

Tips for Shooting Better Macro

by Steven N. Norvich

If you are like me, you probably started out in underwater photography by shooting a Nikonos V (or Sea and Sea) with framers and extension tubes. As time goes by, however, certain limitations of this system can get frustrating. As such there is a tendency to move to a SLR camera which is either amphibious by nature or is housed in a metal or Lucite housing from one of the many good vendors in the business. While a SLR allows more creativity and control over the results, it also requires more skill than simply placing a framer over a subject and pressing the trigger. Here are four tips, which will make your macro photography better.

Create Contrast

Successful images have a subject that stands out. Too often I see photographs where the subject blends into the background (sometimes called negative space) and simply fails to grab ones attention. This often occurs when shooting down on a subject. If you are aware of this problem when composing an image there are various ways to make a subject stand out or “pop”. Making a subject “pop” involves creating contrast between that subject and its background or negative space. There are three easy ways this can be accomplished.

Color Contrast



Photographing a subject against a background of a completely different color can create contrast. This could be a black background, which can be easily created by shooting at a small aperture and fast shutter speed, a blue water background, or a different color background as shown by the photograph of the starfish feet below.

Depth of Field Contrast

Contrast can also be created using depth of field. When shooting at larger apertures such as f5.6 and f/8 (as opposed to f22), there is a significant drop off of depth of field past the subject. This causes the



background to be blurred and create an effect called bokeh. This effect can be very pleasing and causes the subject to “pop” from the background. This is illustrated by the image of the Mimic Valentini (above) which was shot at f5.6 rather than the f11 in the previous image of the starfish feet. Notice the red colored soft corals are blurred into a very pleasing bokeh and the subject stands out from the background.

Negative Space Contrast

Another way to create contrast is by using negative space to accentuate an interesting subject. This photograph of the mating Nembrotha Nudibranchs works better because the negative space is interesting and colorful despite being in focus and part of the picture. This negative space shows the environment the subject lives in and also creates textural contrast with the subject. Obviously moving a subject to a good



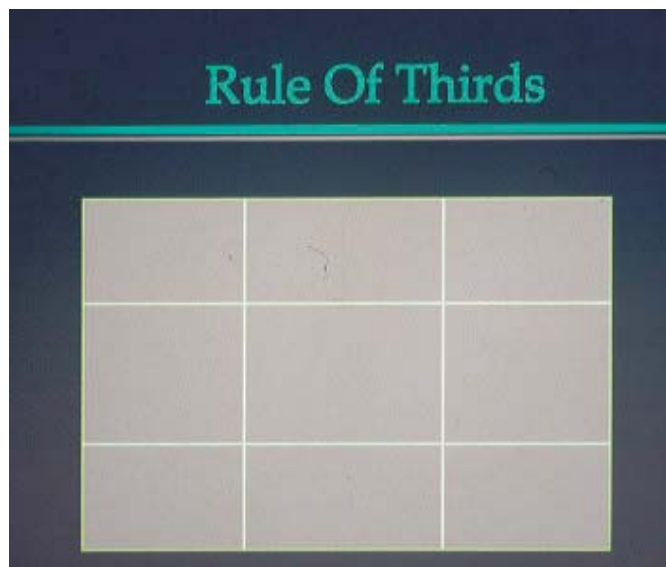
negative space is often infeasible or unethical but angle of composition can often times solve this problem. Good negative space may be available from a different angle. I do not condone ever moving a subject to get good negative space. This will often be harmful to the animal, it creates a propensity for the subject to attempt to leave the area if it is able to do so, stresses the animal, and portrays an unnatural setting.

Creative Compositions

What makes a picture work? If an image is pleasing to the viewer it works, and generally this means that it is composed well. There are two ways to accomplish this. The first is to think about what makes good composition while shooting your pictures and the second is to take all the pictures from a given photo shoot and throw away those that are badly composed. Which makes more sense? It is up to the reader to decide. I personally find that unless I think about composition while shooting, I have far too many images to throw away when culling.

Good composition means that picture elements produce an overall pleasing, unified, and harmonious whole. While this is highly subjective, there are some guidelines, which will help composition be pleasing and cause your eye to gravitate to the subject.

Rule of Thirds



Think of every image as if it were a tic-tac-toe layout with two vertical and two horizontal lines. The intersections of these lines are called “crash points” and these are the power points that will easily draw your attention or those of your viewer. Placing your subject at one of these crash points will create an image that is more powerful and able to keep the interest of the viewer. It gives a feeling of balance and harmony and keeps the image from being boring. Too often, placing the subject in the center of the image makes the picture look posed. So, in effect this is asymmetrical

composition where the subject is not centered or if it is centered, the eye of the subject is at one of the crash points. When the subject is placed on one of these power points or crash points, it is highly desirable that it be positioned such that movement is into the frame rather than out of the frame. The former feels right while the latter creates a discordant feeling.

If it is necessary to center a subject try not to have the subject centered and parallel to the bottom or top of the image. Oftentimes creating a diagonal can cause a mundane subject composition to be more interesting. Note that the eye of the Queen Angel is at a power point.



