

Underwater Photography

Nov/Dec 2018

Issue 105



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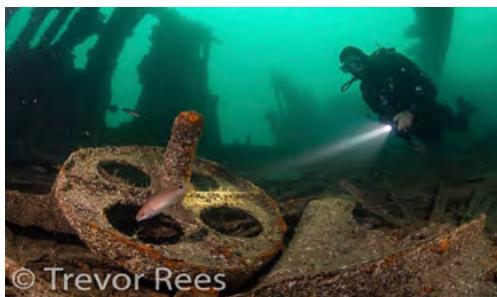
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SoCal Shootout 2018 | Andre Labuda



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Publisher/Editor Peter Rowlands
www.pr-productions.co.uk
peter@uwpmag.com

Teamwork in competitions

A bi monthly publication is hardly the most apt publication to discuss today's topics but my comment in the last Editorial about this subject encouraged the following two responses which is gratifying and I include them for your records.

Avid readers will no doubt be on the edge of their seats to hear whether my attempt at teamwork in competitions had any success and I am here to stand up and tell you that it did not. Not because the team wouldn't work together for they most certainly did but to our credit the images entered by 'the team' were all in the winners enclosure, so to speak, and it was certainly a step in the right direction.

Anyway whilst I'm still on the subject and with half a column to spare, if we are to accept that competitions are a healthy way to encourage the progress of underwater photography then the organisers as a whole must realise how important competitions are and the role they play in encouraging development and innovation.

Part of that responsibility must be in the choice of judges; they are the funnel from which emerges significant influence and therefore future direction. I suspect that not enough thought is put into who is genuinely suitable to make such important decisions.

Now I don't think for one minute that an entrant will modify their choice of entries to suit what they think are the tastes of the judges but it is only natural to look at winning images and to try and emulate them in the hope of success.

As a result the choices made by judges will have a marked effect on how we all develop.

Peter Rowlands
peter@uwpmag.com

Editorial

Teamwork responses:

Your editorial in UWP104 is a breath of fresh air, a brave move and it goes right back to the early days of BSoUP when guys shared ideas rather than squirrel them away - congratulations.

As a fellow boat skipper (as you know) I'm sometimes amazed at the competitiveness of the snappers onboard and often their tendency not to work together whereas in your very memorable example teamwork paid off, for which, I am always grateful for you as a model. I'm now intrigued to find out what is in UWP105!

Charlie Hood
<https://charleshood.com>

Your compelling arguments for the idea of team work in photo competitions, highlights another aspect of modern day photo comps that has fallen behind the times. In becoming so individual-centric, the major comps in the world today reflect no acknowledgement of the story-telling power of collaborative work.

Going back over the past century or more, through to the modern day, collaborative work by the likes of Richard and Cherry Kearton, Orsolya and Erlend, Haarberg, Des and Jen Bartlett, Andy and Sarah Skinner, Hans and Lotte Has, Ron and Valerie Taylor, Armand and Michaela Denis, and many others, have raised awareness and enhanced understanding of the Earth's natural history, and entertained and inspired people in the process.

By definition, no individual photographer, no matter how capable and committed, can match the comprehension and captures of two or more dedicated observers, each with their unique interpretations, each looking for different aspects within the form and behaviour of a common subject, and each equipped with different selections of lenses and techniques. From their collaborative work can emerge a far wider, more in-depth, more nuanced narrative. Plenty of scope there for 'Portfolio' awards featuring inputs from multiple collaborating photographers, I would think.

I made the recommendation for a collaborative entry category to the NHM comp last year. I had several sperm-whale birthing activity u/w shots, which are OK in their own right: Robyn has some above-surface shots that are also OK on their own, but both sets are incomplete without the other. Combined, they create a really interesting narrative that has not been previously photographed. And, I'll bet, there are heaps of husband/wife, brother/sister, sister/sister, mate/mate et al combos out there with similar stories to tell.

NHM seemed then to have no interest, so a ground swell from your readership, stimulated by your original idea might well start to change that. See how it goes!

Wade Hughes FRGS
www.wadeandrobbynhughes.com

News, Travel & Events



Underwater Photographer of the Year Competition 2019 is now open for entries

Entrants have until 4th January 2019 (midnight GMT) to enter their images into the world's premier underwater photography competition.

Judging takes place on 6th - 8th January 2019 and every single image entered will be seen at least twice by our panel of judges.

To honour our commitment to the continuous development of the UPY competition we've added two new categories and one new award.

British Waters 'Living Together'

sponsored by the Crown Estate
www.thecrownestate.co.uk

This is a new category for the 2019 competition and is sponsored by The Crown Estate.

The Crown Estate play a

role in managing activities on the seabed around England, Wales and Northern Ireland, and wanted to create a category that showcases the co-existence of nature and human activities on the UK seabed.

We are happy for photographers to interpret the Living Together theme in a broad fashion in the first year of this new category.

We are looking for strong, striking images (both macro and wide angle) that show the value of natural and/or man-made habitats in British Seas, particularly offshore renewables. Open to all.

Marine Conservation Photographer of the Year

Marine Conservation
Photographer of the Year: (new for

2019) is open to both underwater and "above water" photos. Open to all photographers (even those who are not underwater photographers).

This category has a separate entry system. This is a single image category and photographers may enter up to 5 images. Photos can be taken underwater or above the water but must highlight a marine conservation story (both positive and negative stories are eligible). Freshwater themed images are not allowed.

Images will be judged without captions (but entrants can assume that the judges will be aware of most major marine conservation topics). The winning images will, however, be displayed with a full caption.

2019 is a trial year for this category. Therefore it is free to enter and there is no prize. The winning photographer will be named Marine Conservation Photographer of the Year 2019, and will be promoted alongside the other UPY winners.

Underwater Photography Book of the Year

This category is for underwater photography books first published after 1st January 2017.

Eligible books must contain at least 50 underwater photographs and must be entered by the main photographer/author.

All types of underwater photography (wreck, nature, conservation, studio etc) can be entered and will be judged according to the photographic theme of the book.

The text of the book will only be a minor factor in the judging process and books published in languages other than English are eligible.

Self published books and eBooks are eligible, but they must have an ISBN.

Authors can enter more than one title. At present this category is free to enter and there is no prize, but the winning publication will be named Underwater Photography Book Of The Year 2019, and will be promoted alongside the other UPY winners.

2018 winners

Kirsty Andrews
British Waters Macro 3rd place

"I look forward to Underwater Photographer of the Year entrance day every year; the quality of images is superb and I'm so proud to have had my name on the list for the past two years. I also like poring over the Yearbook to read the judges' reviews and shooting information provided, which inspires and motivates me for next year's shooting projects.

