Newsletter Issue 5

Wairarapa Camera Club

Winning Print Lollipop

"Purr Lick"

Fiona Doherty

February 2010

Calendar

14 Feb Kiriwhakapapa to Mikimiki Guided Walk. 1pm at the Mikimiki Road end. Great opportunity for some local photography.

19-21 Feb WBS Masterton A&P Show. Solway Grounds from 9am.

19-21 Feb The Ngawi Big Three fishing competition

3-6 Mar The Golden Shears, Genesis Energy Recreation Centre Stadium, Masterton

Letter From The Editor

Hi to all members...

Want to learn more about taking great photos ? Then make sure you turn up at the March meeting with your camera (and manual) as we have an evening of "Technical Tutoring".

We will cover 3 topics, Exposure (shutter speed, f-stops, and ISO), Lenses & Filters and White Balance. Each topic will be covered by a brief discussion followed by 20 minutes of opportunity to practice. There will be 3 different stations set up, including still life, motion, and texture. There will also be technical experts available to the members to ask for help in sorting out how to make the adjustments on their camera. We will finish the evening with a panel of experts ready to answer questions.

Also ... don't forget you can now eat your lollipops !

Regards *Nik*

Winning Projected Image Lollipop

"Evening Glow"

Kay Halligan

Competition Results

Lollipop Aggregate

Prints

Purr - Lick	HC	Fiona Doherty	Winner
Pop - Licker	C	Fiona Doherty	
Planet Pop	M	Kay Halligan	
Crash	M	Kay Halligan	
I Got This Sucker Licked	M	Sid Hayes	
Stop. Look Both Ways	C	Sid Hayes	
Hic - I'm No Sucker - Hic	HC	Mike Buck	

Projected Images

Red Means Stop!	M	Kevin Morgan	
Evening Glow	HC	Kay Halligan	Winner
Reflected Orange Pop.	C	Kay Halligan	
Space Pop	M	Kay Halligan	
Touch Of Yellow	HC	Kay Halligan	
Plaster Nobody	C	Kevin Hooper	
Cheeky	M	Kevin Hooper	
Hanging Out With The Moon	M	Kevin Hooper	
Lickety Split	M	Bruce Levy	
Miss Lolly Pop Goes to The Beach	HC	Helen James	
Miss Pop's Sunscreen Flop	C	Garry James	
Lolly Takes a Dip	C	Helen James	

1 Point	A	Accepted
2 Points	C	Commended
3 Points	M	Merit
4 Points	HC	Highly Commended
5 Points	H	Honours

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

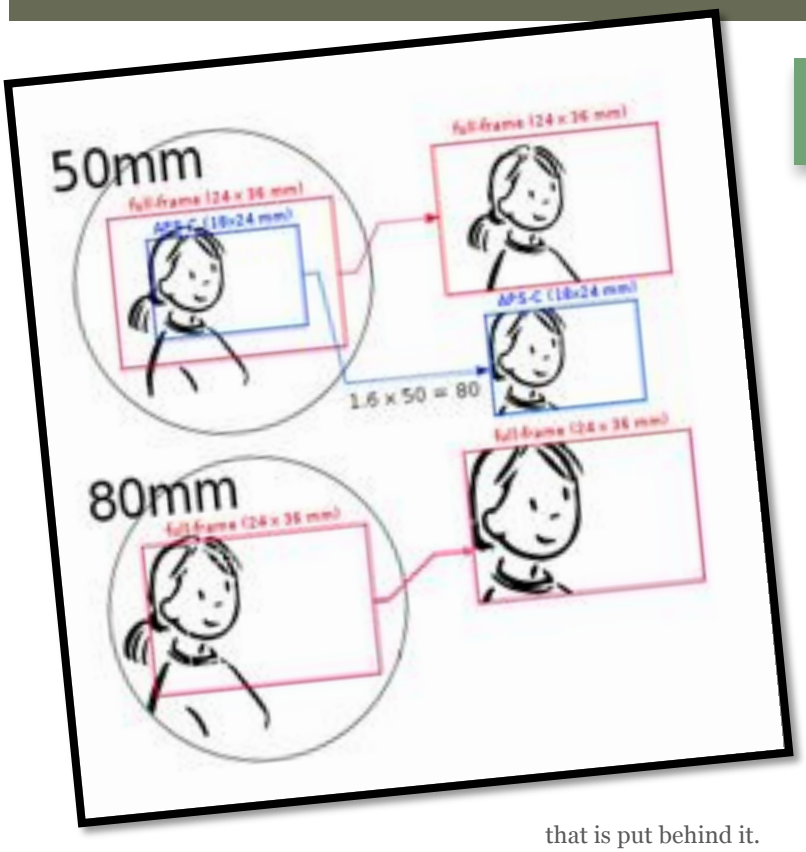
Meetings start at 7:30 pm on the first Tuesday of every month from February to November, at the Education Centre next to Parkview Motors in Dixon Street, Masterton.

