Exposure and Exposure Compensation

Modern camera technology is clever, very clever, but it is not infallible and there are certain circumstance that are likely to fool it.

Your camera will likely have three separate exposure modes, this is most relevant to 'evaluative' which is perhaps the most common.

In the left hand image, the camera has 'seen' that the largest area of the image is relatively bright, as such it has reduced the exposure to bring that area down to a mid-grey.

We need to be aware that this will happen and to adjust our settings before when taking the image. As we need to over-ride the camera's dark setting, we would need to use positive exposure compensation (+EC) to shift the exposure range 'to the right'.

However, as you can see in the second pair of images above, if we were to do that in this scenario then we would create over-exposure. The subject on the left has a neutral-dark background so there is the likelihood that the camera will produce too bright an image – as such (-EC) is used.

You have probably seen over-exposed Swans or such, especially where the subject is not particularly big in the frame. This is due to the fact that the camera sees the bigger picture, for instance a darker pond and calculates settings required to deliver correct exposure for that. So, obviously if your target subject is brighter than that background, you will likely over-exposure.

A slight nudge 'to the left' will help to avoid these issues – but of course do not completely under-expose else you may find that colour noise is introduced if you try and correct later.

Most cameras will offer relatively easy control over exposure compensation, a button or such marked with this symbol will normally be found and either up/down arrows or a dial.

Menu driven or depicted versions will look similar to this Canon one with each stop or part thereof clearly marked.

You can see in this example that the horizontal scale is marked from -3 to +3 with main divisions shown at each increment of a whole 1.

If you have the option to customise your camera dial settings then you can ensure that control of your exposure compensation is easily achievable without having to look away from the viewfinder.

My personal default settings me control of the aperture via the front dial, and EC via the back dial without having to even press the EC button. This is a fairly common setting in Canon cameras.

Histogram

Most if not all cameras now offer the chance to view a representation of the tonal range, more modern cameras also offer a colour version although I personally ignore this.
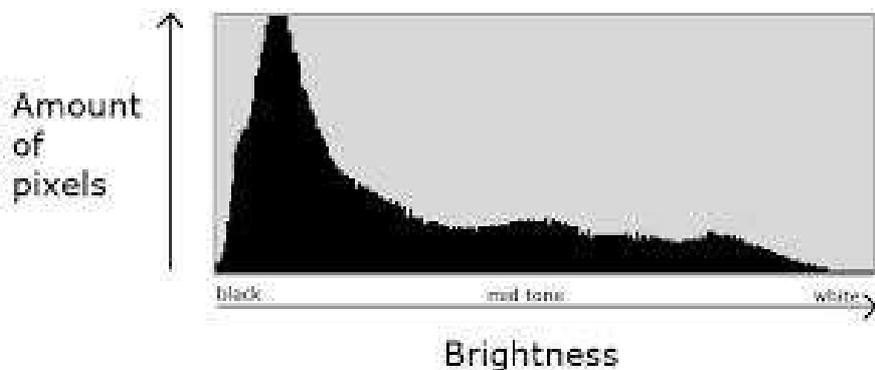
As seen here, the horizontal scale shows the tonal range from absolute BLACK (0) to absolute WHITE (255) included in the image. The amplitude of the histogram bars shows how much of the image is that particular tone.

So, in the example above, we can see that whilst there is a representation of a wide range of tone, a large area or proportion of the image is relatively dark.

Some would have you believe that your histogram is irrelevant and that incorrect tonal range can be corrected in RAW. Personally, I beg to differ. RAW can improve the matter but it cannot recover the extremes - correcting blacks will quite likely produce colour noise whereas an area of absolute white is basically a 'hole' in the image.

Applying a little bit of care when taking the image is far more logical.