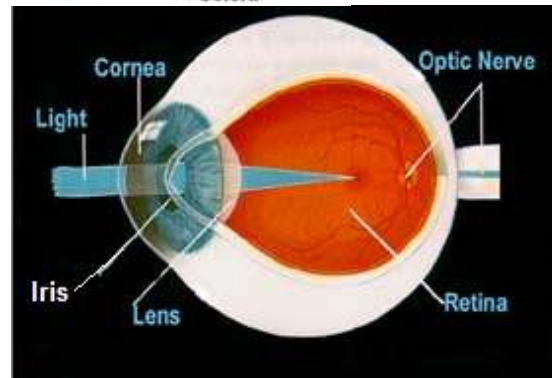
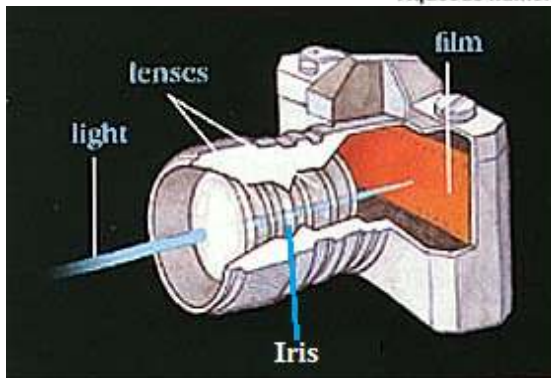
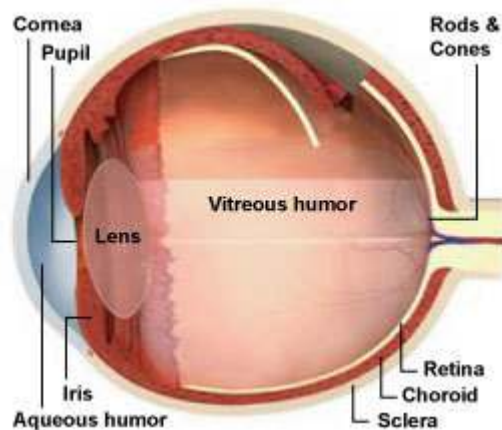


Basic Tips for Digital Photography - Dr. Derek P. Blake

Recently, with the event of camera-phones, photography has become more popular than ever before, and many have progressed from mobile telephones into dedicated digital cameras, having caught the photography bug. The internet is full of pictures of almost everything you can imagine, some of them are stunning, amazing images, however many are photographic disasters. The reason, I believe, for this is a lack of basic understanding of photography, whilst some people take to the art as easily as dropping a zoom lens, for many the skills have to be learned, just as in any other subject. So, this is the object of this paper, to produce a quick reference guide to taking pictures that at the very least, will not be disasters and hopefully will become treasures.

The camera is very much like your eye, everything works the same, except that at the end of the process you either have a portion of film or a light and colour sensitive electronic cell where the retina would be. Your eye has a lens at the front that catches the light and a muscle that allows the lens to focus, behind that is the iris, that adjusts the amount of light that reaches the retina.



We need to bear this fact in mind when we use a camera, the eye is linked to our brain via the optic nerve, so the camera must be linked to our brain via our own eye, but in this we have to do the conscious thinking.

So, photographs are a visual record of the varying levels and frequencies of light being reflected from a million different surfaces onto our film or a light sensor. The light is focused to a point on the film or sensor's surface where it activates small switches called pixels, in digital cameras, or burns a light-sensitive emulsion on film. The sensors in digital cameras are made of basically three layers, sometimes called wafers, each layer acts like a filter to the each of the colours, red, blue and green. One will allow blue through but will block red and green, and so on. Using a process called interpolation, the on-board processor computes the actual colour of each pixel by combining the colour it captured through its the filters with the other two colours captured by the pixels around it. I have

explained this rather technical process simply to demonstrate that taking photographs is all about 'light', it's strength and it's colour or frequency. Which brings us to the most basic point of all, 'Exposure'.

EXPOSURE

Exposure is basically the amount of light that is allowed to fall upon the sensor, too little and your photograph will be dark (under-exposed), too much and the photograph will be light (over-exposed).

