



# LIGHT MAGIC

BY MICHAEL SNEDIC

Light is perhaps the most important aspect of photography, and understanding how it works and how to make the most of your camera in different lighting situations is a sure-fire way to capturing better images.

RIGHT: Shooting wildlife, such as this Thorny Devil, through glass at wildlife parks and zoos can be quite challenging. If the exhibit is outdoors, like here at the Alice Springs Desert Park, or there is harsh lighting above you indoors, then you'll need needs to be taken that the glass doesn't reflect light back on to your camera. One way to eliminate this unwanted light is to use a lens hood on the lens you are using and carefully touch the glass with the hood, but at an angle. This way, you have a much better chance of photographing your subject without unsightly light across your image. Nikon D700, 200mm f/4 lens. 1/25s @ f5.6, ISO 800.



For this Boyd's Rainforest Dragon, I used a diffuser on my flash to minimise harsh light and overblowing the subject. Flash at full power or too close to a subject can create unsightly images. Nikon D200, 105mm f/2.8 lens. 1/60s @ f9, ISO 100.



Whether it's rays of light in a rainforest, subtle early morning sunlight poking through mist or gorgeous backlighting on a bird, nice light can make the world of difference to the feel of an image.

### NATURE'S DIFFUSER

Without exception, nature provides the best diffuser. An overcast day will always produce much more favourable and 'even' lighting as the light is much more subtle. On a sunny day you will often end up with harsh light projected onto your subject as well as contrasting shadows. Unfortunately, trying to 'fix' these type of images in post-processing is usually a lost cause.

Modern cameras are excellent at metering available light and photographing wildlife on overcast days will generally produce images with perfect exposure. However, care still needs to be taken if the subject is white or brightly coloured. If you are using Manual mode, you generally need to increase your shutter speed to avoid overblown highlights. If your camera is set to Aperture Priority, then you will likely need to reduce your exposure compensation in one third increments, until you achieve the perfect exposure. To check for this in the field, turn on the 'blinkies' and check your highlight areas aren't blowing out too greatly between shots.

Where diffused light truly comes into its own is in the rainforest. If you have ever taken shots in a rainforest on a sunny day then you'll know the end

results are usually disappointing – for me personally, I don't even take out my camera in these conditions! Sure, you can take a few images as a memory, especially if you have travelled far to get to your shooting location, but the shots won't be 'competition winning' by any stretch.

However, if you are lucky enough to be in a rainforest on a cloudy or rainy day, try to use a circular polarising filter (CPL). The CPL will help reduce unsightly glare on wet rocks and leaves and give your images a slightly saturated look without being gaudy and over-the-top. Just don't forget that a CPL will lower your shutter speed by an average of 1.5 to 2 stops, so keep an eye on your shutter speed.

### RIM LIGHTING

Rim lighting can add a lovely effect to a wildlife image, especially if it is used the correct way. To use it effectively, you will need to position the sun behind the subject that you are photographing. Early morning (sunrise) or late afternoon (sunset) light creates the most pleasing effect that will really emphasise your subject.

By moving around with your camera and lens and composing the shot, where the harsh light of the sun is 'blocked' by the animal, you end up with a rim of light around your subject. Rim lighting is the perfect way to accentuate textures in fur or feathers, as well as shapes and contours. You'll find it works best for subjects that don't move much.

### PHOTO TIPS: USING LIGHT

**“WHERE DIFFUSED LIGHT TRULY COMES INTO ITS OWN IS IN THE RAINFOREST. IF YOU HAVE EVER TAKEN SHOTS IN A RAINFOREST ON A SUNNY DAY THEN YOU'LL KNOW THE END RESULTS ARE USUALLY DISAPPOINTING...”**

### CREATING GREAT SILHOUETTES

I have always been a huge fan of creating photographic silhouettes, and they can be great to shoot if you're stuck with high contrast lighting. However, as with rim lighting, sunrise and sunset are the best times to try it. The key here is to choose the correct metering on your camera. If you use Spot Metering on your subject, then the subject will often be correctly exposed, but your background will be blown out. The secret is to use Matrix Metering (Nikon), Evaluative Metering (Canon) or Multi-pattern or Multi-segment Metering (most other camera brands), which will mean the camera's meter will read the whole scene you are photographing.

If the background is way too bright, then try to reduce your exposure so that the background is exposed well. With the background correctly exposed, your subject will become a silhouette. Photographing wildlife subjects when there is a rich, colourful sunrise or sunset will often give you the best end results for this style.

