





It's quite common for photographers to have one or two shots of distant storms they have happened to witness, but you've made them a speciality.

How do you do it?

There are channels through Western Australia that are almost like magnets for wild weather. I live in the northern suburbs of Perth and we rarely get storms coming through. But for no particular reason I know of, there are storm channels that appear to have a greater frequency of storms than other areas that go around Perth to the north and south. There's one through Gingin, Corrigin, across the Wheatbelt towards Kalgoorlie, and one through Rockingham, Dwellingup, over the hills to Narrogin, and off to the southeast. I tend to target those areas.

Also, summertime low-pressure systems form in the tropics of WA and cause a line of instability down the coast called the West Coast Trough, which moves through into the Wheatbelt and Goldfields regions. I look for the build-up of what are called towering cumulus, or cumulus congestus, clouds from mid-afternoon to evening. If the ingredients are all there, this line of instability can form an area of thunderstorms anywhere from Geraldton to Merredin to Narrogin and out to Kalgoorlie.

Previous page: Dowerin evening lightning
Left: A different planet.

Obviously, what you're looking for is quite specific. Not just bad weather, but the spectacle of thunderstorms seen from a distance.

That's right. It's hard to get that kind of shot in hilly country, and photographing in the low cloud, wind and muck of cyclones and the like is a very different thing. I've only ever been in one cyclone, and that was by accident when I was staying with my brother in Port Hedland in 2013, during Cyclone Rusty [an exceptionally slow-moving cyclone that subjected the coast to gale force winds over a record-breaking 39 hours].

The raw power of mother nature can be mind-blowing. Big, billowing clouds, flashes of lightning and explosive thunder that seems to roll on forever towards the horizon. Having the opportunity to capture that on camera is extremely humbling and very rewarding.

I assume there's no profitable career in photographing storms, so how does that aspect work for you?

I love photographing landscapes in general – especially the expansive 'big sky' ones so typical of Australia – but career wise, I've been a fire management officer with WA's Department of Parks and Wildlife for many years, and that's where my interest in storm photography started.



A woman and her daughters caught up in a dust storm on their drought affected farm near Bourke, New South Wales.

‘Everything technical just goes out the window. It's all about seeing what's in front of you, reacting to what's in front of you.’

‘Often the images that I remembered were not quite what I had anticipated. And images that came naturally, just as I was walking past, turned out to have more of a timeless quality.’

Some years after having made her home in Sydney, Tamara went back to university where she earned a Masters in Film and Digital Image from The University of Sydney (Sydney College of the Arts). In due course she followed that up in 2020 by completing a practice-led PhD, researching the liminal space between photography and film.

Asked how the two disciplines of filmmaking and photography inform each other in her own work, she said, ‘Filmmaking is essentially an extension of my photographic work. It's a natural progression to add moving image and sound design to expand my practice. However, there is a lot more preparation needed for filmmaking. I often need to draw a visual battle plan in terms of approach and equipment. That said, I still enjoy wandering the streets of Sydney with one

camera and lens, working on a subconscious level as a photographer. The process of capturing moments is spontaneous and still full of magic. This has influenced my approach to the moving image where I allow space for spontaneous moments to unfold in front of the camera.’

When it comes to matters of technique, Tamara said, ‘I think the best photographs happen when you become completely invisible. It's that moment where everyone forgets that you're there, because you've become such a part of the scene.

‘That takes some time, because not only do you have to feel comfortable where you are, you have to feel grounded and the people around you have to have forgotten that you're actually there. It's almost indescribable when all the elements come together.

‘You throw out composition. Everything technical just goes out the window. It's all about seeing what's in front of you, reacting to what's in front of you. There is a kinetic connection between your hand and your eye

and your spirit and the camera in your hand. And that experience is exactly the same for me whether it's a still or motion.’

You might think that switching between the two imaging modalities to tell a particular story would be a challenge, but Tamara says the choice is generally straightforward. ‘There are some stories that suit moving images rather than still images. The choice is often very clear for which format to use. Moving image works are generally more complex and resonate by using more senses. Still photographs have a timeless almost haunting quality. I use both formats to tell stories that are personal as well as universal.’

