

General

We had a good turnout of 18, plus 7 Apologies, for a meeting where Len Fenton provided the lion's share of the education and entertainment, and thus:

Len's Presentation "Close-up and Macro Photography"

Len gave a very wide-ranging presentation on these subjects, and whilst it is not possible to put the complete presentation on the website, here are some of my notes on what he addressed on subjects such as the design and selection of the "cameras", lenses, accessories and techniques used, and how to make best use of what you already have, or can make or obtain at low cost.

He identified some of the major areas to consider and the critical points of each, notably for:

- **Camera/phone sensors:** the effects of variations in size & capability can result in widely differing results at the distances used for close-up and macro photography
NB: Andrew Longhurst may well explore some elements of this aspect in his presentation at the March meeting.
- **Focusing:** Accurate focusing is critical in closeup & macro photography, and is dependent on a combination of contributory factors, some of which are discussed below.
- **Exposure:** Exposure settings are critical because they affect the resulting Depth of Field, and shutter speeds may need to be kept high to minimise movement of the subject or the camera/tripod.
- **Depth of Field (DoF):** at very close distances, the Depth of Field (i.e. the "front-to back" distance that is "sharp" in the resulting image) is very small and thus you may not be able to get all of the subject in sharp focus.

There are various techniques to get around the issues, such as:

- Use smallish apertures (*but not too small – around F5.6 to F8 is a good starting point*) to increase the DoF, or large apertures (*say F2.8 to F4*) to minimise it
- "Focus Stacking" is where a series of images can be "melded together" using software to create an image which is in-focus from the front to the rear of an object). He showed demonstration sequences where up to 7 very close-up shots of flowers (etc.) at fractionally different distances could be combined into one using post-processing software to produce a final image that was sharp from the front to the back of the flower head.

In that context, Len suggested that:

- o a good tutorial can be found at: www.extreme-macro.co.uk/focus-stacking
 - o The more recent versions of Photoshop are OK.
 - o 'Helicon Focus' is probably the market leader but both the above are not cheap, although Helicon Focus can be tried up to 30 times free !
 - o A good free program (open source) is PICOLAY and this can be downloaded at www.picolay.de
- **Viewfinders:** the image used for focusing will be affected by the type and position of the viewfinder, and, where available, viewing on the rear screen can give better results, especially if it can be tilted up/down/sideways to make it easier to use when the camera is on a tripod.
 - **Movement:** At very short distances, and especially with "live" ones like insects, any slight movement by the subject (or the camera!) is magnified and will result in a blurred image. Therefore "immobilise" the subject (*e.g. wire/tie/clip in place, glue in place, spray with freezer spray – or hairspray possibly!*) to minimise that happening.

- **Lighting:** At short distances, lighting the subject can be difficult and can result in dark areas due to shadows from the equipment; therefore a diffused light source (*e.g. a ring light, as below*) can result in more even illumination.
- **Backgrounds:** Object in the background behind the subject can/will be distracting if they can be clearly seen in the final image; therefore use a wide Aperture setting (i.e. a low “F-number”/”stop”) &/or a longer focal length lens or zoom lens which has less DoF at a particular Aperture setting than a more “normal” focal length lens at the same Aperture.
- **Distortion:** Although many modern lenses are very good, they inevitably introduce some distortion into the final images, notably “barrel distortion” and “pincushion distortion”, and also there can be distortion causes by tilting the camera upwards or downwards which resulting in “converging verticals”. Therefore look out for this happening and try to minimise it.
- **Composition:** Close-up / Macro photography is all about concentrating the final image on the intended subject; therefore, watch out for intrusive “objects” around that subject, and move them out of the way - or remove them in “post processing” software!
- **Equipment:** Len’s “big tip” is to use a tripod, or a similar firm camera support, whenever you can as it helps massively to keep an object in focus with the very limited DoF you get when the subject is very close to the camera.

He brought along various inexpensive accessories for members to demonstrate, including his:

- **Tripod:** A stable floor-standing or table top tripod is almost essential, but other supports such as “bean bags”, “Pods”, “G-Clamps”, Gorillapod flexible legged tripods, etc., are available and may be suitable for specific applications.
 - **Focusing rail:** For fine adjustment of camera to subject distance, and both towards/away from and to the left/right of the subject with a 2-rail unit - and examples of which can be found here <https://www.ebay.co.uk/sch/i.html?from=R40&trksid=p2499334.m570.l1311.R6.TR10.TRC0.A0.H1.Xmacro+f.TRS0&nkw=macro+focusing+rail&sacat=293>
 - **Ring Light:** Fits around the lens (*via the filter thread on the front of most lenses*) for diffused and even subject lighting, and can provide either variable levels of constant light, or flash for “stopping” movement, e.g. as shown here: https://www.amazon.co.uk/Neuer-Diffusers-Warming-Panasonic-Olympus/dp/B0093WA9GG/ref=sr_1_5?ie=UTF8&qid=1488221042&sr=8-5&keywords=camera+ring+lights
 - **Light box:** A small box with added local illumination for objects to be photographed. Such boxes are commercially available, e.g. as shown here although it seems not to be currently on sale: https://www.amazon.co.uk/AUTOPKIO-Portable-Lightbox-Photography-Lighting/dp/B01LZBYORV/ref=sr_1_1?ie=UTF8&qid=1488221122&sr=8-1&keywords=camera+light+box or you can build your own from a cardboard box!
 - **LED lights:** inexpensive small torches, strips of LEDs fed by batteries or “power banks” etc., head torches, etc., as can be bought from any “pound store” and the usual websites - such as https://www.amazon.co.uk/s?k=head+torch&ref=nb_sb_noss_2
 - **Close-up lenses** for cameras & lenses that have filter threads around the lens (especially on cameras with non-changeable lenses), and are generally the simplest way of reducing the minimum focusing distance of a camera, although not always optically the best, and can often be used on a variety of lenses with suitable adapters
- NB: please DO NOT incorrectly refer to them as “Close-up filters” as they have no optical filtration capabilities!