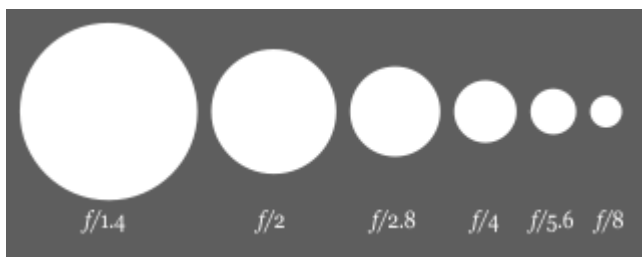


Illustration 1: Under Exposed



Illustration 2: Over Exposed

In a camera, like in our eye, the amount of light is controlled by an 'Iris', also called the diaphragm, a hole that has the ability to widen or narrow, like our pupil. The amount of light is also controlled by the shutter speed, this is a gate that allows light to fall upon the sensor for an accurately measured length of time, The iris and the shutter are often the same thing in modern cameras, but we should think of them as very separate mechanisms. When a photographer talks about the size of the iris, he or she refers to the 'Aperture' and the size of that aperture is expressed in 'f' numbers, commonly known as 'f-stops. Standard 'f' numbers range from f1 to f128. However most hand-held cameras have a range from about f16 to f2.8. The rule is, the smaller the 'f' number the larger the



aperture and the larger the 'f' stop the smaller the aperture [as left]. All cameras will have this system, even 'Point & Shoot' cameras, and most good cameras will have a [MANUAL] setting of some sort, so we need to understand this principle. If you do not use your camera's manual setting, you are losing out on a great tool.

The 'f' actually stands for 'Focal Length' which relates to the distance between the aperture and the point where the picture is in focus, so you do not need a lens to get a focused image. The very first cameras (called 'Camera Obscure') worked as 'pin-hole' cameras, many people will remember these from school when we made a camera out of a biscuit tin. Now this means that different apertures focus at a different point and as a photographer we can make use of this. A small aperture (high number) has a very long field where things are in focus, and conversely a large aperture has a very short focal field, these fields are called 'Depth of Focus'.

The f-stop always goes hand in hand with the shutter speed, the shutter also limits the amount of light that falls on the sensor, and again there is a range of standard shutter speeds. Shutter speeds in digital cameras vary slightly from those used in SLR film cameras, but the shutter speeds range in a progression of half's: B, 4, 2, 1, <seconds/ fractions of a second>2, 4, 8, 15, 30, 60, 125, 250, 500 and 1000th of a second (specialist and high end cameras would go considerably faster and may go up to 1/10,000th of a second). Today's domestic digital cameras roughly follow this pattern, with several additions (My Fujifilm HS20 has B, 15", 13", 10", 8", 6.5", 5", 4", 3", 2.5", 2", 1.5", 1.3", 1second, 1.3, 1.6, 2, 2.5, 3, 4, 5, 6, 8, 10, 13, 15, 20, 25, 30, 40, 50, 60, 80, 100, 125, 160, 200, 250, 320, 400, 500, 640, 800, 1000, 1200, 1500, 1600, 2000, 2500, 3000, 4000th of a second) [extra speeds in red] which are usually associated with special Programs, like 'beach' and 'sport' settings. These two scales, the 'f' and the shutter speed, are upward and downward compatible. In other words if your exposure shows an ideal exposure at 125th of a second, with a f-stop of f5.6, and you want to use a smaller aperture say f16, then you simply adjust you shutter speed to 1/30th of a second, two stops down and two speeds down. This works with every stop in the scale and in both directions.



Waterfalls

Before we leave shutter speeds behind completely, here is a tip that is worth its weight in gold, the next you photograph a waterfall, try using a fairly slow shutter speed. Instead of freezing the water and making it look like a jelly-fall, the longer exposure will blur the water a little, giving it a feathery quality and giving it a sense of movement.

Getting More Control Over a Point-n-Shoot Camera

Now it's all very well me explaining about apertures and shutter speeds etc. but not everyone has a digital camera that has a facility to select these functions, well here is a little trick that you can use to fool your 'point-n-shoot camera. Now all digital cameras, even the simplest operate in 'Automatic Mode', and these days most compact cameras give the user a choice of a few shooting modes. Each of these modes uses a pre-set aperture and shutter speed, [Landscape] setting will give you a small aperture (very deep depth of field), the [Sport] setting will give you a fast shutter speed and a mid aperture, and the [Portrait] setting will set the camera to a wide aperture (a narrow depth of field). So all is not lost, you just think about what the settings give you rather than the description, like [Sport], which can be used in any situation where you want to freeze the movement/action.

