



Text and images by Scott Bennett, Andrey Bizyukin, Larry Cohen, Amanda Cotton, Andrey Gorbunov, Jennifer Idol, Steve Jones, Matthew Meier, Brandi Mueller, Andrey Shpatak, Peter Symes, Don Silcock, Olga Torrey and Beth Barklage Watson

Ever wanted to know how a photographer captured a fantastic, unique or strangely weird shot? Well, here are the favorite image picks and their backstories from several of our featured contributors, as we celebrate the new year and look back on dive adventures past.

Peter Symes

— *Light-Painted Corals*
Marsa Alam, Egypt

This is quite an old picture, taken over 15 years ago. It shows how film was used, which had far less low-light sensitivity than the sensors in present-day digital cameras. It was shot handheld on a night dive with the full moon illuminating the surface and dive lamps light-painting the corals from behind. I picked it as an example of how an image can be envisaged and planned. I sat on the beach of the Red Sea one fine moonlit evening

and came to wonder whether it was possible to push the envelope and do night photography underwater without a strobe. This was in the days when ISO 100 color slide film was the norm for serious underwater photography, and I happened to also have some rolls of a rather unique slide film:

the Agfa Scala, which was an ISO 160 black-and-white slide film that could be “pushed” to ISO 1600 or 3200 with decent results. But even at these high ISO settings, the required shutter speed would be counted in seconds, resulting in blurry images as I had no tripod or support for the camera.

The solution: I used a rebreather and swam out about five minutes ahead of my buddies and laid down flat on the sand, supporting the camera with my elbows, resting directly on the seabed facing the beach. I got my breathing calm and steady. Since I was on a rebreather, my buoyancy did

not fluctuate, and I was able to lie very still. I composed the image and steadied myself, waiting for my buddies to appear to light-paint the corals. I then squeezed the trigger VERY gently. I believe the indicated shutter speed was about two seconds, but it came out decently sharp. Nowadays,

it is nothing special, and modern technology can produce much better results. But back then, it required thinking out of the box to get the desired results—and that is what this image now represents. This image was captured on a Minolta 700si with a 16mm fisheye in a Seacam housing.



How I Got The Shot

— *Backstories on Our Contributors' Favorite Picks*



Scott Bennett

— *False Clownfish Trio*
Witu Islands, Papua New Guinea

During the daytime, clownfish have attitude to spare, nipping divers who get too close to their host anemone. Yet, the moment a cam-

era is positioned nearby, they promptly retreat into the undulating tentacles. However, on a night dive, it's a different story. At Papua New Guinea's Witu Islands, a slow approach enabled a frame-filling image of this trio of false clownfish. However, getting the right composition required some patience. Although they did not retreat, the fish did squirm about, obstructing each other's bodies or moving partially out of frame. After some perseverance and six attempts, I managed to capture all three fish in a pleasing composition of diagonals enhanced by the vertical format. Although the rear fish is partially obscured, I like that its eye is just visible, peering out. This image was captured with a Nikon D200 camera with a Nikon 105mm lens in a Seacam housing. Camera settings were *f*/29, 1/80, ISO 100. **Bennepix.com**



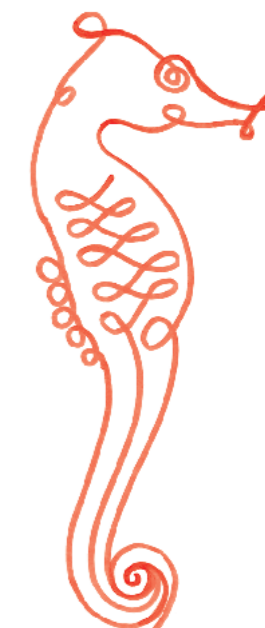
Andrey Bizyukin

— *Curious Brown Booby*, Darwin's Arch, Galápagos Islands, Ecuador

I came up from a dive in a strong current at Darwin's Arch near Darwin Island in the Galápagos Islands. All the other divers in my group were in a hurry to get back onto the dive boat, so as not to get lost in the endless ocean. I decided to skip all that and gave myself up to the current. The current took me quite a distance away, attracting the attention of local birds, which became quite interested in me. Animals are driven by curiosity. For them, there is always a chance to get some extra food or learn something new. This is probably why they became interested in one lonely diver, drifting in the open ocean. They swooped down to me and began diving into the water right next to me. I wasted

