

WHAT LURKS UNDER YOUR HULLS?



The Take It Easy crew is known for their love of sailing and endless thirst for exploring beautiful coves. This time, **Christine Danger** takes us somewhere different – underwater!

Sailing the Great Barrier Reef and being a keen photographer unavoidably leads you to experiment with underwater photography. The wonderland that lurks just under the surface is truly captivating. The variety of colours and shapes of corals are many, from wrinkled brains, to cabbages, table tops, antlers and pillars. The multitude of fish of all sizes amongst all this beautiful coral is astounding and their colour often incredibly vibrant. I could not envisage snorkelling without a camera amongst a reef, whether tropical or temperate, and made a choice last year to buy a waterproof compact for underwater photography.

Most people are wooed by the incredible world and sights they discover when they go snorkelling and wish they could record what they see. In this article I

will share with you some techniques to ensure that if you too decide to give underwater photography a try, you maximise your chances of taking pleasing shots regardless of the type of equipment you use.

WHAT YOU SHOULD KNOW ABOUT PHOTOGRAPHING UNDERWATER

Whatever camera equipment you use, there are important aspects about water which you need to know, as they greatly affect the way you photograph under the surface and the quality of images you get.

- The behaviour of light underwater is unlike the behaviour of light on land. For starters, the density of water is 800 times that of air. In effect, we can compare a picture taken in 1m of water to one taken



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on land at 800m away. So your subject can become blurry and low in detail very quickly

- As soon as light enters the water it is absorbed and also interacts with suspended particles, resulting in loss of both colour and contrast: red goes first, then orange and yellow, until only green and blue are left. Within half a metre of the surface those red bathers are muted and dull
- Even with good visibility, particles in the water column in front of your camera tend to reflect and scatter light. This is what is called backscatter – little prisms of light that can ruin your shots
- Place a pencil in a glass of water and you will see that it bends at the join between the air and water. This is called refraction. Water refraction is a third more than air refraction. This means any object underwater appears one-third larger than its actual size. This fools the eye of the photographer and the camera lens ... oh and of the fisherman!

The combined effect of colour loss, light diffusion, refraction and backscatter is that what you think you are photographing is not always what you find you have actually taken ... unless you follow a few basic rules and tips.

RULE 1: GET CLOSE

The reduction of the water column between the lens and the subject is paramount. So get close – no, really close ... and fill the frame. Close up shots of fish or corals are far more effective than non-descript scenes with blurred or ill-defined subjects. You need to get much closer than you think to get a clear, colourful shot.

RULE 2: DON'T SHOOT DOWN

As soon as you put a snorkelling mask on your face, you look into the sea at a downward angle. After all, this is where the fish are! But you will get better results if you can get below a subject and shoot up towards the surface or at least at eye level. It is just the same as on land. Just think, you would not shoot down on the heads of people when taking a portrait. But it does take practice and can be hard on your neck.

RULE 3: BEWARE OF BUILT-IN FLASH

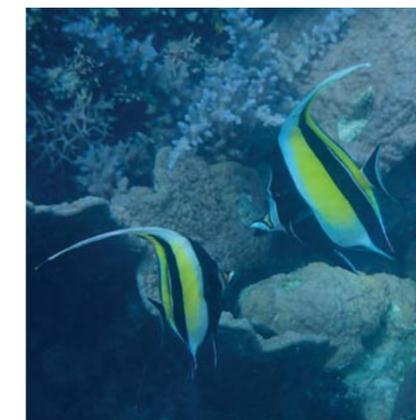
A built-in flash works well in the air, but has a limited range underwater. Light is absorbed very quickly. It can also bounce off small particles causing bright specks on your image (backscatter). So to prevent backscatter you need to use an off camera flash or a strobe in such a way that the light illuminates the subject and not the column of water in front of the lens.

RULE 4: F8 – 1M – BE THERE!

This is a well-known maxim in landscape photography. It is just as relevant in underwater photography. It is all about a catch all situation. With compact underwater cameras, an aperture of f4 is comparable with an f8 on an SLR. In other words it is a mid-aperture.

One metre from the camera lens is a very comfortable working distance. You are close enough for the subject to fill the frame, and not too close to threaten it. It also means good saturation and sharpness and less backscatter.

And of course 'be there', be in the water when the magic moment appears before you. As the saying goes "You have to be in it to win it".



TIPS FROM THE PROS

What follows are some suggestions and tips picked up along the way through discussion with experienced underwater photographers and during dive courses.

- The use of complementary colours can add significant impact to your images. In the ocean the primary colour of blue surrounds you. Its opposites on a colour wheel are yellow and orange. Underwater the combinations of these colours work dynamically together. As luck would have it, there are lots of yellow fish swimming around the reef: butterflyfish, angel fish, moorish idol to name a few. Similarly, beautiful sandy coloured antlers or table corals stand out wonderfully against a blue water background. Red is also an excellent colour to combine with blue, as in vibrant soft corals against a clear blue sea.
- Underwater, we have the most intense and predictable colour cast of all, you guessed it: blue! Corals, fish, water, everything can look unnaturally

blue. To overcome this, if your camera has an underwater setting, use it since it compensates for that blue cast. Another option is to adjust the white balance in post processing.

