photo & video

The Snoot Method

Using the optical snoot without any sliders will allow you to shoot bigger subjects, to direct the strobe flash and to deliver intensity when its needed. This animated dancing wunderpuss was surrounded by sand and scrubby algae. I used a standard strobe flash at first, which initially left me with a very flat image of a very special subject. Shot in the shallows on a sunny afternoon, I used a low ISO to eliminate the ambient sunlight, strong strobe flash and a fast shutter speed. The *f*-stop controlled the colors of the subject with great accuracy when illuminated.

Text and photos by Mike Bartick

There are several ways to create dramatic images when you are shooting photos underwater: strong compositions, compelling behavior, exotic subject matter and of course lighting.

When I considered buying my first snoot, I was searching for a way to up my photo game a little bit and to broaden the scope of my portfolio. Something that would help me to create stronger compositions and create better frame presence of my subjects—a way to help me assert more control over the image and a way to gain ground on new skills.

For years, I had been swimming over the sandy-sloped dive sites in places like Lembeh, Bali, and Anilao, to name a few, and shooting photos of the whimsical critters that can be found there. After reviewing my images from a trip, though, the photos felt flat—even when shooting something really exotic, like a blue-ringed octopus or a hairy frogfish.

I experimented at length with *f*-stops, strobe angles, single strobe, dual strobe, lenses and anything else I could find. Then I saw a few images from a shooter that completely blew my mind, inspiring me to try something new. He was using a snoot at a time when no one else was using them, and after seeing those incredible images, I was hooked. The next step was teaching myself how to use one.

Using a snoot has become quite popular over the last few years. Some shooters have become so well adapted to

Emperor shrimps on a nudibranch are so much fun to photograph, I love it! Making something special out of it, though, can be a challenge. In this image, I wanted the gill of the nudibranch to frame the subject softly but remain bright. Again, using the FO style snoot, I was able to set up the shot and then to move myself around the slug, gaining different angles of view to shoot from. As long as the nudibranch or the shrimp are not disturbed, both will remain calm and natural.

using them that it becomes an exclusive way for them to shoot. While I love using a snoot in my own work, it is important to keep in mind that a strong portfolio should allow for many different methods of shooting, and that a snoot is not the answer for everything.

What is a snoot?

A snoot is a device that is used to control strobe flash in an image. Snoots do not produce light but help to channel the light for dramatic placement and effect. Oftentimes it is not what is in the image with snooting, but what is not in the image. In other words, using a snoot also helps to eliminate a fussy background or confusing substrate by illuminating just your target while the rest of the frame remains dark.

The first things to consider when buying a snoot is not the cost. In fact, if you are worried about dollars spent on camera gear, you have picked up the wrong habit, I mean hobby. Yes, there is a ceiling of return per

Snoots

My guide pointed out this interesting and prehistoric-looking shrimp (below), which seemed to match the green coral it was living on perfectly. Using a longer fiber optic cord for my strobes allows me to set my strobe up off-camera and to give me the freedom of movement around my subject. I simply removed the strobe and adjusted the snoot tip to the desired position. The coral was nearly surrounding the subject, making it nearly impossible to photograph without causing damage to it or without casting a shadow using my optical snoot. The FO snoot works perfectly for this situation.

Hairy shrimps respond really well to backlighting. Using a torch works, but oftentimes, it is hard to control the torch power with the finesse that a strobe can have. Strobes also freeze the action, but when using a torch to backlight can also create soft edges. Simple placement of the FO tip behind the hairy shrimp off-camera allowed me to concentrate on the subject and to control the settings until I achieved the acceptable outcome. Oftentimes with a from flash, the delicate features, such as the eggs hidden behind its tail, would be lost. Backlighting allows the light to pass through your subject's transparent properties while adding an interesting result to the image, overall.

Snake eels are a subject that are calm and easy to work with as long as you do not touch them. For this shot, I used two Kraken Hydra video lights to rim light the subject from behind. After the backlighting was just right, I then applied a little light on the eye of the eels using my optical snoot with the medium-sized slider. This method is something I like to call "The Works," or two-point lighting. It can be used with a wide variety of subjects; adding colored light also adds yet another dimension.

