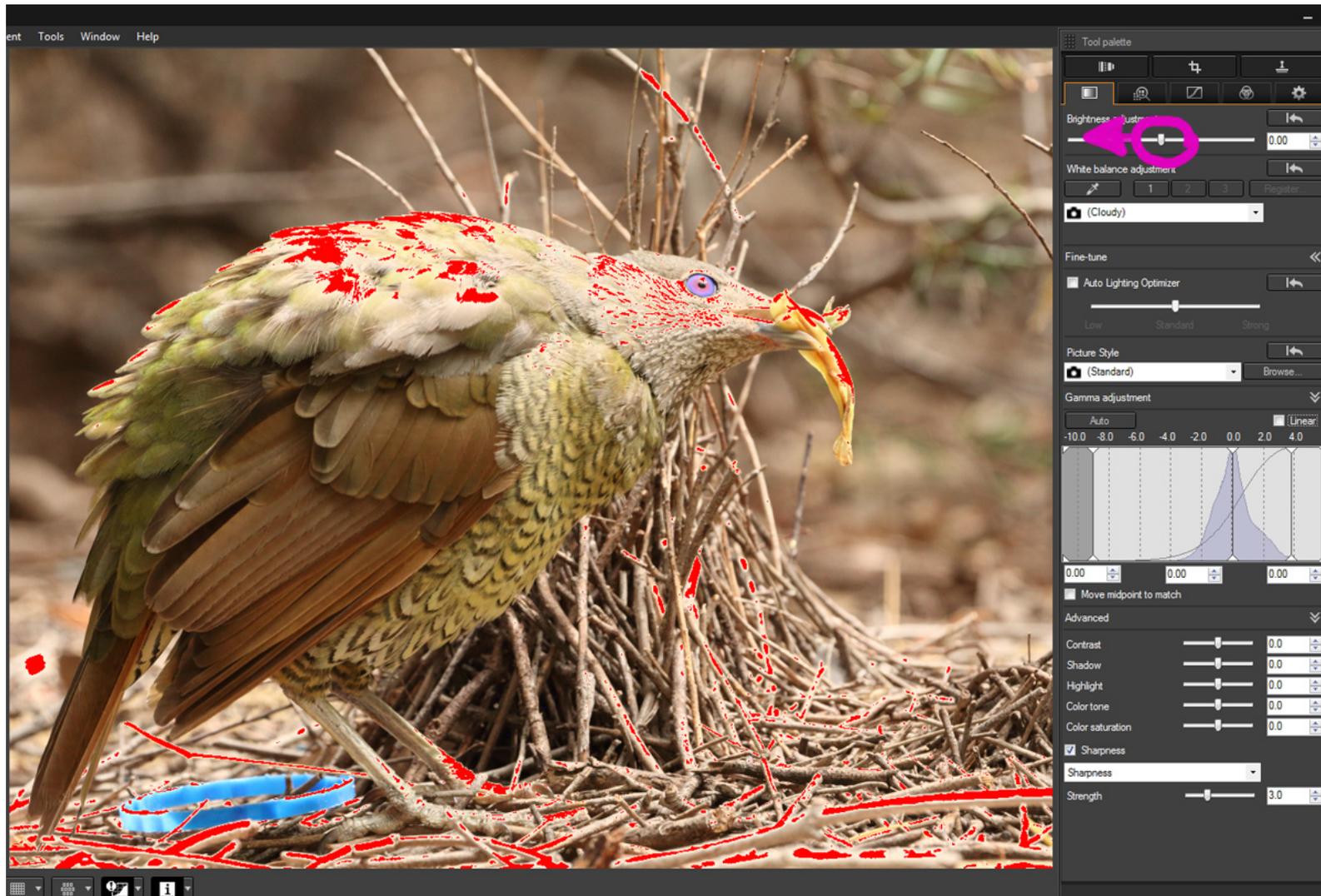


Figure 2. The unedited RAW image opened in Canon Digital Photo Professional version 4 (DPP4). The highlight (red) and shadow (blue) clipping warnings have been turned on for this and subsequent figures. In particular you can see there is considerable clipping of highlights on the top part of the bird and some of the foreground twigs. The first step is to adjust the overall exposure (circled).