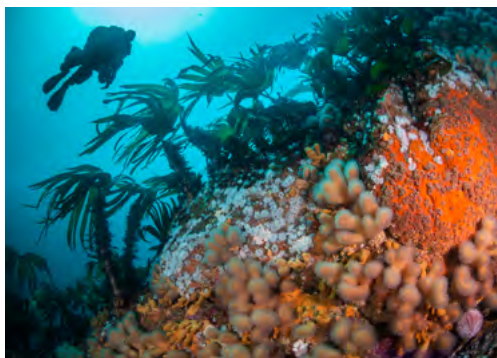
The 'points mean prizes' system

for UPY is clever and means you get to choose a prize that really suits you. In my case it couldn't have been more tailor-made; I was already hoping to spend a week on the liveaboard MV Halton in 2018 so was delighted to win a week's diving for me and a buddy, which I took advantage of almost straight away.

Having done well in the British macro category, it was great to win the opportunity to take more UK shots in some of Scotland's most remote and photogenic sites. A lot of my photography is UK-based and I love to surprise and impress people with the beauty in UK seas. I already knew the diving would be spectacular but my buddy Mae Dorricott hadn't been diving in Scotland before and was blown away by the visibility, colour and life on our trip. We were really lucky.

Bob Anderson, our skipper, is a very talented photographer himself so knows how demanding photographers can be and what will keep us happy! During the week I shot tiny pelagic crustaceans, soaring arches, caverns and sea walls, diving seabirds and a jellyfish explosion in a sea loch. It was a truly memorable trip and a worthy prize for the Underwater Photographer of the Year competition."

www.mvhalton.co.uk



Shane Gross 2018 Macro 'Winner' and Behaviour 'Highly Commended'

"Congratulations to Shane Gross, the winner of Photographer of the year macro division 2018. Shane's eye and lighting skills came together for his stunning backlit image of seahorse shot to represent density at one of his favorite dive sites.

Shane won a dive package for a week at CBR and of course the honor and high esteem of winning in such a competitive category and prestigious

Sylvie Ayer 2018 Black & White 'Runner Up' and 'Commended', Up & Coming 'Highly Commended'

The 2018 UPY competition saw Sylvie Ayer from Switzerland do very well, with three images being included in the winners circle. What was even more impressive was that this was Sylvie's very first international competition, so to get a 'Highly Commended' in the Up & Coming category was richly deserved, but also be awarded as 'Runner Up' in the open Black & White category was a huge achievement. Sylvie chose the 1500Euro voucher to spend with Siren Fleet to the Philippines.

The photo above is a very happy Sylvie with the crew of the Philippines Siren!



competition.

Well done Shane! from everyone at Crystal Blue Resort."

www.divecbr.com



www.sirenfleet.com

www.underwaterphotographeroftheyear.com

www.uwpmag.com



Galapagos with Josef Litt 17 Jan 2020 - 26 Jan 2020

Author, explorer and photographer with a curious mind and a soft spot for life, fish, universe and everything. Josef travelled the world for business and pleasure. Josef is an acknowledged underwater, nature and drone photographer.



“Since I was a little boy, I dreamt of becoming an adventurer shooting movies in the wilderness of Africa and the depth of the ocean. Hitchhiking did not cut it, so I borrowed a camera and took it under water.”

After creating half a dozen of books from trips for his friends and family, he wrote and published GALÁPAGOS, a fantastically received travel guide to the archipelago.

www.scubatravel.com

2018 International Coastal Clean-up (ICC) in Malaysia



On 22nd September, Reef Check Malaysia joined numerous partners across Malaysia to participate in the 32nd International Coastal Clean-up (ICC) Day 2018. Nearly 4,000 volunteers joined the effort, which covered all of Malaysia's states. A star studded cast included Tengku Zatashah from Selangor, YB Yeo Bee Yin, Minister of MESTECC, H.E. Victoria Treadell, British High Commissioner, and celebrities galore.

In previous years, RCM has conducted clean-ups and programmes in conjunction with ICC on Tioman and Mantanani Islands, but on a much smaller scale. This year, RCM planned for a clean-up on a much wider scale, in conjunction with the 3rd International Year of the Reef (IYOR) 2018.

RCM's Theresa Ng, who coordinated the event, commented: “The Body Shop is the custodian for

ICC in Malaysia, and we approached them to offer our help to arrange a national-scale event to coincide with IYOR and to gather data for our campaign to reduce marine debris. Teams were self-organising and we provided briefing materials on how to conduct clean-ups and collect data. The effort has been tremendous, and we would like to thank the thousands of people who have taken part”.

The clean-up was conducted at 84 locations around Malaysia. Nearly 7,500 kg of trash was removed from beaches, with the most common items being plastic bottles, cigarette butts and plastic bags.

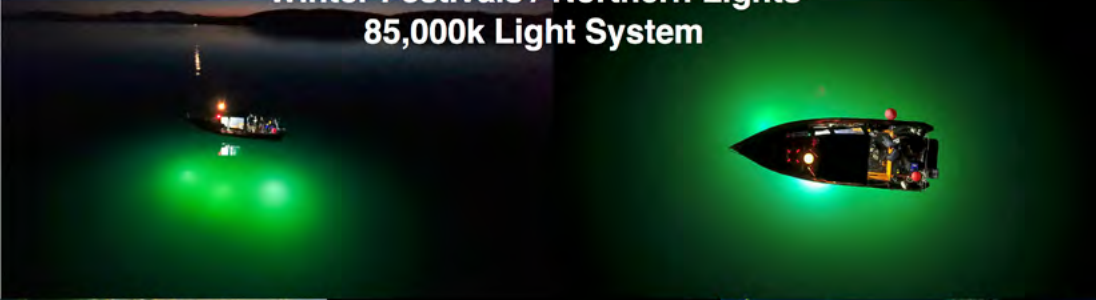
www.reefcheck.org.my



Michael Patrick O'Neill school assemblies



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www.baskingsharkscotland.co.uk / www.diveoban.com



Treat your students and staff to an unforgettable elementary / middle / high-school assembly with national author & wildlife photographer Michael Patrick O'Neill!

In the past 14 years, he has visited over 400 schools in 24 states, and his school assemblies are often described as the "best ever." They combine the arts, science, conservation and writing and fit perfectly with school curriculums.

To make sure the entire student body benefits from his visit, Michael has age-specific school assemblies, one for the little guys and girls (K-2; 40 minutes), and one for grades 3 and higher (50-60 minutes). The former is more basic, while the latter is more sophisticated and includes topics such as an in-depth discussion on marine biology, conservation, geography, and writing, among other topics.



He prefers to limit the size of to no more than 200 children, and they should take place in a room where the lights can be turned off so the projected images look their best.

