

Selective lighting for macro

By Daniel Stassen

Many dive sites around the world have not only been extensively dived in the last couple of years, but also most of their critters have been photographed by thousands of keen photographers at every level. How can we take original photos of subjects that have been photographed a million and one times? There are many techniques that you may or may not yet have experienced with, for example the use of a snoot to isolate a subject from the rest of a frame or emphasize a certain part of that subject. Snoots have become increasingly popular, thanks to the inspiring work of Keri Wilk ! However, in this article I am going to try to explain selective lighting with the use of a single or twin strobe and nothing else, which can be all you require for creating photos with a special mood and showing a subject in a “new light”.

Some people like to use two strobes at equal distance from each other on each side of the housing. They will happily use both of them simultaneously for a whole dive without even thinking to change angles or even turn one off, regardless of a subject and its orientation.

Even though this technique may remove unwanted shadows, in my opinion it creates flat, 2-dimensional, unflattering photos. I find that the most difficult part is to aim my strobe(s) in a way that will not illuminate a distracting background or anything that can take away the attention from a subject. In most instances, a single strobe properly angled works best to produce dramatic results, keeping the focus on the subject. By trial and error one can, sometimes, find the perfect strobe angle that best isolates a subject in the frame with a black background to add drama to a scene. Of course, it is not always a success and one will often end up with stacks of rejects, but when it works, it is most rewarding experience!

Even though you can achieve stunning results by using large apertures in macro photography, rendering a background blurry and isolating a subject from the rest of a frame, personally I prefer using the smallest aperture possible to maximise the overall sharpness of my images and create a black background. What I have found works best is to set one or two strobes on full power and



(Left) Ribbon eel (With black background) One way to remove a distracting background is to use the inwards strobe technique . Canon 7D, Nauticam ND7, 100 mm macro, twin Inon Z240, ISO100 f16 1/250



(Right) Ribbon eel (With blurry background) It is difficult to isolate a ribbon eel from its background. Canon 7D, Nauticam ND7, 100 mm macro, twin Inon Z240, ISO100 f16 1/250

to change the aperture until I have achieved a good exposure. I always start around f32 or f29 and try my way down to f16. As they say “a picture is worth a thousand words”; hence I will explain how I achieve selective lighting with examples of my own trial and error experiences.

Hand covering

You can achieve selective lighting by partially covering a strobe with your hand. By doing this, you can choose where the light will and will not illuminate a frame. Instead of using a hand, you can also cover part of your strobe with a black plastic or anything that will block the



It is difficult to get an original photo of a Waspfish because they lay in sand around leafs and logs. Canon 7D, Nauticam ND7, 60 mm macro, single Inon Z240, ISO100 f16 1/200

light. I prefer using my hand as I can directly adjust the coverage of the beam underwater. Let's have a look at the Waspfish photo. The Waspfish was sitting in the front of a log, and front lighting would have also shown a distracting background, not exactly what we're looking for ! To achieve the black background on left side of the Waspfish, I used a single strobe positioned at the right side of my port and angled outwards. I could have stopped there, but I wanted to create a more dramatic image; hence I covered

part of the strobe with my hand, only lighting with the edge of the beam the most important features, the mouth and the eyes.

Use the surroundings

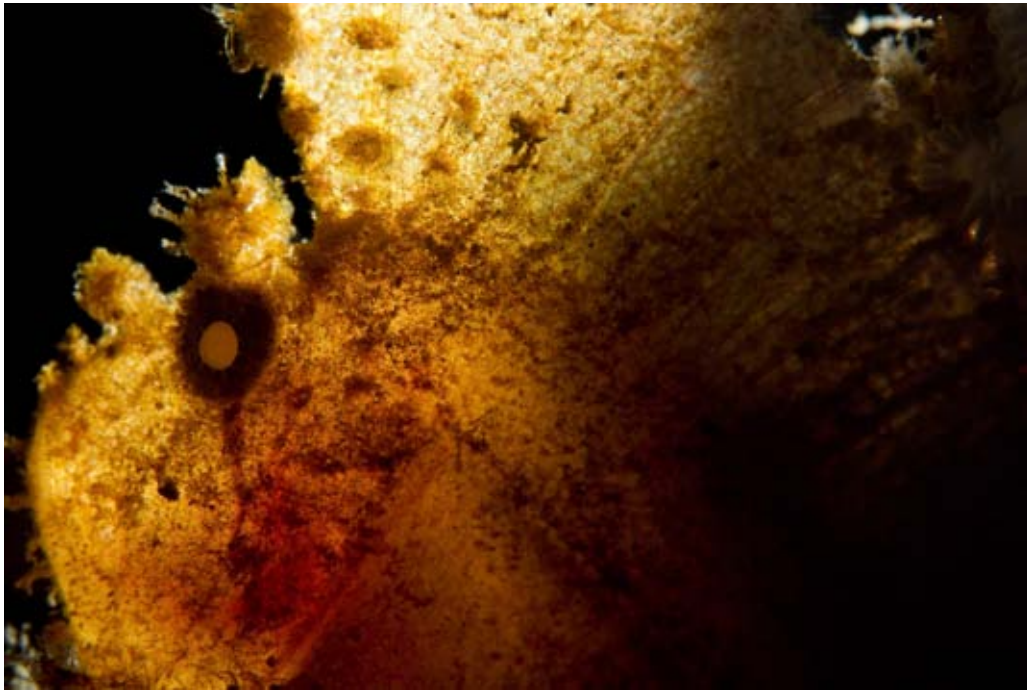
One more way to create a moody atmosphere is by using the surroundings of a subject. By using the same principles as the "hand cover" technique, an object located close by a subject can also stop the light illuminating distracting parts of a frame. It can be a log, leaf,



