

Tips, Trials and Tribulations of

Nature photography

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Nature Competition Regulations

Nature



Wildlife



GENERAL SUBJECT MATTER		
	ALLOWED	NOT ALLOWED
NATURE	Anything to do with natural history (the study and description of organisms and natural objects). Subject matter must be identifiable.	Anything that is classified as anthropology (the study of humans) or archaeology (the study of historic or prehistoric peoples and their cultures)
WILDLIFE	Same as Nature.	Same as Nature.
SPECIFIC SUBJECT MATTER		
	ALLOWED	NOT ALLOWED
NATURE	All extant (not extinct) organisms (plants, animals, etc); landscapes, geological formations, and weather phenomena.	Human created hybrid plants, cultivated plants, feral animals, domestic animals, mounted specimens of plants and animals.
WILDLIFE	Animals, birds, insects that are free and unrestrained in a natural or adopted environment. Carcasses of extant species.	Landscapes and geological formations. Animals, birds, insects, etc. that are in captivity or under controlled conditions. Botanical species under controlled conditions (such as plants growing in a hothouse).
HUMAN ELEMENTS		
	ALLOWED	NOT ALLOWED
NATURE	Human elements that are an integral part of the nature story (such as birds nesting on a man-made structure). Scientific bands, tags or collars.	Human elements (such as buildings) that are not part of the nature story being told by the image.
WILDLIFE	Same as Nature.	Same as Nature.
IMAGE ALTERATIONS		
	ALLOWED	NOT ALLOWED
NATURE	Cropping. HDR techniques. Focus stacking. Removal of dust spots, digital noise or scratches on film. Subject must be presented honestly.	Anything (such as cloning) that alters the content of the original scene by adding, moving or removing image elements. Stitching together multiple images (e.g. to create a panorama)
WILDLIFE	Same as Nature.	Same as Nature.
IMAGE ADJUSTMENTS		
	ALLOWED	NOT ALLOWED
NATURE	Techniques (such as contrast adjustment) that enhance the image without changing the nature story, or altering the pictorial content of the original scene. Grey-scale monochrome images.	Adjustments that change the nature story, such as turning a daylight scene into a night scene. Toned monochrome images. Infrared images.
WILDLIFE	Same as Nature.	Same as Nature.

Some tips for starters

- LOTS OF PRACTICE! Practising at a Zoo or Wildlife Park will be a great help
- To avoid including cage structures, you will need a telephoto lens (200mm +)
- Preferably aim for early morning or later afternoon light, avoid harsh shadows and bright contrast
- Set your camera to Raw (with or without Jpeg high quality)
- While crop sensors bring you closer to your subject, image quality, dynamic range and depth of field will differ
- For portraits it is generally best to use a wide aperture (f5.6, f4 or less) to give a nicer bokeh behind the subject, but even f6.3 or f7.1 can work if you are close to subject
- I mainly use centre-weighted or spot metering, but matrix can also be handy, especially for landscapes.
- Often best to keep your shutter speed at a minimum of 1/500s when possible in case of unexpected movement