His equipment requirements (provided by the school) include a quality LCD projector, mike and large screen. He brings his own laptop, loaded with his Keynote presentations.

www.mpostock.com

www.uwpmag.com



Tulamben, Bali, Alam Batu Sep 21 - Oct 1, 2019



2019 Raja Ampat with Bluewater Travel's Katie Yonker February 25 - March 8, 2019

The jewel-like islands of Raja Ampat are caressed by a convergence of swift nutrient-rich currents. Here the pulse of marine life thrives from the sea floor to the surface where the kaleidoscope of corals can start in less than a meter of water.

There are sites that are so pristine and packed with growth, that a photographer is hard-pressed to find a spot to place a steadying finger. Exotic sea life and macro critters abound of course, and photo opportunities border on overwhelming.

But at the end of the day, the most memorable moments for us are what can rarely be captured in digital format: the incredible experience of drifting along miles of exquisite reef brimming with hues and activity, the likes of which few have ever experienced.

www.bluewaterdivetravel.com

Tulamben, Bali is well known for its biodiversity. Alam Batu's 800-meter house reef is one of the region's best. Guests often spot pygmy seahorses and larger animals like ocean sunfish and even pilot whales on the same dive.

Short boat rides are available to famous dives sites like The Dropoff, Coral Gardens, and Ulami. Also not far from the resort is the wreck of the Liberty, a U.S. cargo ship torpedoed during World War I, a bucket-list dive site that's among the world's most

famous wreck dives.

Both wide angle and macro shooters will be happy. The region's ecology is complex. More than 3500 different species have been found in the surrounding waters. Iconic critters like the harlequin shrimp, wonderpus, seahorses, frogfish, boxer crabs and various nudibranch are regulars around the resort. Alam Batu's underwater guides are experts at spotting unique photo opportunities.

Small groups of divers ensure excellent images for everyone.

www.backscatter.com/reviews/post/Tulamben-Bali-Alam-Batu-Underwater-Photo-Trip

7th annual Ocean Art Underwater Photo Competition

The Underwater Photography Guide is proud to announce that it is accepting entries for the 7th annual Ocean Art Underwater Photo Competition.

Ocean Art is one of the most prestigious underwater photo competitions in the world. A long list of prizes valued at over \$75,000 also makes it one of the richest, attracting pro to amateur photographers across the globe.

Sixteen categories ensure all photo disciplines and cameras compete fairly, while the 75+ winning images create a portfolio of the best underwater photos of the year.

Ocean Art prizes are provided by almost 30 scuba diving resorts, liveaboard dive yachts, and underwater photo gear manufacturers.

Grand prizes include a choice of an Indonesia liveaboard itinerary on the S.M.Y. Ondina, an Indonesian liveaboard itinerary on the M.Y. Oceanic, a 7 night liveaboard trip to Palau on the Solitude One, a trip aboard the Pelagic Fleet, a 7 night liveaboard trip on the M.V. Bilikili in the Solomon Islands, 7 nights on the Solomon PNG Master, a 7-night package with Villa Markisa, a 9 night



package with Experience Lembeh, and a variety of gift certificates from Bluewater Photo.

Premium travel prizes are provided by Siladen Resort & Spa (Indonesia), Solitude Liveaboards & Resorts (Indonesia), Aiyanar Beach and Dive Resort (Philippines), Atlantis Dive Resort (Philippines), Volivoli Beach Resort (Fiji), Manta Ray Bay Resort (Micronesia), Crystal Blue Dive Resort (Philippines), Spirit of Freedom Liveaboard (Australia), El Galleon Dive Resort/Asia Divers (Philippines), Aquamarine Diving (Indonesia), Atmosphere Resorts (Philippines), Eco Dive Resort (Indonesia), Scuba Cozumel (Mexico), Blackbeard's Cruises – Allstar Liveaboards (Bahamas), and scuba

travel agency Bluewater Travel. Premium gear prizes are provided by Sea & Sea, Think Tank Photo, and Ikelite.

Ocean Art 2018 consists of 16 categories, including a Novice DSLR category, 3 compact camera categories and 3 mirrorless camera categories, giving underwater photographers of all levels a chance to win a great prize. Unique categories include Supermacro, Cold/Temperate Water, and Nudibranchs, while the more traditional categories include Wide-Angle, Macro, Marine Life Portraits and Marine Life Behavior. The Underwater Art category encourages creativity in post-processing.

Winners from each category will be able to rank the prizes they would like to receive, making it more likely that each winner will receive a prize they desire.

Photos must be submitted before the deadline of 23:59PM PST on November 30, 2018.

We look forward to your participation. Information can be found on our Ocean Art Photo Competition page

www.uwphotographyguide.com/ocean-art



NAD-Lembeh Resort is a small, owner-operated, photography-oriented dive resort in the Lembeh Strait.

Situated in a private bay on Lembeh Island, you can enjoy being away from the hustle and bustle of the mainland.

Guaranteed 2:1 guest to guide ratio as standard, which makes for a private dive experience and lots of time to take pictures.

NAD is often the choice of film crews and production companies. We also offer Blackwater Night and Mandarin Fish Dives if you would like to try something different!



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NIKON Z7

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Introducing the new 200DL Underwater Housing for the Nikon Z7. Every detail has been thoughtfully designed to enhance creative control, streamline the system, and reduce travel weight to a bare minimum. The large diameter Dry Lock (DL) port system provides superb optical performance with a wide variety of Z-mount and F-mount lenses. Add the optional DL1 DS Link TTL Converter for the fastest, most reliable, and most accurate TTL strobe exposure in the water.

Read more at ikelite.com.



New Products

Nauticam MWL-1 conversion lens



Deciding whether to set up for macro or wide angle has long been a dilemma for SLR shooters. It's also a concern to many photographers that want to move to an SLR system from a compact or mirrorless that are accustomed to the versatility of wet-mate conversion lenses. The new Nauticam MWL-1 conversion lens is an ultra-wide angle lens that attaches to the front of a macro lens in the water, and makes these issues a thing of the past.

The MWL-1 is the latest addition to the Nauticam underwater

corrective optic lineup which includes the WWL-1 and WACP wide angle conversions lenses as well as the SMC and CMC magnifiers. With 7 lens elements in 5 groups, the MWL-1 is designed to be used with supported macro lenses and at a 60mm equivalent focal length gives an ultra-wide 150° field of view. The MWL-1 can focus anywhere from the front element to infinity which allows for unique close focus wide angle images.

The compact size of the MWL-1 makes it the perfect travel friendly wide-angle option especially when



heading to a primarily macro destination. Not only can you switch between wide angle and macro on the same dive, you can also capture unique close focus wide angle images of macro subjects.

