



Edited by Don Silcock

Flamboyant  
cuttlefish  
photographed  
with a snoot

Text and photos by Mike Bartick

Ask any photographer the one thing they would like to improve in their underwater images and most will likely say, “The lighting.” Lighting in photography is everything and shooting underwater often requires the photographer to read the ambient light and to create durable images on the fly. Unlike terrestrial photographers, underwater photographers don’t have the luxury of time and a studio full of equipment to help design their images, so many photographers have explored other, more portable methods to assist.

Snoots are an effective tool for underwater photography that gives the user precision control of light quality and direction that can be used for creating interesting compositions in macro photography.

But be sure to bring your sense of humor and be prepared for a challenge as learning to use them is anything but easy. That said, once your images begin to take shape, the additions to your portfolio and your understanding of light will reach new heights and be well worth the effort.

I’ve carefully crafted my first crude

snoots with precise amounts of duct tape, tin foil, funnels and zip ties. These were so effective that I think I left a trail

of them across the ocean floor from Southern California to Indonesia and across to the Philippines. Recently, I have

decided to re-visit my love for snoot photography, and after seeing some of the new products emerging on the market,

I decided to go with a manufactured snoot over a DIY project—and I am happy that I did.



*Precision control of light*  
**Sensational  
Snoots**





## photo & video

### So what exactly is a snoot?

Well, it's a device that fits over a strobe head that controls the direction and size of the strobe flash beam. The area of the beam is controlled by a variety of means depending on the brand of snoot and can range from a broad beam of light to a narrow more laser-like surgical tool.

Using a snoot will help you to create more dramatic compositions through lighting, cut down on backscatter and help you, the photographer, to totally control the direction of light and how the light source plays out in an image.

Often snoots are used off-camera, either handheld, pointed by an assistant or mounted on a tripod. While all of these

options work, I personally like to mount the device on-camera and use a long articulating arm for greater reach and control from behind my camera, which enables me to limit the task load and allows for quick and accurate changes.

There are many different brands of snoots to choose from these days. My snoot of choice is the Reefnet Optical Snoot, which is basically an articulating arm with fiber-optic lines on the inside. The base plate fits tightly and is secured over the strobe head in a screw-down method, and doesn't fall off when adjusted. The snoot base includes one arm but the arms includes two interchangeable

tip sizes, which can be easily changed underwater.

The Reefnet device doesn't have an aiming light to help find the subject, which makes it tough to learn, but as a benefit, your subject won't turn its head away either.

I strongly recommend starting with the single arm and larger tip. Then, as your patience and skill levels develop, add the additional arm and try the smaller tips, because while the smaller snoot tip provides a tighter radius of light, it also increases the difficulty of using the device.

The flash beam is best controlled by the height of the tip in relation to the subject. The closer the optic tip is to the subject, the narrower and more intense is the beam, while elevating the tip from the subject broadens and softens the beam.

### Technique

Shutter speeds, f-stops, lens choices and distance to the subject all come into play as the decisions on how to light your subjects will change the dynamics of each image. Pay close attention to the details as overexposing the highlights can happen easily when the tip and light source is close to your subject.

Techniques on how you use your snoot will develop with experience as each

Needlefinger shrimp



subject requires a different method for lighting. Your techniques will also develop around the lens selection and style of photos you're creating.

Super-macro images tend to miss the point of snoot lighting but can benefit from the directional effect of an articulating snoot. When using a 100/105mm lens with a diopter, I like to use a more directional lighting affect by articulating the arm into a front lighting position, rather than standard top lighting. The front lighting plays well with a narrow depth of field created by using magnifiers and diopters, with the light precisely positioned to accentuate features and decrease shadows, rather than the standard overhead strobe flash.

