Equipment & Photographic Techniques

A few practical Do's before you leave.

- Check that your camera equipment is functioning properly.
- Familiarise yourself with the basic functions of your camera (and bring your manual in case you require assistance).
- Take some pictures on memory cards and make sure that the images download correctly onto your computer.
- Check that you can successfully transfer files to your portable storage device if you have one.
- Film users check your camera is loading properly and take a test roll of film to check for scratches, exposure and other problems prior to travelling.
- Make sure your camera equipment is fully insured for your destination.
- Keep a check list of serial numbers just in case!

Suggested Equipment

Camera & Lenses

- Digital or film SLR camera? The majority of Wildshots guests are now digital camera users but film users are equally welcome!
- Lenses suitable for the subjects that you intend to photograph check itinerary for fuller details of likely subjects.
- For wildlife subjects we would recommend a telephoto lens of 300mm or longer plus teleconvertors. Many guests use a 500mm as their main telephoto lens. Teleconvertors are sold as 1.4x (1.7x Nikon only) or 2x and are very useful for increasing focal length. Check that your lens will accept teleconvertors prior to purchase and buy the same brand as the lens for best results. A fast telephoto lens (e.g. f2.8 or f4) is recommended to get the most from flight photography.
- A mid-telephoto lens (e.g. 70- 200mm or 100-300mm) is ideal for some wildlife subjects, especially where you want to show the subject as part of its environment and also for landscape photography.
- A standard lens or zoom that covers the range 28- 70mm is useful for landscape work and as a general purpose lens.
- A wide-angle lens is highly recommended for landscape photography. For film users or digital cameras with a full frame sensor, a lens in the range 17-40mm or 20-35mm is ideal. Many digital cameras have a 1.5X 'cropped' sensor, so that a 28mm 'wide-angle' is effectively a 42mm 'not so wide-angle'! So, you may want to consider buying a specific 'digital' lens in the range 10- 20mm to overcome this 'digital' problem.
- A macro lens though not essential is very useful for close-up photography and reveals a fascinating world in miniature. Tamron's 90mm or Sigma's 180mm offer exceptional quality.

Accessories

- Spare batteries for camera plus battery charger.
- Portable storage device or laptop computer for digital users.
- Compact flash cards these are cheap now so it's worth having a total of around 8 -12 Gb as a minimum.

- Film users should estimate how much film they might use and then double it! It's always better to have more than you require. ISO 50 / 100 is recommended for landscape work and ISO 100 / 400 for wildlife.
- A 'small' flash unit is often useful for 'fill-in' lighting or close-up work.
- Cable release. Can be useful and some photographers swear by them.
- Hotshoe bubble is invaluable for keeping horizons straight.

Camera Bag

There are now more camera bags on the market as there are cameras so deciding which one is best can be difficult. Lowepro and Tamrac purpose-built rucksack style bags are among the best. Buy one that suits your current needs and one that is 'just' big enough to fit all the equipment you plan to take on a tour. Overseas travellers should be aware of airline baggage size restrictions (for carry-on luggage) or otherwise invest in a heavy duty hard plastic, waterproof camera case (e.g. Pelican Cases) that can be stored in the main hold.

A photographic or similar waistcoat or 'bum bag' is useful for keeping small camera accessories etc. to hand.

Tripod

The most common cause of blurred images is an inadequate tripod. First of all, use one whenever possible (the exception being when shooting from a bean bag). Using a tripod will greatly improve image sharpness as well as composition but make sure that your tripod is (more than) adequate for the job! A 'poor' tripod and head may not be good enough to provide a solid support for your camera / lens combination but equally it may impinge on the way that you work and ultimately hinder your ability to take images quickly and effectively. It must be solid and be able to support the lenses you are using. Carbon fibre tripods are expensive but are the best compromise between strength and weight. A tripod head that accepts quick release plates is invaluable (e.g. Arca Swiss B1 ball head). A good quality ball head is ideal and suits most people. Seek advice if you are unsure and try before you buy if possible.

Photographic Techniques & Considerations

Lighting: The quality of the photographic image relies on good lighting. However, good light for one subject doesn't necessarily suit another. Low angled sunlight at either end of the day is optimum for many subjects. Consequently, on many of our tours we seek to be out in the field early, and late in the day, to take full advantage of the best lighting whenever possible. In summer time or in locations where harsh overhead light is a problem we will often take an extended break during the middle of the day. Soft overcast light equally suits many wildlife and nature subjects, eliminating contrast problems and providing even lighting with softer shadows. Dramatic weather can also enhance many images so you can expect to photograph in rain, snow and wind to produce images with a difference.