There are two mounting options, Nauticam's bayonet system or one of the two flip mounts. The MWL-1 can be quickly engaged or disengaged or even swapped for an CMC-1 or CMC-2. Now going from wide angle to macro and even super macro is possible in seconds. The small size of the MWL-1 means you can bring it with you on every macro dive. Weight (Air/Water) 1.20kg / 0.58kg
Dimensions 108mm Dia x 120mm L
Depth Rating 100m
Mount Nauticam Bayonet or M67

www.nauticam.com

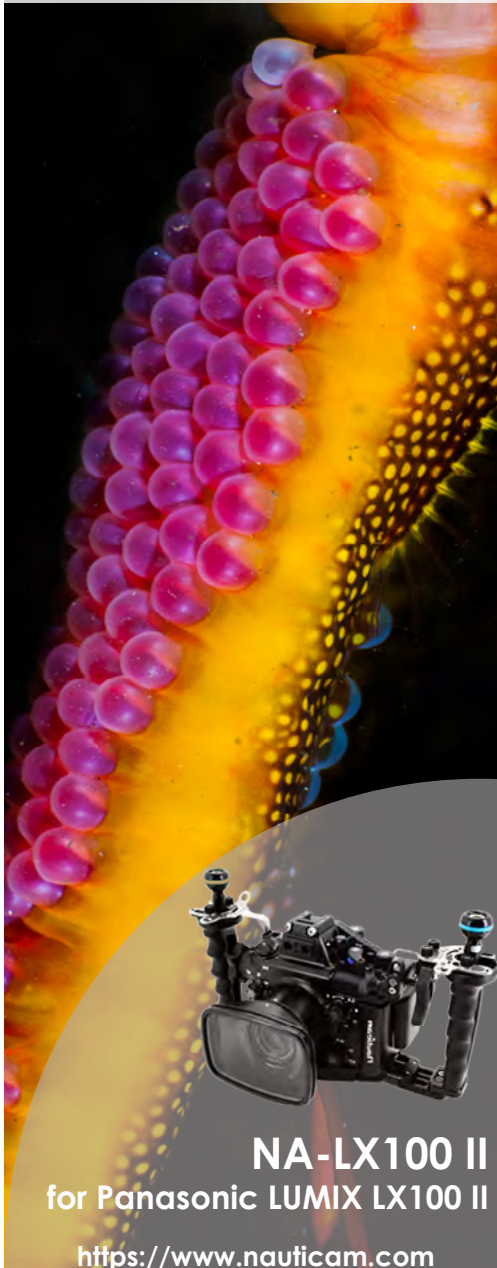
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NA-LX100 II
for Panasonic LUMIX LX100 II

<https://www.nauticam.com>

Ikelite housing for Panasonic DC-LX100 II



Panasonic shooters will be happy to know that the new Panasonic DC-LX100 II digital camera is fully functional in the existing Ikelite underwater housing for the original Panasonic LX100.

The LX100 II camera supports true TTL communication with compatible Ikelite DS strobes when attached to the housing by electrical sync cord. Electrical TTL allows you to shoot more frames per second, improves battery life, and provides the most accurate strobe exposure for most settings.

This compact and lightweight housing provides all important functions of the Panasonic Lumix LX100, LX100 II, or Leica D-Lux (Typ 109) up to depths of 200 feet (60m). Large, easy-to-reach controls are provided for all camera functions including the rear dial and custom function controls.

Control functions are placed in a similar configuration to the camera's layout for the most natural operation. Rear controls are marked with easy-to-see laser engraved symbols which never fade or fall off.

The front-loading camera mounting system makes installation and removal a breeze. The camera mounting plate allows ready access to the battery and memory card, and features a standard 1/4-20 mounting point for attachment to a tripod topside.

www.ikelite.com

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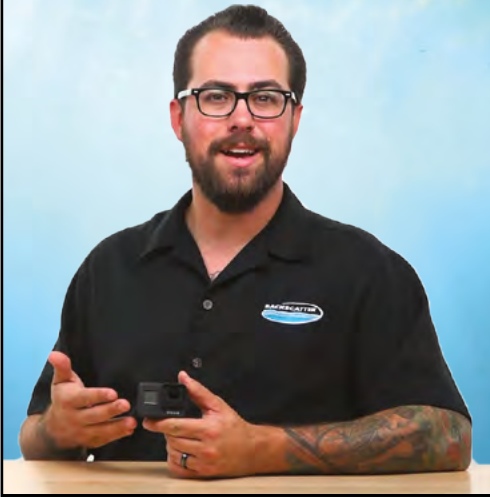
NEW JAPANESE VERSION



GOPRO HERO7



UNDERWATER CAMERA REVIEW



Nikon KeyMission 170 and WP-AA1 40m housing



Shoot underwater at depths of up to 40 m for 30 minutes with the Nikon WP-AA1 Waterproof Action Camcorder Case. Designed to make sure you can shoot for as long as possible, the WP-AA1 has an additional battery compartment so that you can add a second battery, which will work sequentially – when your main battery runs out, the second will instantly take over.

The wearable KeyMission 170 delivers rich 4K/UHD3 videos and Nikon-quality stills that reveal every detail in dynamic ultra-wide-angle 170 degree vision.

The bright f/2.8 NIKKOR lens combines with Nikon's high-performance CMOS sensor to deliver perfectly sharp vistas and dramatic compositions.

Thanks to the 170-degree angle

of view, you can capture every element of your mission: it's easy to get yourself or your team in the frame too.

The high-resolution LCD monitor makes it simple to review every epic shot you take. And you can save still images during movie shooting.

www.nikon.co.uk

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Nauticam NA-A7RIII housing for Sony A7RIII and A7III



Nauticam NA-EMIII housing for Olympus OM-D EM-1 Mark II



Nauticam NA-RX100VI for Sony RX100 VI



Nauticam NA-D850 for Nikon D850

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Ikelite DLM 8 inch Dome Port

Comparable image quality to glass yet several pounds lighter and easier to handle, especially at the surface of the water.

A new acetyl base allows the dome port to attach directly to a compatible housing with DLM port system and weighs only slightly more than our smaller diameter 6" dome ports.

The injection molded acrylic 8" diameter dome is specifically designed for underwater photography to provide superior optical performance. This dome provides image quality virtually indistinguishable from glass yet several pounds lighter and easier to handle, especially at the surface of the water.

Compared to smaller 4" and 6" diameter domes, the larger dome reduces edge distortion on pictures taken with certain super-wide angle lenses and makes shooting over-under shots (half-in, half-out of the water) easier.

Domes are ideal underwater for shooting wide angle and zoom lenses. If you're shooting a macro lens, we recommend using the a flat port instead.

Compatibility
For use with compatible housings featuring DLM/A, DLM/B,



and DLM/C port systems. Refer to the appropriate lens port for your housing to determine compatibility. This dome port cannot be used with DL or FL port systems.

