Newsletter Issue 3

Wairarapa Camera Club

PSNZ National Convention ⇒

Date: 7-11 April 2010
Location: Nelson
Content: 11 speakers, 7 field trips, 6 tutorials, 4 workshops, 5 exhibition tours, an Honours Banquet and heaps of FUN!

For full details please visit :
www.simplynelson.co.nz

December 2009

Calendar

Now until 21 Dec 'Riverways' exhibition of new photography by David Milne-Watson to be held at the Carterton Exhibition Centre in Holloway Street from 10am to 4pm daily.

5 Dec Masterton Christmas parade starts at 12:30pm. Great opportunity for some local photography.

19 Dec Exposure Workshop. 10am at 227 Woodside Road, Greytown. Don't forget your camera and charged batteries.

Letter From The Editor

Hello to all members...

As you all know the club doesn't meet up over December and January but the news letter will continue to bring you news, information, tips and tech talk.

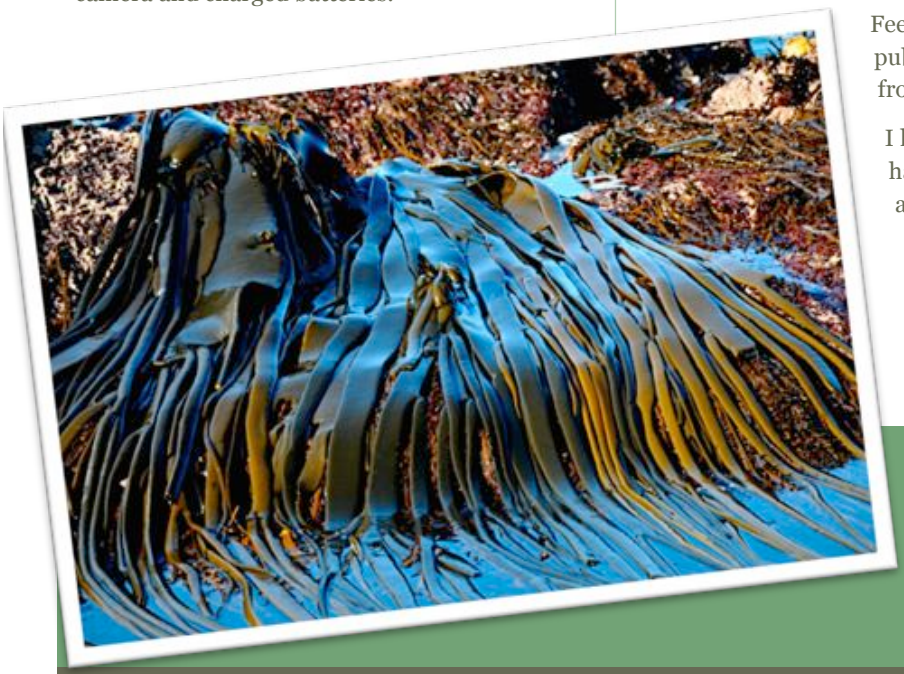
There won't be any competition results so instead in this issue I will select some of my favourite images from our trips away over the past year.

Feel free to send me any news or articles that you want published or any ideas for new articles, input is welcomed from all !

I have thoroughly enjoyed my short time at the club, you have all been an inspiration to my photographic journey and I look forward to seeing you all again next year.

I will be holding a workshop on 'Exposure' on the 19th December at my place so keep that date free and dig out those user manuals and learn how to adjust your cameras basic settings.

Cheers *Nik*



"Seaweed"

Photographed by Bruce Levy on our trip to Glendhu on the Wairarapa coast back in August 2009.

