



Welcome to the 2nd of the WCC Monday Night Training Sessions

2nd half 2016

Tonight's topic is:

WAVERLEY CAMERA CLUB

WCC



Nature Photography

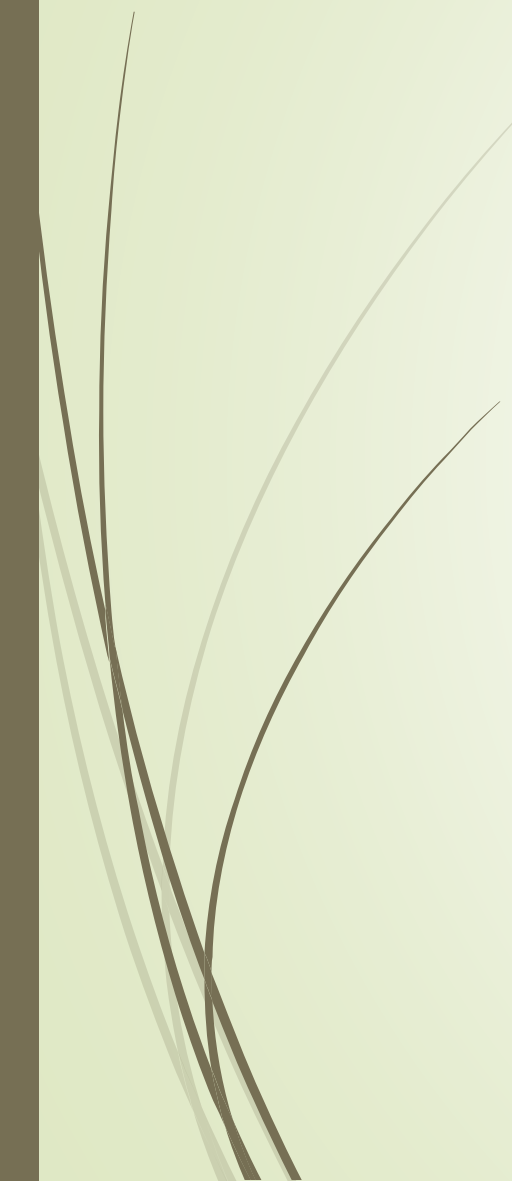
By Dave Sumner

Please note that all overlapping images have been placed on a blank slide after the content page they appeared on so that it can be made into a PDF. Also the videos are now linked via URL.



What is Nature Photography?

The Australian Photographic Society's (APS) and the Fédération Internationale de l'Art Photographique's (FIAP) Definition is:

- Nature photography depicts living, untamed animals and uncultivated plants in a natural habitat, geology and the wide diversity of natural phenomena, from insects to icebergs.
 - Photographs of animals that are domesticated, caged or under any form of restraint, as well as photographs of cultivated plants are ineligible.
 - Minimal evidence of humans is acceptable for nature subjects, such as barn owls or storks, adapting to an environment modified by humans, or natural forces, like hurricanes or tidal waves, reclaiming it.
 - The original image must have been taken by the photographer, whatever photographic medium is used.
 - Any manipulation or modification to the original image is limited to minor retouching of blemishes and must not alter the content of the original scene.
 - After satisfying the above requirements, every effort should be made to ensure the highest level of artistic skill in all nature photographs.
- 



So, What Does That Mean to You and I?

Well, unless you are entering national or international competitions, then to you and I it means:

Zilch

Nothing

Not a Lot





However, in the world of nature competition, they couldn't survive without such a limiting definition, but why?

This is José Luis Rodríguez's image that won The Wildlife Photographer of the Year competition in 2009.



© Jose Luis Rodriguez/Veolia Environment Wildlife Photographer of the Year 2009

- So, does anyone know what happened or more to the point is there anyone who doesn't know what happened?
- The 2009 Wildlife Photographer of the Year was stripped of his £10,000 prize, after judges found he was likely to have hired a tame Iberian wolf to stage the image of a species seen rarely in the wild.
- The judges of the award, which attracted more than 43,000 entries from 94 countries, said they were convinced José Luis Rodríguez hired the wolf called Ossian from a Madrid wildlife park, contradicting his claim the image was taken in the wild after months of patient tracking of the dwindling species.
- So this is why they need a strict definition