External filters are not compatible with dome ports. Look for filters that attach to your lens prior to installation. We recommend Magic Filters (not sold by Ikelite).

www.ikelite.com

www.uwpmag.com

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Fibre snoots, dome diffusers and snoots are also available for the Z-330.



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GoPro Hero 7 Black



The new GoPro Hero 7 Black has arrived! It's small, rugged design is waterproof to 10m making it the perfect action camera. Capable of shooting 12MP still photos with RAW Photo Capture, Timelapse and GoPro's new SuperPhoto Mode. For video 4K Footage can be shot up to 60fps allowing you to slow down the action later or for super slow-motion shoot up to 240fps in 1080p.

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- Live Streaming
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www.oceanleisurecameras.com

Fisheye Fix Neo Premium 4030 DX II



Featuring a high CRI of 90 and 4000 lumens (wide), the Fix Neo Premium 4030 DX II Light can be paired with with Fix Neo Remote for the ultimate ease of use.

An approximately 120 degree ultra wide beam of coverage is a great match for wide-angle video and photo solutions. The NEO exposes the subjects underwater with a premium high color rendering Ra90. Color LCD display shows both output level and minutes remaining. Easy lighting adjustments in 1% increments or 25% output steps.

www.fixneo.com



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SONY RX100VI



UNDERWATER CAMERA REVIEW



Ikelite 200DL Underwater Housing for Nikon Z7 Full Frame Mirrorless

We are very excited for this new line of full frame mirrorless cameras from Nikon.

The new housing is packed with features at a fraction of the cost and weight of an aluminum alternative.

We are in the process of updating the DL system port chart to include Z-mount lenses and F-mount lenses when used with the new Nikon FTZ Adapter.

We will post the new port information within the upcoming weeks.

Key Features

- * Durable and corrosion-free ABS-PC construction
- * Easy to assemble and dependable DL port system
- * Depth rated to 200 feet (60m)
- * Ergonomic access to important camera functions
- * Vacuum valve pre-installed
- * Spare M16 port for use with third-party accessories
- * Lighter and smaller than aluminum
- * Full view of the camera and o-ring seal through the back of the housing
- * Made in USA

Nikon's first full frame mirrorless interchangeable lens



camera is finally here. The weather sealed body packs a 45.7 megapixel BSI-CMOS sensor and is capable of continuous shooting up to 9 fps. Its hybrid AF system and 5-axis in-body image stabilization are usable when shooting stills or 4K ultra HD video.

In addition to the series of new Z mount lenses to be released progressively, Nikon shooters can also use their favorite F mount lenses thanks to the new FTZ Adapter.

Our new ABS-PC blend front is durable, provides improved contrast and visibility, keeps your camera running cooler in the sun, and is significantly lighter weight than aluminum alternatives.

Every housing is made in the USA, individually inspected for fit, and water pressure tested to 200 feet (60m).

www.ikelite.com



Nauticam NA-RX100VI for Sony DSC-RX100 VI



"Close in on the Action"

With the sixth iteration of the RX100 series, Sony has continued to add features to this workhorse compact camera and Nauticam is also adapting with the new NA-RX100VI housing. The NA-RX100VI housing provides the ergonomics, build quality, and innovative feature set our customers demand in a tiny, travel friendly package with the addition of an interchangeable port system to accommodate the longer zoom lens of the Mark VI, a 24-200mm equivalent. Nauticam designs are always evolving, with new features integrated into each new release. The ergonomic experience has been tailored for a photographer's right hand on the side of the housing, placing key controls literally at the users finger tips.

www.reefphoto.com



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NA-GFX Housing for
Fujifilm GFX 50S Camera

www.nauticam.cn

Nauticam NA-Z7 for Nikon Z7/Z6 Cameras



Underwater image makers rely on environmental diversity to push their art to its limits and not just in the underwater environment. With the introduction of the Nikon Z7 and Z6, the full-frame mirrorless camera market has major new competitors to push the segment even further.

The Z7 and Z6, Nikon's first full-frame mirrorless cameras offer underwater shooters the same legendary Nikon sensors with the versatility of an electronic viewfinder and the more compact form factor of a mirrorless system. The NA-Z7 supports both the Z6 and Z7 models.

Nauticam are very well known for their precise, innovative and trustworthy housings. All controls are placed within easy reach. This housing is designed by underwater photographers with ease of use and full control in mind.

Lens Support: The Nikon Mirrorless housings for the new Z7

cameras allow the use of F lenses as well as Z lenses with the Nauticam N120 port system.

The NA-Z7 includes a built in fiber optic trigger (manual only) that allows using the housing with external FO triggered strobes without using up the cameras battery. Upgrade to TTL is available with an additional converter.

Safety: The housing includes a moisture alarm and vaccuum system to warn of any leaks and make sure the camera is well protected.

Specs: The housing is depth rated to 100m/330 feet. It weighs 3kg and its dimensions are: Dimensions: 360mm x 200mm x 160mm (W x H x D)

www.nauticam.com



Nauticam NA D-850 for Nikon D500



"The Next Frontier"

Proving that speed and resolution can indeed coexist, the Nikon D850 is a multimedia DSLR that brings together robust stills capabilities along with apt movie and time-lapse recording. Revolving around a newly designed 45.7MP BSI CMOS sensor and proven EXPEED 5 image processor, the D850 is clearly distinguished by its high resolution for recording detailed imagery. Nauticam is the market leader in build quality, ergonomics, and reliability. Built on a foundation of innovative product design and modern manufacturing technology, NA-D850 is the ultimate accessory for the exciting new Nikon D850 camera.

www.reefphoto.com



Unleash
Your
Creative
Potential



NA - Z7
for Nikon Z7



<https://www.nauticam.com>

INON D-200 Strobe



The next generation lightweight and reasonable standard D-200 strobe equipped optically designed dome lens offering wide 110 degree coverage underwater without any diffuser which can sacrifice power, was released on September 8th, 2018.

The next generation of lightweight and durable strobe equipped with an optically designed dome lens offering 110 degree of underwater coverage without a diffuser and Guide Number 20.

A rotating Light Shade helps prevent backscatter

Features

- Powerful Guide Number of 20
- Underwater coverage of 110 degrees without diffuser thanks to refined design and technology
- Robust and durable construction against generated heat

-Bundled rotatable Light Shade prevents backscatter effectively even if a strobe is positioned close to camera lens

-220 lumen Focus Light with Auto-Off

-Enhanced controllability with large control knobs, phosphorescent control panel/knobs and intuitive manual setting

-13-step Manual Mode in addition to proven S-TTL Auto.

-Optical connection compatibility.