So, to recap:

- If you want a shallow depth of field, use the Portrait setting.
- If you want a deep depth of field (everything in focus) use the Landscape setting.
- If you want to freeze the action with a fast shutter speed, use the Sport setting.
- If you need a long exposure (slow shutter speed) use the Night setting, but you may need to cover the flash, which will cut in automatically.

Think aperture and shutter, rather than the name of the setting.

Warning - Shutter Lag

Just a quick note about shutter lag, one thing to get used to with digital cameras is that they do not act as quickly as the old mechanical film cameras. When you press the shutter on a digital camera there is always a slight delay before it actually records the image, modern cameras are not as bad as their older cousins, who often had a one second delay between pressing the shutter and the image being recorded. Many users have been disappointed with their images because they have moved the camera too soon after shutter release, causing blurred images. The cure is simple, keep the camera in position until you are sure the image has been recorded, usually when the preview pops up on your back-screen.

Basic Rules

There are some basic rules that need to be observed, here are a few that I would recommend for anyone new to digital photography or for anyone who has bought a new camera.

- **The Golden Rule.** Read the Manual: always read as much of the manual as you can, you will only remember a small percentage of what you read, so put it aside as use it as a reference book. Now explore your camera, with the manual to hand looking things up that you don't understand.
- Make sure you know what each little icon and abbreviation on your camera means, even if you do not wish to use the modes right then. This applies to the top of the camera, the back and the menus.
- Hold your camera in the correct way, if it has a lens turret, one hand should be wrapped around it, if you don't, use both hands, one to cradle the side of the camera in the 90° angle between thumb and left index finger, with the end of the finger gripping the top of the camera.
-



How We Can Use Depth of Field.

Because of the differing depths of field associated with each f-stop we can use it to improve our photography. Landscapes are always popular subjects for the enthusiast photographer, and no wonder, this world has so many stunning sights, however a landscape or seascape can stretch from the immediate foreground to infinity, so can be a challenge to get every detail in sharp focus. In this case the ideal f-stop to use is the smallest aperture for the available light, on a bright sunny day f16 would be a favourite, but because this would mean a comparatively slow shutter speed, sometimes we may need a tripod, watch out for those moving shots.

One of the great uses of depth of field is to use a wide aperture to produce an effect that often seems to have 3D qualities. To achieve this we need to soften or blur the background by photographing it out of focus whilst keeping the subject in sharp focus. Here again we use the 'Depth of Field' to our advantage by setting the camera to a wide aperture, f2.8, f4 or even f5.6 will generate this effect. This is because the wider the aperture, and lower the 'f' number the narrower the depth of field. In bright daylight



conditions the shutter speed will need to be quite fast, especially when using f2.8. This method is especially useful when taking portraits, it not only looks professional but the high shutter speed freezes any movement by the subject, small movements by the subject often spoil portraits, even the movement of the eye can destroy a otherwise perfect shot.

What is ISO All About?

Many digital cameras also allow you to set the ISO of your virtual film, but what is ISO? For the answer to this we need to take a quick trip in our time-machine, back to the days of film photography. In those days we could buy film in various speeds, the speed of a film related to it's sensitivity to light. The normal film we used to buy from the supermarket or local chemist, was usually a 100-ASA or ISO film, it was a general purpose film that suited most domestic needs. Enthusiasts who bought their film from photography shops or mail order could buy a whole range of speeds, I have used speeds as low as 20-ISO, up to about 400-ISO, why the different speeds? Well a 400-ISO film would be many times more sensitive, and take pictures in lower light conditions, than a 100-ISO film, however the quality of the image was not as good, as the higher the speed the more grainy the picture. That is why low speed film was used, in order to get the best possible images with the best detail.

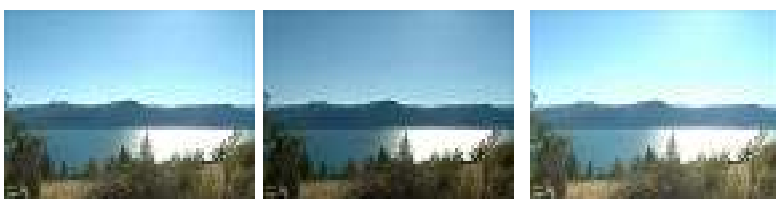
Now this system has been transferred to digital cameras, and the same principles apply. The higher the speed you set the more 'noise' you will get in your image. My current main camera has a range of ISO speeds from 100 up to 12800, but anything above 1600 is rarely used or selected automatically by the camera. However, it is always fun to check these things out and look for uses.

