Outback Western Australia – part of the Pilbara mining region

How do you .....?
create 'good' photos of birds

An occasional series for Panasonic FZ friends and colleagues:-

Around the world, we photographers seem to gravitate to similar image topics, and 'birds' is a very popular one. Birds in flight—birds at rest—birds on the nest—birds simply being birds! … they all end up as subjects for our cameras.

There are many commercially available books on bird photography, and they all seem to suggest that you need a good quality dSLR camera along with one or more powerful zoom lenses. Such a collection will require most people to spend from $4000 to $7000. However, we are Panasonic FZ users, and our cameras are only costing us 1/10th of these amounts, so can we expect the same sort of results? While some of our results will not be as sharp as the dSLR images, they will definitely hold their own.

In the author's experience, when you look at the image of the bird and you are not happy with the sharpness, it most probably is because the shutter speed was not fast enough to freeze the movement of the bird. 'yes'—we have good quality zoom lenses attached to our FZ cameras and many times we try to do too much with those wonderful zooms, but all too often, because we have used large amounts of zoom to magnify the bird, it also magnifies any blur from feather movement, meaning that the shutter speed just is not fast enough to give us 'the best' image.

About the author:-

G'day .... a good Aussie greeting to friends
My photographic history / career started as a 10 yr old being given my first camera - a 120-roll film job. Then in the 1960s I went to 35mm & had several of them before going to a Pentax in the mid-60s, then through the 70s & 80s I expanded to four lenses and a second camera body. The lenses covered the range from 24mm to 1000mm

In 1975 I was invited to join the teaching staff at the Canberra [Australia] Adult Education college, offering several Photographic Techniques modules which I did part-time for many years and later full-time once I retired from my career in engineering and as an I.T. specialist. In 2006 I retired from college activities and took a modified college course to outback Australia, whereby we were offering up to 24 weekend workshops annually to small outback communities, cattle stations, sheep farms etc. Our motorhome has accumulated over 475,000km over 18 years!

In 2015 we ceased this activity as my spouse wanted to spend more time by ourselves. We now tour Australia as 'photographic-tourists', spending between 250-300 days each year as travellers

In 2003 I went Digital with my first Fuji superzoom camera. I graduated to a Panasonic FZ-30 which was used for magazine work, then the Fuji was replaced with a Panasonic FZ-200. The FZ-30 was replaced by the Panasonic G2 plus several lenses, and it has now been replaced by the FZ-2500

Readers wishing to know more can email me if they wish
Regards and all the best in your photography,

Phil Jones

These pages are set up for printing if you wish. I trust that you'll find these notes useful, and queries or suggestions are welcome. Unless otherwise acknowledged, all images shown within this document were created by the author and are copyrighted.

These few pages of notes cannot equate to a 100-page book on the topic … all I am intending here is to provide some 'basic' information as to my "how-to" so that you, with your Panasonic FZ camera can follow these suggestions and create your own good photos. At the end are a series of my bird images along with the camera settings used.

Equipment needed...

Here we are referring to a camera with at least a 20x zoom lens. Many Panasonic models have lenses that equal or exceed 20x zoom, with several models offering 50x zoom, equating in film camera / Full-Frame digital terms to a 1200mm lens focal length and a very small angle-of-view.

Additional equipment (1) – a very good tripod -or- monopod; a 'bird-hide' which could be a motor car or a specially adapted dome tent with holes in the sides to place the lens into, and most of all—good strong sunlight.

Things to consider – as adults we will have heard the phrase "fight or flight" when it comes to any reaction to danger. Animals have the same response to perceived danger, and birds – being so small – will go into flight mode and disappear at the slightest worry for them. It means that we have to be very patient and/or conceal ourselves so that they do not see any danger. So the need for a bird-hide, and your motor car is often the easiest to use.

Try to position yourself to avoid cluttered backgrounds and twigs and leaves in front of the subject. Try to photograph at the bird's level or as near as possible. If birds are active nearby, try just standing still for a while and they may move closer or to a better position. Another option is to take a small folding seat and a book to read—you can find a good location and settle in and read for a while: and once the birds become used to you sitting there quietly, you can swap the book for the camera.