-On-board Wireless TTL capability

www.oceanleisurecameras.com

www.uwpmag.com



Nauticam NA-A7RIII for Sony a7R III



"Reality Realized"

Sony, the pioneers of the full-frame mirrorless camera with their a7 line have brought us their latest iteration and it is awesome. Taking cues from the just released a9 the a7R III adds better autofocus, faster continuous shooting, and the same great 5-axis stabilization we've come to love. 4K footage can be captured either from the full width of the sensor or from a Super 35 size crop. A professional housing befitting of a top-of-the-line camera, the NA-A7RIII underwater housing provides fingertip access to all key camera controls in a rugged and reliable aluminum underwater housing. Ergonomic camera control access is one of the defining strengths of a Nauticam housing, and the NA-7RIII continues this tradition.

www.reefphoto.com

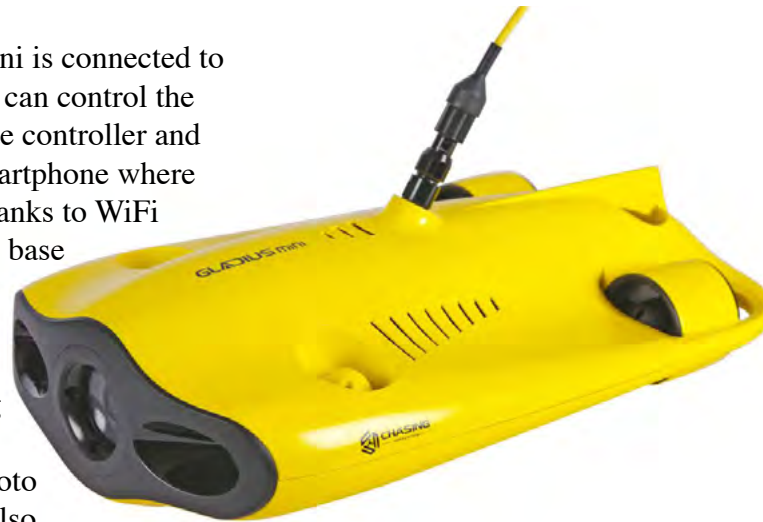
Gladius MINI underwater drone with 100m cable

The Gladius Mini is connected to the base station. You can control the drone with the remote controller and look live on your smartphone where the drone is going thanks to WiFi connections between base and your phone.

The underwater drone can dive to 100 meters, allowing you to capture 4K / HD1080P quality photo and video. You can also stream your dive in realtime. The Gladius Mini has two 1200 lumen lights (4000-5000K) with adjustable dimming function.

The speed of the underwater drone is about 2 meter/second (4 knots). The average runtime is 2 hours. The drone is easy to control and has approx. 45° adjustable tilt function. This can be regulated to pan left or right and tilt up or down.

The Gladius comes with an 49mm filter holder to attach a red filter to see true color underwater. The drone comes with replaceable Seawater/Freshwater ballasts for use in fresh and sea water.



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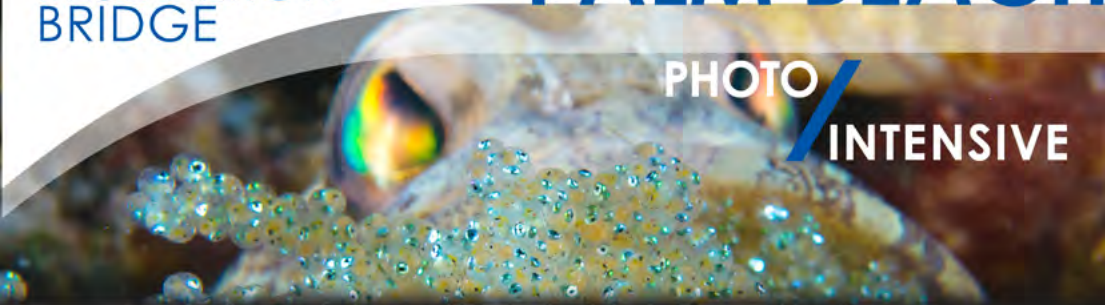
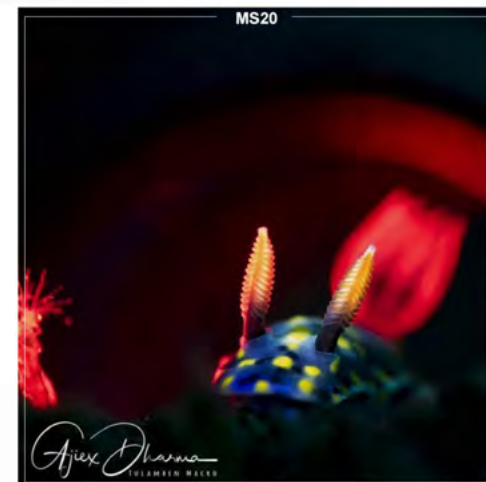


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/
INTENSIVE



Scubalamp MS20



Specification

- CREE XP-L HI LED with a lifespan of up to 50,000 hours
- Four color lumens Red, Withe, Green, Violet
- Working Voltage: 2.7V - 4.5V
- Compatible Battery: 1x 18650 batter
- Super Bright 1200 lumens.
- Can withstand a max. pressure of 20PA and is waterproof to 100 metres
- 5° angle light beam, 100mm distance the Spot diameter is 30mm
- Patented side switch for non-visual, one-handed touch operation(-ZL201420230874.1)
- High-grade aviation aluminum alloy with type III hard anodization for corrosion

www.scubalamp.com

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Size: H 24cm x L 21cm x W 9cm

Weight: 520g approx

Parts Used: Sheet metal, Spoke, Nuts, Bolts, and etc...

Moving Parts: Removable base

* Because sculptures are made from recycled materials, availability of some parts are limited. The sculptures may have slight variations than the ones in the images

www.digitaldiver.com.au

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Precision engineered to deliver professional performance in a compact, travel-friendly platform. Sola Video Flood models feature a chip-on-board LED array to create high-quality illumination with the widest beam angle possible for stunning imagery. The advanced optical design lights subjects evenly without hot spots and allows greater latitude for camera positioning. The new Sola Pro LE builds on the Sola 3800's impressive design by including a dome port optic for a class-leading 110° diffused beam angle.

Featuring:

- 3800 lumen flood output certified to the FL-1 Standard
- Dome Port Optic increases beam angle and softens light fall-off at edges preferred for wide-angle shooters
- Depth Rated to 100 meters

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Wildlife Photographer of the Year 2018 exhibition

Now in its fifty-fourth year, Wildlife Photographer of the Year showcases extraordinary animal behaviour and the breathtaking diversity of life on Earth.

Explore the world's best nature photography, exhibited on 100 exquisite light panels.