What do I mean by 'noise' ? Well basically it's those little speckles you get in the very dark areas of the image or that gravel effect you can get in some colours, instead of the flat tones, sometimes it looks like a slight fogging of the detail. This used to occur with film, but that was due to the emulsion grain on the film's sensitized surface, now it's just electronic 'noise', but rest assured, there is no such thing as a deep, flat black with digital photography.

Bracketing, for the Best Exposure

One fantastic tool for ensuring you get the best exposure possible is the 'Bracketing' function, which is a great tool that all professionals use, especially 'Wedding Snappers'. Must modern cameras include this function in the camera menu. The idea is not new, it has been the practice with SLR cameras for many decades, but it was sometimes a time consuming practice, taking three separate shots every time. The idea of bracketing is that when you take a picture the camera also takes a picture one f-stop up and one f-stop down, which means for every shot you take, you get three images, at three different exposure settings. These pictures will be, the one that the camera thinks is the right exposure, one that will be slightly lighter and one that will be slightly darker.

You can then chose which image you like best and delete the others. Wedding Snappers use this a lot to ensure they get at least one usable shot each time, it was rumoured that Patrick Lichfield used a five shot bracket.



Nominal Exposure

- one f-stop

+ one f-stop

Maintaining Focus

Today's cameras are little miracles, but they can't do the impossible. How many close up, or medium close-up shots have been disappointing, when you find they are slightly out of focus and those details that make a great shot are missing. Well if you are physically holding the camera it is impossible for you not to move, even slightly, and that is all it takes. Obviously the answer is a tripod or one of the new, go anywhere gorilla-pod camera mounts (the ones that look like strings of large beads), but a tripod is not always convenient to carry around, and you don't want to miss that great shot. The chances are that just as you press the shutter button, you will move slightly, so here's how to increase your chances of getting that perfect shot. Simply (if you have the facility) use the multi-shot setting, on many cameras these shots can be set to take three or six or nine images with one press of the shutter, one of them must be a good shot.

One point to remember, the lighter the camera the more shake you will get, it's all about inertia, and the energy it takes to start it moving, if there is little mass, it takes very little energy to move it, so a very small shake of the hand will move the camera. With heavier cameras there is more mass so those little shakes do not move it as easily. If you have a very light camera and it has a tripod mounting thread in it's base, one thing you can do is find a screw that will fit the mount, and use that to suspend a bag of marbles or sand from your camera. This simple device absorbs much of the natural shake from your hand, it's a tip that used to be adopted by people with those Super 8 cine cameras back in the seventies and eighties.

Composition

Do you give a thought to the composition of your pictures? Most people just snatch images, and just hope it turns out. We have all experienced it, either first or second hand, the tree growing out of someone's head, the half person in a group photo, the wire that appears from an ear, and hundreds of other background issues. These mistakes happen because most of us only see the object or the subject we are photographing, not the full picture. When you look through the viewfinder or at the LCD screen, get into the habit of ignoring the subject and look at the frame and what it includes. When we look at a picture on the wall, our first action is to look at the whole picture, if it interests us we look closer, and may even, then closely examine the detail. Good pictures work as a whole, so forget his or her, lovely smile and look at the picture as a whole.

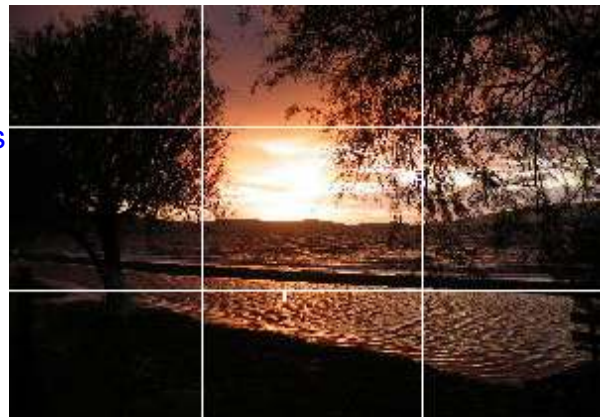
There are some tried and tested rules of composition however, which are worth noting.

The Rule of Thirds

Most digital cameras have a grid function that splits the LCD screen into nine rectangles (a three by three grid), this is of great help if you are unsure about your composition. These lines will not be on your final picture, but if your camera does not have a built in grid then you can use your imagination.