The rule of thirds also suggests a one third/two third ratio between background (negative space) and subject. Often, in underwater images, this means one third is black or blue water background or negative space and two third subject. Be careful about overusing the black water background; I prefer blue water instead.

Change your Viewpoint

Try to get the most out of a given subject. Good subjects are difficult to find so don't simply take one photograph and move on. Shoot the same subject from different viewpoints, directions, and sides. Look for creative ways of showing how the subject fits into its world. Look for simplicity rather than complexity so the subject does not get lost in a myriad of detail. Consider shooting both vertical and horizontal compositions of the same subject.

Magnification and Depth of Field

As magnification increases for a given focal length, depth of field decreases. This means that as you get closer, you lose depth of field making it difficult to have the entire subject in sharp focus. If the subject has eyes, be sure they are in sharp focus. If you can have the subject parallel to the focal plane, that will keep more of the subject in sharp focus but do not do so at the cost of compositional elegance.

Magnification and Relative f-stop

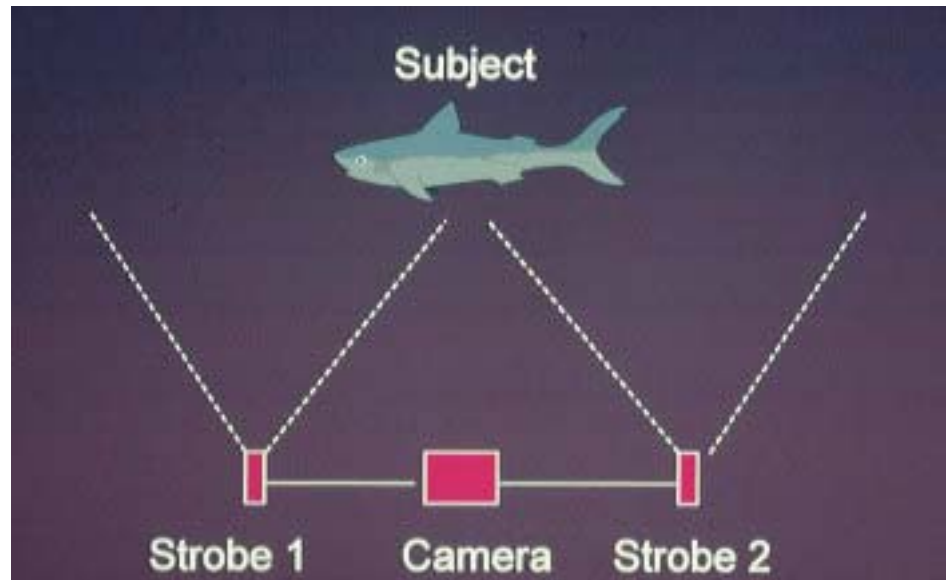
When shooting macro with an SLR 60, 105, or 200 mm lens, as magnification increases, the distance between the lens and the film increases (just as it does when using an extension tube on a Nikonos V or SLR). This means that the f-stop selected on the lens is not the f-stop as perceived by the camera. The f-stop perceived by the camera is the relative f-stop. As such you may see relative f-stops of f45 or even f64 even if the f-stop on the lens is only f22 or f32.

Ok, so why do we care about relative f-stop? Well we do care because strobe lighting at small apertures/high relative f-stops requires more strobe power, closer strobe to subject distance, or faster film to properly expose. It depends on your strobe power whether this is relevant to your particular shot, but if you are getting under exposed images back and the strobe to subject distance is within the coupling range of your strobe for a given f-stop, this may be the reason.

Avoiding Backscatter

Backscatter is lighting pieces of particulate in the water before or in front of the subject being photographed. Backscatter is not inevitable even in water heavy in particulate. The only way to avoid backscatter other than photographing in crystal clear water is to paint the subject with the edge of your strobe beam rather than aiming directly at the subject.

Obviously, decreasing the amount of water between subject and lens reduces the backscatter opportunities but painting the subject with the strobe edges will work even in murky conditions.



Dual Strobes

I personally prefer the use of two strobes rather than one. Occasionally I even use three strobes where the third strobe is on slave and is used for backlighting a subject. Most often I have one strobe on the left and one on the right of the subject, slightly pointing downwards and nearly straight ahead (as opposed to angling inward).

Lighting Ratios

Occasionally, when using two strobes, I will use different lighting ratios. To do so, I will use them at slightly different powers or different strobe to subject distances to create lighting ratios. Ideally there should be one stop difference in the illumination of the two strobes but a two-stop difference can be very dramatic. Experiment to see what appeals to you for a given subject.

If the strobes are attached to movable arms or one of them is hand held, it is an easy thing to control lighting ratios. When using this technique, proper bracketing is desirable and occasionally essential to find the best effect. In this case bracketing is done with strobe to subject distances or strobe power settings rather than f-stops.

Conclusion

In conclusion, I hope that the tips discussed will be useful to you and that you will try them in a situation where you can get immediate feedback by processing your film and then looking at results. Always evaluate your results and keep notes about what works, what does not and what your preferences are. Evaluation will cause your photography to improve in the long run.

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