You can also create interesting silhouettes when the sky is dull. I suggest turning the background to white when post-processing, thus creating interesting black and white silhouette images.

### CAPTURING A MOODY LANDSCAPE

There is nothing more appealing than a photo of a moody landscape. This could be rays of light beaming through a rainforest, mist across a valley or the sun hitting a part of a beautiful landscape. The best way to capture rays of light or mist is to venture out with your camera early in the morning, especially after rain. It is important to expose for the rays of light or mist to make them stand out. Once again, this effect is best on a cloudy day.

Waterfalls and cascades are very popular subjects with many landscape photographers. To be in an environment where you are surrounded by rainforest while breathing in fresh air and listening to water flowing is very relaxing. For best results when photographing waterfalls or cascades, photograph them when it's cloudy.

It may be the angle of the sun hitting a certain part of a landscape that makes an image 'pop'. Try honing in on that particular area by zooming in with a lens that has a longer focal length. This way you are concentrating on that specific area and accentuating the part of the landscape that has the sun shining on it.



LEFT: By shooting birds and other wildlife with the sun in front of you or slightly to the side, rather than behind you, you can create lovely rim lighting around your subject. By lining up your subject (in this case a Cape Baron Goose chick on Kangaroo Island) so that it is in line with the sun, you are also stopping the sun from being completely overblown in your shot. Nikon D850, Nikon 500mm f/5.6 lens. 1/2500s @ f5.6, ISO 400.

RIGHT: To create a silhouette like of this Rainbow Lorikeet feeding on a Grass tree, set your camera's metering to Matrix (Nikon), Evaluative (Canon) or Multi Pattern/Multi Segment (most other brands) and expose for the sky. Sunrises and sunsets is the best time to try this. Nikon D850, 500mm f/5.6 lens. 1/8000s @ f5.6, ISO 800.



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Some of the most interesting images of trees I have seen over the years are ones that have been taken directly after rain. Certain species of eucalyptus trees for example shed their outer bark at particular times of the year and reveal incredible colours on the inner bark. But when this layer of bark becomes wet, the rich colours come to life. Some people don't like to head out after rain or during rain but I can guarantee some of the best shots of trees have been taken during rain!

**FILL FLASH FOR BIRDS AND WILDLIFE**

While natural lighting is often preferred by many wildlife photographers, fill flash can be advantageous in some situations. Recently I was presenting a wildlife photography workshop in the rainforest in Lamington National Park, Queensland. It was early in the morning; the clouds were very dark and shutter speeds were abysmally low. This is where flash can help

The light released from a flash or speedlight is enough to increase your camera's shutter speed, without the need for a really high ISO setting which can create lots of noise. Sure, images with lots of noise can be corrected in post, but the issue is that your image quality will be greatly reduced.

By practising with different flash angles, varied power settings and diffusers over the top of a flash, you can end up with shots of the same subject, all with varying lighting effects. Sometimes using two flash units, where each flash is set up on brackets attached to the camera's hot shoe, can also create delicate light without harsh shadows.

**PORTABLE DIFFUSERS AND REFLECTORS**

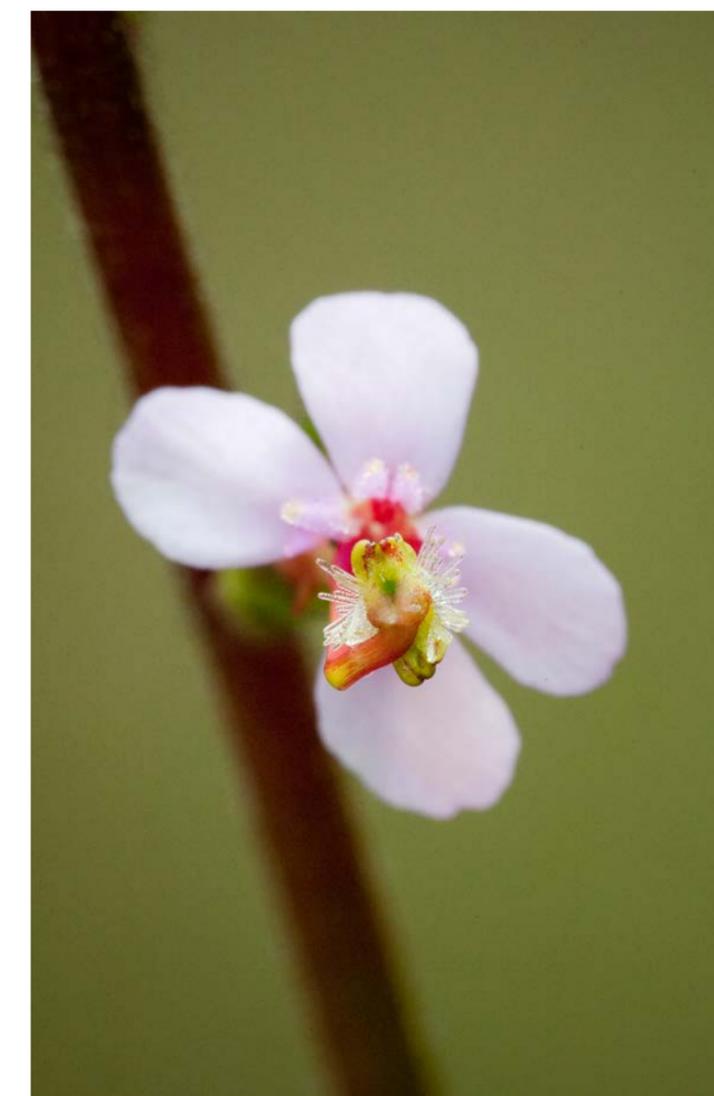
If you don't have a flash, handheld diffusers and reflectors can be a good backup. Something like a 45cm or 50cm 5-in-1 reflector/diffuser is compact and easy to carry around and very versatile, and I'll always try to pack one when photographing macro subjects such as fungi, flowers or insects. Fungi images in particular can be greatly improved by using external light sources.