A tiger shrimp sitting at the edge of a black sponge. The sponge stopped the light illuminating the subject's background, creating a spot-like effect. Canon 7D, Nauticam ND7, 60 mm macro, single Inon Z240, ISO 100 f8 1/100

rock, or anything that is strategically positioned in relation to a potential subject. It may not be obvious at first but with practice you will develop an eye for these kinds of scenes. I used this technique for an eel inside a bottle. The bottle acted as a perfect tool to play with the light. I chose to light the right side of the eel's head because, at the moment, it seemed the better angle of approach with the slight tilt of the eel's head. I took the photo with a single strobe positioned on the right

of the port angled outwards. The neck of the bottle created shadows on the top, right, bottom and back part of the head, creating a different atmosphere all together. I must say that eels are excellent for this type of lighting because they are often hidden between rocks, wood and the likes. The majority of times I encountered tiger shrimps, they stood hidden among crinoids or inside crevices. One time I got lucky, a tiger shrimp stood at the top of a black sponge looking up towards the sky. I took the



Leaf scorpionfish make excellent subjects for backlighting. Canon 7D, Nauticam ND7, 100 mm macro, single Inon Z240, ISO200 f16 1/160

opportunity and lit the tiger shrimp with the outside edge of a single strobe which was angled outwards to the frame. Angled properly, the black sponge acted as a barrier to the light, not illuminating the negative space at the back of the shrimp.

Inwards strobe position

I learnt about the inwards strobe position technique in the last edition of Martin Edge's book "Underwater photography", or should I say "the bible of underwater photography". Even though most techniques seem

easier in theory than in practice, I could directly obtain solid results. For those of you who have not read Martin Edge's last book, I will try to explain. It works by positioning one or more strobes towards the inside of a port until the majority of the output beam will only illuminate a subject and not the background. Basically, a subject is lit with the outside edge of a strobe's beam, whereas in more traditional techniques we try to light a subject with the inside edge of a strobe's beam. I used this technique to eliminate a distracting

background for a blue and yellow ribbon eel photo. I must agree that two strobes on each side of the port facing outwards produced a relatively pleasing result and I could have gone searching for more photogenic subjects such as Rhinopeas which are commonly photographed at Aer Prang in Lembeh. However, I always experiment new techniques to improve my photos, and by placing both strobes at each side of the port but facing inwards, I could isolate a commonly photographed subject from its rubbly background, creating a beautiful black negative space. As a bonus, the ribbon eel opened its mouth as much as it could, making this photo even more special.

Back lighting

Back lighting works best for subjects that are somewhat translucent. Leaf scorpionfish are particularly good subjects to practice this type of lighting because the light seems to shine through, and as a bonus they do not move very much. What I usually do is place my strobe in the desired angle, which needs to be adjusted until I find the best position to avoid backscatters and to illuminate the subject. Then, I change the aperture and/or shutter speed until I obtain the desired effect. Selective lighting enables us to take our photographic experience to the

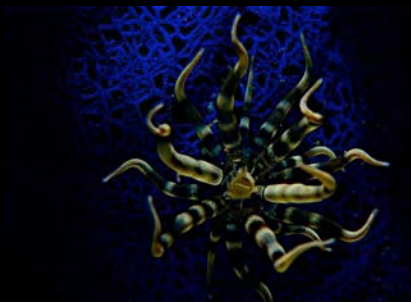
next level, and in many instances can transform what we see. Because of the narrow range of lenses we can effectively use underwater, we have a considerable challenge to differentiate our work to others. Thus, it is important to always try new camera settings and/or strobe angles for a same subject until you have exhausted all the photographic possibilities. If you adopt this mind set, you will need to be patient and never give up any single idea because two or three different strobe angles did not produce any satisfying results, and sometimes you might also need to spend a whole dive with a single subject until you are satisfied with the results.

Of course, there are many more techniques than the ones described above to achieve stunning selective lighting. There are no limits to your imagination!

Daniel Stassen



Creative Lighting with Seahorn Snoot!



Flexible fiber optic attachment coming soon!



Many thanks to Kay-Burn Lim,
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photos above!

Seahorn Snoots are available from:

Scuba Symphony Malaysia: <http://www.scubasympphony.com>

Reefphoto & Video, USA: <http://www.reefphoto.com>

Fotosub, Italy: <http://www.fotosub-shop.it>

Onderwaterhuis, Netherlands: <http://www.onderwaterhuis.nl>

Scuba Supply Sweden: <http://www.scubasupply.se>

Digital Dive, Germany: <http://www.digital-dive.de>

Underwater Visions, UK: <http://www.uwvisions.com>

Cameras Underwater, UK: <http://www.camerasunderwater.co.uk>

Splash Underwater Imaging, Philippines: <http://www.splashuwimaging.com>

Oceanic Focus, Singapore: <http://www.oceanicfocus.com>

Diver Channel, China: <http://www.diverchannel.com>