When asked how her work had been affected by the pandemic, Tamara said that she had been focusing on her teaching activities. As a sessional academic with the University of Sydney since 2016, she divides her time between postgraduate students in the Master of Moving Image programme and undergraduates in Screen Arts.

True macro photography

WE EXPLAIN THE TRUE MEANING OF THE TERM 'MACRO PHOTOGRAPHY' AND OUTLINE THE WAYS TO TAKE MACRO SHOTS AND THE HURDLES YOU MIGHT ENCOUNTER.

Margaret Brown

Close-up shooting is a special photography genre that has attracted a broad range of photographers ever since lenses became capable of close focusing. Interestingly, the term 'close-up photography' has no scientific definition, being applied simply to images that show subjects closer than we're used to seeing them.

It doesn't require special equipment; almost any camera and lens (including smartphones) can be used to take close-ups; all that's required is for the subject to fill the image frame. Under these constraints, for example, a telephoto shot of the moon can be classed as a close-up; so can a sports action shot or a head shot of an animal or bird.

True macro reproduction is somewhat different. It requires the image on the sensor to be reproduced at 'life size'; i.e. with a 1:1 reproduction ratio. Macro photography is used for photographing small items like jewellery, coins and similar tiny objects. It's also popular with photo enthusiasts for taking dramatic close-ups of flowers and insects – or even parts of animals, such as the eye.



Examples of some of the subjects popular for close-up work with snapshotters and photo enthusiasts.

It has been particularly valuable for scientists where it has developed into two sub-categories – photomicrography (which involves using a microscope) and micro photography (defined as having a reproduction ratio of 20:1 or greater). But both require special equipment and that is beyond the scope of this article.

The right gear

If you're really interested in macro photography, a proper macro lens is the best solution. You can certainly shoot close-ups with a wide variety of cameras and lenses, including smartphones. But they won't be true macro shots because only specialised equipment can focus from infinity to a distance where the image is reproduced life size on the sensor. (That distance depends on the focal length of the lens.)

Zoom lenses with 'macro' focusing seldom give you better than half life size magnification, with a 1:2 reproduction ratio. You can shoot some great close-ups with these lenses; but it's not true macro.

There are two ways to give non-macro lenses a semblance of macro capability: extension tubes or extendible bellows and close-up lenses. Extension tubes and bellows have no optics; they simply fit between the lens and the camera mount to extend the minimum focus. The longer this distance, the closer you can focus on a subject and the higher the resulting magnification.

Extension tubes and bellows work best with short to medium focal length lenses. The cheapest ones lack electronic contacts so exposure must be controlled manually.

'Zoom lenses with 'macro' focusing seldom give you better than half life size.'

Defining macro photography

The term 'macro photography' was first proposed back in 1899 by a photographer named W. H. Walmsley for defining close-up images with less than 10 diameters magnification, to distinguish them from photo-micrographs. That's a pretty obscure definition and the word 'macro' has been adopted as a marketing message applied primarily to telephoto zoom lenses.

In most cases these lenses simply have a close-focusing setting. True macro lenses will achieve the technical definition for 'macro' and provide 1:1 reproduction – or life size magnification of a subject. This means the lens will reproduce a subject that is 5 mm long such as a grain of rice) at exactly 5 mm on the image sensor.

By this definition, this magnification will be independent from the camera's sensor size

and resolution. A lens that achieves 1:1 macro on a full-frame 24 megapixel sensor, will still be a 1:1 macro lens on an M4/3 camera with a 24 megapixel sensor. The percentage of the image frame occupied by the subject will be larger with the M4/3 sensor but the 1:1 reproduction ratio will be the same, by definition.



These two images show that a 1:1 macro image covers much more of the sensor area on a M4/3 camera than it does on a camera with a 'full frame' sensor. It can also be more difficult to obtain sharp focus with the smaller sensor

What would Ansel do?

WE LOOK AT HOW ANSEL ADAMS' CLASSIC 'ZONE SYSTEM' REMAINS RELEVANT BOTH TECHNICALLY AND AESTHETICALLY FOR TODAY'S DIGITAL PHOTOGRAPHERS.

Margaret Brown

The foreword to the 1981 publication of *The Negative*, the second volume in The Ansel Adams Photography Series, which outlines the techniques and procedures developed by the renowned photographer over his working life, states:

For Ansel Adams the art of photography and the practice of its craft were integrally linked. The transformation of a visual encounter with the world into a memorable photograph is the essence of what every serious photographer wants to achieve. A successful photograph is the product of a sensitive and receptive mind and a well executed sequence of actions in the field and darkroom.

It's a message contemporary photographers should take to heart.

Adams is famous for his Zone System, a method developed for silver halide photography in collaboration with Fred Archer at the Art Center School in Los Angeles. It is based upon the characteristics of black and white films and printing papers available at the time and involves both exposure and chemical development.

In *The Negative*, Adams emphasises the relevance of the Zone System to technique and craft as well as creativity, describing it as 'an enabling system to liberate, not restrict, the creative photographer'. The function of the system lies in applying it to achieve a visualised image, with few, if any, limitations on how the visualisation is achieved.

'The purpose of visualisation is to anticipate the controls that must be applied to reproduce the scene.'

Writing in the revised 1981 edition of *The Negative*, Adams foresaw the introduction of 'the electronic image' as 'the next major advance' in photography. What he didn't predict was just how different the materials and techniques we use would become from those used in his heyday between 1930 and the mid 1950s.

Fortunately, some aspects of the Zone System are as relevant to today's photographers as they were when B&W materials dominated the scene. In this feature we'll look at the basic structure of the Zone System, the technical differences between B&W materials and digital media and how Adams techniques can be translated for contemporary usage.

Visualisation

The key to using the Zone System lies in being able to visualise how the scene in front of you will translate into a final image. This 'visualisation' refers to 'seeing' the scene as a range of brightnesses (luminances) and evaluating how that range can fit into the medium chosen to present the image to a viewing public. There's a lot to take in from that statement.

In the first place, a photographer is essentially recording a three-dimensional subject in two dimensions, in effect 'flattening' it. Secondly, the tonal values within the scene are likely to be much greater than the display medium can handle, especially when the image is printed (less so when it's displayed on a screen). The purpose of visualisation is to anticipate the controls that must be applied to reproduce the scene – and these will differ, depending on the medium on which the image will be viewed.

Digital photographers are more fortunate than Adams and his contemporaries because they can call up histogram displays to show the tonal ranges in the subjects they photograph. These graphs make valuable aids, particularly for positioning the mid-tones in the exposure in order to produce a reproducible picture. (Fortunately, today's OLED viewfinders replicate the hues and tones the image sensor records, so what you see in the EVF is what gets recorded in the image file.)



We've added tags to these two digitally-captured images (B&W and colour) to show how their tonal ranges can fit into Ansel Adams' Zone System classification (outlined in the box on page 52).