Exposure: This can be a constant worry for many photographers but there is no need to be overly obsessed by this, particularly if you are a digital user. Most cameras now have very effective built-in metering systems that produce properly exposed images 9 times out of 10. There will always be tricky lighting situations such as light subjects on dark backgrounds (or vice versa) and backlit situations but with practice it is not difficult to become proficient and your guides will help out whenever advice is required.

You should ideally shoot in either Manual or AV metering mode. If you are unsure of these modes then we can offer tuition but in the meantime check out your manual and try shooting in these modes if

you don't already. Digital users should make full use of the cameras histogram that provides an instant visual exposure appraisal in the form of a graph. Again we can offer assistance with this but please make sure you know how to activate this function or bring your manual with you as all cameras differ.

Depth of Field: As well as determining a correct exposure of your images, the exposure settings of Aperture and Shutter Speed also determine the 'look' of your images. The aperture or f-stop (f4, f5.6, f8 etc.) determines how much of the image will be in focus with any given lens - the depth fo field. A large aperture such as f4 will result in limited depth of field whereas a small aperture of f16 will provide much greater depth of field. As a general rule wide apertures such as f4 or f5.6 are used for photographing wildlife subjects (because a fast shutter speed is usually required) and a small aperture such as f16 is used for landscape work when you require maximum depth of field. This is one advantage of working in AV (Aperture priority) or Manual mode because it allows you to select the desired aperture setting.

Shutter speed: By selecting a desired aperture, the corresponding shutter speed will be determined by the lighting conditions and ISO setting of the camera / film. The fastest shutter speed will be obtained by shooting at maximum aperture for a given lens (e.g. f5.6). A shutter speed of at least 1/125th sec will be required for most wildlife subjects, even when using a tripod and a much faster speed (e.g. 1/500th - 1/1000th sec) will be required to arrest fast subject movement such as birds in flight. For landscape work the shutter speed is often irrelevant so it is possible to photograph with shutter speeds of several seconds if required.

Composition: Composition is often instinctive and will certainly make all the difference to your images - good or bad - so think carefully about how you compose a photograph before releasing the shutter. Similarly, always work hard at getting the most from any given situation by selecting a variety of different viewpoints and lenses. A good shot may only take seconds to capture but a great one can take time and persistence.

Here are a few basic ideas to consider when composing your images.

- Try to shoot at eye level to your wildlife subjects if possible. This produces the most intimate images with impact. Kneel or lie on the ground if necessary.
- Try to place wildlife subjects so that they are looking or moving into the frame with more space in front of the subject. Experiment with using different focusing points to aid composition.
- Wait for the decisive moment when the subject looks its best / is in the best position. A catchlight in the eye of wildlife subjects always adds life to picture.
- Take plenty of images with the subject at different size in the frame and try different orientations portrait and landscape format.
- Check for straight horizons use a hotshoe bubble whenever practical and place the horizon on the thirds rather than splitting the frame in half (reflections are one exception here).
- Try to avoid the horizon or a straight line running through the wildlife subject. Change position so that the entire subject is against a solid background or the sky.
- Seek advice from your guides and fellow guests. Sharing ideas is the best way to improve and get the most from each shoot.
- Try something different each time you photograph. New angles, unusual viewpoints, choice of lens, lighting effect etc.

Digital considerations

RAW or JPEG format: The choice of shooting format depends largely on how you intend to use the final images and how much time you want to spend in front of a computer! RAW files are unmanipulated and are unprocessed data straight form the camera, which you then need to convert to a working file such as a TIFF using processing software. The advantage of RAW is that you are able to optimise exposure and colour during processing without degrading the image. The converted RAW file will also be better quality, allowing for more detail in shadows and highlights. A JPEG is a file that has been modified by the camera using parameters that you can control if required, such as colour saturation and sharpening. A JPEG is a smaller file size than RAW allowing more images to be recorded on storage cards / devices. JPEG files can degrade over time and are equivalent to having a final print but not having the original piece of film - great until you lose the print or it fades!

Our recommendation is to shoot in RAW but we appreciate that this isn't for everyone and for some JPEGs offer superb quality without the hassle!

Noise and ISO: Digital noise is a degradation of an image caused by incorrectly coloured pixels and is most noticeable in dark areas of an image. It has a granular appearance and is the digital equivalent to film grain. As with film, noise increases with an increase in ISO setting. However, unlike film, noise is not particularly noticeable at ISO settings of 400 or lower. As a general rule use ISO settings of 200 or 400 for wildlife and ISO 100 (or 50) for landscape work. In low light situations an ISO setting of 800 or even 1600 can be used. Noise can then be removed reasonably effectively using software such as Noise Ninja or Neat Image.

Summary

This is just some basic practical advice that we hope will help when planning your Phototour with us. We are always happy to provide further help and assistance prior to your holiday and of course our guides are always on hand to provide practical help and answer your questions once your tour is underway.