

Camera Club News

Letter From The President

The club is to mount an exhibition of members' prints this year. The exhibition will be shown in Aratoi around August this year so we have to get a move on ! (the precise dates have yet to be finalised).

The theme of the exhibition is "The Run of the Ruamahanga"

The theme may be broadly interpreted. We would want the exhibition to be representative of a range of ideas and cover the length of the river, mountains to the sea. A starter list could include:

The headwaters of the river: water clarity, relationship to mountains and bush etc

Effects of European settlement and activity

The relationship of the river to the farmed countryside

Downstream water quality

The bridges

Recreation on the river (fishing, boating, swimming ...)

Man's attempts to control and channel the river

A further opportunity

The list of possible sub-themes relates to an exciting opportunity for the club.

Coincidentally, as we were planning the exhibition, Gareth Winter, Wairarapa's archivist, was planning a book on the Run of the Ruamahanga. In his book, Gareth plans to address the above themes through historical information, anecdotes about people past and present, as well as the geography of the river.

Gareth has suggested that we might like to make our work available to him for the possible inclusion of some of our photographs in his book.

Photographs for the Exhibition

The exhibition will consist of a maximum of 25 images, to be chosen by the committee.

Selections will be made during July/August this year, so members have until then to be taking (or digging out) photographs for consideration.

The club will arrange and fund printing and framing. The main consideration for members (apart from fantastic images)

Club Information

To learn more about photography, to share your skills and experience or simply to enjoy photographic time with like-minded people, come to a meeting or contact us at

info@wairarapacameraclub.org

Meetings start at 7:30 pm on the first Tuesday of every month from February to November, at the Education Centre, 22 Dixon Street, Masterton.

WCC, PO BOX 502, Masterton

www.wairarapacameraclub.org

All questions, submissions and general information regarding this newsletter should be made to the Editor, Nik Player.

nikplayer@me.com





will be shooting in and processing for maximum printable quality. See 'Preparing Images for Exhibition Printing' for ideas.

Exhibited images will be offered for sale to recover the costs of printing and framing, with any further profit shared in some way between the photographer, the club, and Aratoi (which charges a commission on sales). Until they are sold, the club will own the exhibited photographs (although, clearly not the copyright in the images themselves which remains with the photographer).

Besides the framed and printed photographs for inclusion in the exhibition, we anticipate producing a DVD containing a wider selection of the submitted images, to be shown during the exhibition. Copies would be available to members.

Regards *Nik*

Editors Monthly Photo

Original (Nikon D50)



Processed in B&W



Competition: Rubbish



WINNING PRINT

"Training to be a litter bug" By Tim McMahon

WINNING PROJECTED IMAGE

"Society Reject" By Bruce Levy





Competition Results

Prints

Tim McMahon	A dogs Breakfast	M	
Tim McMahon	Training To Be A Litter Bug	H	Winner
Richard Lambert	Washed Up	HC	
Karen McCosh	Hot Rubbish	M	
Karen McCosh	Not Rubbish 'Compost'	M	
Sid Hayes	Freedom Dumping	C	
Sid Hayes	A Better Quality Of Rubbish	M	
Les Wong	Overflow	C	
Les Wong	Indiscriminate	M	
Jazell Wilkie	Undisclosed	M	

Projected

Kay Halligan	Dinner	M	
Kay Halligan	Five	C	
Bruce Levy	We Rolled It	C	
Bruce Levy	Society Reject	HC	Winner
Karen McCosh	Old Chain	M	
Karen McCosh	Chain Mail	M	
Richard Lambert	Thats A Curly One	HC	
Franz Marwitz	Old Tire Dumped At South Coast	M	
Franz Marwitz	Rubbish Rubbish	C	

Preparing Images for Exhibition Printing

In 2012 the club is again mounting an exhibition of prints.

The club will arrange to have the selected images printed and mounted in 20" x 16" (500mm x 400mm) frames.

This means that images will need to be able to be enlarged for printing at up to 15" along the long side.

Image Quality

High quality images, which:

- are sharp where they need to be, and
- retain the maximum number of original pixels, and therefore the maximum amount of colour and tone information from the original capture;

can be very satisfactorily enlarged for exhibition sized prints.