Some Zoo Subjects – target the eyes



1/250 sec, f4, ISO 1000,
300mm f4 lens, low light



1/1600 sec, f7.1, ISO 320,
Sigma 150-600 f 6.3 lens

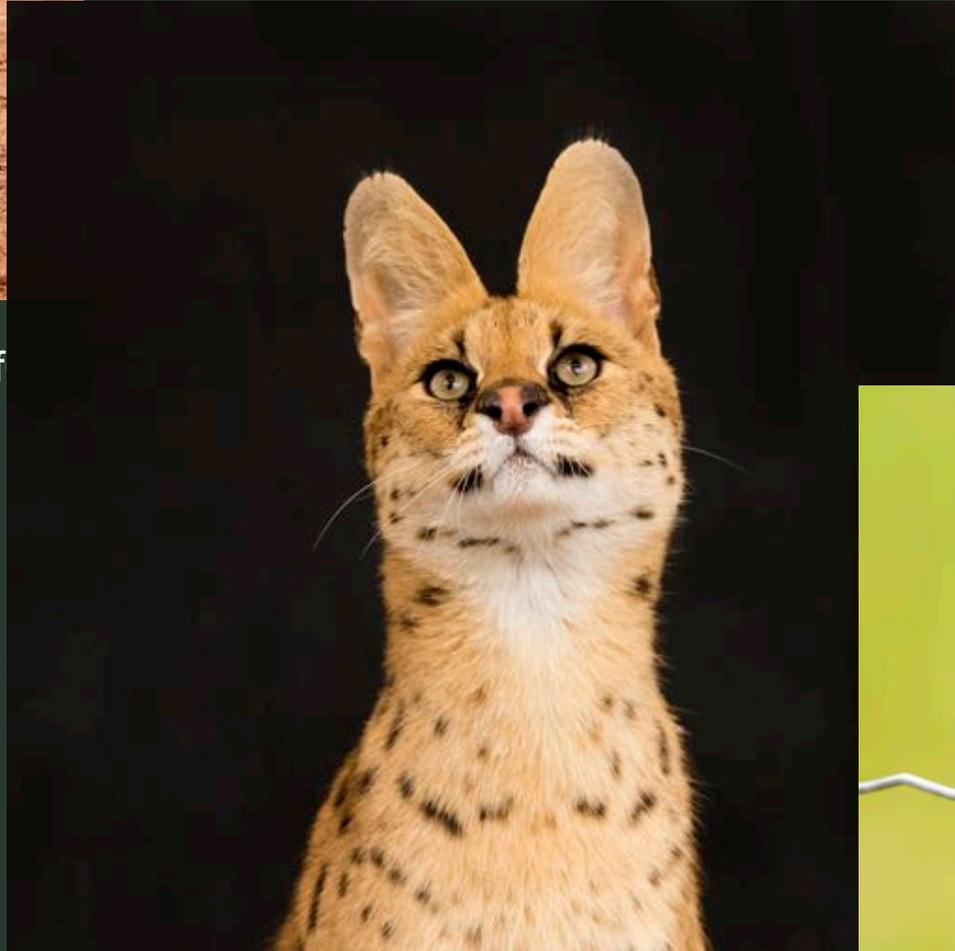


1/500 sec, f3.5, ISO 1600,
300mm f2.8 lens, low light

These are OK for Nature, but not Wildlife



1/1000 sec, f5.6, ISO 400, 150-600 f



1/1000 sec, f4.5, ISO 2500, 300mm f4 lens,

Whenever possible, try to adjust either shutter or aperture, in preference to raising ISO

1/500 sec, f7.1, ISO 1600, 150-600 f6.3 lens





Hyacinth Macaws in love! Jurong Bird Park
1/500, f5.6, ISO 1600: 300mm f2.8 lens

Always nice to have your
subject doing something!

Blue and yellow Macaw in flight, Jurong Park
1/2000, f5.3, ISO 3200: 300mm f2.8 lens



Focus and shutter settings

- Single spot is generally most useful. Try to aim for the eye by moving the spot, or focussing on eye from centre spot and reframing
- Group focus points – e.g. 4 or 9, can be more helpful with birds in flight
- Landscape can have either targeted focus area or all focus points activated
- Keep shutter speed up with a subject moving or likely to be
- Set camera on continuous autofocus (AF-C, continuous autoservo) at high frame rate for fast moving subjects
- Back button focus highly recommended – check Youtube videos for setup and use

And wildlife.....water and birds



The dreaded over blown highlights need watching out for - histogram



1/2500, f4, ISO 2500, low light

Diving Pied Cormorant, breeding plumage, Stockton, NSW. 1/1600, f6.3, ISO 250.



1/800, f8, ISO 640

Yes, Dad has a fish snack!

Common difficulties



■ Problem

1. Subject is un-cooperative – moving away, partly hidden etc.
2. Focus is not quite sharp
3. Light is too contrasted or too low
4. Distance from subject becomes too great, available focal length of lens is inadequate.
5. Selected mode (e.g. shutter priority) is not giving reliable exposure

■ Possible solution

1. Wait (load up with patience!), or choose another subject
2. Check focus settings, use tripod or find a rest for camera; lots of practice with moving subjects
3. Wait for suitable light, preferably early morning, later afternoon, or lightly overcast
4. Wait for subject to approach, or move closer. Minimum 300mm or greater in wildlife photography; use of extender should be no more than 1.4x; loss of one stop of light when in use e.g. f4 = f5.6
5. Try Manual mode with auto ISO

Birds in flight



1/1600s, f6.3, ISO 400. Use a fast shutter, depending on the speed of the bird eg. from 1250 to 3200