Trip Photos 2009


Alison M


Chris Kilford


Bruce Levy


Sid Hayes

Club Info

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

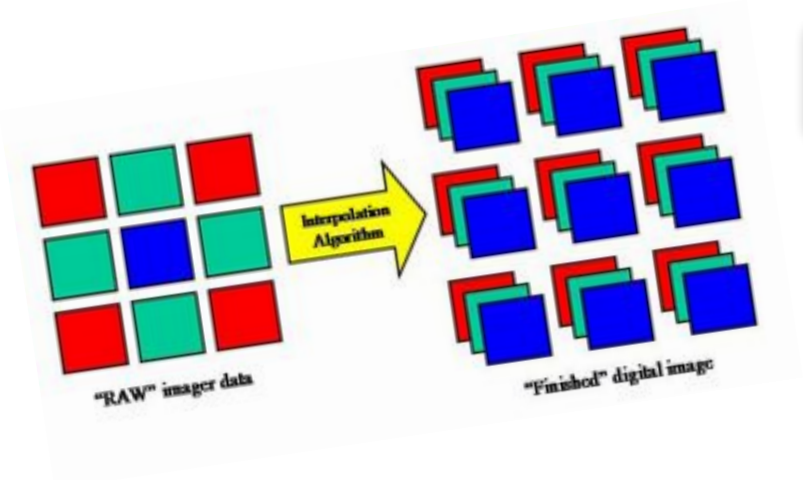
Meetings start at 7:30 pm on the first Tuesday of every month from February to November, at the Education Centre next to Parkview Motors in Dixon Street, Masterton.

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



Technical Corner

This month we discuss what RAW files are and shooting in the RAW format. There are benefits and disadvantages to shooting in RAW instead of Jpeg. Some situations are better suited to others for either format as we shall see.

Skill Level: Intermediate

There is a lot of misinformation and lack of information regarding what raw files are all about. There are also many reasons why one should shoot in raw mode, but also quite a few reasons why many people don't.

What is Raw Mode?

When a digital camera takes a photo the imaging chip records the amount of light that has hit each pixel, or photo site. This is recorded as a voltage level. The camera's analogue to digital circuitry now changes this analogue voltage signal into a digital representation and creates a set of RAW digital data. This is not an image, just data from the sensor and camera settings.

Shooting RAW

If you are saving raw files the camera creates a file which contains all of the camera settings along with the sensor data. This raw image data, what the imaging chip recorded along with the so-called meta-data (the camera settings and other technical information) is now saved to the card. These RAW files have to be converted to images on your computer using software. These 'RAW converters' are available in may different guises, common software packages are Apple's Aperture, Adobe's Lightroom & ACR, Phase One's Capture One and DXO's Optics 6.

Shooting in JPG

If you have chosen to have the camera save the file as a JPG then the RAW data is converted into an image and then the in-camera settings are applied, such as White Balance, Sharpening, Colour Effects and Corrections and finally the image is stored as a compressed jpeg file. All the settings are baked into the image and we throw away all the original data from the sensor.

Pros and Cons

So now you see the difference. A raw file is essentially the data that the camera's chip recorded along with some additional information tagged on. A JPG file is one that has had the camera apply linear conversion, matrix conversion, white balance, contrast, and saturation, and then has had some level of potentially destructive compression applied.

Reasons to Shoot JPG

— Files are smaller and therefore more of them fit on a card.

— For many applications image quality is more than sufficient (family snapshots, news images).

— Many photographers don't have the time or inclination to post-process their files.

— Many cameras (especially point & shoots) can not shoot quickly when working in raw mode. Some lower-end models can't record raw files at all.

Reasons to Shoot Raw

— A raw file is comparable to the image contained in a piece of film. It holds exactly what the imaging chip recorded. This means that the photographer is able to extract the maximum possible image quality, whether now or in the future when better software becomes available.

— Raw files have not had white balance set. They are tagged with whatever the camera's setting was, but the actual data has not been changed. This allows one to set any colour temperature and white balance one wishes after the fact with no image degradation. It should be understood that once the file has been converted from the linear space and has had a gamma curve applied (such as in a JPG) white balance can no longer be properly applied.

— RAW conversion is done on a computer with a fast and powerful microprocessor. This allows much more sophisticated algorithms to be used than those done in a camera with its slower and less powerful processor.

— The raw file is tagged with contrast and saturation information as set in the camera by the user, but the actual image data has not been changed. The user is free to set these based on a per-image evaluation rather than use one or two generalised settings for all images taken.

— Possibly the biggest advantage of shooting raw is that one has a 16 bit image to work with. This means that the file has 65,536 levels to work with. This is opposed to a JPG file's 8 bit space with just 256 brightness levels available. This is important when editing an image, particularly if one is trying to open up shadows or alter brightness in any significant way.