The hairy frogfish (above) has to be my all-time favorite subject to experiment with. They are calm, photogenic and respond really well to backlighting. I also use a snoot fashioned from a length of PVC pipe over my hydra 1k video torch. When using a torch exclusively, you will not need to worry about synch speeds. Angle the light so it rakes across the subject from behind, then position yourself to exclude the torch from the frame. The secret to good backlighting is to trap the light behind your subject without too much of the light escaping from around the edges. The PVC pipe helps to create a tight column of light and allows me to assert better control over the light beam.

This tiger-striped cardinal fish (right) caught my eye when I saw the fresh orange eggs in its mouth. I found this guy sheltering under an iron beam of a wreck and in a silty environment, making the strobes nearly impossible to use accurately. Angling my optical snoot with the large slider, I was able to capture the head of the cardinal fish and eliminate the rest of the mess surrounding it.

dollars spent, but do not be shy about spending a few bucks on a device that will actually add chapters to your portfolio. Think of your snoot as you would a new lens. It will actually have that much of an effect on the way you shoot and over your portfolio.

Types of snoots

There are basically two types of snoots on the market: fiber optic snoots, where the base fits over the strobe head and the flash is carried through fiber optic cables; or the optical snoot, which fits over the strobe head, with only a slight diffuser between the strobe

Costasiella sp. or
Shaun the Sheep
nudibranch

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flash and the subject.

A few questions I would ask prior to making the buys are:

- Ease of use—is the device easy to put on and take off?
- What is the scope of use—can I shoot with a wider angle of view and super macro?
- Will I be able to operate the device on my own?
- Do I like the quality of light?

Using a snoot is so much more than casting a ring of light around your subject. Using a snoot helps to eliminate a fussy background while delivering light to precisely where you want it.

The challenge of using a fiber optic snoot (or FO snoot), is the inability to see where the snoot will fire prior to releasing the shutter. More recently, some other products have emerged on the market that eliminated this problem by allowing the shooter to use the pilot light on their strobe to aim with. The light-shaping device also makes it possible to change the size and shape of the light pool by using a set of various masks or sliders.

Each of these types of devices are useful in their own right; it just depends on the user's creativity.

There are also different ways of using a snoot that is not just about creating a ring of light around your slug. Once you begin to master the basics of using a snoot, you will find that its use becomes limitless and could provide you with that creative edge you have been looking for.

Mastering the basics

The basics for using a snoot can be broken down to a single simple phrase: "controlling the light." For the best results, use the following settings.

Jump Settings for using a Snoot:

- **ISO-100/Low ISO** to control ambient light
- **Shutter speed: 1/200** further eliminates ambient light and keeps the image sharp.
- ***ƒ*-stop: *ƒ*18 and higher** controls the color and depth of field, and ultimately, the light quality and light pool.
- **Strobe power: 3/4 power.** If the strobe power is not strong enough, open the aperture slightly. For super-macro images, increase the ISO from 100 to 360. I do not recommend using your snooted strobe on full power as the strobe head becomes quite hot. Taking a break for a few minutes during intense use will also help the strobe to perform better.

TIP: Use the snoot on the left strobe so that you can make adjustments with your left hand while looking through the viewfinder and adjusting your camera settings with your right hand.

Yes, using the snoot off camera with

Marrionia nudibranchs are highly textured, with some of them displaying some very subtle colorations. Using the optical snoot high above the subject to allow for its larger size gave me a wider pool of light to work with. Remember that your LCD oftentimes lies, so after shooting and adjusting, be sure to review the image. Look for shadows in the foreground, and if present, adjust and shoot again. If the exposures are too hot, roll your *ƒ*-stop a little higher to tame the highlights.

Sponge goby (right); The blue-striped goby (far right) and fringed-head blenny (below) are common subjects found off Southern California on the US West Coast.