- 
- 
- Jim Brandenburg, a judge and a wildlife photographer with 45 years experience of taking pictures of wolves, marvelled at the image of the animal, captured so clearly and apparently hunting a farmer's livestock. He declared it "a masterfully executed moment", but having studied pictures of Ossian and Rodriguez's image, he is now "99.9%" sure it is a tame wolf.
 - The organisers were alerted to suspicions about the image by Spanish photographers who recognised the wolf and the location as the Cañada Real Wildlife Park.
 - Wolf experts also questioned why the wolf would jump the gate when a wild animal was more likely to squeeze between the bars. The judges said they asked Rodriguez for corroboration of his story and if there was anyone who could act as a witness to back him up, but his answers were inadequate.



Now, Back to the Real World

- You and I do not need to worry too much about definitions, we have the luxury of being able to do as we please.
- OR DO WE?
- Take a shot of your dog or cat and you've got exactly that a picture of a pet and it doesn't really matter what is in the image. But, do you want that shot of a wild animal at the zoo to have man made bars and fences in it?
- For e.g. if you want a photograph of an Orange Bellied Parrot how are you going to do that? There are only around 50 breeding pairs left in the wild and a total of 200 birds left in existence. So one option is to attend the Melbourne Water safety briefing, pay for a key and attend the Water Treatment Plant at Werribee in the hope that you will see one in the few weeks they are in Victoria. Or, you can travel to Tasmania and try to find one there but it is a big island. Or, you can go to Healesville Sanctuary where they have 10 to 20 and photograph them there but, you are for all intents and purposes, 'cheating' and for it to be a convincing shot, there needs to be no evidence of the aviary or people etc.

- So, the answer is no, we do not need strict definitions but yes, we do want to create convincing photographs. So what we need are some guidelines to help us achieve convincing shots.
- This is one of my pictures of an Orange Bellied Parrot but where was this taken?
 - Tasmania?
 - Werribee?
 - Healesville?

I've never been to Tasmania so unless I have a VERY long lens, that narrows it down to Werribee or Healesville and I frequent both so it could be either.

This reinforces my point that we need to produce shots that convince the viewer that it was taken in the wild, David Attenborough's production team have been doing just that for years so why shouldn't we?





Don't believe me about David Attenborough.....then watch this

This is the David Attenborough Lyrebird video from around 1998 which you may or may not have seen on TV. In it he showcases the Superb Lyrebird and the mimicking sounds it makes.

The video is made to look like that David is in the rainforest but if I pause this at around 35 seconds you will see something that you might recognise that surprises you. Also, it is in my opinion that the chainsaw sounds were not made by this bird. In 10 years of following Lyrebirds around, I have never heard any sounds like chainsaws coming from Lyrebirds. This is likely the power of clever editing, similar to what we can do by hiding the manmade objects in our pictures.

- ▶ David Attenborough's video can be watched here, be sure to pause the video at 35 seconds to see where the video was filmed, the Rainforest Aviary at Healesville
- ▶ <https://www.youtube.com/watch?v=VjE0Kdfos4Y>



Well Now is the Time....

There's no escaping it

We're going to have a look at some of my photographs but, we're going to try and spot which is the first slide with a captive animal or cultivated plant?

To make it more interesting, the first person to give me the correct answer will get a small prize.

Please don't shout it out and I'll ask you at the end.

The slideshow can be found and watched here

<http://www.imagistic.com.au/Audio-Visuals/General-Videos/i-ZKW2r9h>

Helmeted Honeyeater
Melbourne Zoo





What Do We Need For Successful Wildlife Photography?

- Equipment – what you will need to capture wildlife successfully.
- Accessories – additional equipment to assist you.
- Methodology – how to go about getting the shots.
- Patience – in a nutshell ‘patience’ means you might be hanging around for a long time.

Remember though, in all areas of photography ‘all comes to those who wait’ and that can be said especially of landscape and wildlife photography.