no time. I forgot about the boat, my friends, the dangerous currents, and began to entice the birds with my camera and play with the boobies, taking pictures just at random. It just so happened that the birds liked this process, and I got some very funny photos with these curious diving birds. After about 15 minutes of being late returning to the dive boat, my friends and the crew finally found me and picked me up. Upon reflection, I realized how useful it can be sometimes not to push oneself and rush to get back onto the dive boat, but to take the time and use any opportunity to play with our small curious brothers. This photo was taken with Canon 5D Mark II camera with a Canon 15mm lens, Subal housing, and two Inon Z240 strobes in manual mode. **Xray-mag.com/contributors/AndreyBizyukin**

SEACAM
silver



cinema of dreams



www.seacam.com



Amanda Cotton

— *Humpback Whale Calf*
Vavau, Tonga

Young humpback whales can be quite inquisitive and this calf was no exception. While leading a group for BigAnimals Expeditions in Tonga last season, I encountered this youngster with its mother resting just below the surface. While mom

was happy to hover calmly around ten meters below our group, her young calf could not contain its enthusiasm, bolting to the surface and coming in close to our snorkelers time and time again. Photographing these large animals is always exciting; knowing these encounters are initiated by the animal and end when the whale is ready to move on

makes these long encounters that much more memorable. This image was captured while the calf was at the surface, using ambient light only. The photo was taken with a Nikon D800 with a 24mm Nikon lens in a Isotta housing. Camera settings were *f/16, 1/1000, ISO 320*.
Acottonphoto.com



Larry Cohen

— *Outrigger Canoe, Witu Islands, Papua New Guinea*

I was diving with *MV FeBrina* in Papua New Guinea off Witu Island. While underwater, a group of locals visited the live-aboard. At the end of the dive, I glanced towards the surface and saw the perfect image. An outrigger canoe was silhouetted against the blue sky. The lighting was perfect, the water smoothly changed from dark indigo to middle sky blue, and then to a light blue as the sunlight streamed through the water.

The person in the canoe turned into an abstract figure because of the ripples of water, and the paddle in his hands added to the composition. Sometimes the perfect photograph just happens.

This image would visually say Papua New Guinea, merging

the culture and underwater world. Unfortunately, there was one problem. I had a 60mm macro lens on my Olympus OM-D E-M1 and a flat port on my Aquatica AE-M1 housing! I knew before leaving PNG, I had to recreate the image.

The following week, I continued my adventure at Tufi Resort. I discussed creating the image with resort manager Brian Boustridge. Two days before leaving Tufi, I traveled an hour offshore to Veale's Reef. I was in one dive boat, which was followed by another boat that had a few people from a local village and their outrigger canoe. As we arrived on site, the sky turned gray, the wind picked up and the seas rose to 1.5m. Today was not the day to get my shot.

We needed to stay close to the dock area on the last day of diving in PNG. The sun was shining, but this close to shore,

the water had a greenish cast. Still, a green photo would be better than no photo. We swam out a little distance; on the surface, we were followed by the police chef's son in his outrigger canoe. I had my Olympus M. Zuiko ED 9-18mm f/4-5.6 wide-angle lens on my camera and a dome port on my housing. I positioned the canoe to get the same lighting effect I saw the week before. Diving down, I was able to lay on the sandy bottom in 5m of water and shoot upwards.

To get detail in the shadows, I fired my two Olympus UFL-3 underwater strobes on low power. The camera was set at ISO 200, shutter speed at 1/250 and aperture at *f/13*. I got the image I wanted but was not happy with the green cast on the RAW file. Using Adobe Lightroom, I was able to adjust the color to a pleasant blue.