Snoots

Swimming over the reefs of Southern California, you can see gobies by the dozen; however, once you try to settle down and shoot one, they all but completely vanish. In these cases, I like to plan a sneak attack by finding one in its little hiding place and to position my snoot flash just outside of it. Once I have gained the correct focus point and exposure, I turn off the pilot light of my optical snoot and wait. When the goby or subject peeks out, I release the shutter. This usually scares the goby right back into its hole, so be patient and wait. Gratefully, a fish only has a memory of a few seconds, so this could actually continue for the entire day or until you get the shot. I also use the same sneak attack method for shooting blennies. In fact, the blennies and gobies can often be found living in the same areas as each other. The gobies hide under the rocks and the bennies hide in little holes on top or on the sides. Very convenient for macro shooters that do not like to swim and search.

fiber optic cords is also do-able but will add another dimension of difficulty to a simple shoot.

Nearness to your subject with the snoot tip (FO or Optical) will shrink the pool of light, and as you pull the snoot tip back or away from the subject, the light cast will broaden or get wider. The intensity of the contrast will also change. The optical snoot has a working distance just like a camera lens and is approximately six inches from your subject for the best light quality.

The FO snoot can be used with very close proximity and offers very good light quality. For super-macro shots, I actually prefer to use the FO snoot rather than the optical snoot as it is easier to control after the initial setup is complete.

Final thoughts

The bottom line is that, without a doubt, lighting is everything, when you are trying to create an image that pops or stands above. Using a snoot could be the next step for expanding your portfolio, broadening your skill set and teaching you much about how to control light in ways you never thought possible. Your patience will surely be tried along this challenging path, as is mine. It is a journey of learning and not a destination. Have fun!

Mike Bartick is a widely published underwater photographer and dive writer based in Anilao, Philippines. A small animal expert, he leads groups of photographers into Asia's underwater realm to seek out that special critter. Please visit: ***Saltwaterphoto.com****.*

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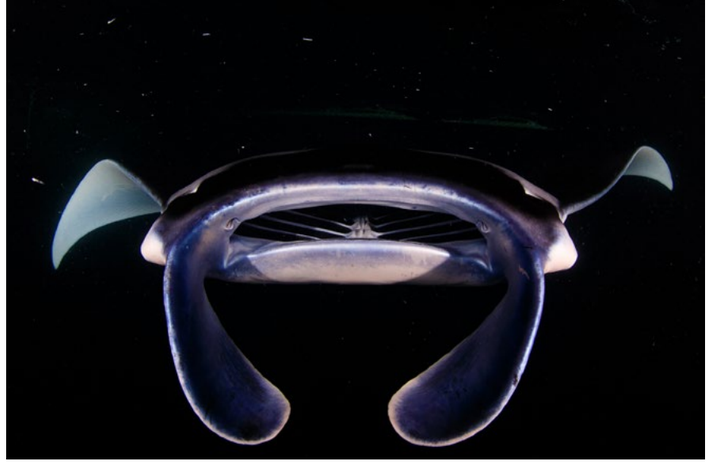
Last year, Yen-Yi Lee of Taiwan won first place in the Wide-Angle category of the Lens Beyond Ocean International Undewater Photo Contest 2017, with her shot of a manta ray.



Call for Entries and Sponsors: Lens Beyond Ocean International Photo Competition 2018

This year's categories include: Macro, Wide-Angle, Compact Camera, Portfolio, 3-Minute Video, Creative, Freediving and Young Talent. Deadline for submissions is 31 March 2018.

Now in its eighth year, the annual international underwater photography competition, Lens Beyond Ocean, is accepting entries from 1 December 2017. Winners in each category will be chosen by an international panel of judges, with the winning photographs and videos to be displayed at the Malaysia International Dive Expo (MIDE) in Kuala Lumpur, 4-6 May 2018. **Deadline for submissions is March 31**.