The needlefinger shrimp (above) was shot by top lighting the subject, and while it works, I feel it doesn't quite have

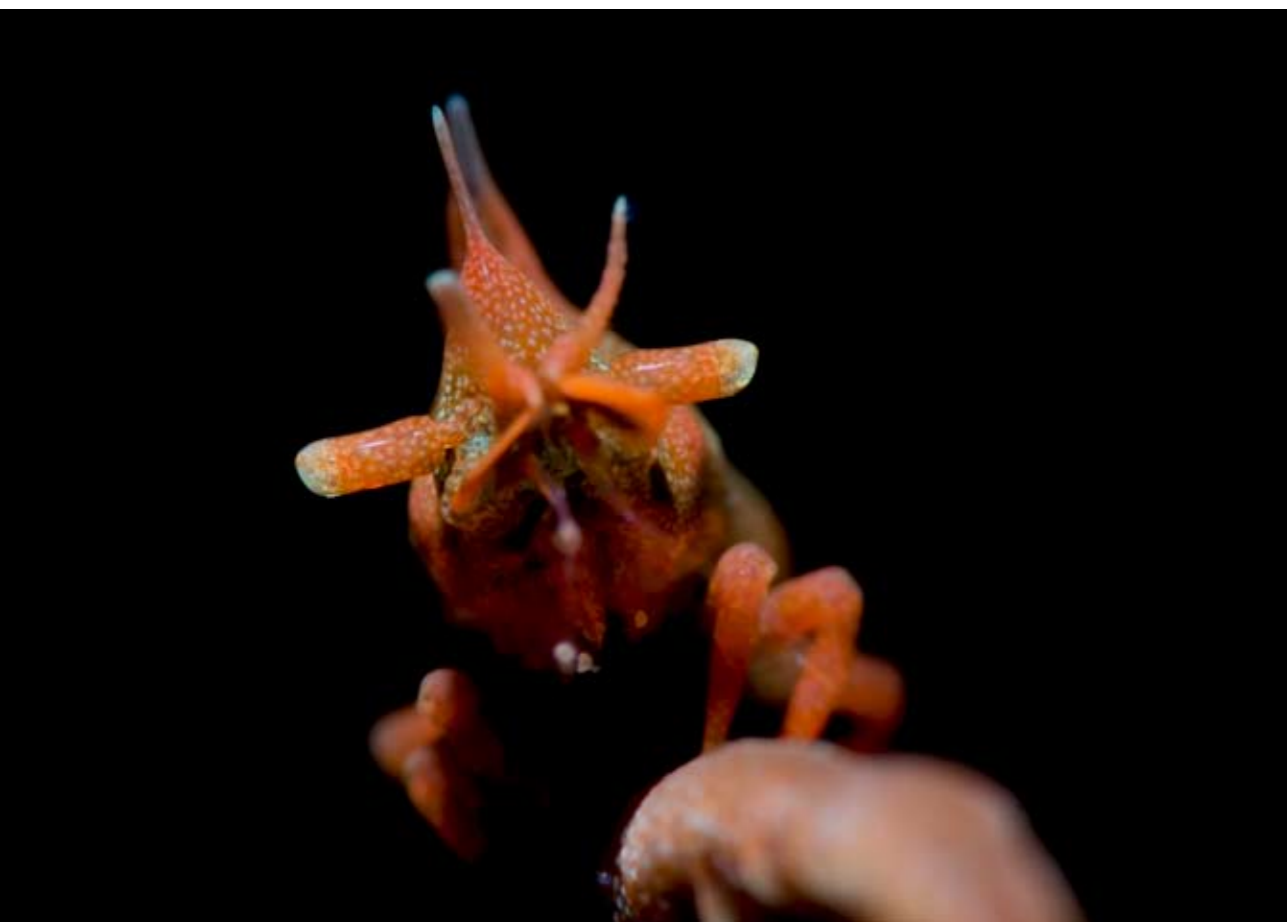
the dramatic effect as a front lit image. Keep in mind that while using a snoot, sometimes it is more of what isn't in the frame than what is. Lens selection is key in this aspect.

I prefer the 40-60mm macro range best as it allows a tight working distance and a better tonal quality of light since there is less water to shoot through, and it maintains the negative space that I'm after. The negative space is a key feature of using a snoot and should not be overlooked.

### Special effects

"The Glow" is an effect that I strive for when shooting images of nudibranchs, and the more translucent the subject is, the better the glow will be. Using a snoot really increases that effect.

The softer directional lighting of an



Pandalid shrimp



# photo & video

Phylodesmium nudibranch (right); The author's camera rig setup with snoot (below center)



## Snoots



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articulating snoot works well for nudibranchs. As they tend to move and wrap themselves around objects, the snooted light will illuminate them in different ways.