Experience the changing face of nature and uncover the surprising, and sometimes challenging, stories behind the photographs.

Chosen from over 45,000 entries by expert judges, the images were awarded for their creativity, originality and technical excellence.

19 October 2018 - 30 June 2019

South Kensington, London

Adult £13.50. Child £8. Concession £10.50

Family £28-£38

Free for Members, Patrons, children under four and disability personal assistants.

Advance booking is highly recommended for this exhibition.

www.nhm.ac.uk

Winner 2018 Under Water Michael Patrick O'Neill, USA Night Flight

Late one night, over deep water, Michael was following a flying fish. By day, they move extraordinarily fast, but at night they swim slowly just below the surface. He tried various shutter and flash settings, all the while keeping track of his small subject. 'I wanted to create a sense of



movement,' he says.

By rapidly beating their forked tails, flying fish such as this juvenile propel themselves in the water until they take off at the surface. By holding their long, pointed pectoral fins out stiffly, they can glide in the air for several hundred metres, away from underwater predators.

*Nikon D4 + 60mm f2.8 lens; 1/8 sec at f16; ISO 500;
Aquatica housing; Two Inon Z-220 strobes*

Michael is an award-winning photographer and author specialising in marine wildlife and environmental issues. For the last 25 years he has travelled extensively, photographing diverse aquatic animals and habitats and humanity's impact on them. His images have appeared in many publications including BBC Wildlife, National Geographic Magazine and The New York Times.

www.mpostock.com



© Audun Rikardsen

Highly commended 2018 Under Water

Audun Rikardsen, Norway
Night Snack

Large numbers of herring were overwintering in the northern fjords, attracting hundreds of predators and night fishing boats. The killer whales had realised that the sound of nets being hauled up meant the possibility of an easy meal. Audun asked the fishermen to angle their strongest light into the water, to capture his shot.

Killer whales are the largest members of the dolphin family. Although one species, it's now thought there are several kinds living in different areas, using specific hunting strategies and social structures. This is a male eastern North Atlantic form, which is known to work together with other killer whales to herd fish into dense shoals.

Canon EOS 5D Mark IV + 14mm f2.8 lens; 1/80 sec at f2.8; ISO 1600; Aquatech housing

www.audunrikardsen.com



© Shane Gross

Highly commended 2018 Under Water

Shane Gross, Canada
Beneath the Blue

Shane had looked for the Bahama cavefish many times since his first encounter, and found this one in the cold, clear depths of the marine cavern known as the Sapphire Blue Hole. The pool was tricky to reach, especially with heavy kit?

The Bahama cavefish, as its name suggests, lives only in the Bahamas in a dozen or so inland blue holes and caves, connected below ground to the sea. It moves between upper fresh water and salt water deeper down, feeding on small invertebrates such as shrimp. Almost blind, it's rarely seen near the surface, living in the dark depths where it uses its sensory pores to navigate.

Nikon D500 + Tokina 10–17mm f3.5–4.5 lens at 11.5mm; 1/250 sec at f22; ISO 1000; Aquatica housing; Two Sea & Sea YS250 strobes

www.shanegross.com



Highly commended 2018 Animal Portraits

Tony Wu, USA

Looking for Love

Tony was on a mission – he wanted to capture an image that portrayed the ‘unique expression and burning desire of a male in love’. His subject was the Asian sheepshead wrasse, a fish found near Sado Island. After years of planning, and amid torrential rain, he finally found an earnest suitor for his portrait. ‘This,’ he says, ‘is the face of a fish looking for love’.

If there are no dominant males in the school of Asian sheepshead wrasse, larger, older female wrasse will change sex. The transformed fish will use its bulbous head, which turns red in the breeding season, to gain control over other males, attracting a harem of females in the process. It will then mate with these females dozens of times a day.

Nikon D800 + Sigma 15mm f2.8 lens; 1/200 sec at f11; ISO 200; Nauticam housing; Pro-One dome port; Two Nikon SB-910 flashes + custom Zillion housings

www.tony-wu.com



Highly commended 2018 Animal Portraits

Valter Bernadeschi, Italy

Mister Whiskers

Extending his camera ahead of him using two monopod poles and a float, Valter slipped into the icy water to photograph the walrus he had spotted from his dinghy. This caught the attention of some curious youngsters who began to swim towards him. Exhilarated by this peaceful encounter, Valter captured this intimate portrait from a pole’s length away.

These walrus are likely to live for up to 40 years, spending their days trawling the seafloor, using their whiskers and muzzles to find and extract food. Their thick skin protects them from the cold as they forage mainly for molluscs, such as clams. In the Arctic water, blood flow to the surface of their skin is reduced to retain heat.

Sony ILCE-7RM2 + 28mm f2.8 lens + ultrawide converter; 1/800 sec at f8; ISO 1250; Nimar II housing; Nikonos remote control; Feisol monopod

www.ilmiocantolibero.com

**Winner 2018 Behaviours
Amphibians and Reptiles
David Herasimtschuk, USA
Hellbent**

Clamped in the jaws of a hungry hellbender salamander, things were not looking good for the northern water snake. But when its attacker repositioned its bite, the snake pushed free and escaped. David was thrilled to catch a battle between these two unlikely foes. 'I've seen hellbenders display an array of behaviours, but this was by far the most remarkable,' he says.

Hellbenders are the largest salamanders in the USA and are among the most endangered. Usually they hunt for small prey, such as crayfish, insects and eggs, so a northern water snake is an unexpected choice. These amphibians use suction to secure their prey before using their teeth – a method unlikely to subdue a wriggling snake.

Technical specification

Sony a7R II + 28mm f2 lens + Nauticam WWL-1 lens; 1/60 sec at f13; ISO 1250; Nauticam housing; Inon Z-240 strobe

David's passion lies in producing imagery that helps foster an appreciation for the life in rivers and streams. By working with the non-profit Freshwaters Illustrated, he is able to create images that have the power to capture the imagination and educate audiences about the importance of keeping their rivers clean and healthy.

www.freshwatersillustrated.org



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Wildlife Photographer of the Year
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2018 SoCal Shootout Results

This year marked the 8th annual shootout, with a record breaking number of prizes and dollar values!

After hearing reports from our various contestants, conditions were quite mixed depending on where you went out, making some divesites much more challenging to shoot than others, but overall there were some great marinelife sightings and some stunning photos submitted!

The 2018 SoCal Shootout weekend took place September 14-16th, 2018 with participants diving throughout our Southern California waters. The participants for the event were a great blend of local divers, and commuters coming as far as the East Coast in order to participate!

Over \$25,000 in prizes are being awarded to the winners with top sponsors including Quino el Guardian, Aquatica Digital, Kraken Sports, Volivoli Beach Resort, Clearly Cayman Resorts, Bluewater Travel, El Galleon Dive Resort, & Think Tank Photo. Bluewater Travel will be organizing the winner's trips from our international sponsors.