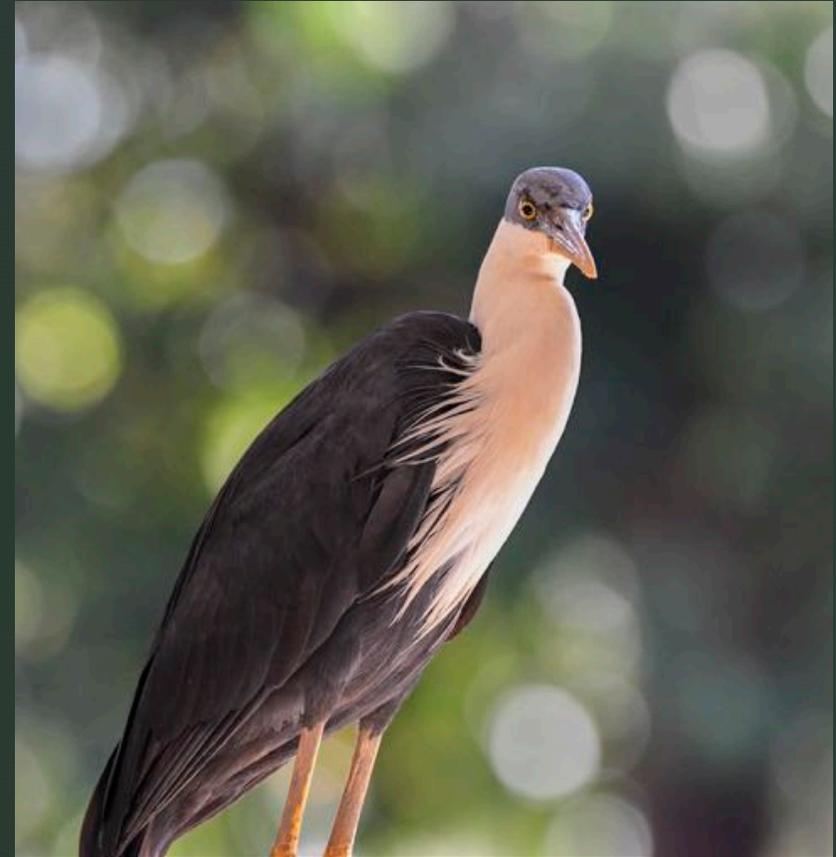


1/2000s, f6.3, ISO 1000

Exposure and metering

- Automatic exposure modes such as Aperture/Shutter Priority and Manual with Auto ISO can help in many situations, but some exposure compensation (+ or - EV) will often be necessary.
- Full Manual gives total control but also needs monitoring of the meter scale in viewfinder with adjustments at times.
- Matrix/evaluative metering evens exposure out – often suitable for landscape or scenes/subjects with a mixed tonal range.
- Centre-weighted/partial metering is often useful for many wildlife subjects, and the camera meters best around the focus spot/s used.
- Spot metering uses only a tiny area (2% of frame) and is useful for singling out a particular spot for special attention, but for BIF (difficult to keep small spot on flying bird), aperture or shutter priority are less reliable than manual mode, which will keep exposure more stable despite where the metering spot ends up.
- Have Playback preview set to show histogram and highlight 'blinkies,' check it regularly and adjust EV as necessary

Composition and magic of light....