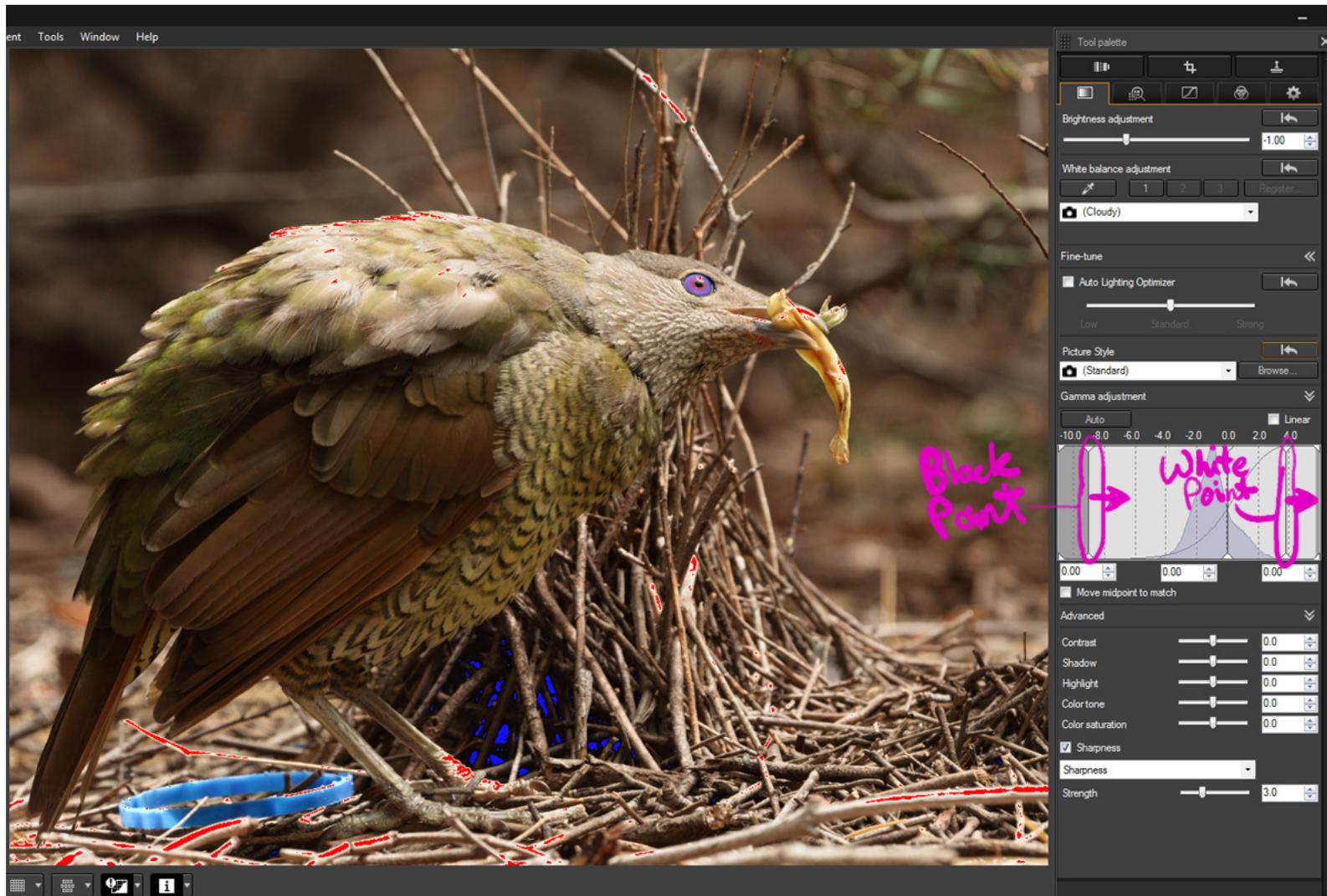


Figure 3. The overall exposure has been adjusted. This has fixed most of the clipped highlights but made parts of the bird that are in shadow too dark – but that will be dealt with in the next step. For now, the job is to set the black and white points. Moving the white point to the right will remove most of the remaining highlight clipping. Don't be tempted to move it any further right than you have to as that will reduce the contrast in the image. You will notice that the only shadow clipping (blue) is deep in the structure of the bower where I wouldn't expect to see any detail anyway. So I'm going to move the black point to the right as this will help improve the contrast in the darker areas on the bird's wing