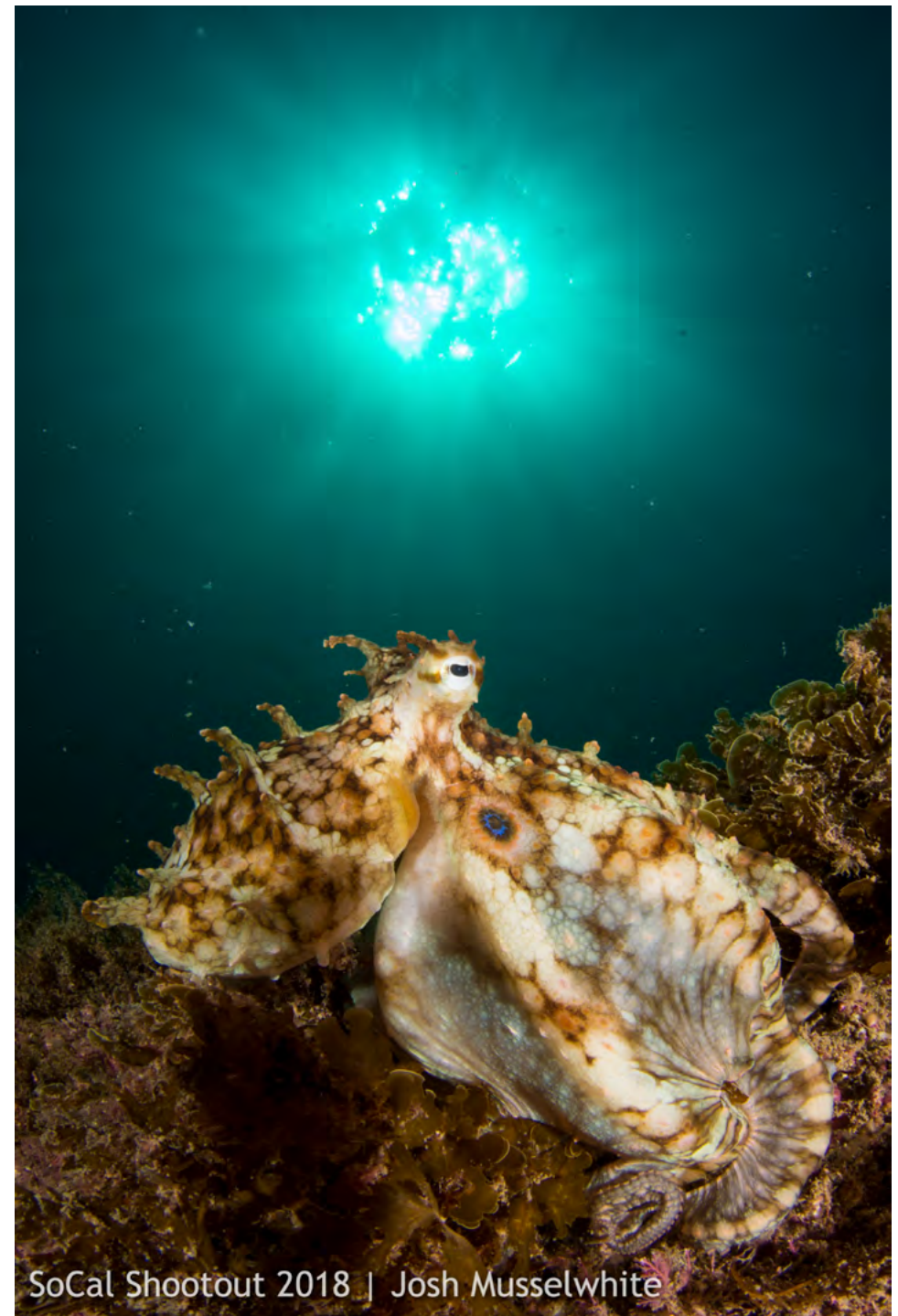
The SoCal Shootout is a weekend-long photography extravaganza in which underwater photographers strive to capture the best possible photos over a single weekend. Major editing is not allowed, so the competition truly tests

their abilities to capture stunning imagery in-camera. Bluewater Photo, a dedicated underwater photography center, hosts the event along with sponsors from many top underwater photography brands, international dive resorts, and local California dive boats. All share the excitement of supporting the Southern California scuba diving community.

For those interested in participating next year, the 9th annual SoCal Shootout will be September 13th - 15th, 2019.

Best in Show Josh Musselwhite

Nikon D7200 Camera, Tokina 10-17mm Lens, Nauticam Housing, Sea & Sea YS-D1 Strobes

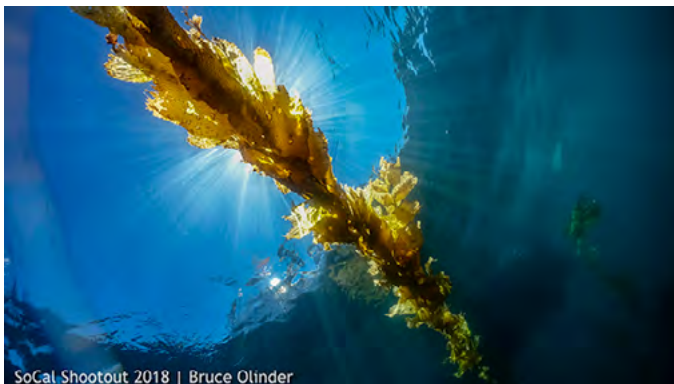


SoCal Shootout 2018 | Josh Musselwhite



Open Wide Angle
First Place - Davis Huber
Tope Shark in Kelp

*Panasonic GH4 Camera with 16mm Fisheye Lens,
Nauticam GH3 housing
Davis won a YS-D2 Strobe from Sea & Sea*



Compact Mid to Wide Angle
First Place - Bruce Olinder
Kelp with Sunbeams

*Sony RX100 Mark IV with Nauticam Housing
Bruce won a Light & Motion Sola 2000 Video Light*



Mirrorless Macro
First Place - John Ericksen
Fringehead

*Sony A7rII with Aquatica Housing and Dual Sea &
Sea YS-D2 Strobes
John won a trip to Aiyandar Beach & Dive Resort in
Anilao, Philippines*



SoCal Shootout 2018 | Desmond Ho



Mirrorless Wide Angle
First Place - Andre Labuda
Copper Rockfish on Oil Rigs

*Olympus EM1 Camera with Panasonic 8mm Lumix
Fisheye Lens in Nauticam Housing
Andre won a stay with Atmosphere Resort in
Dumaguete, Philippines*

Open Macro
First Place - