Shutter Flutters

AUGUST/SEPTEMBER 2015



Hot Stuff - by Brian Clark

MEETS TUESDAYS 7:30 PM

PROGRAMME

August

Tuesday Saturday Tuesday Tuesday	4 8 11 18	Judging Set Subject - Beatles Song Titles National P J judging Critique members images/prints Quiz night Kaikaura weekend with Buller Club
21 - 23 Tuesday	25	Kaikoura weekend with Buller Club Committee meeting

September

Tuesday	1	Judging - 4th Open
Tuesday	8	Guest Speaker
Tuesday	15	Showing of the National PJ
Wednesday	23	Committee Meeting
Tuesday	30	No Club night
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New Brighton Photographic Club

P O Box 18-546 New Brighton Christchurch www.newbrightonphotoclub.org.nz

Meets

1st, 2nd & 3rd Tuesday Of every month at 7:30pm Ascot Community Centre 12 Ascot Avenue Parklands

Contacts

President: John Stewart ph (03) 3884110 Secretary: Carolyn Collins ph.(03) 3824212. Email nbpc.photo@gmail.com Shutter Flutters Jo Aldridge pljaa@xtra.co.nz

Committee Meets

4th Wednesday of the month

New Members and Visitors Are Very welcome

COMPETITION RESULTS: 4th Open Judge: Ron Willems FPSNZ FAPS AFLAP ARPS

PROJECTED IMAGES

Title	Photographer	Award
Entanglement	Katrina Michie	Gold
Nesting Black Fronted Tern	Geoff Tutty	Gold
Tomato	Carol Bremner	Gold
Acid Trip	Darren Stephenson	Silver
Flight of Fancy	Rosemary Simpson	Silver
Immature Spotted Shag	Dorris Tutty	Silver
Indian Beauty	Katrina Michie	Silver
Muscle Bound	Katrina Michie	Silver
Phaulacridium marginale Mating Pair	Geoff Tutty	Silver
The Old Has Gone	Darren Stephenson	Silver
The Perfect Storm	Rosemary Simpson	Silver
Triangles	Peter Warren	Silver
Saddleback	Carol Bremner	Silver
From Out of the Scrum	Rondi Teisen	Bronze
Pekeko 1	Rondi Teisen	Bronze
Sand Ripples	Peter Seymour	Bronze
Harbinger of Spring	Jo Aldridge	Bronze
Lake Tekapo Lupins	Gill Williams	Bronze
A Very Colourful Lady	Brian Clark	Bronze
Baby Kaylee	Al Stewart	Bronze
Dunedin Harbour	Dave Dunick	Bronze
Preparation	John Kember	Bronze
Pukeko	Al Stewart	Bronze
Stormy	Anne Silverwood	Bronze
Tuatara	Al Stewart	Bronze

PRINTS

Title Banded Dotterel	Photographer eoff Tutty	Award Gold
Light and Lines Mating Tiger Beetles	Paul Koster Doris Tutty	Silver Silver
Golden Limbs	Paul Koster	Bronze



Nesting Black Fronted Tern



Tomato



Flight of Fancy



Saddleback



Muscle Bound



Indian Beauty



Triangles



Immature Spotted Shag



The Old Has Gone



Acid Trip



The Perfect Storm



Phaulacridium marginale Mating Pair



Baby Kaylee



From Out Of The Scrum



Pukeko 1



Dunedin Harbour



Harbinger of Spring



Lake Tekapo Lupins



A Very Colourful Lady



Sand Ripples



Preparation



Pukeko



Stormy



Tuatara



Light Bulb



Fitting The Shoe



Entanglement



Handling Hot







Going For The Double Play



Fire On The Tracks

Hot



At The Grindstone



Engine's Firebox

COMPETITION RESULTS: Set Subject - Hot Stuff

Judge: Jenny Reeve

PROJECTED IMAGES

Title	Photographer	Award
At the Grindstone	John Hoeben	Gold
Inflamed Hot Link	Rosemary Simpson Jill Jackson	Gold Gold
Hot Link	JIII Jackson	Gold
Red Hot and Almost Gone	John Stewart	Silver
Engine's Firebox	Darren Stephenson	Silver
Fire on the Tracks	Darren Stephenson	Silver
Fitting the Shoe	Doris Tutty	Silver
Hot	Gill Williams	Silver
Handling Hot	Jill Jackson	Silver
Caire Car Daville Blace	Deter Wesser	D
Going for Double Play	Peter Warren	Bronze
Ablaze	Peter Seymour	Bronze
Too Hot to Handle	Rondi Teisen	Bronze
Campfire on a Chilly Night	John Hoeben	Bronze
Inferno	John Hoeben	Bronze
Light Bulb	Jo Aldridge	Bronze
Hot Chillis	Dave Dunnick	Bronze
Hot Stuff	Brian Clark	Bronze