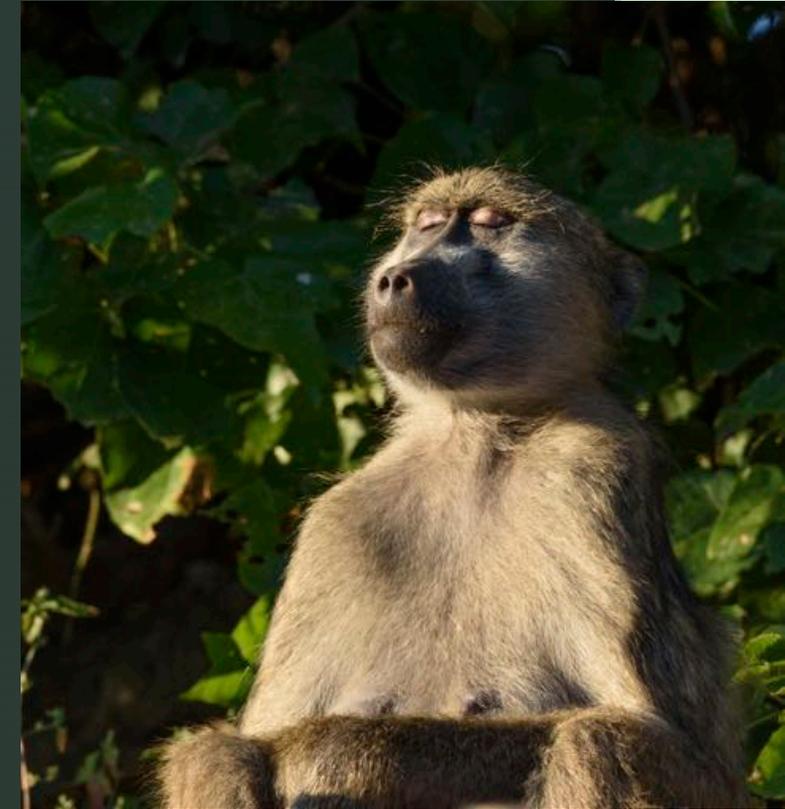
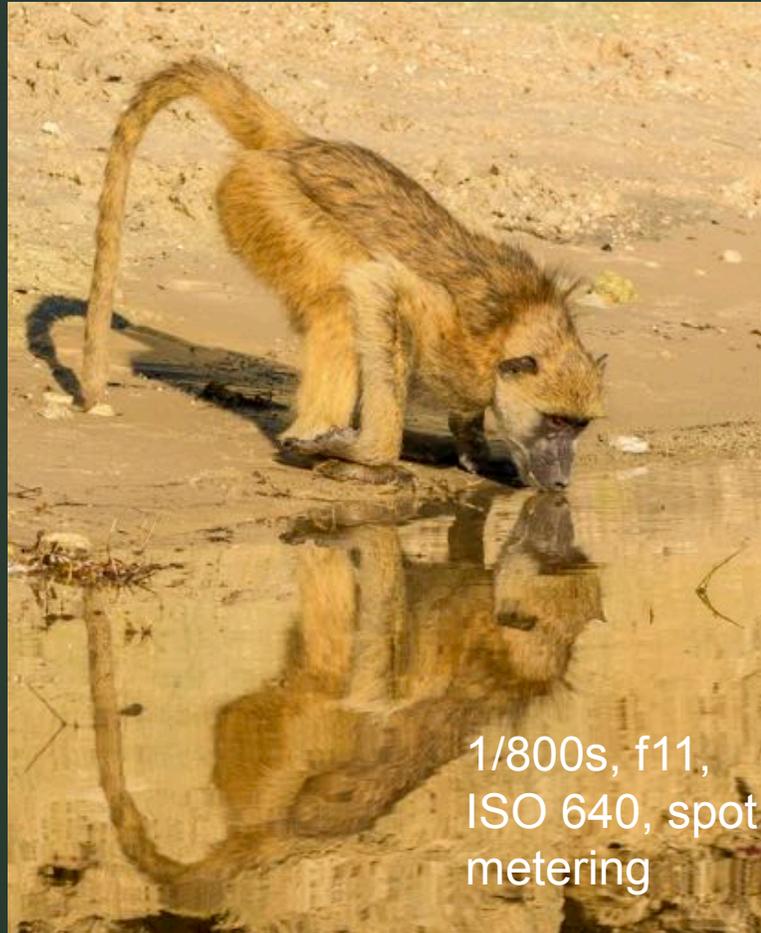
Taken during day



1/1250, f7.1, ISO 450

Late afternoon light





Full frame tonal range + prime lens sharper focus are hard to beat, when you can afford them, but crop sensors are perfectly adequate in most situations. Just allow for aiming to use a lower ISO whenever possible.



Full frame camera,
1/2000s, 300mm f4 lens,
ISO1600

Taken at eye level





Crop factor

- The more an image is cropped, either in camera or on computer, the more sharpness and detail deteriorates
 - Larger full frame sensors in cameras with a greater number of megapixels will allow more room for cropping in before image deteriorates
 - Aim to get close enough to subject so that it fills $1/3 +$ of frame, whenever possible
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Original image on crop
sensor: 1/2500, f5.6, ISO
1250



When cropped in this
much, the birds needed
more sharpening and a
little noise reduction



Landscape

Australia has a wealth of great landscape opportunities. Use of wide angle lenses, a tripod, filters, live view and knowledge of suitable aperture selection are all important.



Morning and
afternoon light is
unbeatable.....



- ▶ Dark and light for artistic effect...





High key results when pushing histogram to the right

Telling a story is often a plus for nature competitions...









1/2000, f6.3, ISO 320



Now go for it!!