If you want to give RAW shooting a go but are unsure of what is involved then let me know and I'll help out. If there is enough interest then I can provide a workshop.

Cheers *Nik*

Photography Tips

Compromise

Photography is all about making compromises with the available light and situation of the subject to be photographed. We know that at least one of the three main exposure settings either shutter speed, aperture or ISO usually has to be compromised at some point to get the required values of the other two. There is also the compromise of how much we can afford to spend on camera gear and software and also how much time we have to dedicate to our passion.

There are also less obvious compromises and our recent trip to Cross Hills Gardens is what sparked this article.

After returning from the gardens Kevin Morgan sent me his photo of the waterfall and immediately I was struck by how much better his composition of the falls was compared to my own photo. Both of us had tried to use a long shutter time to get that smooth 'arty' water flow effect and both of us failed to get a 'great' photo !

Compromise: Neither of us wanted to carry a tripod around all day!

Kevin's shutter speed was 1/3rd of a second and while his shutter was open the camera has moved causing the image to be blurred.

Compromise: risk sharpness to get a good composition.

My photo was taken with a shutter speed of 2/3rd of a second and although I managed to rest my camera on a back pack on the ground to steady it this limited my compositional options. If I'm honest I spent so much time thinking about getting a stable platform for the camera that I didn't even think much about the composition.

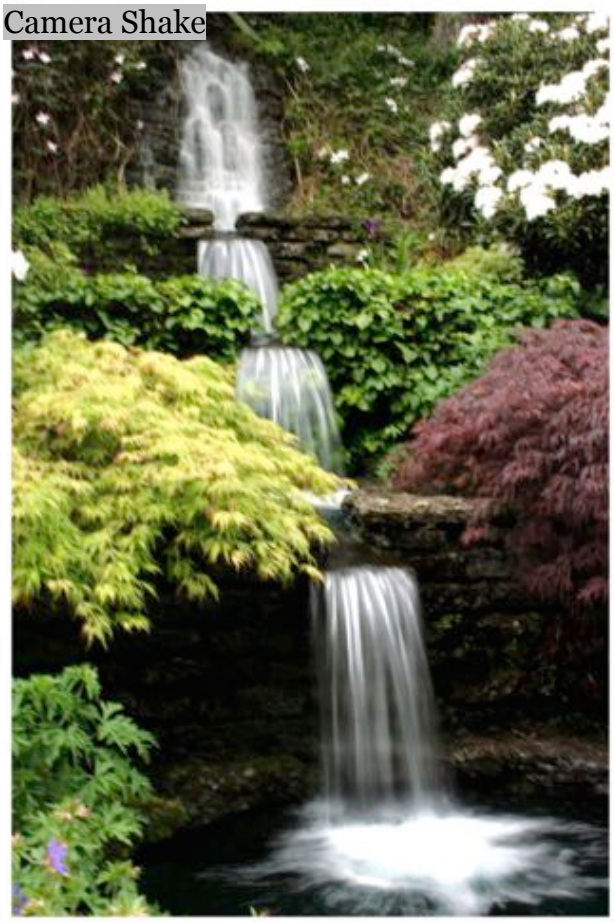
Compromise: Limit composition to maintain camera stability.

We both chose to make a compromise to try and get the effect we wanted. We could of course just taken a shot at a higher speed and got far better results without the 'slow-mo' arty effect but I guess we were pre-occupied by the idea we had in our heads at the time. This is probably a common failing of all of us as we forget to go through all the options available at the time and only pursue the first idea that comes to us. In this respect we compromised our options ourselves.

All is not lost though. By taking these shots and not giving up with our initial ideas on that day we can study the results and learn from them. This will make us think more carefully next time (hopefully) and also allows us to pass on this information to others in articles like this.

My tip from all this is to stop and think even after you have taken a photo and try to see what other options are available. Is there another angle ? or would it be better to try a portrait orientated shot instead? I recently shot a large waterfall in landscape orientation and at the last minute took a portrait orientated shot before leaving. When I returned home I found the portrait shot was actually the best one of the day.

Camera Shake



Poor Composition