PRINTS

Title	Photographer	Award
The Embers	Peter Seymour	Bronze
Bright Sparks	Claire Haslettt	Bronze

Photography 101 – the 3 way conundrum!

Let's go back to the beginning, and look at what photography is. "Painting with light" is the closest we can come to it now days. And what do we have to "record" this? A box with the recording media in it (film in the past, a digital sensor now), and a lens on the front to focus the light onto the sensitive recording surface. All the controls on a camera and lens are used to control that light, or in some instances delay the time that the light arrives (time delay). In film days you purchased transparency (slide) or negative (print) film depending on how you wanted the end result, and then the negative was split again into colour or black and white.

Film came with DIN (the German – European standard) or ASA rating (American Standards Organisation) and later ISO rating, and to change to a higher ISO (400 ISO was deemed a high speed film in the 1970s) you needed to finish the existing film, or remember how many shots you had taken, rewind it, but not completely into the canister, remove and insert the new film, and when finished with that ISO, repeat the process – a very muddy process indeed.

You could also "alter" the ISO rating of the film, and in 99% of the cases the film was "uprated" (why down rate a film when there were perfectly good low ISO films around), and adjustments were made in the developing of the film.

I remember an evening when the Royal Scots Dragoon Guards Band performed at QEII park sometime in the mid-1970s. I knew that they would be performing well out of the range of my flash unit (most small-medium flash units have an effective range of about 15-20 feet, 4-6 metres), so loaded my camera (an Asahi Pentax Spotmatic II) with Kodak Tri-X black and white film normally rated at 400 ISO. I set the exposure meter on the Spotmatic to 1600 ISO and shot the band from the QEII stand. I overheard someone saying "look he has no flash on his camera, he won't get anything". Well, after some "push processing" development of the film I had (actually still have) printable negatives – yes they are a bit grainy but that was the trade off – a little grain against no photos whatsoever! Oh how I wish I could go back and shoot that same performance with my current digital equipment!

Now, on modern digital cameras, changing ISO is just a turn of the dial, but over the last 10-15 years we have seen huge advances in digital sensor sensitivity.

My first digital camera, a Canon 10D DSLR was ok at 100 and 200 ISO, but got grainy at 400 ISO and higher. My next camera (a 1D Mark 3) was a lot better at higher ISO and I can remember entering a print shot at a 1600 ISO. Digital sensor sensitivity is compromise based on several factors:

- Sensor size
- Number of pixels per sensor
- Size of those pixels

I would rather have a larger sensor with less (larger) pixels than a small sensor with 20,000,000 plus pixels! Now I can get good results with 3200 ISO (or higher) on a modern 7D Mark 2, but I still try and shoot with the lowest ISO I can for the shot.

Remember: low ISO equates to better image quality!

But ISO is only one part of the triangle that is "EXPOSURE"! Exposure is the combination of ISO (film or sensor sensitivity), shutter speed and lens aperture. Take a look at the following:

ISO 100, shutter speed 1/2000th second, aperture of f/2.8

ISO 100, shutter speed 1/1000th second, aperture of f/4

ISO 100, shutter speed 1/500th second, aperture of f/5.6

ISO 100, shutter speed 1/250th second, aperture of f/8

ISO 100, shutter speed 1/125th second, aperture of f/11

ISO 100, shutter speed 1/60th second, aperture of f/16

ISO 100 shutter speed 1/30th second, aperture of f/22

If one of the above will give a correct exposure of a scene or subject, **all will**, as they all let in the same amount of light. A wide lens aperture (low f/ number) combined with a high (short) shutter speed (in this case $1/2000_{th}$ at f/2.8) lets "x" amount of light into the camera. As we increase the time that the shutter is open (from $1/2000_{th}$ second all the way to $1/30_{th}$ second) we need to close down the lens aperture proportionally to let the same amount of light in. If we increase the ISO from 100 to 200 we can increase the shutter speeds above to $1/4000_{th}$ second through to $1/60_{th}$ second OR alter the aperture from f/2 to f/16, or a combination of above.