Liquidimagesuw.com



photo &
video



Andrey Gorbunov
— *Stone Flower, Orda Cave*
(the largest cave in Russia)

Every pupil in Russia knows the ancient legend about the master who created a masterpiece of stone called "The Stone Flower." Divers who dive Orda Cave often get to see a unique natural object: a giant column, 15m high, which looks like the huge "stone flower" of legend. When I saw this column, I wondered how I could take a picture of it to show all its beauty. It is not easy to take photos in an underwater cave, in a huge underwater hall with a width of about 80m, in cold water with a temperature of 6°C (43°F). One has to solve the problem of lighting such a huge underground

space. Fortunately, a solution came to me when a group of experienced cave divers from different cities simultaneously gathered to dive the cave. I was lucky that they all agreed to help me and take part in the photo shoot.

It was not easy to organize and coordinate the actions of 15 cave divers all together. Clearly, we had to have a detailed briefing, but not all the divers were able to swim with creative direction. It would take luck to get the shot. I tried to find the right camera angles for over an hour. The 15 divers underwater were constantly moving and going in different directions. In total, we had about 400 thousand lumens of light per group. I changed positions and depth in search of an interesting shot, waiting for divers to

be in the right place. The water in this underwater cave tends to be turbid, so when the whole crowd of 15 divers were actively breathing, their bubbles raised even more silt.

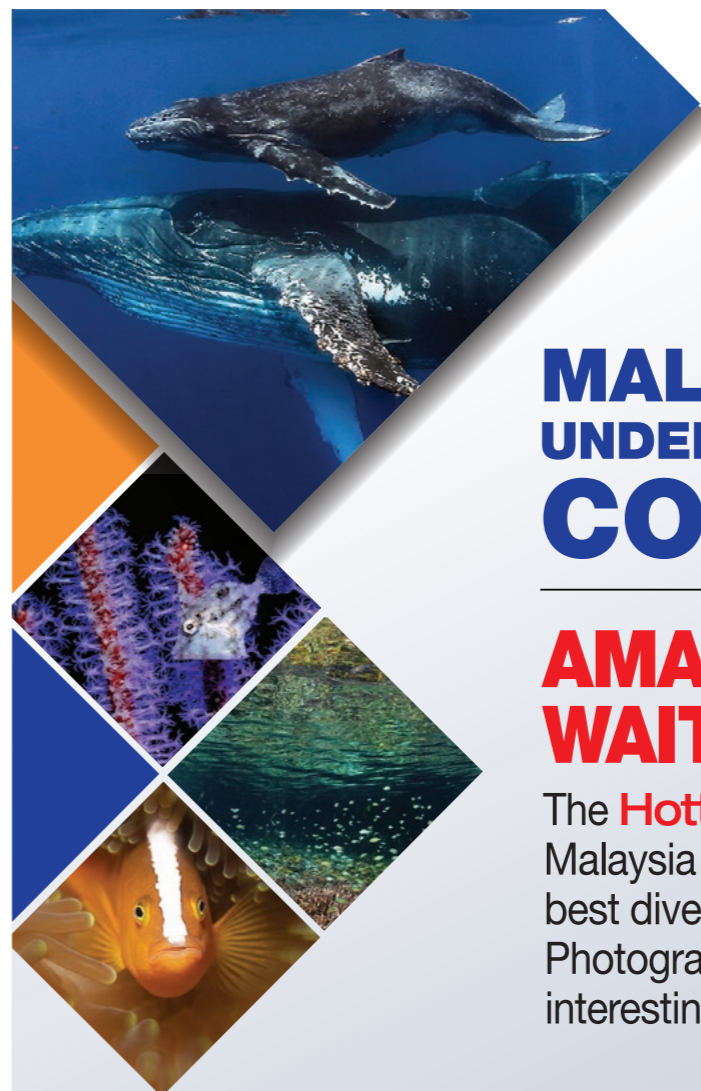
With the dive time coming to an end and the visibility quickly dropping, I ascended up to the ceiling. Suddenly, everything fell into place: the transparency of the water, the divers and the light, and the beautiful perspective. It is worth remembering that in caves, photographic success is a huge team effort. One photographer does not take a good picture. Therefore, I want to say thank you to all the members of our team. I hope we continue to dive the cave together and capture more new and interesting images. **Ordacave.com**