Early morning light right after sunrise is hard to beat if you are wanting subtle, delicate light to fall on plants you are photographing, such as the grevillea shown here. You can also add extra light to the plant by using a diffused hand held torch. Experiment with the angle that you are shining the torch and once you find the right angle of light, you can then work on composition and focusing. Nikon D850, 105mm f/2.8 lens. 1/320s @ f8, ISO 800.



LEFT: One of the best tips I can give when photographing sunrises and sunsets is "look behind you". I was on the Overland Track in Tasmania, photographing a beautiful sunrise scene, when I turned around and saw an even more amazing view. The mist hovering over the landscape, coupled with the beautiful pink glow of the sunrise, made for a perfect setting for this image. Nikon D700, 150mm f/2.8 lens. 1/25s @ f11, ISO 800.

BELOW: For the image of this wildflower photographed at Girraween National Park in Queensland, I was fortunate to have perfect, overcast light above me. This beautiful light bathed the flower, without any harsh light or shadows to worry about. Nikon D700, 150mm f/2.8 lens. 1/125s @ f22, ISO 1600.



A portable diffuser between your camera and macro subjects can create a nicely diffused lighting effect. And, rather than ending up with overblown macro images, the subject will be bathed in subtle, diffused light that is much more pleasing on the eye.

A reflector is also a very handy product to keep in your camera bag as they are cheap and easy to use in the field. I prefer using the silver diffuser compared to gold and I use it to reflect natural light onto fungi or plants. If you are photographing gilled fungi or flowers that have shadows, a reflector adds just the right amount of extra light in the darker areas of the image.

My advice is to locate the position of the sun, point the reflector to the sun and then slowly move the beam of light onto whatever it is you are photographing. Small reflectors are great because you can usually hold one with one hand while your other hand

presses the camera's shutter button or remote/cable release (if using a tripod).

In the end, it doesn't matter what type of external light source you try and where you position it, the key is you experiment.

### PHOTOGRAPHING WILDLIFE IN ZOOS DURING HARSH LIGHT

Zoos and wildlife parks are the ideal places for practising your wildlife photography. There are plenty of animals to choose from in varying shapes and sizes. Sometimes though, lighting can be quite harsh, especially if you're stuck visiting in the middle of the day. It may not be ideal, but you can still photograph in sunny conditions. If shooting white animals or ones with shiny feathers, fur or scales, you can increase your camera's shutter speed in order to reduce overblown highlights. Alternatively, if shooting in Aperture Priority, reduce

your exposure by going minus with your exposure compensation (+/-). Also in Aperture Priority, when shooting an animal and the background is very bright, you can choose Spot Metering. This metering setting helps better manage exposure on your subject.

### EXPERIMENT, EXPERIMENT, EXPERIMENT

The best thing you can do to understand lighting is to experiment like crazy – it's something I still do today. When you have downloaded your images onto the computer, look through them carefully. Some images may not work, while others might be nice but nothing special. It doesn't matter, as it is from these mistakes that you learn. Carefully study why some images worked and others didn't and try and replicate your best results next time you are out shooting. Doing this will help you create fantastic, well-lit and interesting images. 📸