Equipment



- ▶ A good camera with a good focussing system helps here, megapixels mean that you can crop in to your shots. Good noise performance also helps because cropping in magnifies noise also.
- ▶ A long sharp lens is essential, you can get by with a poorer camera but you cannot compromise on the lens. 200mm is really an absolute minimum, 400mm is what I use sometimes with a 1.4 multiplier taking it to 540mm . Also, you will get more zoom if you have a cropped sensor camera. Some, who can afford them use 400 & 600mm primes but even these can limit you in certain circumstances.
- ▶ Tripod or Monopod with a ball head which gives you flexibility. If you are panning and shooting birds in flight then a tripod with a Gimbal head is a good idea.
- ▶ Remote trigger preferably wireless with a reasonable range as you may want to setup your camera and retire to a safe distance to let the animals show themselves.



160-640mm Equivalent on 7D Mark II



With 1.4x Extender **224-896mm**



With 2x Extender (no AF) **320-1280mm**





Accessories

- A lightweight fold up stool, about \$15 from Aussie Disposals. This is essential especially when the ground is wet.
- Toned down clothing, camouflage if possible to reduce the chances of scaring the wildlife.
- Throw over hide or bird hide which hides you from the animals but also doubles up as shelter if it rains.
- Camouflage netting to cover your head, the human face is a bright turnip shaped animal scarer.
- Good boots because it is always muddy and they provide protection from snakes, I also wear gators for those reasons.
- A good lens cover will help disguise that big bright lens.
- Raincoat for you and your camera because some animals only come out when it is raining.





Methodology

■ Camera settings, I usually have my camera on the following modes:

- ISO set to the lowest i.e. 50 or 100 anything higher risks images that are not sharp.

So, why does a high ISO noise ruin wildlife shots when normally it can be removed in post production?

This image was shot at ISO1600 using a Canon 5D Mk3 which is supposed to have good noise handling. As it is the image seems okay but like the majority of Wildlife shots cropping in will magnify the noise to the point where the sharpness will suffer.

In this second image, I have cropped into the Wren but I haven't cleaned up the noise. You can see that the edges are not as sharp and clean as they could be. This is why we need to have as low an ISO as we can manage.





Methodology continued.....

Here's another example of how digital noise can ruin a wildlife shot and also one to prove that it can be used when you don't have to crop too much.

These images were shot yesterday at Jells Park but the light was poor and I had to use a 1.4 extender to get anything at all. Luckily there were some White Browed Scrub Wrens in the trees close where I was sitting and these didn't require much cropping.

Image 1
f/8.0
1/800th Second
ISO 400
1.4 x Extender





Methodology continued.....

This shot used similar settings to the others I took yesterday with the exception that this Scrub Wren was close enough that it didn't require cropping by too much.

Image 2
f/8.0
1/40th Second
ISO 400
1.4 x Extender



Methodology continued.....

- Camera settings, I always have my camera on the following modes:
 - Aperture Priority (Av) with aperture as wide open as possible.

When taking wildlife there can be influencing factors that reduce shutter speeds such as using low ISO and other things like the dark rain forest or the use of a multiplier etc. and I'm often down to 1/60th second on a 400mm lens. However, a low shutter speed such as this on a longer lens and without practice usually means un-sharp images. A fast shutter speed is what we rely on to capture acceptably sharp images which for 95% of the time is what we want therefore, I am usually trying to get the fastest shutter speed possible.

So why not use Shutter Priority (Tv) and set the shutter speed fast?

Well, if my camera is on Tv and I set the speed then the camera uses the aperture to regulate the light which it adjusts to capture a correct exposure. Not a problem at all until, with the aperture wide open as possible, the camera can no longer capture the exposure correctly. So it will now adjust the ISO until it can capture the shot and we DO NOT want to raise the ISO because when cropped in it will ruin the sharpness of our subject.

So, if I use Av and set ISO low then the widest aperture will give me the fastest shutter speed that I can possibly attain anyway and will save me from having to constantly adjust the shutter speed. The trade off is depth of field which I just have to live with.

Methodology continued.....

■ Camera settings, I always have my camera on the following modes:

- Centre Focus Point Only

In the majority of cases we would want the subjects eyes to be sharp and by using the centre focus point only that can easily be achieved. If the centre point is not suitable then the point can be moved on the fly to one of the 61 others that are in my camera.

- Dynamic Focussing Mode (AI Servo)

By coupling the centre focus point with Dynamic Focussing the focus can auto adjust when the subject moves and I don't need to keep reacquiring the focus. If I need to lock the focus then I can use the Back Button Focus button to lock it.

