Choosing A Digital Imaging Format

Several image formats are in use today but most cameras offer the option of the universally recognized JPEG or the camera-specific RAW format. The jpg is a compressed file that has the photo processing parameters from your camera already applied to it and is ready to use in printing kiosks, graphics programs, and web browsers. Compressed files have the actual data from the sensor tagged to make the file size smaller, saving storage space and speeding up web page loading. A certain percentage of your image data is discarded and replaced by simple directions that enable the file to be rebuilt. Each time you change your image and re-save it more data is replaced and rebuilt later. Multiple "saves" can lead to significant degradation of image quality. Always copy original jpeg files in your graphics program and work on the copy. ***Don't work on originals.*** Do a "save as.." on your work file and a "do not save" when closing your original.

A RAW file is in a format that contains the data recorded by the camera sensor but not converted into a photo file and not compressed. This gives the highest quality data but you have to process this data and save the file as a photo image, usually a jpeg or tiff, in order to print or otherwise use the image. The actual raw data is not changed in this processing. Your choices for color and contrast and whatever other selections you make are saved in a special file stored as an added data cache associated with the raw data. This file, called XMP, can be edited over and over as you need to alter your image and the raw file is never directly changed. Raw processing is the choice for files that need lots of editing options.

Some photographers always shoot in Raw. Others only use jpg. I use both depending on my needs, but most recently I have been using RAW more often. My old software did not open RAW files. Since acquiring software which includes Camera Raw ability, working with RAW files is now easy to do.

Camera manufacturers issue new models which have a RAW format that is not readable by existing Raw processors. As they become available, updates must to be added to the program to keep it current. When updates are not compatible with older operating systems,at minimum the software will need to be replaced.or the computer may have to be upgraded or replaced.

Adobe created a universal raw system called DNG that the photo industry is allowed to use free of royalties. DNG is used in some cameras as the raw format , but most still use proprietary software. Photoshop and Lightroom offer the option of a DNG file when importing raw images.