

# **How To.. Photograph**



Text and Images  
by Frank Barbas

# **Anything!**

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# Photographic Terms

## APERTURE

How much light the lens allows in. The Aperture is a variable size hole inside the lens. It controls how much light is allowed in. You adjust the aperture either with a ring around the base of the lens or with a scroll wheel on the camera.

## SHUTTER

The amount of time the sensor or film is exposed to light. This is usually controlled by a scroll wheel on the camera. Shutter speed controls how much movement the subject shows, and also how sharp the photo looks depending on sharp

## FOCUSING

The adjustment of the lens to achieve subject sharpness. This is done manually or through the camera's autofocus sytem. Proper focus is important helping to emphasis the subject.

## LIGHT METERING

There is proper exposure and creative metering. With digital you can still do creative metering after the exposure. To get the best image quality with digital proper exposure is important. Evenissi opta quam rere voluptam, que officate ea vellantur, cum quam, quossinumqui officto dolorit lat facepta prorent officid isciis derio

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## DEPTH OF FIELD

The part of the image that is in focus forward and behind the subject. Depth of field is affected by the focal length of lens and size of the lens ape rture. Evenissi opta quam rere voluptam, que officate ea vellantur, cum quam, quossinumqui officto dolorit lat facepta prorent officid isciis derio moluptae lati officipsam ipsae audam, sit officiatem inversp itatend uciatquos aut ut que occuptatet erovidebita vel ipsunt modiatur ari officip iditio. Equisque porpor mi, autassed minus simus sitat alitatur?

## FOCAL LENGTH

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## POLARIZING FILTER

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## ISO

This is a number that describes how sensitive the camera is too light. The higher you set the ISO on your camera the less light the camera needs for exposure, but the more noise and compressed dynamic range the image will have.



# How To...

## TAKE A BETTER PHOTO’S



Take a photography course! That is the number one thing to do to improve your photography. In what ever subject interest you the most, another cool thing to do is a photo excursion. There are many excellent photo excursion led by established photographers. Check out there work first, to make sure it matches your interests.

Second best thing read books on photography and look at other photographs work. The best is in a gallery setting, next in a book and lastly on the internet, as prints always look better then pictures on the internet.

Get out and photograph!, the more often the better, I personally try to get out at least once a week. Even if I don’t feel inspired or expect to get any great images. It is often surprising what you will see and be able to photograph.

And never ever fall into the trap that some fancy new piece of equipment will make you a better photographer. There are definitely situations, where a certain piece of equipment is required to get the shot. For example if you wanted to do bird photography, you actually do need some type of digital SLR, with a long fast lens to isolate the subject and an easy manual focus over ride. Another example is sports photography, where you need a fast responding camera, and fast lenses.

Don’t be afraid to crop your photo’s to concentrate the viewers attention on your subject.  
Elk Falls Park,  
Campbell River, BC

Tofino, Vancouver Island,  
BC. Nikon 43-86mm on a  
Panasonic GF1



# How To...

Take an average meter reading of the scene, make a mental note of the aperture and shutter speed. Try to set the aperture to around f8~f11, and a reasonable shutter speed, if you need be use a tripod or set a higher ISO. Auto focus or manually focus the camera one/ third of the way into the scene and set the camera/lens to manual focus. Stand firmly in one position, keep your feet planted, and rotate your upper body only. Visually overlap the images by at least 25%, and keep the camera level and the horizon line at the same height in each shot.

## TAKE A PANORAMIC PICTURE

- 1. Orginal series of photo's
- 2. After merging with photoshop
- 3. Final image cropped and straighten

1



2



3





# How To...

## BLUR THE BACKGROUND

There are three factors that effect how much blur the background has in a photograph.

The distance between the lens or camera and your subject. The closer you are the more the background will be blurred.

The size of lens opening, ie the larger the aperture, the less depth of field there is resulting in a more blurred background.

The more telephoto the lens is the less depth of field it will have, the longer the focal length the more pronounce the out focus or blur there will.

Example of close up blur



Google Image 85mm f1.8



Example of telephoto blur  
My Cat, Nemo  
Taken with a telephoto  
zoom lens at f5.6 and  
210mm setting.





# How To...

## SHOOT RAW



An example of subject matter that should not be shot in raw, most camera's are slower when shooting in raw mode. Campbell river Motocross, April 2011

Shooting in raw mode is easy, it is the processing of the pictures that is more difficult.

Check your manual, seriously, your manual will tell you how to set your camera to raw, and as ever model of camera is different, no use me trying to explain it here. There are a couple of points that need to be mentioned though when shooting raw, and why shoot raw.