On the other hand, images that have been compressed, or downsized, or have had colour information thrown away, often cannot be satisfactorily upsized for printing. Enlarging such images usually introduces jagged edges, 'pixelated' areas, and stray colour 'artefacts'. In short, they're no good.

Adjusting, correcting, enhancing and otherwise editing image files

A fantastically composed, and wonderfully sharp image that tells an amazing story, can often be made even better by judicious cropping, adjustment of white balance or contrast and so on. Most digital photographers use some software program or other to make such 'improvements'. Two rules:

Rule 1: Don't edit original image files

If you make an error in editing an image and it becomes unusable you can always retrace your editing steps on another copy of the original file. You can never recreate the original file if you have edited the original pixels, especially if you also broke Rule 2!

Only ever edit a copy of your original.

Rule 2: Don't edit JPEG files

The enemy of straightforward quality printing is JPEG, because, by its nature, JPEG approximates colour and tone values in individual pixels, in order to achieve a smaller — compressed — image file size.

When an image is saved in JPEG, information is thrown away. Irretrievably. To make matters worse, every time a JPEG file is opened, edited and re-saved, further compression and further loss of information takes place. If you broke Rule 1 your original is lost forever.

JPEG suffers from two other disadvantages:

- (i) it saves files in an 8-bit file format which introduces the risk that edits in areas containing subtle tonal gradients will become jagged or 'posterised' because changes are either ignored or overdone;
- (ii) by default (although you may over-ride this), saving an image in JPEG format converts all colour information to fit in the sRGB colour space, which risks watering down some of the more saturated colours in your image. All of this means that, to make the highest possible quality image for printing, you should not edit JPEG files unless you have no choice.

Options for preparing images for high quality printing

The options you have depend on whether your camera is capable of saving RAW files or not, and what kind of photo editing software you have.

1: My camera only saves JPEGs

Save original JPEG, process TIFF, print from TIFF

All digital cameras actually 'shoot' in RAW. However, not all cameras give you the option of saving the RAW file; instead, a dedicated computer inside the camera converts the image to JPEG before saving it to your memory card.

If your camera saves only JPEGs then:

- (i) set it to record 'LARGE' — the biggest JPEGs your camera can make. (Some people assume that small files are better because more will fit on a memory card. That is true, but the price you pay is degrading the quality of your pictures.)
- (ii) set it to record images in the AdobeRGB colour space (rather than sRGB), and
- (iii) after you have downloaded the original image files and saved them on your computer, open the pictures that you may later want to print, and 'Save As' in TIFF file format.

A TIFF file can be further edited and printed, but it is not compressed. Image data is not deliberately thrown away in processing TIFFs.

Now open and edit the TIFF file if you want to do any further editing. That way, the original JPEG will remain without further compression as a sort of Master back-up file in your pictures directory, and any edits you do on the TIFF copy of the file will not cause unnecessary image degradation.

2: My camera allows me to save RAW, but I don't have a dedicated RAW processor.

Shoot RAW, process TIFF, print from TIFF

- (i) Shoot in RAW, and use the software that came with your camera to handle RAW conversion and initial colour and tonal adjustments then export (or 'Save As') the image as a TIFF file.
- (ii) When you save as TIFF you will likely get the option to 'embed AdobeRGB colour profile' — choose this option to preserve as much colour information as possible. Do not choose sRGB if you have a choice.

Now open and edit the TIFF file if you want to do any further editing. That way, the original JPEG will remain without further compression as a sort of Master back-up file in your pictures directory, and any edits you do on the TIFF copy of the file will not cause unnecessary image degradation.

3: My camera allows me to save RAW, and I have Photoshop, or Lightroom, or ...

Shoot RAW, process RAW, print from RAW

A very good option is to 'shoot' in RAW, and use your computer's software to handle RAW conversion, and colour and tonal corrections.

Good RAW converters, such as Lightroom, Aperture, Digital Photo Professional and Adobe Camera Raw (ACR), (which is part of Photoshop and Photoshop Elements) enable almost all the RAW photo adjustments, including cropping, straightening, colour and tonal adjustments, spot and red-eye removal, sharpening and noise reduction, that you could want.

Lightroom, Aperture, Digital Photo Professional, Photoshop, and Photoshop Elements, can also output a print-ready file without requiring you to save in JPEG format.

What about Picasa?