Standard strobe light creates a similar effect, but the snoot seems to fill the subject with light in a unique manner that compliments a nudibranch's natural beauty and quickly creates more of an

artistic image, elevating the image from ordinary to something a bit more elegant.

When I found the orange and white gymnadoris (below), I quickly changed the tip to the narrow beam and concentrated on lighting just the front portion of that nudibranch. The natural teardrop shape



Orange and white gymnadoris nudibranch



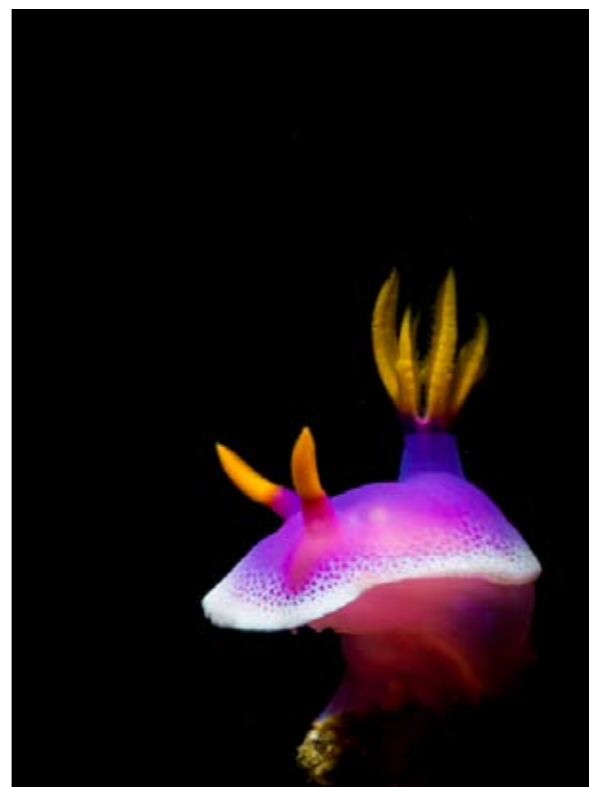
of the notum stubby Rhinophores and flat colors were isolated by the narrow strobe beam creating a special composition that again helped to create

something different.

A phylodesmium nudibranch (top right), or solar-powered nudibranch, is a perfect subject in illustrating the glowing effect. I used the wider tip to help capture the mane-like cerata and purple creamy pigments of the solar-powered

nudibranch while leaving everything else out.

Anticipating your subject's movement and positioning your light source, then waiting, is another useful technique for creating something special.



Hypseledoris apolegma nudibranch



Yawning Ambon scorpionfish (left); Hairy frogfish (right, below); Harlequin shrimp (lower left)

backscatter to the point that there is little or nothing to do to edit one's image.

I have noticed that the skin tags and filaments surrounding an *A. striatus*'s face form a natural frame that I have tried to bring out using standard methods. I've even resorted to cropping my images to bring that out, but with standard lighting, I have consistently missed or overlit my subject.

The directional beam of light cast by the wider tip enabled me to hit it just right, with hardly any post process editing.

Shooting in shallow daylight conditions using higher shutter speeds will decrease the ambient light almost completely, allowing for rich strobe saturation

and the use of higher f-stops to retain the natural beauty and details of your subject.