MALAYSIA'S ANNUAL UNDERWATER PHOTOGRAPHY COMPETITION

AMAZING PRIZES ARE WAITING FOR YOU!

The **Hottest** and **Coolest** Dive Expo in Malaysia is bringing to you prizes from the best dive destinations in Asia, Dive Equipment, Photography Gadgets and many more interesting stuff you're gonna love.



PARTICIPATE NOW!

Register at www.lensbeyondocean.com
Closing Date: **31st March 2019**



Malaysia International Dive Expo
3 - 5 MAY 2019
PUTRA WORLD TRADE CENTRE
KUALA LUMPUR • Malaysia





photo & video



Jennifer Idol

— *Lamna ditropis*, Port Fidalgo off Prince William Sound, Valdez, Alaska, USA

Our best images are not necessarily the most technically correct or complex. Sometimes, they are our favorites because of our intimate relationship with the subject. Alaska captured my heart the first time I visited and ran away with it completely when I saw a salmon shark for the first time.

This first visit was filled with days of waiting, punctuated by a split second of joy as a salmon shark chasing our herring rushed past me. While I used strobes, they are tricky for adjusting to the fastest shark in the world. Keeping shutter speeds fast and f-stops as sharp as allowable helps reduce blur. Rectilinear wide-angle lenses keep the whole shark in the frame with as little distortion as possible. While the sharks can come very close, a fisheye generally shows too much water and reduces the shark in the frame too much.

This moment inspired me to return again and again, with me now leading a limited trip to visit

these shy sharks. They are terrified of people, so we hide beneath a boat and try to keep as still as possible, even when presented with lightning-fast encounters. The salmon shark is also a shark species that may have diminished in population astronomically, with records showing numbers as great as 100,000 killed in a single year. By visiting these sharks each year

and documenting them, I can share their story and educate people about the differences between various shark species, their behaviors and their needs. This image was taken with a Nikon D5 camera with a Nikkor 16-35mm lens in a Nauticam housing, using two Inon Z240 strobes. Camera settings were *f/8.0*, *1/250*, ISO 1250. uwDesigner.com

Steve Jones

— *Tunnel Vision*
National Diving and Activity Centre (NDAC), Chepstow, United Kingdom

Wrecks present vast areas to light and can prove a challenge if you choose the wrong technique. Generally, there are three light sources in use by wreck photographers that can be used in a variety of combinations: ambient light, strobe light (flash) and continuous light (LED). The latter two sources can be mounted on or off the camera, placed near or afar, and you can use as many as you like! This image of BBC Natural History Unit filmmaker Doug

Anderson swimming through an aircraft wreck is a good example of using off-camera LED lights to illuminate an image.