Firstly you need to decide what your subject actually is (the reason for taking that particular picture), once that is decided then the 'Rule of Thirds' suggests that the best place to position your subject is near where the lines intersect.

This is not always the best but it is a good rule to start with. If you have a grid function it is also useful for ensuring your images are level or vertical (the verticals are the most



important as they are the most noticeable), if your camera does not have a gimbal (an electronic level). When taking landscapes the picture always greets the eye better if the horizon is above or below the centre of the picture, one would normally aim to place the



horizon somewhere in the vicinity of the two horizontal lines. There are exceptions to this rule of course, reflections look great with an equal split and cloudscape, these will often be improved by just a little of the sea or land being included. In sport images we can also use the Thirds Rule, a track runner always looks better



heading into the picture rather than out of the picture. In other words if the runner is moving from right to left they should be placed near the right-hand vertical line and the left line if they are moving from the left. This

rule applies to most fast moving subjects where the impression of speed is required. As with all rules, there is always the exception, but just look at the frame, as Nikon says, "look into your viewfinder, not through it," if it pleases you, SNAP-IT.

Night Photography

As we walk around at night we see so many things and effects that would make wonderful photographic images, if only we knew how to record them. The illuminated cathedral or castle, the street lamp in winter, the Moon rising behind the woods, light reflections on water or ice, or city-scape, they all deserve to be recorded. First let me say, night photography is not a specialist area nor do you need specialist equipment, even if you have a simple 'Point & Shoot' camera, try it, you have little to lose. I have seen some stunning images taken by simple cameras. If you are fortunate enough to own a camera that has a selection of special programs, that includes night shots, you can take some stunning shots. If you have a tripod of some kind, you can use this to extend your night range, but a convenient wall, fence or tree/lamp-post, will serve to steady the camera, and use your self-timer will avoid any hand movement, however tripod or no tripod; beware of wind!

Here again the manual setting comes into its own, you can experiment with different shutter speeds and apertures to get the shot you want, and this is the reason we need to understand about 'exposure' (shutter speed, aperture and film speed). To show what can be achieved with a little patience and a bit of experimentation, this image of the Moon (right) was taken with the camera on my lap holding it as still as possible, it was not a time exposure (which would not have worked) but was taken at $1/800^{\text{th}}$ of a second with an aperture of $f5.6$ with a sensitivity of ISO 100, something within the range of most cameras with a manual setting. It is not the best picture of the Moon I have ever taken but it shows many of the Moon's features. Getting the focus right was the big challenge here.





The picture of Molivos castle on the left was the result of some dozen or so experiments, using a tripod and the self-timer function, the wind here was quite strong so many shots suffered from vibration. The shot was taken with a shutter speed of three seconds at an aperture of f5.6, and again using a setting of ISO 100. Shots like this are just a matter of patience and perseverance, even going back several times to get the best shot possible.

The picture of the tree (below

left) was taken with a miniature point and shoot camera. The combination of the raindrops on the tree and the street lamp makes a pleasing image that screams 'A November Night' (even though it is stamped 'January'). I remember jamming the camera against the corner of a wall to stop it moving.

Man has always been fascinated with the stars and they are no less fascinating to the photographer. The obvious target is the moon, it's a mere two-hundred and forty thousand miles away, as opposed to the stars that can be millions of light-years away. Believe it or not, taking a picture of the stars is just as easy as taking a picture of the Moon. Did you know that with just a simple digital camera, you can take a picture through a pair of binoculars or a small telescope? It's true, even semi professional astronomers use this method. The picture below was featured on the BBC's stargazing program a couple of years ago, and was taken with a compact digital camera through a small telescope. The picture is of Saturn being occulted (hidden) by the Moon (bottom right), what a wonderful shot. The only prerequisite is that



the binoculars, telescope and camera, needs to be secured so that it cannot move in any way. What makes it easy with a digital camera is that you have a small screen on which you can see what you are taking. With the modern super-zoom cameras, pictures of the moon can be easy, as long as you get the exposure right. The Moon will appear as a very bright disk on a

dark background and because the image will be mostly background, the camera will over expose and you will get a white blur without any detail. Here again cameras with a manual setting score, the trick is to balance the aperture and the shutter speed. Use as low a ISO setting as possible and a shutter speed of 1/125th of a second, then experiment (remember the smaller your aperture the less critical your focus).