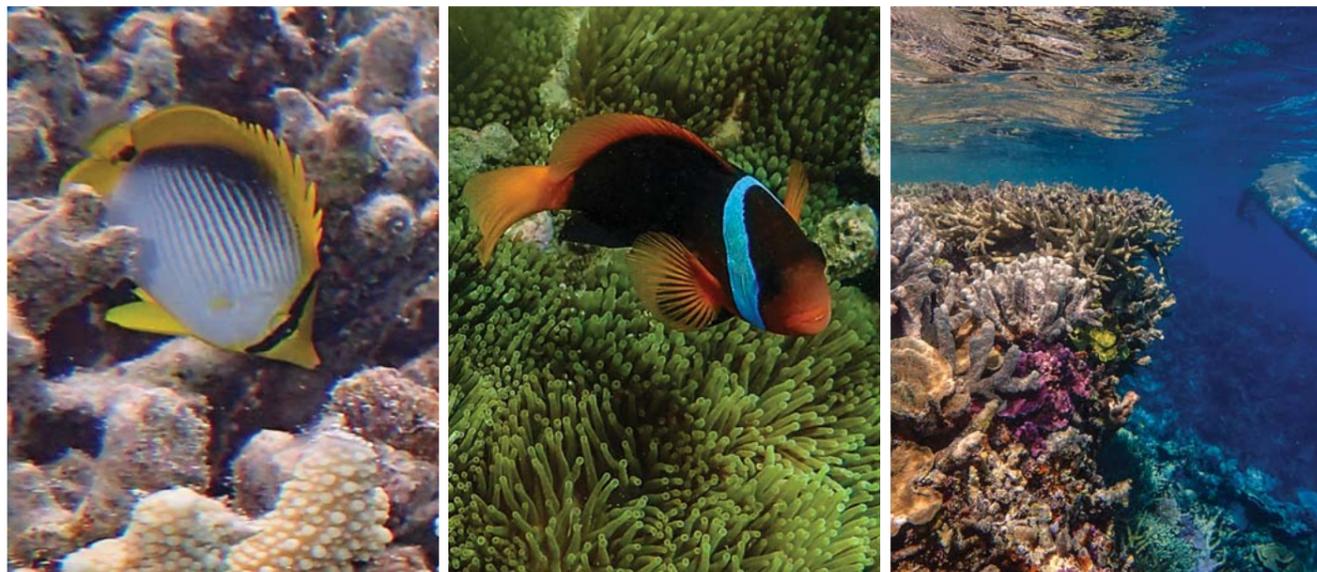
- Shooting on a sunny day with a wide angle lens or setting, close to the surface, can often produce a rich blue background and pleasing results. So when the conditions and visibility are good, make the most of it. But when it is cloudy and visibility is reduced then it is macro time.

EXPERIMENTING WITH IDEAS

Beyond capturing beautiful underwater gardens, portraits of fish or of your partner snorkelling, it is fun to experiment with different genres.

ABSTRACT ART

You can represent a recognisable subject in an unusual way or even take away the identity of the subject



matter and leave your imagination to focus on textures, lines, shapes, patterns or colours. Generally the macro mode works best for this, particularly when you fill the frame with your chosen topic such as the marbling of seagrass, or a giant clam siphon.

OVER-UNDER

A fun thing to try is to use a fish eye lens and take shots that are half over and half underwater. Although it takes a lot of practice, you can get some interesting effects. The difficulty is finding half a scene that will complement the other half! You will often find a colourful, photogenic shallow reef in the foreground with nothing above the surface to complement it, or a yacht floating topside with nothing of interest under the water line. But it is worth looking for those split layers.

WAVE ACTION

Capturing the movement of water and waves from unique angles, impossible to get from the shore, can be quite exciting. For instance taking waves side on to the swell, in the swell, or from underneath the wave can

produce amazing results. But sometimes it does mean getting tumbled around. Keep a firm hold on that camera!

DIFFERENT ANGLES

Because in underwater photography, the horizon line is absent, you

can experiment with tilting your camera and achieving dynamic diagonal lines in your composition.

REEF ETIQUETTE

When diving and snorkelling, one should be concerned with reef conservation. It is not acceptable to make extensive contact with the reef with your body, or your fins by standing on it or grabbing hold of coral to steady yourself. Many codes of conduct about photo-diving emphasise the need to avoid touching the reef as much as possible.

Good buoyancy is a major part of getting good images, but when you are underwater, you are rarely still and can sway in the current, which makes taking photos challenging. There are a couple of useful techniques to practise to remain stationary and stable when you take shots. One is the two-finger technique where you use the index or middle finger and thumb to anchor yourself on a dead piece of reef for support. Another is the use of a stainless steel pointer. It is also a great tool for pushing away from the reef when finished.

GIVE IT A TRY!

Once you start playing with a camera underwater and pushing your creative boundaries, you will be hooked, guaranteed! It does not have to be an expensive exercise. There are affordable underwater housings for most compacts, and some compacts such as the Olympus TG4 or the Nikon Coolpix will be water resistant to 10 or 15m, which is ample when snorkelling. All shots in the article were taken with the Olympus TG4, some of them with the addition of a fisheye wet lens.

But most important of all it is the great fun you will have and the opportunity to extend your portfolio of amazing images. So what are you waiting for?

Chris and her partner Wade sail on *Take It Easy*, an 11.6m catamaran from the drawing board of Easy designer, Peter Snell. To follow their adventures, and see more of their photography – both under and over the surface – go to www.sv-takeiteasy.com