But what is the difference to the image recorded with the above example. The depth of field (the area of the image in focus) changes from very shallow (nice $_{\Omega}$

out of focus background) at f/2.8 to a large area of focus at f/22. Many of us chose to shoot at a pre-determined aperture to get the result we need. For example, an outdoor portrait where we want the subject (or the subject's eyes) in focus, but want the hills in the background to be blurred a little we would use a f stop of f/2.8, f/3.4, f/4 (if our lens goes down that far), while for a macro image of a grasshopper we want a large depth of filed so will shoot at f/16, f/22 or even f/32.

Personally, I shoot about 80% of my images in AV mode — I want the aperture to be my number one priority. I then accept the shutter speed given, or if the shutter speed becomes too slow (inability to handhold even with an IS lens (see below), I will either grab the tripod, or alter the aperture, or alter the ISO or a combination of all. Occasionally I shoot in time (shutter speed) mode, mainly for sports.

Also the ability to "hand hold" the camera (no tripod) reduces as the shutter speed drops. There is a rule for handholding that you **should not** hand hold a camera/lens combo below the equivalent shutter speed of the focal length of the lens, but this is even more complicated now with what we call crop sensor cameras. So, if you were using a "full frame" 35mm camera with a 400mm lens we should try and shoot the image at 1/400th second or quicker.

Now with a majority of APS-C cameras (1.5 or 1.6x crop factor) when we stick our 400mm lens on we should not hand hold below 1/600th second. Obviously if the lens has IS (Canon's Image Stabilization), VR (Nikon's Vibration Reduction) or other image stabilization system then we can reduce this by the stabilisation factor for that lens. Some lenses are advertised as a 3-stop IS, or 4 stop IS. Then we can handhold at slower speeds but I would still recommend a tripod or other camera supporting device such as a bean bag.

Can you work out your exposure without an internal or external exposure meter out and about during the day? Yes! You just need to know the "sunny f/16 rule".

This rule states that on a average brightness subject (not all white such as snow and not all black, such as our national rugby team) you can use the following combination: ISO 100, $1/100_{th}$ (really $1/125_{th}$) second at f/16. By applying our variations (one up, one down) we can alter that to ISO 200,

1/250th second at f/16 or ISO 200, 1/125th second at f/22 are any combo you care to use as long as you remember to compensate one (or both) of the other sides of the triangle if you change one side If it is a little overcast but still bright then reduce the aperture down to f/11 or keep at f/16 and reduce the shutter speed to 1/60th second.

If darker still then reduce further. If brighter then increase the shutter speed (up to $1/250_{th}$ or quicker) or make the aperture smaller (f/22 or f/32 for example.

Exercise (homework):

Find a local subject from a flower to stationary car and set your camera to auto mode, but on the lowest ISO.

Take a shot but note what the settings were. It may have been 1/500th at f/11.

Now change the camera to either aperture (AV) mode or manual and set the following.

If AV mode, set it at f/16. What is the shutter speed? Should be around 1/250th second

If in M (Manual mode) then set aperture to f/16 and shutter speed to 1/250th. Take another shot.

Now reduce again (f/22 and 1/125th) Now go the other way 1/1000th second at f/8 is the next shot 1/2000th second at f/5.6 etc etc

Note that you will have to work out your own figures based on the initial shot, but remember that if you don't change the ISO it is one down, one up.

Look at your images – the exposure should be the same, but depth of field will change.

Next instalment: The effect of focal length on an image

Author - John Stewart



Fanfare - by John Hoeben

UPCOMING EVENTS IN CHRISTCHURCH

Canterbyrt A & P Show 11-13 November 2015 8:00am onwards ASB Agricultural Park

Asia Pacific Bowls Championships 24 November - 6 December 2015 From 8:30am daily Burnside Bowling Club

Coca-Cola Christmas In The Park 28 November 2015 7:30pm - 10pm Hagley Park North

Christchurch South Island Wine and Food Festival 5 December 2015 11:30am - 7:00pm Hagley Park North From \$39.90 + booking

Santa Parade 2015 6 December 2015 2:00pm Riccarton Road

Carols in the Square 12 December 2015 4:00pm - 7:00pm Cathedral Square