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

The terms crop factor and focal length multiplier were coined in recent years in an attempt to help 35 mm film format SLR photographers understand how their existing ranges of lenses would perform on newly introduced DSLR cameras which had sensors smaller than the 35 mm film format

Skill Level: Intermediate

In digital photography, a crop factor is related to the ratio of the dimensions of a camera's imaging area compared to a reference format; most often, this term is applied to digital cameras, relative to 35 mm film format as a standard. In the case of digital cameras, the imaging device would be a digital sensor. The most commonly used definition of crop factor is the ratio of a 35 mm frame's diagonal (43.3 mm) to the diagonal of the digital image sensor in question.

This ratio is also commonly referred to as a focal length multiplier ("FLM") since multiplying a lens focal length by the crop factor or FLM gives the focal length of a lens that would yield the same field of view if used on 35mm

Using an FLM of 1.5, for example, a photographer might say that a 50 mm lens on his DSLR "acts like" its focal length has been multiplied by 1.5, by which he means that it has the same field of view as a 75 mm lens on the film camera that he is more familiar with. Of course, the actual focal length of a photographic lens is fixed by its optical construction, and does not change with the format of the sensor that is put behind it.

Most DSLRs on the market have nominally APS-C-sized image sensors, smaller than the standard 24×36 mm (35 mm) film frame. For example, many Canon DSLRs use a sensor that measures 22.5 mm × 15 mm. The result is that the image sensor captures image data from a smaller area than a 35 mm film SLR camera would, effectively cropping out the corners and sides that would be captured by the 36 mm × 24 mm 'full-size' film frame.

Because of this crop, the effective field of view (FOV) is reduced by a factor proportional to the ratio between the smaller sensor size and the 35 mm film format size.

For example, a 28 mm lens delivers a moderately wide-angle FOV on a 35 mm format full-frame camera, but on a camera with a 1.6 crop factor, an image made with the same lens will have the same field of view that a full-frame camera would make with a ~45 mm lens (28 × 1.6 = 44.8). This narrowing of the FOV is a disadvantage to photographers when a wide FOV is desired. Wide-angle lenses become 'normal'. However, the crop factor can be an advantage to photographers when a narrow FOV is desired. It allows photographers with long-focal-length lenses to fill the frame more easily when the subject is far away. A 300 mm lens on a camera with a 1.6 crop factor delivers images with the same FOV that a 35 mm film format camera would require a 480 mm lens to capture.

When a lens designed for 35 mm format is used on a smaller-format DSLR, besides the obvious reduction in field of view, there may be secondary effects on depth of field, perspective, camera-motion blur, and other photographic parameters.

The depth of field may change, depending on what conditions are compared. Shooting from the same position, with same f-number, but enlarging the image to a given reference size, will yield a reduced depth of field. On the other hand, compared to the 35 mm-equivalent focal length shooting a similarly-framed shot, the smaller camera's depth of field is greater.

Perspective is a property that depends only on viewpoint (camera position). But if moving a lens to a smaller-format camera causes a photographer to move further from the subject, then the perspective will be affected.

The extra amount of enlargement required with smaller-format cameras increases the blur due to defocus, and also increases the blur due to camera motion (shake). As a result, the focal length that can be reliably hand-held at a given shutter speed for a sharp image is reduced by the crop factor. The old rule of thumb that shutter speed should be at least equal to focal length for hand-holding will work equivalently if the actual focal length is multiplied by the FLM first before applying the rule.

Photography Tips

Cheap Macro Shots

Dedicated Macro lenses are expensive but you can get some pretty good results with ordinary lenses by using extension tubes.

The more space you put between your camera's sensor and your lens, the closer you'll be able to focus, and because of that, companies make extension tubes.

These extension tubes attach between your lens and your camera (they look like a thin extra lens) to move the lens farther away from your camera's sensor, which cuts your minimum focus distance right down, so you can get in there and shoot nice and close (like you had a true macro lens).

The advantage of these extension tubes is they're much less expensive than a dedicated macro lens, starting around $50 and they take up less space in your camera bag. (By the way, if you have a macro lens already, an extension tube can make your macro focus even closer.)

When shooting Macro you will need good strong light as you will usually have to shoot at small apertures like f16 and above and that will restrict the amount of light hitting your sensor.

This is because the closer the object is to your camera the more shallow your depth of field will be. Depth of field (often referred to as DOF) is the amount of the photo that is considered to be in focus before and after the focal plane.

At small apertures like f22 and below the DOF increases and more of the photograph will be in focus.

When using small apertures your shutter speeds will have to drop to compensate for a correct exposure. Using a tripod and / or raising your ISO will help with this.

Macro lenses are expensive for a reason and are designed to work at close focussing distances so will produce better results than extension tubes. However, the tubes are definitely worth a try as they are so inexpensive and can give very good results with careful setup.

Stackable Tubes

Variable Bellows