Practice makes Perfect – as the old saying goes. And sometimes the best place to practice is around your own house or apartments. The locations might not be exotic or special, but the techniques required are the same and you have much less chance for disappointment or frustration if you get it wrong. And—you can easily go out again and try another time.

Research - you need to spend time looking into your surroundings / talking to others with similar interests / and prepare yourself for more than one attempt to get the perfect photo! Seed-eating birds / nectar-eating birds / raptors / carrion feeders / they all have their habits … and you need to find them.

Easy and simple bird photography – many American photographers use a seed bell hanging in a tree to attract birds to their yard. They locate a tree a few metres away from a window in the house, prune some branches so that the camera can get a good view of the bird at the seed bell, and they successfully create many fine images of their local birds.

Some Australian photographers spread seed into the grass to attract ground-feeding seed eating birds. They then park their car at a suitable distance away and take their photos from the car.

Some Australian bird photographers I deal with mention that they often return to the same location a dozen or more times over the year to photograph their birds—always trying to create "that perfect image".

Try to get good eye-contact with the bird's head slightly facing you or side on, with the eye in focus and visible. Don't crop too tightly around the subject - give it some room to move!

Position of sunlight – with your bird photography you will get best results with the sun behind you shining onto the feathers and creating a sparkle in the eye. A bright-overcast day can give a nice soft light and with practice you'll get it right in camera more and more often, and you can get the birds to stand out well in these conditions. You just need a bright enough day to keep the ISO at a reasonable level.

Camera settings to consider...

Shutter Speeds – Use a shutter speed above 1/1000s whenever possible and if the quantity of sunlight allows it, go to 1/1600 or 1/2000 where possible. Even a perched bird moves quite a lot. If the light is not good, slower speeds from 1/250 to 1/500, in conjunction with image stabilisation, can give good results. For flying birds keep the shutter speed to 1/2000 or more, particularly smaller birds, as this will freeze feather movement and increase the sharpness of the image.

ISO settings and options – I suggest that your FZ camera be preset (at all times) to "ISO= Auto with 800 maximum", and this is done in the 'Camera-taking pictures' menu and titled "ISO Limit set".

With ISO settings – like any others, you can alter them at any time and as light conditions vary, always remembering that the ISO settings over say, 1600 will lead to a loss of image quality the higher the ISO numbers go.

Aperture choices – Depth of Field as we usually seek it is not generally needed here, as the bird is usually in a tree or bush and what we are seeking is a good sharp image of the bird and we allow the tree branches to become blurry. For most FZ users, you will get good results at or close to maximum Aperture, and by setting the camera to "S"-Shutter mode, the camera's exposure mechanism will determine what Aperture is being used.

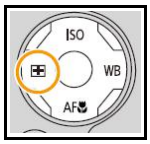
Exposure modifications – Bird feathers reflect vast amounts of white light and very little black / dark light, so with a dark feathered bird, it pays to have the sun located behind you. For those birds with white or near white feathers (like the Australian cockatoo or pelican), you may find that the feathers 'bleach' when in open sunlight. If you experience this, then use the EV+/- button to underexpose the image by one or two clicks of the settings. Equally if the bird is heavily dark or black feathered (like the European black swan or the raven) then you might get better results via using the EV+/- button to add exposure via one or two clicks of the settings.

Single-Frame mode -or- Continuous / Burst mode? – will vary from time to time and always depend upon the subject. For a bird sitting quietly on a branch, then single-frame mode will probably work well. However as birds hop around all the time, then Continuous mode (shown as **AF-C** on the camera) is needed. Many FZ cameras when in Continuous mode will shoot up to 99 frames ~ but this is not needed for most things.

Try to limit it to 5 at a time or close to that. Take your finger off the shutter and reset yourself for another set of 5 or so. You might do this 3 to 4 times and in this you are giving yourself a better chance at getting that shot you are after.