- **Extension Tubes:** These can only be used with cameras with interchangeable lenses, and are fitted between the bodies and the lenses in order to mount the lenses further away from the camera body sensors, and thus reduce the minimum focusing distances. They are very camera-brand and camera-model specific and so need to be chosen carefully to match your particular camera and lenses, and especially where the lenses have automatically controlled aperture and focusing mechanisms – which may not then work!

NB: Lenses with manually controllable diaphragms and focusing mechanisms are often preferred to those with automatic diaphragms and focusing as they allow closer control of both aspects

NB2: fitting an extension tube will result in loss of “infinity” focus, so can’t be left in place!

- **Cable, wireless or infra-red (“IR”) remote release shutter controls** for cameras with suitable connectors (& many cameras can now be controlled by Apps on a mobile phone)

*NB: **before** buying one for your camera, do on-line searches to check which types can be used with your exact model as they do vary considerably from camera brand-to-brand, and from camera model-to-model within each brand.*

Finally, after the above, Len showed some of his interesting close-up and macro shots in a short “guess what this is and where was it taken?” “quiz” – such as fine and variegated-colours of Barbados sand on a tray, small soap bubbles on a transparent (glass?) tray sitting on a richly coloured wooden table top, and so on.

He also suggested that a good article covering most aspects of close-up photography can be found www.photographylife.com/macro-photography-tutorial/5

This was a very interesting and informative introduction for many members to the subject of close-up and macro photography, and will, it is to be hoped, encourage them to experiment and find out what they and their cameras and phones are capable of in this respect. Therefore, many thanks to Len for giving us the benefit of his skill and experience 😊

The February Prints Competition “January Blues”

Not a huge entry but those that were submitted were excellent, and the voting resulted in the following:

1 st	-	Margaret Mayes	“Blue Fountain”
2 nd	-	Andrew Longhurst	“Cat loves Blue Flowers”
3 rd	-	Ian Brown	“Blue Tit”
4 th	-	Ian Brown	“Canada Goose in the Blue Sky”

As usual the Winning Members should send the image files for those shots to the email address hillingdonu3a.pictures@gmail.com - giving the:

Competition name – “January Blues”, the photo position number and the “photo name” (**AS ABOVE, PLEASE!!**), and, of course, their own name; and image **file sizes should be NO LARGER than 1Mb**.

NB: I will send a message to the above email address so that Eirwen knows what to expect to receive from the Winners. They should then be on our webpages a few days after the WCH meeting on Monday 9th March – see here in due course: <https://u3asites.org.uk/hillingdon/page/93256>

Len’s Photo Quiz

Having had to be held over from both the December and January meetings, it had since grown and grown until there were finally 72 mind-teasing images (often composites) to tax the brains of those present in trying to identify the photographic “associations”, covering almost everything from camera brands, exposure settings and shooting techniques to image faults.

Not many people “got” a huge number of “correct” answers (*sometimes there were several possibilities for a particular image!*) but most people got a decent number, and I don’t think that anyone flunked the lot (*or at least I hope not, or else our efforts here in the Group will all have been for nought!*)

This quiz took a really big effort, and a lot of time, from Len and so we thank him greatly for that and for giving us quite a few laughs - *and not a few groans!* – on the day 😊

Future meetings

March Meeting

Main Presentation:

Andrew Longhurst will be giving his views on the comparative “pros and cons” of various types of “photographic devices” such as compact cameras, DSLRs “Mirrorless Interchangeable Lens” (“MILC”) cameras, “Bridge” cameras, and “phones used as cameras”.

The Prints Competition: “Close-up and Macro Photographs”

Since we had Len’s Close-up and Macro Photography presentation at this meeting, it was agreed that the Prints Competition would on the same subjects.