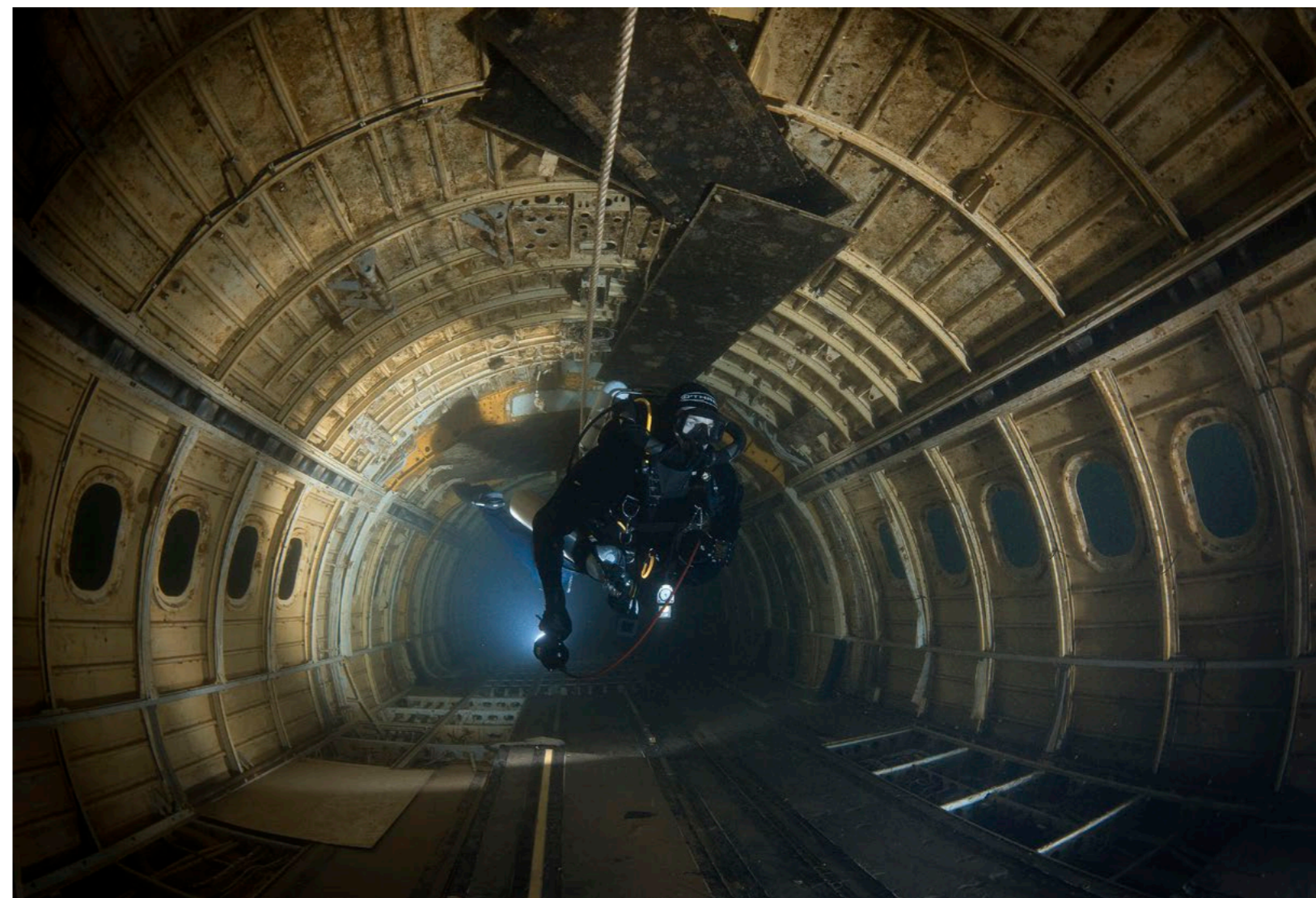
Our light source was the mighty Orcalight, a canister lamp available in several versions, including an ultra-powerful 22,000 lumen and an almost-nuclear 30,000 lumens! Due to the length of this aircraft, one lamp would not have been enough to illuminate both the foreground and background, so we used two Orcalights to give the image the necessary depth.

Doug was carrying one pointing backwards, set on full power and lighting everything behind him. The second Orcalight was positioned to the right of me to

light the foreground. I turned this one down to one-third power to balance the light and not overexpose Doug.

One of the most creative and fun forms of wreck photography, off-camera lighting allows you to bring out colour and highlight details that are too far away for lights mounted on-camera. Experiment with this type of lighting and you will find that even though it requires a bit more effort, the possibilities are endless!

