

Through The Lens

*A guide to digital photography for computer enthusiasts.
After the click of your camera, you're only half done!*

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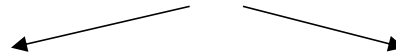
*Users helping users
for over 40 years*

RAW versus Jpeg – Pros and Cons

by Lynda Buske

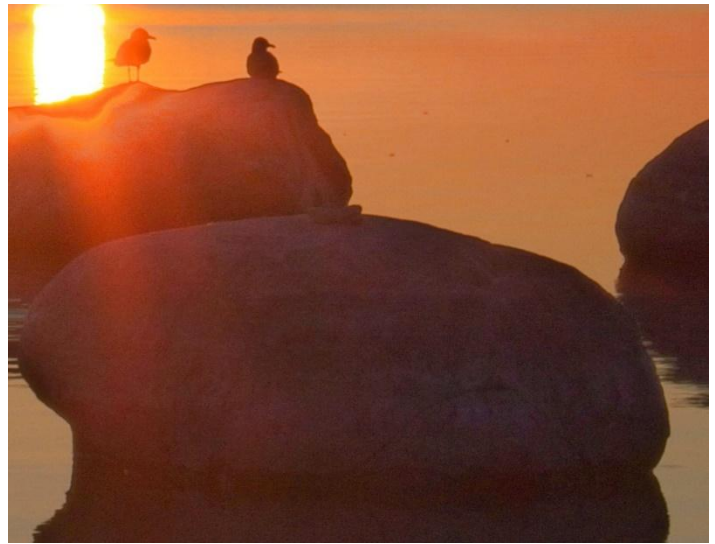
Many cameras (even cell phones) have the option of shooting in either RAW or Jpeg format. RAW is the "raw" or unprocessed data that comes off the sensor so it allows for the maximum amount of post processing (i.e. photo editing) to achieve a final image. Jpeg is processed in the camera. The camera manufacturer chooses certain modifications including things like sharpening and colour temperature and "bakes" them into the Jpeg. While you can later adjust from what the manufacturer chose, usually the latitude is less than what can be done with the "raw" data.

The ability to recover blown highlights and especially shadows can be dramatically higher with RAW files than Jpegs. However, RAW photos must be post-processed. You can't post a RAW file to the web or have it printed. On the plus side, the RAW file includes information about what the camera would have done had you told it to produce a Jpeg and your RAW photo editor may start with that.





Colour/tonal banding is unnatural looking with JPeg



Smoother gradations in colour/tones with RAW

An advantage of JPeg files is that they are smaller than RAW files which can easily exceed 20MB in size. Some photo editors take a long time to open raw files which can slow you down if you are just trying to straighten and crop a few hundred travel photos.

If you want to photograph in B&W, set the camera to B&W but record in RAW. You then see things on the LCD display (or electronic viewfinder) in B&W to help you visualize while shooting, but you have all the colour data available to you if you change your mind during post-processing.

Not all photo editors can edit RAW files. As well, how each software publisher interprets the RAW data can differ. As new cameras come out, often it can take weeks or even months before your photo editor is updated to handle a new RAW format. You are not in a total lurch as each camera that can produce RAW files will include software to deal with their files, but it is not ideal to have to use it and then switch to your favourite editing software for final editing.

Some free editors, such as PhotoScape X will allow you to work with a raw file but forces you to save your edited image as a JPeg file thus preventing you from accidentally modifying the original RAW file. If you use an editor such as Adobe Lightroom and ON1 Photo RAW, information related to your RAW image edits are saved in a database or a "sidecar" file. This means you can go back and re-edit to change any aspect of what you have edited: lighting, cropping, masking, layers, etc. This is known as non-destructive editing. And you can always get back to the original, unedited form of the image - the RAW file itself. Jumping back and forth when editing JPegs can be trickier; you often have to redo your later adjustments. Not so with a RAW photo editor. You can go back and change things you edited early in the process without undoing later changes.

Since there are benefits to both RAW and Jpeg, I tend to set my camera so I'm shooting in both formats. That way, I have the choice later during photo editing. You may wish to get a make sure you have a large capacity memory card such as a 128GB which costs between \$20-\$30. To save time, I usually download just the JPegs off my camera until I see if I need the RAW images.

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