

# Newsletter for week ending 12th March 2022



Collage produced using Pixlr Smartphone App using iPhone 13 Pro Images

## Welcome to this edition of the newsletter and the words you don't want to hear!

First of all I would like to express a heartfelt thanks to everyone who sent get well messages and prayers for my brother and myself following the last newsletter. There were so many that it would have been impossible to respond individually so please accept this acknowledgement here. It has been another whirlwind 3 weeks with more hospital visits for tests and consultations. I did get a fast track appointment for the MRI scan of my prostate and had an agonising 9 day wait to get the results.

During this consultation the urology nurse reached behind her and picked up a fairly thick booklet and proceeded to find one specific page before turning to me and said “ your biopsy results have now come through and I have inform you that we have found some cancer in your prostate”.

I had already mentally prepared to hear those words and I had also expressly asked that my wife was not to be present during this consultation – and she fully understood that decision.

There was then a fairly lengthy discussion about the Gleason score and how my 32 tissue samples had been graded to arrive at a score of 7 built from a 3+4 count putting me in grade 2 cancer band. My brother, with is situation also had a Gleason score of 7 but his was a 4+3 making him a grade 3 overall score.

As there was only 1 sample which turned out to show the abnormality there is now a wait for a multi-disciplinary team to consider each individual’s results as to what course of treatment to recommend. I will get to hear the suggested pathway on the 14<sup>th</sup> March.

It is possible that they could suggest a “wait and watch” method whereby my PSA would be monitored annually and should it begin to climb at that point come back for further examination. She mentioned that this low grade tumour could stay as it is for the rest of my days or could be very slow growing. However there is always the chance that the tumour could escape the prostate capsule and into the nearby lymph node system with a very poor prognosis.

A second option would be put place me on an “active watch” whereby PSA would be monitored every 4 months with a follow up MRI at 12 months to determine if the tumour had changed in size – if so another biopsy to determine the status at that point.

The third option suggested may be to go on a testosterone blocker hormonal course for 3 months to shrink the cancer and then blast it with a 20 minute radiotherapy course carried out over a 5 day period and then again another hormone therapy course. This is the course that my brother has already started and he is experiencing some of the associated side effects of this treatment such as breast tissue increase and lethargy.

A fourth option would be surgery to remove the prostate completely.

Both option 3 and 4 carry some risk of a poor outcome with option 4 carrying the highest degree of associated risk. There is plenty of support material available from our NHS and the Macmillan Cancer trust and I will do doing many hours or research into the two most likely options. I also will be looking at a lifestyle change to reduce our processed food consumption and switch partially to a vegan/plant based diet.

I’m remaining positive about this and **really urge any of my male readers here over the age of 50 to go and get a simple blood test to check your PSA**. Early intervention is one of the ways in making this cancer treatment one with the most successful of outcomes.

## CONSTANT VERSUS VARIABLE APERTURE LENSES



Zoom lenses can be designed with an aperture that remains constant as you zoom through their available focal lens or the designer may choose to employ a simpler construct with fewer lens elements where the effective aperture decreases as you move from the wide angle to telephoto lens setting. The former is referred to as a “constant aperture” lens and the other a “variable aperture” lens.

Zoom lenses zoom by moving some lens element groups both front and back.

Moving the elements positioned in front of the aperture blades does not alter the F number where moving the rear elements do.

So by positioning the zoom elements in front of the diaphragm, the lens is able to zoom and maintain constant aperture.

On the image of the camera on the left (the FZ300/330) looking at the lens decal you can see it states 1:2.8/4.5-108. This means that throughout the lens zoom range of 4.5mm to 108mm (24 to 600mm EFL) when the lens is set to an aperture of f2.8 it will remain at F2.8 throughout the whole zoom range.

In the camera on the right (FZ80/82) you can see that this is labelled 1:2.8-5.9/3.58-215) (20 -1200mm EFL) when the lens is set to an aperture of f2.8 it will gradually decrease from F2.8 to F5.9 through the whole zoom range.

This does not prevent you setting any available aperture though with either camera.

If you set F4 on the FZ300/330 you will find that it will stay set at F4 even though you may zoom through the entire range.

If you try the same setting on the FZ80/82 then providing that the F4 aperture can be set (which will depend upon the zoom position of the lens when you try to set it!)

You will notice that once you have set F4 if you zoom further towards the 1200mm EFL position then the value will eventually change to F5.9.

So what are the advantages or disadvantages of the two lens systems?

Firstly, to create a constant aperture lens requires more elements often using more expensive optical glass elements.

The mechanism to move the zoom elements also is also more complex.

This puts up the cost of the lens (and hence the total camera price in the case of a bridge camera like the FZ300/330) however the optical quality is generally better.