- Spot Metering

Spot metering is used because quite often we are photographing a small subject in a larger environment for e.g. a bird on branch in a tree. With the tree and sky as backgrounds, we aren't really interested in them so why expose for them? The most important thing is the subject so spot metering will expose for that object and ignore the rest of the scene.

However, spot metering can be fooled especially by a bird on a branch with a bright sky behind. In this case you will need to dial in 1 or 2 stops of exposure compensation. However, beware that increasing the exposure will reduce the shutter speed so if it is already low then it will be even lower once the adjustment is made. **DON'T FORGET TO RESET IT AFTER YOUR SHOT.**

Methodology continued.....

► Camera settings, I always have my camera on the following modes:

- Continuous High Speed Shutter Mode

Taking several images of the same subject is a pain when it comes to sorting through your images however, to be certain I get at least one sharp shot, this is the only way to go especially if I am hand holding the camera. Also if the subject is moving, I can get differing poses etc. and may get something better as the subject moves around which I may have missed by trying to capture individual shots.

► Lens Settings, this is how I set up my lens:

- Stabiliser Mode 1 or maybe 3, if you have it

Stabilisers allow us to take sharp shots with slower shutter speeds so it is an ideal opportunity to leverage this feature. On my lens I have 3 settings:

1. is an all-round mode that stabilises everything but remains on regardless of whether I am taking a shot or not.
2. Is used for panning horizontal subjects only.
3. Is the same as mode 2 but only starts stabilising once the shutter is fully depressed therefore, conserving battery life but mainly to allow smoother panning without the stabiliser causing weird effects in the viewfinder.



Methodology continued.....

➤ Lens Settings, this is how I set up my lens:

- Automatic Focus Mode

I do use manual focus sometimes if on a tripod and in a hide but generally the setting is auto-focus mode. This is to compliment the AI Servo dynamic mode which won't work without auto focus enabled.

➤ Location, plan where you are going before you go.

- Do Your Research

It is important to research your subject before you go shooting even if that is limited to what you would expect to find in an area.

For e.g. if I wanted to photograph the Helmeted Honeyeater it is no good going to the Water Treatment Plant and waiting in my hide, I wouldn't get a shot in the foreseeable future. If I do a search for the Helmeted Honeyeater on the Internet then I would find that it is only resident in Yellingbo State Park.

A little research can save you a lot of effort for e.g. what your chosen subject eats and when it is active etc.



Methodology continued.....



Take the right equipment

- The right gear for the right job

If I am going on a boat to photograph seals is it worth my while taking a tripod? Likely not but maybe not because of the reason you are thinking. Boats are not stable platforms therefore, tripods are useless for landscape/seascape type shots which usually have longer exposures. However, to hold a heavy camera they would still work perfectly for shooting Dolphins or seals whilst on a boat. But, space is usually limited on boats and the Captain isn't going to be pleased with you blocking his boat with a tripod so, take a monopod instead.

Other examples of the right equipment are a throw over hide in Healesville Sanctuary likely isn't necessary but a tripod may be a godsend for a heavy camera setup and it can be used as a monopod as well. You likely don't need dark clothing there either as the animals are used to humans. But trying to capture a Freckled Duck at the Water Treatment Plant, you are going to need a seat, hide and camo clothing.

Patience

With both landscape and wildlife photography they are about the light and the wildlife. In the former, photographers camp out for weeks to get the right conditions for the shot however, for wildlife we don't usually need to camp out for weeks but it can mean sitting around for hours waiting for the right shot.

For e.g. if you want to capture a shot of a Brolga Chick you have to be there when the Brolga chicks hatch and that will require patience. Even if they are already hatched, then you may have to wait several hours just to see them.