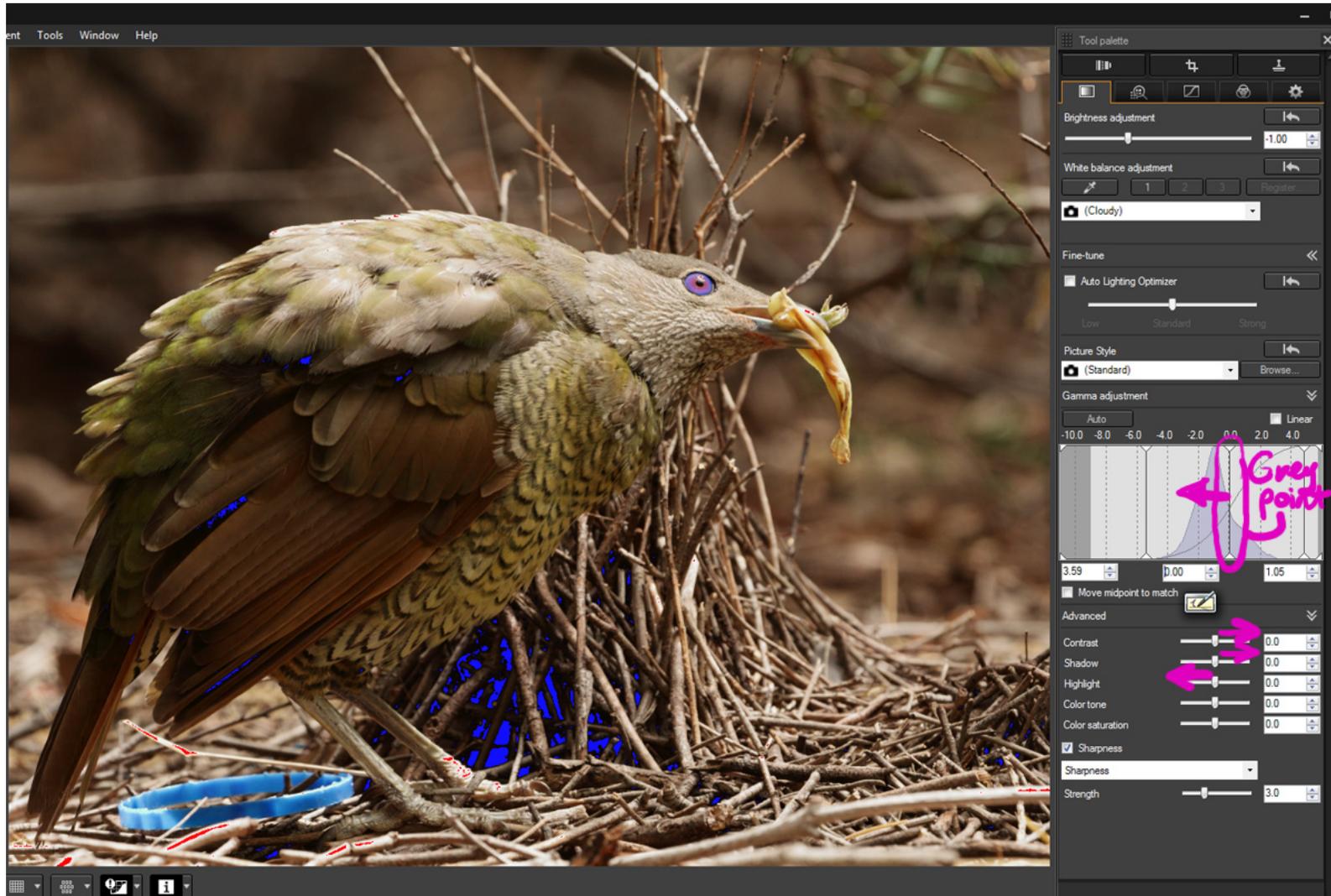


Figure 4. Virtually all of the highlight clipping is now cleared from the bird – it's usually more important to get rid of this than shadow clipping as the eye is drawn to highlights so detail missing from those parts will produce a less pleasing image. A small amount of shadow clipping is now present behind a few feathers on the mid and lower part of the bird but this shouldn't be a problem. The next steps are to move the grey point a little to the left. This will lighten the midtones. I will also boost contrast slightly. The 'Shadow' and 'Highlight' sliders are moved as shown to brighten the shadow areas and darken the highlights respectively.

When done, save as a 16 bit TIFF file, then open the resultant file in an image editing program like Photoshop or GIMP to finish the processing (cropping, if not already done, size reduction and final sharpening). If you are using Adobe Camera RAW, there is no need to save. You can open the file directly in Photoshop or Lightroom from ACR. Sometimes it may be necessary to do some additional lighting adjustments on the TIFF file, for example to increase the midtone contrast. The key point is that as many lighting adjustments as possible must be done on the RAW file if you are to take advantage of the tonal information it contains.