Cliff Jumper

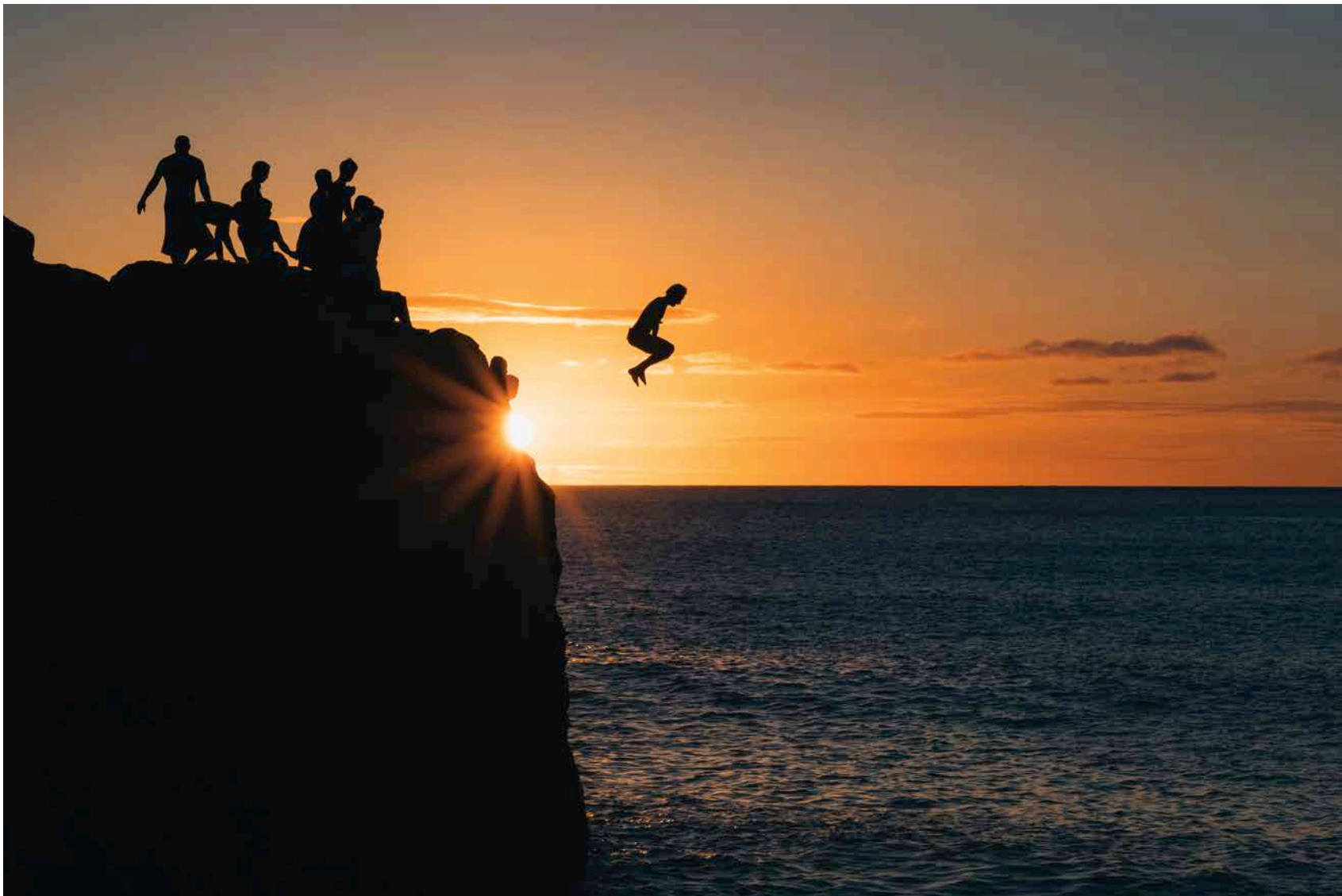
By Mark Davies

Fujifilm X-T20; Fujinon XF 56mm f/1.2 R lens

A cliff jumper during sunset at Waimea Bay, Hawaii. I could see that the sun was going to set in line with the cliff, so I positioned myself to create a starburst and fired off some exposures as people jumped into the ocean.

Don's response

An excellent example of thinking photographically. By anticipating the eye-catching alignment of elements in his choice of shooting position, photographer Mark Davies gave himself the best chance of capturing something out of the ordinary. And, because the centre of visual interest is so strong, he gets away with the landscape aspect ratio. However, I think that the 'story' of the image is the jump and jumps being vertical, I'd get with the strength and crop this with a portrait aspect ratio to get rid of the excess empty space on the right.





Barrel Racer

By Steve Evans

Fourth Winner Image Review 12

Canon 7D; 70-200 f/2.8 @ 155mm; 1/640s; ISO 400

Stroud Rodeo, NSW Hunter Valley. Much like fishing, you can spend many hours at a rodeo waiting for the Big One, but it's really rewarding when you get it.

Don's response

To extend photographer Steve Evans' comment, this isn't just catch of the day, it's the tournament winner. Everything about this picture is right. Technically immaculate, compositionally impeccable, it invites the viewer to explore all the detail and to marvel at the rider's astounding poise as her totally focused mount executes the turn. An exceptional piece of work by horse, rider and photographer.