Prizes

Since the competition's humble beginnings in 2011, it has grown each year, with over 600 underwater photographers from around the world participating for a chance to win US$15,000 worth of prizes ranging from travel packages to dive resort destinations, liveaboards, underwater photography equipment and more.

One winner will be selected in each of the eight categories. Other images selected by the panel of judges will be awarded honorable mention as "Memorable Pictures." Winning videos will be showcased on the big screen on the main stage at MIDE.

This year's elite panel of judges include widely-published, international award-winning, professional underwater photographers Dr Alex Mustard (UK), Amanda Cotton (USA), and Nurul Yazid (Malaysia).

Encouraging new artists

Every year or so, new aspects are incorporated into the competition to entice, encourage and motivate more underwater photographers and videographers around the world to capture in images, the nature and wonder of the underwater world. Through the years, with the exhibition open to the public, imagery by these artists have created greater awareness of the fragile beauty of the underwater realm among divers and non-divers alike.

The Young Talent category was added for young photographers, 10 to 18 years of age, to showcase their images. The aim of this category is to encourage youths to go diving, learn about marine environments and understand and appreciate the underwater world.

First place, Macro category, by Marchione Giacomo, Italy, Lens Beyond Ocean 2017

Call for sponsors

Businesses and organizations keen to sponsor the event or donate prizes will benefit from intensive international exposure. Your organization's logo will be posted on all print and online promotional materials. This includes a classification as Sponsor on the Lens Beyond Ocean website with a link to your organization's website, logo promotion on social media, the Lens Beyond Ocean gallery banner and venue banner panel during MIDE 2018.

For more information, please visit: **Lensbeyondocean.com.**

Compact drone

If you fancy getting a bird's eye view, DJI has just released the Mavic Air drone, which is quite small and compact and therefore a practical option for dive travellers wishing to add some new perspectives to their photography. Take-off weight is just about a pound (430 grams), and dimensions folded together just 168×83×49mm (L×W×H). The drone is capable of 21-minute flight times and able to shoot 4K video. The camera has a 12 MP sensor. **Dji.com/mavic-air**

Variable red filter

STC Aqua-Red Underwater Fader is like a polarizing filter except the purpose is to create a variable red filter for underwater videographers. By rotating the outer filter, the spectrum of light passing through is adjusted to restore rendition of colours at different depths just like normal red filters except this is variable. Tiny holes along the rim allow for entry and drainage of water between the glass layers, and the filter can also be taken completely apart for rinsing. Made by German Schott—a glassmaker owned by Carl Zeiss, the maker of high-end photographic lenses— it is made in crown glass, with a double-sided anti-reflection coating to reduces lens flare. Available in two diameters: 67mm and 77mm. **Stcoptics.com**

Nauticam WACP

Nauticam Wide Angle Conversion Port (WACP) gives image makers the opportunity to use true water contact optics. Water contact optics correct for the corner softness most domes suffer from, allowing the photographer to shoot at wider *f*-stops. The WACP is much more than a port. It is really a lens, or more correctly, the front half of a very elaborate lens. The lenses that we use with the 0.36x Wide Angle Conversion Port act as the internal components of the lens, performing auto focus and electronic aperture. In addition the 0.36x Wide Angle Conversion Port increases the angle of view of any lens used behind it up to a maximum of 130 degrees. This is a field of view that sits between the popular full frame fisheye lenses (180 degrees diagonal) and ultra wide rectilinear zooms (approximately 110 degrees). Whether there is a market for the US$3,950 asking price remains to be seen. **Nauticam.com**

Inon Z-330

Inon's long awaited Z-330 strobe—which replaces its immensely popular Z-240, which was discontinued last summer—was released on 24 December 2017. The new model has a built-in optically-designed dome lens, offering the combination of both high power and wide coverage without a power sacrificing diffuser. Inon stated that unlike a conventional translucent diffuser, which can widen coverage but sacrifices power and stores heat internally, this specially-designed dome lens diffuses light, thanks to the refraction ratios of air, acrylic and water to attain an underwataer coverage of 110 degrees, without any power loss. **Inon.jp**