This photo was taken with a Nikon D4 camera with a Nikon 16mm fisheye lens in a Seacam housing. Camera settings were *f/8*, *1/60*, ISO 3200. Special thanks to Orcalight.co.uk. Millionfish.com



How I Got The Shot





Matthew Meier

— Weedy Scorpionfish (*Rhinopias frondosa*), Great Barrier Reef, Australia

During a recent liveaboard trip to Australia's Great Barrier Reef, I was lucky to discover this weedy scorpionfish hiding under a plate coral on a pinnacle called Steve's Bommie. Also known by their scientific name, *Rhinopias* sp., these fish are rare finds and on the bucket list of almost every underwater photographer. Lucky for me, we had two dives on this site, as I had a wide-

angle lens on my camera when I found this beauty during my first safety stop. For the second dive, I swapped over to my 105mm macro lens and headed straight to the spot where I last saw the rhinopias. These fish are ambush hunters and do not move around much, so it was still in the same general location but had turned around to face away from the outside wall of the pinnacle. What would have been a fairly easy photograph now involved a bit of contortion work and delicate buoyancy to avoid damaging the surrounding

coral. Happily, there was enough room to see under the plate coral from the other side but not enough room to maneuver and include the entire fish in the frame. Using my one strobe on the right, along with a homemade snoot, I feathered the light to avoid illuminating the busy background and created this portrait, silhouetted against a black background. This image was captured on a Nikon D810 in a Subal Housing, with a Sea&Sea YS-250 strobe, shooting at *f*/13, 1/125, ISO 200. MatthewMeierPhoto.com

Brandi Mueller

— Squid on Bonfire Dive
Lembeh Strait, Indonesia

Recently on a trip to Indonesia, I was given the opportunity to do a bonfire dive in Lembeh Strait. I did not know what that was, so of course, I said yes. Sort of inspired by blackwater dives, a bright light is set up on the seafloor pointed upward on a night dive to try and attract free-swimming ocean animals such as plankton, larval-stage animals and other critters, which may come up from deeper depths at night. The difference is that bonfire diving is shallow, whereas blackwater dives are in open water.

We headed out to Lembeh Resort's house reef, which has a simple shore entry. It was a short swim to around 20m (60ft) where our dive guide set up the light, and we let it "burn" for about 15 minutes while we checked out the area like a normal night dive. Coming back to the light, we saw it was swarming with plankton, marine worms and other critters. This squid (*Sepioteuthis lessoniana*) and several others were among the marine life chaos in the light. As I swam a bit closer, this squid left the bonfire and swam right to my camera in-between the beams of my two

focus lights.

It spent several minutes swimming right in front of me, giving me lots of time to try different shots and get the squid at different angles and to adjust my strobes. I particularly like this angle where you can see both its eyes, but the arms are centered. I wondered if it was upside down, but I

guess the real question is, "What is upside down for a squid?" I also really like that you can see individual suckers on its arms. This image was taken with a Nikon D850 and a 60mm lens at *f*/11, 1/160, ISO 200. I was using two focus lights to light up my subjects and two Ikelite DS161 strobes.

Brandiunderwater.com





Andrey Shpatak

— *Walking Giant Pacific Octopus (Enteroctopus dofleini), East Sea, Primorskij Kraj, Russia*

In the East Sea, it is quite rare to find a giant octopus walking underwater these days. We have quite a large number of large seals here, which hunt and eat octopuses. But our local fishermen also like to catch giant octopuses.

Most often we see octopuses in burrows, where they come out to walk the sea floor only at night. I found this very large and calm individual walking on the sandy bottom about 20m away from some rocky underwater reefs. Octopuses of this size are probably the best photo models; they hold themselves with the inherent strength and composure of giants. We spent about 20 minutes

together, but I captured my best shot at the very beginning of our interaction, when the octopus passed through some bright green seagrass (*Zostera marina*). This photo was taken with a Nikon D800 camera with a Sigma 15mm lens, Sea&Sea housing, and two Inon Z240 strobes in manual mode. Shpatak.livejournal.com