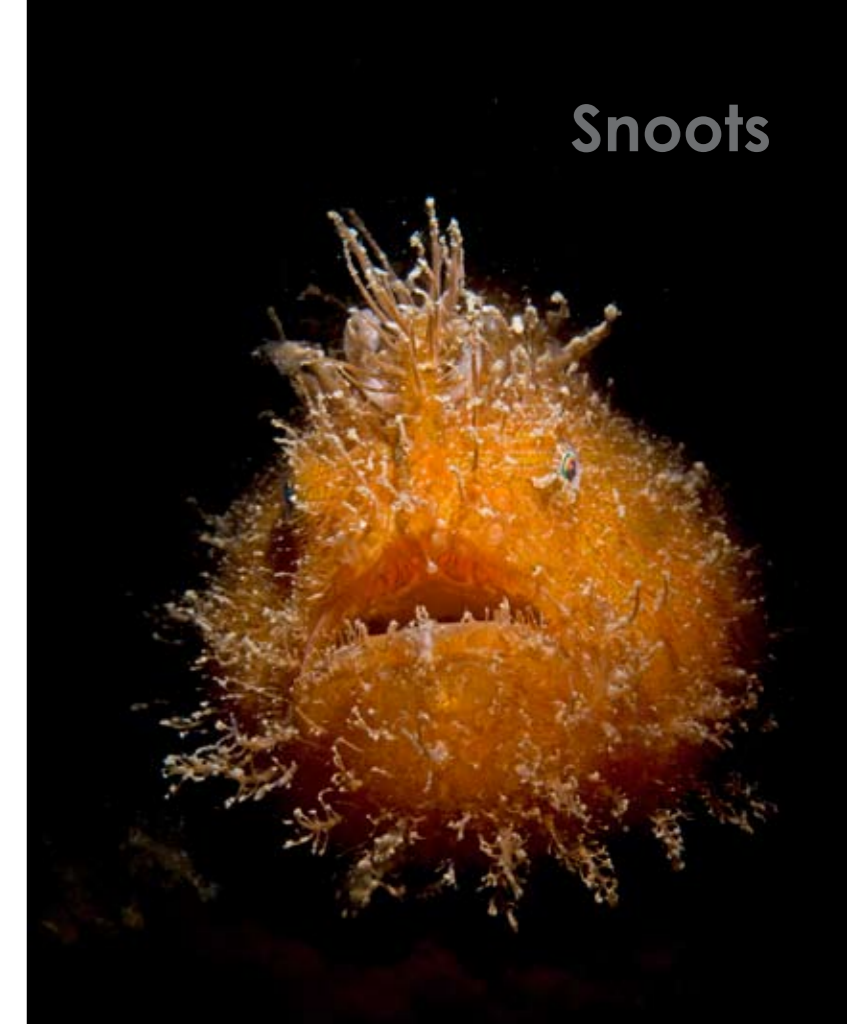
### Tips

In summary, here are a few tips that might help when you are attempting to use a snoot with or without a focus light for aiming:

- Get to know your lens and working distance.
- Compose your shot, then articulate the snooted strobe head for lighting.
- Make small corrections and movements.
- Try using the snoot at home before taking it underwater.
- Use the larger tip first.
- Sedentary objects and critters make the best models.
- Change from landscape to portrait.
- Higher shutter speeds help to decrease the ambient light.
- Distance of your light source from the subject will soften and widen the beam.

I rarely dive without a snoot these days, especially when using my 60mm macro lens, and when I set up my system, I put the snoot onto my left strobe or use the cold shoe mount on the top of my housing.

It's really important that I dedicate my left hand to making adjustments and my right hand on the camera controls, as I don't like the tripod or off-cam-



era method because it takes far too long to set up the shot before your subject is spooked and decides to move away.

Having your snoot mounted on the strobe will help you capture more images, as you will quickly pick up a feel for the position and lighting of your device.

Lighting is everything with underwater photography, and having the power to control the light is an effective tool that should be in every underwater photographer's gear box. The changes it will make in simple or complex subjects will add to your portfolio, and as your skill level and confidence grows, so will your subjects and shot selections.

Now get out there and have an adventure! ■

Mike Bartick is a Photo Pro at Crystal Blue Resort, Anilao, Philippines.

### Snooting scorpions

A surprising benefit of using my snoot was discovered while shooting a smaller Ambon scorpionfish (*Pteroidichthys amboinensis*). In the past, I have struggled with creatively lighting Ambon scorpionfish and other filamentous critters. Cryptic subjects blend in well with sand and algae and are difficult to separate from that element in an image.

Using a top/front lighting angle on the snoot, I was able to keep the light above the substrate and on the subject, creating a deep rich image that didn't lose quality in the highlights.

I enjoy shooting other benthic creatures such as octopus and flamboyant cuttlefish, but my favorite has to be the hairy frog-



fish (*A. striatus*). Using the snoot on the hairy's has created incredible results, as the snooted light really brings out the natural beauty of these special creatures.

The *A. striatus* tends to inhabit the shallows here in Anilao,

Philippines. Subsequently, the silt and surge can be problematic at times, but the snoot helps to decrease the