To remind you: prints are to be from shots taken in the last 12 months (*preferably a lot more recent than that!*) before the meeting in question, and should be between (roughly) A5 & A4 size, with the following info on the back (a post-it will do):

- Date
- Camera make/type
- Image size (in “pixels”) & Image file size (in “kB” or “MB”)
- Shutter speed, Aperture size, and possibly the exposure metering mode
- Lens “focal length” & Zoom setting (only “sometimes” for some camera/lens combos)
- ISO sensitivity setting
- Any Exposure adjustments used, including possibly “White Balance” setting.
- Whether flash was used
- If you did “post production work” (“Photoshopping”, etc.) then notes on what you did.

“Your Shot of the Month – ANYTHING Goes!”

Unfortunately, by the time that we had had Len’s presentation and quiz, and the Prints voting, we had run out of time for this competition, which was to have covered the period from November until this meeting 😞.

Therefore I am making a slight change to the approach for the March meeting, in that we will have **TWO** competitions, i.e.:

- The **FIRST** one will cover the November to February period – most of the entries for which I assume that I have already received;
- The **SECOND** one will cover the period between the February and March meetings, and thus, hopefully, be a return to the “relative normality” of how this competition is usually run.

For the latter competition, the shots must *have* be taken between 24th February and 23rd March - but please send them to me by 18th March to give me time to put them into the presentation for the 23rd!

April Meeting:

Hopefully, Malcolm Barwick will be giving us a presentation on “Light” along the lines of “what it is”, “what it does” and “How to use it to advantage” in photography.

May Meeting and Beyond:

As outlined below, the May meeting is likely to be an off-site photoshoot on Thursday the 28th – although where and by whom it would be organised is still TBD.

Thus we need members to lead that and other off-site photo shoots to reasonably local places which they know to offer good photographic opportunities, and will also be likely to prove enjoyable for members’ partners and companions (and their dogs, maybe!)

As for the meeting themes from June onwards, please send/tell us your ideas and requests for future meeting themes AND, IF POSSIBLE, express YOUR willingness to prepare and present the relevant presentations!

Something else – “Real” “Bricks and Mortar” Camera Shops you can visit!

During discussions, someone asked where they could find “Real “bricks & mortar” camera shops to visit and compare “stuff”, and so here are some suggested at the time &/or which I can recommend as being “relatively local”, stock a reasonable range of photographic brands and equipment, and a have decent reputation (all having been established for many years):

- **SRS Microsystems** - 90-92 The Parade, High Street, Watford, WD17 1AW
<https://www.srsmicrosystems.co.uk/>
- **Park Cameras** - 53-54 Rathbone Place, Fitzrovia, London W1T 1JR & York Road, Burgess Hill, West Sussex RH15 9TT,
https://www.parkcameras.com/?gclid=EAlaIqObChMI39ay6e305wIVgrTtCh3t5gDPEAAYASAAEgJbL_D_BwE
- **Camera World** - 72 Wells Street, London W1T 3QF <https://www.cameraworld.co.uk/>
- **London Camera Exchange** – 98 Strand, London WC2R 0EW; 8-9 Tunsgate, Guildford GU1 3QT; 7 Station Rd, Reading RG11 1LG (and they have many more branches around the UK)
<https://www.lcegroup.co.uk/>
- **WEX Photo Video** – 37-39 Commercial Rd, Whitechapel, London E1 1LF
<https://www.wexphotovideo.com/>

Any further recommendations for others within a reasonable distance will welcomed, and added to forthcoming issues of the Notes!

Group Membership Review and Confirmation

As I mentioned in the Notes to the January meeting, many Members come along very regularly, but a number have not seen for a long time, and thus we wonder if they are still interested in belonging to the group?

Therefore, as it takes a fair amount of time and effort to accurately maintain the membership records, email addresses and contact phone numbers, and to distribute information to people, we will soon be reducing the size of the mailing list.

We briefly discussed the above at the February meeting and agreed to “slim down” the list for the beginning of the next “U3A financial year” in April – **therefore, if you have not already done so, please email me ASAP to confirm that you DO want to remain on the list.**

Monthly meeting Diary Dates for 2020 - the 4th Monday of each month

(EXCEPT for some on Thursdays as indicated below)

On the basis that the meetings will normally – *wherever possible* – be on the 4th Monday of the month, here are the dates booked **at the moment**:

March 23rd, April 27th, *Thursday* May 28th (*), June 22nd, July 27th, Aug 24th (**), September 28th, October 26th, November 23rd, *Thursday* December 17th (***)

We discussed the above dates, and provisionally agreed the following:

- ***May** – The 4th Monday (24th) is a Bank Holiday, and so, after discussions we provisionally agreed to hold an off-site photo shoot on **Thursday 28th**.
- ****August** – The Church is completely booked throughout August and will not be available on Monday 24th and so *we came to a decision to aim for an off-site photoshoot on the same day – although, again, where and by whom it would be organised is still TBD*
- *****December** – Xmas Day is Fri 25th and therefore we have provisionally booked Thursday 17th, but Judy will check on whether that is still viable, given the “total fiasco” on the 19th of December 2019!

Therefore, all the best and see you on **MONDAY 23rd March 2020**

John Allen

And on behalf of the other members of the Steering Committee: Judy Peddie, Len Fenton and Brian Hillier!