© 2016 mlp | Photography





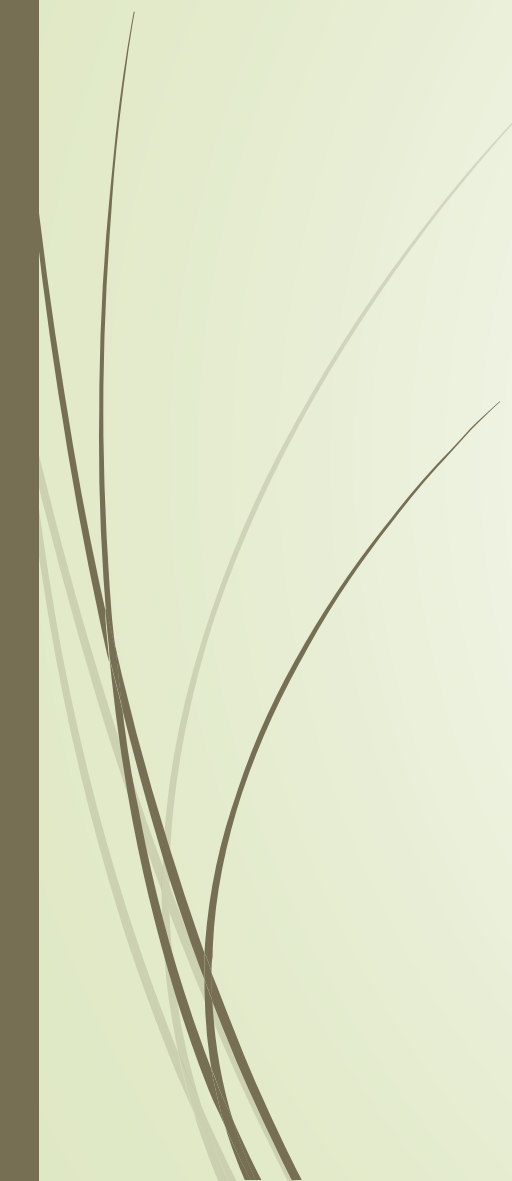
So, Let's Look at All of These in Detail

To do this we can use a scenario, let's say that you've been asked by a relative to take a picture of a Koala to create a print for their wall. How do you go about doing this?

- Firstly you will need to decide where and how you are going to take the photographs and what composition you will use?
 - In the wild means you are going to have to do some research as to where there are some Koalas, hopefully close to home.
 - In captivity means you need to capture a shot that looks realistic so location is important. Most zoos and sanctuaries have Koalas but their compounds are setup for tourists not photographers.
- Learn your subject
 - The questions when do they sleep or when are they active can dictate what equipment you need i.e. Nocturnal or Diurnal. It is no good if they perched at the top of a Gum Tree they'll be little dots in the frame. Ideally you need to have them down on the ground or lower in trees so you need to know when they will do this.



So, Let's Look at All of These in Detail continued...



► When are you going to attend?

1. Zoo's and Wildlife Parks get busy at weekends and school holidays so there may be too many people around.
2. In the wild can also be a problem if the location is popular with tourists etc.
3. Weather and time of year are also factors that have to be considered.

► Visit the location

1. This will allow you to decide what shot you can get and how you will get it.
2. This also allows you to decide when to attend i.e. during the week, the weekend or anytime etc. What are the access/opening times?
3. You can see where the light comes from and what time of day will have the best lighting.
4. You can also decide on camera variables such as what shutter speed you will need, aperture and additional light etc.
5. You can decide on any accessories such as tripods, seats, hides and clothing etc.



We've done a lot of work and haven't even picked up a camera yet...

So we've done our research, picked our site, decided when we will visit and decided on equipment etc.

Let's say we've chosen the sanctuary at Healesville for our shot and we intend to visit on a Wednesday, the quietest day of the week and no school holiday. We intend to be there for opening time and will go straight to the compound to see what the Koalas are doing. But, how will this help us?

The keeper may well be there getting the Koala's out and putting them into a tree ready for the show later in the morning. The keeper will be able to tell you which tree they will be in and what they will be doing. You can then plan your shot and if you are really lucky the keeper might even put the Koala where you want it etc.

So what's next?



Setting up to take the shots...

When you are ready to take the shots you can setup your tripod which isn't a problem because there aren't too many people around.

Setup your camera as close to eye level with the Koala as you can, getting to an animals own eye level may well allow the shot to be much more engaging for the viewer than pointing up or down at a subject would be.

Make sure you are using the right lens and set it to capture your desired composition ensuring that the background is going to be suitable.

Now is the time to work out your depth of field and set the camera so that you can get what you need in focus. Luckily Koala's don't do anything in a hurry so you can use a slower shutter speed.

Now get that shot in the bag.





That's it Folks....

Thank you very much for listening, I hope you got something out of this presentation.

Please feel free to ask questions