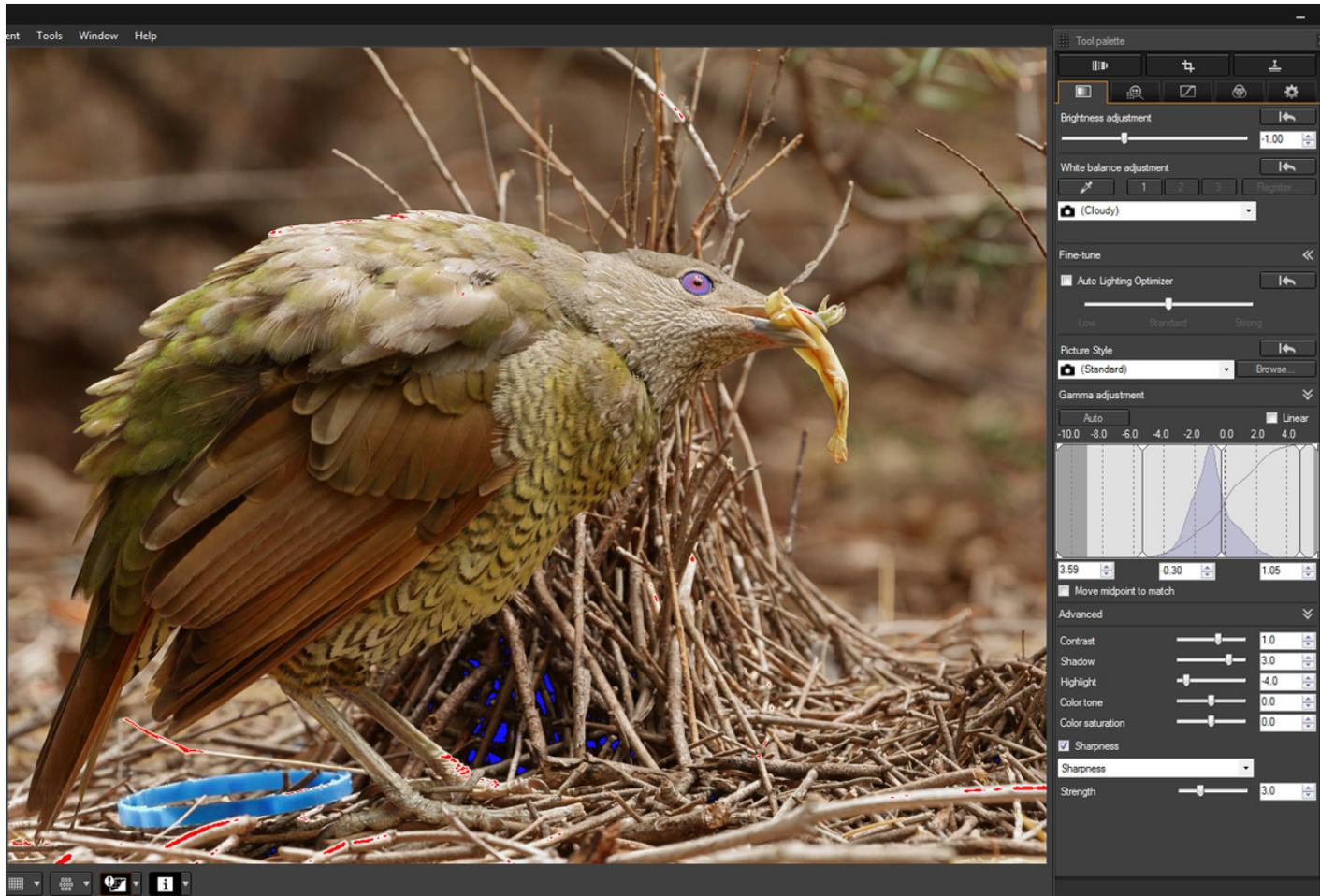


Figure 5. The final result. A tiny bit of highlight clipping remains on the bird but it won't be noticeable. Any further attempt to get rid of this is likely to reduce the overall image contrast. And remember, if you don't like the final result, it's easy to go back to the start and try again or tweak a few of the earlier settings. Remember one key thing though – ask yourself if the result looks natural. If not, reconsider what you have done.