The number one thing to check is do you have software capable of processing your raw files. If you own Adobe Photoshop you most likely do, although you may need to upgrade to a newer version if your camera is a recent model. Other software choices are, the software that came with your camera, this is the cheapest choice, often the best quality conversion, but may not fit in well with your work flow. Adobe Lightroom is a good choice if you like the way it works, everything can be done in one package, includes an image organizer as well. Secondly, do you have time to learn and do the raw conversion, it does generally give better results, but requires more effort on your part. Thirdly, the files are bigger and more processor intensive. You will need a faster computer and more storage capacity. Fourth some camera's will only be able to shoot a limited number of shots in a rapid sequence, before the buffer fills up. So for sports you may be better off to shoot Jpg.

Why shoot raw, control of the image conversion process and more dynamic range, IE, getter range of values possible. For example, you are shooting a beautiful landscape, the trees are in the shade, and sky is really bright. Shooting raw, will often allow you to bring out the detail in the shadows and still keep the sky from getting washed out.

Good example of when to shoot raw, allows you to capture the high light values, while keeping details in the shadows even after increasing saturation and decreasing the exposure of the high light area. Campbell River, Vancouver Island.





# How To...

## CHOOSE THE RIGHT LENS

Lens choice is always a topic for much debate. There are many factors involved, what focal length or range in the case of a zoom, what brand, what speed fast or slow lens and even what series of lens, such as in the case of canon where an FD series lens will not fit on the newer Canon camera's. For shooting in low light a faster lens is better, as it means not having to bump up your ISO as much. Also allows the camera to focus and meter in lower light conditions. For travelling, it is more convenient to have a lens that does it all. This general means a wide to telephoto lens, that covers a large range, only lens you need to carry, with maybe a fast, fixed focal length prime lens for low light. Portrait and wedding photography is advantageous to purchase a large aperture telephoto zoom lens. As it allows you to blur the background, isolating your subject, bringing the focus of the image to your subject. That combine with a mild wide angle lens, one that does not have much edge distortion.



Sigma 10 -20 mm, wide angle zoom f4 to f5.6.



Canon 17 to 85mm efs standard zoom lens, great for holidays or genral purpose lens



Nikon 70-300mm f4.5 to f5.6, moderate priced lens, fast focusing. Good for outdoor action.

Canon 300 f2.8 telephoto lens, great for sports, fast apature allows for blurring of the background.



Sigma 50 to 500mm lens, great for bird and wildlife photography.

# How To...

## BUY ONLY THE FILTERS YOU NEED

There are only three filters I would recommend for digital photography.

- 1. UV or skylight filter, use it when shooting in adverse conditions, such as caving, very dusty areas, salt spray etc.
- 2. Polarizing filter, handy for removing reflections, darkening sky's, increasing the colour saturation of foliage.
- 3. Neutral density filter, allows you to use slow shutter speed for creating dreamy water fall effects, and soft flowing water. Of course you will also need to use a tripod.



Google Image, neutral density filter to get soft water fall effect



Google image, effects of not using a polarizer or using one.

No Polarizer   Polarizer



Google image, you can get some great shots in inclement weather.



# How To...

## SHOOT IN BLACK AND WHITE

Traditional method, adapted to digital, set camera to shoot black and white, use colour filters to adjust tonal range of the image. Red for more contrast in the sky, also darkens the sky. Green to lighten foliage, orange is more subtle version of the red, my first pick for landscape photography.

The new method, the one I use is using digital colour filters. This is a cool trick you can do if your digital camera supports raw file output which will help you with your black and white photography. You can set the camera to shoot black and white, and because you are shooting raw, you still have all the colour information you need to output a high quality black and white image. Let me explain! Setting the camera to black and white mode, lets you see how the image will look in black and white on the back screen. Shooting raw, retains the colour information so you can make a better black and white image. Part of the knack of making stunning black and white images is being able to control the tonal relationships between different colours in the image and how they are converted to Black & White. You control the tonal relationships by selecting the right colour filter when doing the conversion in Photoshop. This method is based on the traditional film methods of shooting black and white film with colour filters, except now you don't need to buy a whole set of colour filters. You can even use different colour filters on different parts of the scene, Maybe a red filter for the sky, and a green filter on the foliage to lighten the trees.



Crossover  
Campbell River BC



Frost covered Fern Leaf  
Campbell River, BC



# How To...

Quick answer, Pick a small lens aperture, focus one third of the way into the scene. Magnify view on back screen and check for sharpness. For the best quality photo use a tripod and a cable release and try to avoid shutter speeds between 1/15 to 1/60 of second unless you are using mirror lock up on your camera.

Complicated answer, calculate exact depth of field using tables, or download an app. for your smart phone or I phone. Make sure your lens has a focus distance indicator.

## GET MAXIMUM DEPTH OF FIELD



Here it is important that everything is sharp to give a real feel of depth.  
Zebra Path, Campbell River, BC  
f8, 1/60 sec, at 18mm

There is a great sense of depth from having everything sharp from foreground to the sky in the background. Miracle Beach, Campbell River, BC





# How To...

Set your camera to shoot at the lowest possible shutter speed and the highest frame rate. Panning with the action, is like swinging a golf club. Before you click the shutter you need to be already panning with the action. While panning take as many shots as you can. Only a few usually turn out. After you finish shooting continue to pan, following the subject.