Most Panasonic FZ cameras will offer around 7 FPS in mid-speed continuous and 10-12 FPS for fast continuous. The author nearly always chooses medium-speed as then each new image has enough variation from the earlier image to make reviewing images a pleasure.

Setting the Focus Point – You will need to alter the focus arrangements that probably have been set for your landscape photography—so that only one focus point is in use, and that focus point is small to medium in size.



For your everyday photography you might have 'face-recognition' mode or 'multi-point' mode selected. However for your bird photography, you will get better results from selecting Single-Point focus mode (Coloured RED here for clarity)

The latter two images show single-point focus options.

Using "4k" video / stills shooting mode for your images

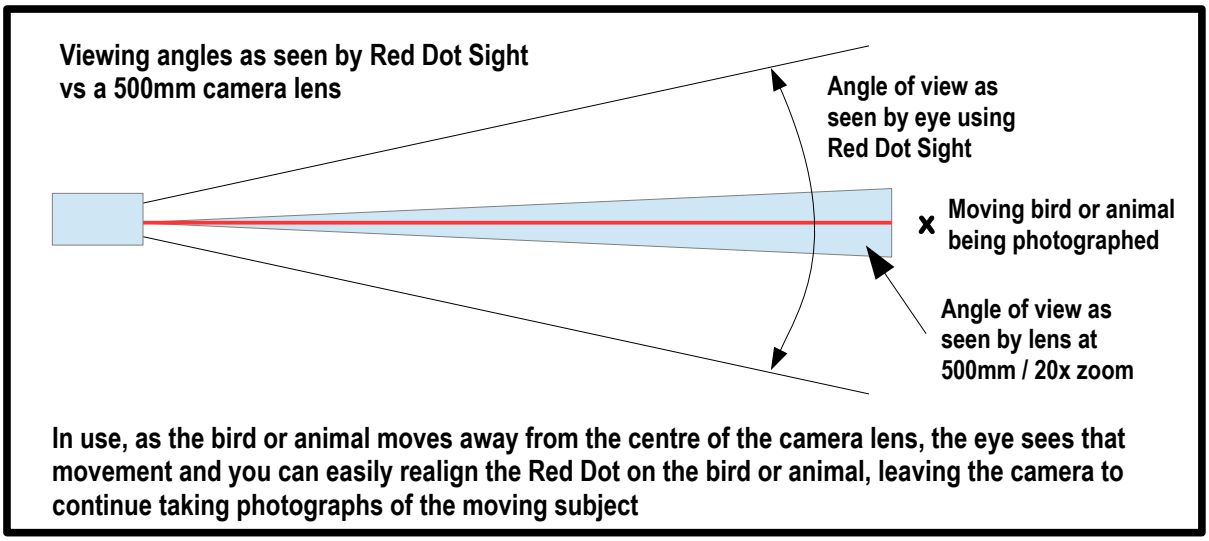
– in recent years more and more camera makers have introduced increasing video capabilities into their cameras. In doing so, the video is recorded in the industry standard of "4k"-- meaning that the pixels in use and the frame rate for the video is significantly better than before.

The pixel size for the "4k" video is approx 3500px x 2400px, making a total of 8mpx for each frame of the video. Panasonic have offered users the ability to shoot video images at 30 FPS—which is very fast indeed. After "filming", the user reviews the video, frame by frame, in the camera and selects whichever individual frames are 'good'. These 'good' frames are then saved as regular JPG images onto the memory card.

Because this is using less pixels than usual, the image now seems larger in the viewfinder—called 'the crop factor' in dSLR cameras. The crop factor now means that each individual image is about 25% to 40% larger than before ... purely because the viewfinder shows the reduced-pixel image at the viewfinder's full size.

For your bird photography, it now means that the bird that is your target will also appear larger in the frame, along with increased blur from feather movement as the wings are hard at work!