Don Silcock

— *Florida Manatee, Crystal River, Florida, USA*

The very best place in the world to see and photograph the unique Florida manatee is without a doubt the Three Sisters Spring (3SS) in Crystal River, Florida. The manatees gather there every winter because of the warm waters of the many freshwater springs in the area. And the 3SS is the biggest and very best of those springs. The “three sisters” refers to the three large lobes (areas) of the overall spring. In the right circumstances, it is an amazing and incredible place to see the manatees be-

cause the spring waters are crystal clear, and it feels like you are immersed in gin. In the wrong circumstances, you could be sharing the springs with dozens of tourists and schoolchildren who kick up the bottom and transform that gin into a muddy cocktail!

So, you just have to be there, be patient and hope for that special moment. Mine came one afternoon when I found myself alone with a snoozing manatee in one of the lobes. I knew that within the next 10 to 15 minutes it would have to rise to the surface to breathe. And I also knew that when it did, it would be quite quick, and that the best angle would be from

down low.

So, I made 100 percent sure I had all my settings correct and waited. At the first signs of movement, I prepared to exhale and sink to the bottom so I could capture my visualized image of the floating manatee. Underwater breath holding is not my forte, but I managed to stay on the bottom long enough to capture what is one of my all-time favourite images! This photo was taken with a Nikon D800 camera with 16-35mm lens in a Nauticam housing with a Zen 230mm dome, using two Ikelite DS160 strobes. Camera settings were *f/13, 1/60, ISO 640*.

Indopacificimages.com





Olga Torrey

— *Diver in Cenote Jardin del Eden Ponderosa, near Playa del Carmen, Mexico*

A few years ago, I went cavern diving in Cenote Jardin del Eden Ponderosa, near Playa del Carmen. I wanted to show the magic of this spectacular under-

water location. Crystal clear water, with light penetrating the surface, creates the feeling of being on another planet. I had our dive guide pose at the location, which added to the composition.

I turned the power down on my strobes to fill in the shadows on the overhead ceiling so one can see the soft brown color in

contrast to the blue and green.

This time, I used the Panasonic Lumix G Vario 7-14mm f/4 ASPH lens on my Olympus OM-D E-M5 camera in a Nauticam housing. Two Sea&Sea YS-D1 strobes were used for lighting. Camera settings were f/6.3, 1/40, ISO 1250.

Fitimage.nyc



Beth Barklage Watson

— *Barracuda (Sphyræna), Tubbataha, Philippines*

Tubbataha lies in the middle of the Sulu Sea. This amazing dive destination offers great wall diving and the opportunity to see a variety of pelagic fish. It was a gorgeous day, the sun was shining and the seas were calm and flat. On this dive, we were making our way along a steep vertical wall. Out in the blue, I noticed a large school of barracuda. They were lined up in a long, narrow and compact group. Working my way out towards the fish, I contemplating in my mind the image I wanted to create. Shooting the image in a vertical format was an easy decision given the formation of the fish. Dialing in the camera settings and strobe positioning was the next step. Then came the tricky part, hanging patiently in the water column, waiting for the fish to come as close as possible. Chasing them would have only pushed them further away. Eventually, the



fish lined up and came very close. I was able to capture this shot. In post-production, the image was de-saturated allowing the details and highlights of these amazing fish to be revealed. This image

was taken with a Canon 5D MKV camera with a Canon 8-15 4.0L fisheye lens in a Nauticam housing using Ikelite strobes. Camera settings were f/13, 1/125, ISO 640.
BethWatsonImages.com



photo & video

Two in one

When I-Divesite launched the Symbiosis SS-2 system in which an LED light and flash is combined in one smallish body, it quickly proved to be very popular. Now a younger sibling, the SS3, is being launched, which is far more compact, combining a 2800 lumen LED light and a flash with a guide number of 20 under the same dome. It is also much lighter, weighing only 520g on land (half that of the SS2), something the travelling photographers will appreciate. It is powered by two 18650 Li-ion batteries, which are standard rechargeable batteries. LED burn time is rated at 55mm and number of flashes is 700 with 3400mAh batteries. Its depth rating is 60m. **i-Divesite.com**