For star photography, beautiful images of the sky can be taken without too much trouble, all you need is a tripod or safe base for your camera, and a 'B' setting or long exposure shutter speeds, and you are in business. Again this is just trial and error, take a picture, check it and adjust. One caveat, the earth is revolving, so the stars will move across the



sky, and your camera will pick this movement up over even short periods of time. so with a 50mm lens your longest exposure will be 15 seconds, going up to 30 seconds with a 28mm focal length lens. If you zoom in your exposure time will be accordingly shorter. What will happen if we exceed these limits? You will get 'star-trails' (left), which make good images, but it depends what you want, it's your choice, trails or a record of a constellation. as the picture of the Pleiades Star Cluster, or

Seven Sisters (below)



If it's the Moon you want to photograph, one tip would be to photograph when the Moon is not full, a side lit Moon picks out more detail, like mountains and craters, etc than at the full Moon, as below and the full moon below right.



Moon or star pictures work well with elements of the land in the foreground, hills, trees, buildings, etc.



One last note on astrophotography, do not expect wonderful Hubble style pictures, even the pictures of deep sky objects like the Milky Way showing all the glorious colours of the heavens, they were taken with very specialist equipment.

Wildlife and Nature Photography

One of my passions is wildlife photography, it does not matter where we live, city, town or country, there is always wildlife around for us to photograph. There are now more urban foxes than country ones. Local parks, zoos, and also back gardens, and all ways, provide subjects for our cameras. You see, wildlife does not just include big game and exotic birds, it includes anything that is living, insects, garden birds, plants, flowers, rodents, any form of life.

Wildlife photography, is a mixture of technique, knowledge and luck. It is rarely that wildlife will sit and pose for you, you can't shout "Hold it!" and expect them to freeze while you frame up and shoot. Most of the time you will scare them off, unless they are curious about you, but sudden moves or sounds will often put them to flight. Most animals regard man with caution, however they will often totally ignore a motor vehicle,



so it is often easier to shoot from your car. If the animal is ignoring you, don't make any changes, if the engine is running, don't switch it off, open the window rather than the door, however electric window may disturb birds or small animals. If you are able, turn down or switch off your camera's shutter sound, I have known that to scare subjects off, even the low bleep as you turn your camera on can sometimes set an animal to flight. If you are on foot and want to get closer, never walk or creep directly toward the animal, a zigzag path is preferable, approaching directly is very threatening.

Camera wise the longer your zoom lens the better, and the higher the mega-pixel (MP) rating the better, but NEVER be tempted to use your Digital Zoom if you have that facility, you can do exactly the same by cropping your image, when you download later. Digital Zooms actually crop the image in the camera. Digital Zooms are effectively useless, you need an Optical Zoom, that acts like a telescope rather than a digital zoom that acts like a magnifying glass.

Some manufacturers offer a range of filters and extender lenses that improve the image or extend the range of the zoom. If you examine the front of your lens and find a short thread

around the inside of the lens housing, there is a good chance that there will be filter or extenders available. More about filters etc later.

A long range zoom helps you to get in close to your subject, the new-ish range of super-zoom cameras can give you enormous ranges from 24mm to 740mm in one lens (30x zooms +). Long zooms plus high MP rating, which allows some cropping without the image being affected adversely, gives you a powerful tool.

The picture on the left (below) is how it came from the camera, on the right, the same picture cropped slightly.



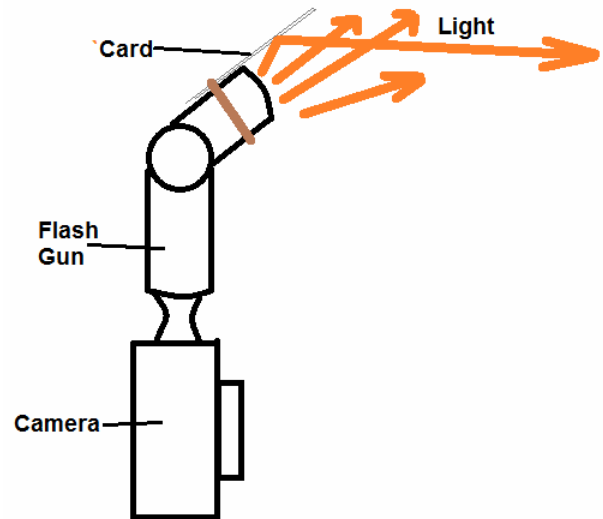
When it comes to wildlife, and birds in particular, it's a matter of the closer you are the better, even with a massive telephoto lens, the closer you are the easier it is to fill the frame. If it is a bird or small mammal you want to photograph, you can be looking to fill the frame with something smaller than your hand. Sometimes it's a matter of waiting for the subject to come to you, rather than chasing the subject around, this means understanding the animal's habitat and knowing the sort of habitat that the animal frequents. Another way to attract birds in particular is to offer them a free drink or food, many bird photographers find out where the birds are and then take a feeder or a bowl for water with them, a shiny stainless steel bowl is best to attract birds. We can also recon the area with a pair of binoculars looking for the places where birds feed, then set up close to the spot (where there are insects, fish on the shore line, etc.).