With the FZ80/82 the design of this lens was to build a 60X optical zoom from 20mm to 1200mm effective focal length so this precluded the implementation of a constant aperture system.

It is always better to allow as much light into the smaller sensor bridge cameras to maximise image quality and reduce image noise.

If you are using the FZ80/82 then in aperture priority mode I would suggest that you zoom to the widest angle setting and then set the aperture to F2.8.

Now just ignore the fact that the camera will gradually decrease to F5.9 this as you zoom towards the 1200mm EFL position. This ensures that you will always have the most light entering this camera.

Don't forget that because of the 5.6x crop factor the depth of field of this lens/sensor combination already gives you almost a F16 full frame equivalent depth of field when you are using F2.8!



The FZ80/82 hand held burst mode and 8 median stacked images produces a virtually noise free image for this type of image and shows the 1200mm EFL benefit of this lens.

## Playing with Light



In the window of a local charity shop I spotted this lovely little doll. Originally it was in a very battered box, the clothes were absolutely dirty and the hair a bit of a mess. However the face of this “Leonardo Collection” doll had a certain charm.

It was only £3 so I bought her.

I washed the clothes and did my best to get out all the stains from them however some stubborn stains do remain.

I then dry shampoo cleaned the hair, the hat and the accessories and she began to look more of her original self.

Using just a single studio light at 45 degrees above and 45 degrees to the doll I captured the image using the Fuji XT-4 with 18-55mm F2.8- F4 lens for the  $\frac{3}{4}$  shot and the 55-200mm lens for the head shot both at ISO 160. The background was my usual black backdrop.



The same head shot at ISO 3200 shows how well controlled the image noise is in this camera. It is said to have a dual ISO sensitivity which alters the gain in two stages 160-800 and then 800 and above. There is some confusion as to whether this only applies to log video mode only or it is applied in all settings but it certainly appears to be applied in stills mode in my tests.



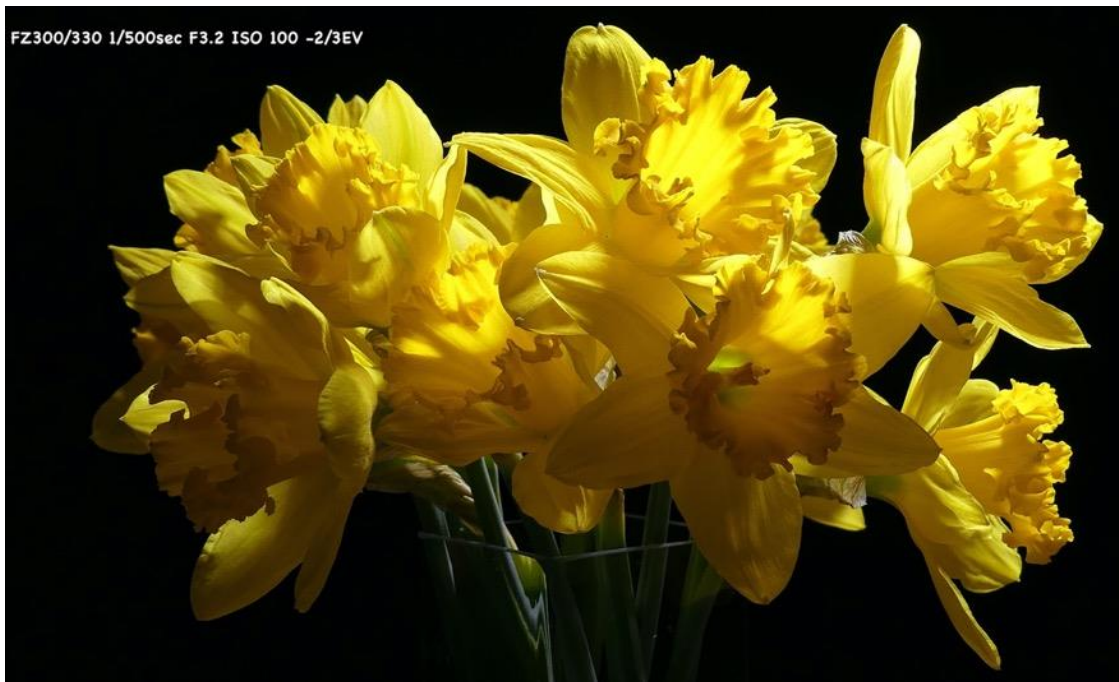
**More Surprising Captures**



FZ80/82 1/250sec F4.3 ISO 80 -2/3EV



FZ300/330 1/500sec F3.2 ISO 100 -2/3EV



I shot a few more images of the daffodil's with the iPhone 12 Pro Max, the FZ80/82 and the FZ300/330. The iPhone capture was using a third party app called Halide which does allow more control of the image capture. It wasn't in a HDR mode and I was surprised at resulting image.