Variable colour

The two new Venom lights from i-Divesite, the 50 RGB and 60 RGB models, which we were presented with at DEMA comes with a feature that we have not seen before. The little knob on the top of the housing changes the colour temperature of the beam and thus is used for creative lighting or casting the background in a different tone. The Venom 50 RGB outputs 5000 lumen with a CRI* value of 90. The Venom 60 RGB is slightly more powerful with an output of 6000 lumen but with a smaller CRI value of 80. **i-Divesite.com**



* "A colour rendering index (CRI) is a quantitative measure of the ability of a light source to reveal the colours of various objects faithfully in comparison with an ideal or natural light source. The CRI is expressed on a scale from 0 to 100 percent, indicating how accurate a 'given' light source is at rendering colour when compared to a 'reference' light source. The higher the CRI, the better the colour rendering ability. Light sources with a CRI of 85 to 90 are considered good at colour rendering." — Wikipedia

Upgraded models from Retra

Slovenian flash manufacturer Retra always placed much emphasis on producing a wide and very even beam without unsightly hotspots. As they put it: "It's not all about guide numbers." Based on feedback from photographers who are using the original Retra Flash, the company has now launched two new models—the Retra Flash Prime and PRO. The improvements include an optimised user interface to make the use of the flash more intuitive and precise. The new models now come with 13 power levels—as compared to nine in the original—and a colour temperature of 4900K, down from 5600K in the older version. The Retra Flash PRO features 50 percent higher flash power and 65 percent brighter pilot light compared with the Retra Flash Prime. Battery indicator and leakage detector are built-in. Housing dimensions and controls are identical on both variants. **Retra-uwf.com**



Splashproof backup

The rugged SanDisk Extreme Portable SSD has been designed to stand up to rain, spills, dust and drops—all of which are part of the environment when going on a dive trip. High-speed transfers with up to 550MB/s read speeds makes it well suited for saving and editing hi-res photos and videos on the go. Thanks to the housing, the drive can withstand operating temperatures ranging from 0°C to 45°C (32°F to 113°F), as well as storage temperatures ranging from -20°C to 70°C (-4°F to 158°F). The drive comes in capacities of 250Gb, 500Gb, 1Tb and 2Tb. The pocket-sized drive is lightweight at only 79g (0.17lbs) and compact enough to fit in the palm of your hand. The drive comes formatted exFAT for PC and Mac compatibility, and will work with both PCs and Mac computers out of the box—no drivers needed. The SSD comes with a 3-year limited warranty. **Sandisk.com**



Be aware of counterfeit memory cards on Amazon and eBay

Fstoppers—the online photography community—citing numerous reports, warns that Amazon still has massive problems in particular with memory cards when it comes to weeding out counterfeit goods, even when selling via its Prime service. Reviews on Amazon itself suggest that some customers are losing images as a result of being scammed.

Fake cards may mount all right, reporting the correct capacity written on the package, and never report an error when the capacity of the original card before modification has passed. These cards may even format correctly to the fake capacity. However, once they reach capacity, they will no longer function and any images cannot be read. Effectively, the cards become unmountable.

If you are curious about how memory cards can be faked, have a look at this **YouTube video by Linus Tech Tips. (link)**

In 2011, Petapixel (another big online photography resource) cited a SanDisk engineer who said that "at any given time, approximately a third of the SanDisk memory cards . . . in the world are counterfeit. As in, not SanDisk memory cards at all—some other kind of cards dressed up as lookalikes."

Giveaway signs include a yellow locking tab (it should be gray) and a lack of a serial number on the reverse.

Amazon is quick to replace counterfeit goods, but this does little to make up for one's images that are lost as a result of using the fake items without realising it. Buy memory cards from large chains or authorised dealers, and consider the rest suspicious. Use your computer to test the card immediately after purchase because you might miss the window to return it. ■