Of course nature is not just birds and animals, flowers are another favourite subject, with flowers the important issues are detail and colour, so here's where your Macro and Super-macro setting comes in useful. Close-up images can be stunning, but watch out for composition, your image needs to be recognisable as a flower or plant. If your flower is outdoors you will most often have a breeze that will move the flower around slightly, taking it in and out of focus. This is where the multi-shot function comes in useful, take a number of pictures and hopefully you will have at least one frame that is in sharp focus. Most people look at photos subjectively, so we must aim to 'connect' with the person looking at the image, and most people connect with a flower. Try this tip to increase the colour of the flowers, use your flash, even in daylight, the flash (set to 'fill' if you have that setting) will intensify the colours. Alternatively try getting the light source behind the bloom, this will also intensify the colour and it will bring out the veining detail in the petal or leaf. Leaves, especially in the Autumn or Fall, can make such dramatic images, with a range of colours that is no less than stunning. Macro images of leaves can also be interesting subjects, especially when wet or in the winter snow. However watch those shadows, close up to a subject, your camera can cast a shadow or a partial shadow over your subject or the background, use your zoom combined with your super-macro setting to get just that little further away.

Don't forget the weather, the weather often changes quickly and an image of the same scene in varying weather conditions can produce many very different images. We all love taking images in bright sunshine, but we must not neglect the clouds, they are forever changing and they are just above our heads. If you are taking the clouds as your subject, don't forget to meter the light in the cloud, not the land, take your exposure with no land in the view then lower the frame to include what land you want in your picture.

Flash Photography with your built in flashgun.\

Flash photography, especially with a fixed or pop-up flash gun can produce stark and hard images, people can look surprised or shocked, and then there is the age old problem of 'Red Eye'. Red-eye is caused by the retina remaining wide open when the light from the flash hits it, some cameras have a Red-eye prevention system, this normally produces two flashes, one to close the retina and then the second to illuminate the subject for the picture. If you have a separate flash gun you may be able to bounce the flash light off of something in order to soften the light or diffuse it. One way of bouncing a flash is to cut a piece of stiff white or light coloured card the same width as the flash gun and about six inches long which can be fixed to the back/top of the flash head with an elastic band (as per illustration above right). Some manufacturers make diffusers and colour filters that clip over the flash gun lens.



Another method of muting or diffusing the light from the flash is to use a 'sock', this is a piece of thin material that fits over the flash head (like a sock) these can be made of that material that is used to stiffen shirt collars (white translucent material) I believe it's called 'Interfacing'. This can be made to any size to fit your flash gun, pop-up flash or even cut into small pieces and fixed over integral flashes you get in most compact cameras.

If you have problems with a diffuser and use a raw flash, try not to have people looking directly into the camera, you will get a slightly softer image and you are more likely to avoid Red-eye. We should also all be aware of the limitation of the flash unit, flash units in compact cameras are good for up to around 14 feet (4m), if your subject is beyond that distance, and if it is poorly lit, your pictures may be disappointing. Don't worry about what you do with your flash, modern cameras and flash guns measure the light that comes back from the subject, and then adjusts the flash intensity accordingly.

Backgrounds

The basic tip here is, 'take notice of the backgrounds'. Make sure they do not interfere with the subject, or are so powerful that they distract the attention away from your subject. If you are taking a portrait make sure the background is clear of distractions like other people or overly busy or colourful. When indoors use self coloured walls, outdoors the use of greenery (grass, trees or shrubs) or even blue sky. Of course in the ideal situation you can use the depth of field to blur the background.



Framing your subject

How about framing your picture before it's in the camera? Well what I mean is shoot your subject through something else, these pictures can be very attractive. Framing the subject can draw the eye to where you want people to look, and framing ideas are all around us, windows, archways, doorways, tree branches, the list goes on. I once took a picture of Salisbury Cathedral for a walking guide, I took the shot through a pair of legs in shorts, thick socks and walking boots, the legs were obviously in keeping with the

walking theme and the triangle formed by the legs drew the viewer's attention to the cathedral and its long spire pointing to heaven. Framing is a great tip and adds interest to shots that can otherwise be mundane.