Picasa can convert RAW files and offers some limited tools for adjusting RAW files.

However, it seems to have been built with the idea of publishing on the web only, because it offers no option other than saving compressed JPEGs in sRGB colour space. Those files are not really satisfactory for high quality printing, especially if they have to be 'blown up' to a bigger size.

Sending a file for printing

If one or more of your images is selected for the club's exhibition, when you have edited your image to your satisfaction, you can save or export, onto a CD or memory stick, a copy of your edited image file:

- (i) In TIFF format
- (ii) at full (original) size, and 100% (maximum) quality
- (iii) with AdobeRGB embedded (or any bigger colour space if you've been using it, but not sRGB)

You do not need to resize files for large prints. The printing software that we have has sophisticated tools for 'blowing up' enlargements beautifully, provided that the initial images are sharp and have not had colour or tone information thrown away by compression.

By the way

If you are taking an image to another printer who asks you to bring a JPEG file in the sRGB colour space, you can open your edited TIFF files and EXPORT or SAVE AS a maximum sized, maximum-quality JPEG, as the very last step.

However, you should discuss this with the person doing the printing. If they have any kind of quality printing software, then they should be able to open your TIFF files with a larger colour space easily, as long as they are told what to expect. (Many places simply use Photoshop as printing software, and a competent user can open and print just about any image file type with Photoshop.)

Glossary:

JPEG

JPEG is a standard file format invented by the Joint Photographic Experts group. A file format that was designed to save computer disk space by throwing away 'redundant' image data and approximating colour and tone information in small blocks.

Because they may be compressed, JPEG files are useful for images that are going to be loaded up on the web where small file size gives a speed advantage and where they will be viewed only on computer screens which have relatively low resolution.

On a computer JPEG files are followed by .jpg, for example: _MG_5678.jpg

TIFF

Tagged Image File Format is a standard format for image files that allows for lossless compression. Maximum quality TIFF files may be edited and saved without losing image quality.

Because they are lossless, TIFF files are good to use when you want to maintain maximum quality for printing.

On a computer TIFF files are followed by .tif, for example: _MG_5678.tif

RAW

The data actually generated by a digital camera's sensor. Camera makers all use different sensors and different electronics so no two cameras raw files are in the same format. So that images can be



manipulated by standard software and printed raw files need to be translated by software into a standard file format before anything can be done with them.

Most digital cameras have an in-built computer that converts their raw image files into JPEG files. Some digital cameras allow the user to save the raw files and convert them to a standard format using a software program (raw Processor) on their desktop or laptop computer. A good raw processor can translate raw files directly into the file format required by a printer without needing to translate the file into JPEG or TIFF.

On a computer RAW files will be followed by a suffix that depends on the make and model of camera that made it: some examples are : _MG_5678.NEF (Nikon), _MG_5678.CR2 (Canon), _MG_5678.ORF (Olympus), _MG_5678.PEF (Pentax), _MG_5678.SR2 (Sony), _MG_5678.RW2 (Panasonic/Lumix)

Megapixels, Megabytes, and print size.

Most fine art prints that are made to be viewed close up, are printed using 300 inkjet dots per inch (300 dpi). You can't see the individual dots with the naked eye. (By comparison, computer screens typically display images at between 72-120 dots per inch).

If you want to make a 15" X 10" print at 300 dpi your image will be printed with 13,500,000 individual ink dots, 4500 dots wide X 3000 dots high.

The best possible quality print will match each dot in your print exactly, with a corresponding pixel in your image file. In the case of the 15" X 10" above, your image file would have to have been 4500 pixels wide X 3000 pixels high. It would have had a total of $4500 \times 3000 = 13,500,000$ individual pixels which translates to 13.5 MB of data.

Any image data file that is smaller than 13.5 MB will need to be scaled up (upsized) to make a 15 X 10 print. Most people's images will be in this situation so image quality is really important.

Colour space

A standardised system for assigning colours to numbers so a computer can deal with them.

sRGB

A colour space that assigns numbers to only those colours that can be displayed on most TVs and monitors. Most printers can easily print all the colours of the sRGB colour space.

AdobeRGB

A colour space that assigns numbers to all colours that can be displayed on monitors, and also some more saturated colours that are beyond the colour capability (gamut) of most monitors. AdobeRGB is more suited to images that will be printed.