## PAN WITH THE ACTION



Near Campbell River, BC. Take lots of photo's a motordrive or high Frames per scenond camera is ideal. This is one shot out of 49 I took that day

Campbell River MotoCross Event. Telephoto lens and slow shutter speed.





# How To...

## PHOTOGRAPHY AT NIGHT



Fireworks  
f1.4 at 1/40 of second  
hand held at iso 400

There are few equipment requirements to shoot at night. A fast aperture lens, will allow you to meter and shoot in lower light. A tripod will hold the camera steady, and a cable release will prevent you from moving the camera when you click the shutter.

If your camera has a noise reduction feature I recommend you turn it on. It will double the time between shots, but does give a cleaner image.

For auto focusing camera's you may want to use a focusing assist light, this is usually built into the camera. You may have to turn it on as it is quite annoying if you are photography people to have this blinding light shoot out from the camera.



Oyster Bay,  
Campbell river, BC  
70-210 at f5.6 30 second  
exposure.



# How To...

## DARKEN BLUE SKIES

Often in landscape photography the sky looks wash out. There are a couple of different ways to resolve that problem. Probably the easiest is to use what is called a polarizing filter. They are made in different sizes, to fit almost any lens. A polarizing filter is made of two sheets of glass, one sheet turns, as the sheet turns it either filters the reflected light, or only allows the reflected light in. What washes the sky out is the glare or more correct explanation is reflected light of the atmosphere. The way to use a polarizing filter is to focus and zoom the lens and then turn the outside ring of the polarizing filter until the sky darkens to the degree you want.

Another method is to convert the image to black and white using a red filter effect in Photoshop. Or set the camera to BW jpeg, and screw in a red filter in front.

Third method is to use HDR, this is the process of taking two or more photographs, one exposure for the sky(darker) and one exposure for the foreground(lighter). You then merge the two or more images into Photoshop. Creating image that has a darker sky and lighter foreground.





# How To...

## SHOOT PORTRAITS



Example of blurring a busy background using a large aperture lens



Example of family portrait

Focus on the eyes! Number one priority, next is nail the exposure. Try to have a catch light in the eyes. Pick a nice unobtrusive background if possible. Alternatively you can blur the background by picking a large lens opening or getting closer to your subject. Other type of portrait is an environmental setting where you give more information.

Keep head in clear space, frame the head.



Example of picking a pleasing background

Example of Environmental portrait, picture tells the story.



# How To...

For digital camera's I like to use 2 times the focal length. For example if the focal lens is 50mm, I try to shoot at least at 1/125 shutter speed. This allows me to get sharp photo's of static subject matter if I am not using a tripod. For moving subjects, the faster the better if you want to freeze the action. Experimenting and experience are your best guide.

## FREEZE ACTION



When shooting something approaching you head on or going straight away from you don't need as high of a shutter speed.  
f5.6 at 1/320 th of a second, 70-210 at 210mm

Using a 200mm lens, on a fast moving subject, I picked a very fast shutter speed.  
1/1000 of a second.





# How To...

There are several levels of doing close-ups. First and the most common is to use the macro feature of most zoom lenses, next level is using close up lenses and the highest level is using a macro lens.

The fun with doing close ups is you see an unusual perspective. Blurring of the background occurs because you are focusing very close. In fact as you get really close, you need to pick a smaller lens aperture just to get enough depth of field for the subject. Which entails longer shutter speeds, leading to having to use a tripod.

## DO CLOSE UPS



High key Cloes up



Cloes up of two dandelions, using a large aperature to blur the background even more.

# How To...

## SHOOT SUNSETS/SUNRISES

Use a Tripod and Cable release, plan plenty of time, and get there early and leave late. Expose as far to the right as possible, with out excessive clipping, don't worry about lighthening up the shadows. Let the shadows go dark. Check your histogram on the back of the camera to make sure exposures is correct. Try to set the lens aperature a couple of stops below max, for best image quality and least amount of flare. Pick the lowest possible ISO for your camera, (you are using a tripod, right!). If shooting in Jpeg mode, set the camera to vivid or high colour saturation, make sure exposure is not giving out a washed out look. If shooting raw, exposure should be set for best image quality and then adjusted to suite in your favorite photo eaditing program.

S Curve, Campbell River, BC  
f11, 1/80 sec, iso400





# How To...

The purpose of a silhouette is to add mystery to the photo by removing detail. You need a strong source of light behind the subject. The way to do a silhouette is to expose for the high lights. Meter on a bright part of the scene, this will under expose the picture, forcing the area that is back lighted to go black.

## SILHOUETTES



Different take of a silhouette, a self portrait. I emphasis the contrast even more in Photoshop by using a threshold filter.

I cheated a bit on this silhouette, as I used Photoshop to paint the sun red. Tofino, BC at our campsite.