## Using a Flash Extender For Outdoor Photography



Having a flash extender in your wildlife photography kit bag to extend the range of your flashgun is essential. Flashguns work by spreading light in a wide area. Consequently the range that they are effective over can be quite limited.

*The “better beamer” attached to an external flash gun to provide a much longer light throw.*

With wildlife photography the subject is often further away than the flashgun can reach, or it is very diffused by the time it gets there. If you’re using a 300mm lens, for example, the angle of view is narrow and much of the power of the flash is wasted by lighting up areas that are outside of this.

This is where an extender comes in. It focuses the light of the flash into a narrower beam using a “Fresnel” lens. Because the light is less spread out it can travel further before the intensity is reduced.

I’m sure you’ve used one of those zoomable torches where you can adjust the width of the beam. You can have a widely dispersed beam that lights up the area immediately in front of you, or a narrower more focused beam that penetrates further into the distance.

That’s exactly what an extender does. If you focus the flash beam so that it covers the same angle as the angle of view of your lens, then it will have a greater range.

An often overlooked benefit is that it allows a greater depth of field to be achieved than just using a flashgun – even if it can reach the subject. The more intense light produced by the extender means that a smaller aperture can be used. In wildlife photography any increase in depth of field helps.

One of the best ready-made flash extenders on the market is the Walt Anderson Better Beamer and is available from Amazon <https://amzn.to/3HQ5oih> (affiliate link for the most common size external flash guns).

Using standard “Fresnel lenses” it is possible to make your own and is something I’m experimenting with at the moment.

## Experimental Beam Extender

I've been experimenting with sheets of Fresnel lenses reading sheets and found that two sheets together allow for a much tighter beam pattern when the lens is held about 25mm (1inch) from the face of the pop-up flash of the FZ300/330.

In the first image this is the flash in TTL mode and 0EV adjust with the aperture set to F7.1, ISO 100 and 3 metres from the doll



The next image is with the Fresnel lens held in front to the pop up flash



A more concentrated beam output allowed a proper exposure at the same settings.



So these are the small sheets or Fresnel lens pocket reader (which are supplied in packs of 10 on Amazon sites) Two sheets sandwiched together to increase the focal length. I drilled two small holes to allow me to experiment with fixings however I will work on a more suitable method.



Since the Godox TT350 is a nice small compact flash unit I made a very quick “proof-of-concept” Fresnel lens holder to fit on the front of this unit.

Using black foam board and lining the inside with reflective silver foil I made a rectangular tube to fit over the Godox TT350 and then I glued the two Fresnel Lenses to the front of the unit. The flash is used in TTL mode and effectively is firing at full power. As the beam angle is less I was expecting more of a sharper shadow. I’ll experiment some more with different lenses to see if a better result can be achieved.



With the flash zoomed to 105mm and fitted on the FZ80/82 a distance of 20 feet, F5.6 ISO 80 it looks like the extender gives about 1 – 1.5 stops increase in light or at least a doubling of the output light.

## Window Light Photography

You don't need complicated lighting set ups to create stunning images. They can be achieved by simply using available light and simple reflectors and backgrounds.



This doll's portrait, taken with the Panasonic Lumix FZ300/330, was captured using just the window light and a black card background. If needed white card reflectors can be used to bounce back light into shadow areas to reduce the contrast. 200mm EFL, 1/20 sec F3.2 ISO 100



The set up for the above image capture

This natural light can be used to fantastic effect for things like food and jewellery photography. Usually a tripod is used as that helps you to get the perfect composition and help to capture images with longer exposure times.  
Window light images can provide some dramatic lighting effects using a large aperture for very shallow DOF.



*I captured this with a 50mm F1.4 lens on the Canon 5D mk3 during my daughter's wedding*



*Again the accessories just shot with window light*

## Viltrox Weeylite Ninja 20 Review



The Weeylite ninja 20 is the latest studio light from Viltrox. This is a 200W light with a fixed colour temperature of 5600K. It features Bluetooth control via the RC-11 remote controller or via a smartphone app. It has a reduced special effects portfolio (just 6 in this unit) however I have never found the need to use any of them but I'm sure that they are useful in some video productions. It is a mains powered device and powered by a large 36V 200W power supply. There is a "silent mode" which cuts out the cooling fan however the power is reduced to 20% in this mode.

It has a powerful light output of 64000 lux at 1 metre distance using the supplied reflector. The unit has a standard Bowens bayonet mount so it is possible to attach standard light modifiers.



My full video review of the light is now on [YouTube](#).



Looks like spring is just around the corner.

Until the next issue, early April 2022, take care

**Graham**