

Tips For “better” Underwater Images

This is not a definitive course in underwater photography and it is not meant to be. I developed this list of tips as a memory jogger to myself when I first started taking underwater photographs. I have compiled the comments under 4 main headings; Composition, Technical, Strobe Positioning, and Other.

COMPOSITION

- For fish shots, try and approach and shoot from below. Predators approach from above, and shooting slightly upward allows additional natural light to reach the lens which can help to provide a nice background.
- User the rule of thirds where possible.
- Take into account naturally flowing lines to frame your image. For example, the line of reef edge with a fish swimming along the edge.
- Most subjects always look better in a photograph when shot from left or right front quarter. Do not photograph retreating fish butts - unless they look cute!
- Try to fill the frame with your subject, unless you are shooting a vista. This minimizes cropping, maintains aspect ratio and does not go against the rule of getting in close.
- Always focus on the eyes. The eyes MUST be in focus otherwise the image will not be attractive to viewers.
- If possible use red & yellow colours in your subject. Red & yellows catch the viewer’s eye.
- If a diver is looking at something, then the something must be in the image.
- Use frames if possible. Coral, wreck, etc.
- If shooting a diver, ensure diver glances at camera while looking at subject. This ensures that eyes will be captured in image.
- Always angle diver at 45 degrees if possible when shooting straight on. Pose divers at angles - never straight on.
- Use the Explorer pose for divers. Have the diver cross the main strongest line at angle.
- Always align diver body with strong lines. Align like a trumpet-fish does with a coral.

- Use leading lines - eyes follow strong lines. Strong lines create moods, vertical & horizontal lines are static and diagonal lines are dynamic. Use them.
- Use triangular composition. Place subject near apex of triangle.
- Use implied vanishing point (railway line). Place subject at V of lines. Use angles.
- Avoid mergers such as: distance appendages (antlers), colour on colour, and complicated patterns on complicated patterns.
- Look for curves in nature, look for ovals, and look for frames.
- If the image looks boring, chances are the photo will be boring - forget it & move on.
- Viewer's eyes travel left to right. Shoot left to right. For example a fish moving towards the left.

TECHNICAL

- Get in low & close to your subject to minimize the water distance between the subject and camera. Shoot upwards to remove busy backgrounds & provide mid water colours. Utilize snells window. Closeness equals sharpness, better colour & exposure when shooting underwater.
- Use M for manual for optimal results. Shutter and aperture priority can cause problems in underwater work.
- Unless shooting macro, refrain for taking photographs when there is a lot of particulate matter in the water. Back scatter will ruin your shots.
- For a darkened or black background, either use high F numbers (F 8 plus) and fast shutter speeds (1/320th plus) and light the subject with strobe light only. If you require a set aperture, use shutter speed and ISO to control the ambient light
- For a blue background (assuming the water is coloured blue and is clear in clarity) use low to medium F numbers (F 4 - F 5.6) and slower shutter speeds (1/100th). You may want to use your strobe as a fill light or to illuminate a object close to the camera.
- If shooting natural light, metering off the blur water is equivalent to neutral (grey card)
- Set up your camera to shoot images that suit the environmental conditions. Dirty water is usually great for macro but useless for vistas.

- Take photographs and don't get caught up reading all the technical theory. Theory is great to know, but unless you actually take photographs you will never improve your artistic side.
- Average image. 1/3 depth of field in front of subject and 2/3 depth of field behind subject. However, with macro the distance is roughly 50/50 either side of the subject.
- To deemphasize background in macro, focus 1/3 past nearest part of subject.
- Wider the lens focal length - greater depth of field & more separated subject will appear. Narrower the lens focal length, decreased depth of field & compression of subjects.
- Wide angle lens - subject appears larger when close, and smaller when far.
- Wide angle lens - barrel distortion. Be aware.
- Underwater, a 35mm lens provides a natural perspective. On the land a 50mm lens provides a natural perspective.
- Silhouette shots - use snells window
- Shooting towards the surface. Set strobe for low power to light subject close by (ie: coral). Set aperture, shutter speed for ambient light.
- Before shooting, scan backgrounds for unwanted material/effects. This beats cloning!
- When shooting macro, always ensure you focus slightly wider than your minimum focus distance for the lens attached. This ensures the front of your subject will not be out of focus. Likewise use F19 to ensure good depth of field. F13 is too shallow, unless this is the result you are seeking.
- Set you aperture for the depth if field required, expose for the ambient using the shutter speed and ISO (with compensation if necessary to take into account the tonality of the subject. Then, use your strobes in M mode to supply the creative lighting you want to use.

STROBE POSITIONING

- Aim the strobe slightly behind the subject to minimize back scatter. Remember the subject is closer & bigger when viewed underwater.
- Position your strobe to the left or right slightly behind the lens and focus the strobe slightly behind the apparent position of the subject (refraction).
- Have the strobe positioned to the left or right, and slightly behind the camera body so light does not reflect particulate matter back into the lens.
- Try to position the strobes so that the inner arc of the strobe light just touches the subject with the area between the subject and camera lens not illuminated. This will avoid a lot of back scatter issues.
- If shooting macro, position the strobe above the camera pointing at an angle to the subject.
- If you use two strobes (and you should be) always use the strobes in M for manual mode. Yes, ETTL does work now and again but, by using M mode you will learn how and when to apply whatever power to the strobes for a given situation.
- Learn to take you strobes off the camera housing and move them about the place. The strobes are your creative edge and you should try to learn how your strobe sees. Once you can visualize how your strobe views a subject you will have control of your compositional lighting.
- When shooting macro, always use a diffuser on the strobe. This will cause the light source to be larger and the illumination will be more even with far less contrast.

OTHER

- Determine your photo mission for the dive before you dive.
- Conduct an exploratory dive first to determine sea life and strongest features of site. This will help you decide on the best lens combination.
- If you want to photograph a specific animal. Research the animal. Learn it's habits, sleep patterns, etc - and then be there waiting for it.
- If the subject has a lot of suspended particulate matter surrounding it, the chances are that strobe back scatter will be a problem. I usually move on as experience has taught me that in these situations the image is rarely decent, and you spend hours behind the computer screen cloning & healing in PhotoShop. It's always best to shoot to the environmental conditions.