Filters

These days you can all sorts of filters for all sorts of cameras, even for camera phones, some one somewhere make filters for your camera, though some say there is little need for filters when you can achieve the same effect on your computer. What are filters? Filters are disks of glass set in a threaded ring that screw or clip onto the front of the camera lens in order to achieve various effects. It is true that most of the effects that were achieved with filters on film can now be achieved in the computer, however there are still a few filters that are worth buying at little money.

UV0 filter is very useful for two reasons, firstly, in my book, it is a cheap filter that I fit permanently to my lens in order to protect the lens itself, better to scratch the filter than the lens itself. Secondly it cuts through a lot of haziness in the air by filtering out the UV rays that tend to 'fog' pictures and improves the crispness of the picture.

CPL Filter is a polarising filter that filters out reflected light (like polarised spectacles) this means you can shoot through glass with less or no reflection showing up, very useful. By reducing glare and unwanted reflections, polarized shots have richer, more saturated colours, especially in the sky.

FLD Filter, is great for shooting under fluorescent lighting (and there is a lot of that about), the filter corrects the light reaching the chip in your camera.

Centre Clear Filter, is just a strong lens with a hole in the middle, this is often used by wedding snappers and blurs the picture, with the exception of a circle covering the centre of the picture, gives a very romantic feel to the picture.

And lastly a **Star Filter**, this creates stars where ever there are lights or highlights in the scene, useful now and again, but something you would use often.

And those are about the only filters worth entertaining in the digital world of photography.

If you don't have a camera that accepts filters at the front of the lens, all is not lost, instead of a CPL filter, try holding a pair of polarised sunglasses in front of the lens to cut down the glare from the sea or white sand (not recommended with prescription sunglasses that are used to correct sight deficiencies). Place the glasses as close to the camera lens as possible, then check their position in the LCD viewfinder to make sure you don't have the rims in the shot. Note, the polarizing effect is strongest when the light source is at a 90-

degree angle from the subject. Even if your sunglasses are not polaroid, you can still use them as most good quality modern sunglasses also include a UV filter.

Housekeeping



Housekeeping is of utmost importance, if you want your camera to produce good quality images for any length of time. Many people do not give a thought to their camera, they grab it out of the cupboard or drawer, take it out of the case (if it's in one) and expect it to take great pictures. Everywhere on Earth suffers from dust, every home collects cooking residue and we do need to keep our cameras clean, particularly the lens. A speck of dust can blur a part of your picture and it could even put a scratch in the lens, you may not see it with the naked eye, but those photons that bounce through it will see and they will be scattered by it. Likewise a finger print or a part of one will also give you a blur in your picture, the one time I never checked my lens resulted in a day's shooting being lost

and a journey back to the location to shoot over. However **don't clean your lens with the back of your sleeve** (or any other old cloth that is not meant for the job), that's the quickest way to ruin your lens. Always use a puffer-brush (like the one on the left) and lens cleaning tissues, both are available from any good photographic shop or electronics dealer.

Nothing spoils your pictures like a smashed camera, well obviously, but it is worth taking care of your camera when you are using it. Many camera cases that are supplied with the camera are not worth anything, most have no padding and would not protect your camera from a collision with a fly. If you value your camera, get a case that will protect it. I also see so many people out taking pictures with cameras that have no strap, or if it has one they never seem to use it. If your camera does not have a strap, you can purchase them from most photographic shops for little money, if it does have one please use it. I have seen so many cameras go the way of raindrops because the lovely shiny body slipped out of the person's hand. My camera has a neck/shoulder strap with a grip, but I also have a wrist strap that screws into the tripod mounting socket, if there is any danger of dropping the camera, if it is in an awkward position (like through a car window) I will always wrap the neck strap around my wrist, or use the wrist strap, it's better than dropping the camera. But keep cameras well away from sand, sand is the camera's worst enemy and destroy an camera quicker than anything else. Keep it safe and it will serve you well.

Last Warning

Avoid dust, sand, moisture/ water, salt and knocks and bumps, these are all enemies of your camera. You should also avoid chemical sprays, perfume spray, oil or greasy fingers (including but not restricted to sun screen), deodorant sprays, these are not friendly toward you camera.