Additional equipment (2) – for those who wish to chase images of birds-in-flight (**BIF**) it is quite difficult to have your zoom lens set to 25x to 40x zoom / 600mm to 1000mm in Full Frame equivalent terms. The angle of view becomes so narrow that should you lose vision of the bird in the viewfinder, you will never get it back again. Many experienced BIF people overseas use a device called a "Red Dot Sight" for locating the birds-in-flight. This device clips into the flash-gun accessory slot on the top of the camera and the user does not use the camera viewfinder any more … they hold the camera away from the eye and look through the RDS unit.



This is what the device looks like when attached to the camera.

Camera settings when using the Red Dot Sight – are much the same as elsewhere … "S" mode with the shutter speed that you determine is needed for the subject movement, **AF-C** for continuous focussing on the moving animal, and your choice of Frames-per-Second in continuous mode.

In creating these notes I also say 'Thanks' to members of the Australian Photoholics Forum.
https://www.ausph.com/index.php

Their on-line personas are … Ralph, Isac, Wigz, Hans and Grumpy John

1)- Cockatoo landing in tree

distance to bird = 25metres (approx)
camera = Panasonic FZ-200;
exposure = 1/2000s x F4,0
zoom lens in use = 24x / 600mm FF equivalent
continuous shooting, = yes, medium FPS
hide in use? = no

2)- Galah landing in tree

distance to bird = 25 metres (approx)
camera = Panasonic FZ-200;
exposure = 1/1300s x F4,0
zoom lens in use = 24x ~ 600mm FF equivalent
continuous shooting = yes, medium FPS
hide in use? = no

3)- Kookaburra waiting for a frog

distance to bird = 5 metres (approx)
camera = Panasonic FZ-300;
exposure = 1/125s x F3,2
zoom lens in use = 24x / 600mm FF equivalent
continuous shooting = no
hide in use? = no

4)- Kookaburras on power line

distance to bird = 10 ~ 15 metres (approx)
camera = Panasonic FZ-200;
exposure = 1/500s x F4,0, EV+/- @ -1,0
zoom lens in use = 23x / 590mm FF equivalent
continuous shooting = no
hide in use? = no

5)- Rainbow Bee-eater

distance to bird = 6-8 metres (approx)
camera = Panasonic FZ-300;
exposure = 1/2500s x F2,8
zoom lens in use = 24x / 600mm FF equivalent
continuous shooting = yes, high FPS
hide in use? = yes, motor car

6)- Rainbow Bee-eater

distance to bird = 6-8 metres (approx)
camera = Panasonic FZ-300;
exposure = 1/2500s x F2,8
zoom lens in use = 24x / 600mm FF equivalent
continuous shooting = yes, high FPS
hide in use? = yes, motor car

7)- Australian Magpie

distance to bird = 4 metres (approx)
camera = Panasonic FZ-2500;
exposure = 1/125s x F4,5; EV+/- @ +0,7
zoom lens in use = 20x / 480mm FF equivalent
continuous shooting = no
hide in use? = no

8)- Rainbow Lorrikeet pair

distance to bird = 15 metres (approx)
camera = Panasonic FZ-2500;
exposure = 1/1600s x F4,5; EV+/- @ +1,0
zoom lens in use = 20x / 480mm FF equivalent
continuous shooting = no
hide in use? = no

9)- Osprey landing at nest

distance to bird = 40 metres (approx)
camera = Panasonic FZ-2500;
exposure = 1/1000s x F4,5
zoom lens in use = 20x / 720mm FF equivalent
continuous shooting = 4k shooting mode used
hide in use? = no

10)- Australian Pelican

distance to bird = 40 metres (approx)
camera = Panasonic FZ-2500;
exposure = 1/1600s x F6,3
zoom lens in use = 20x / 720mm FF equivalent
continuous shooting = 4k shooting mode used
hide in use? = no

11)- Silver gulls in flight

distance to bird = 8-12 metres (approx)
camera = Panasonic FZ-2500;
exposure = 1/2000s x F4,5
zoom lens in use = 20x / 480mm FF equivalent
continuous shooting = yes, medium FPS
hide in use? = no

12)- Heron

distance to bird = 40 metres (approx)
camera = Panasonic FZ-200;
exposure = not recorded
zoom lens in use = 24x then cropped
continuous shooting = no
hide in use? = no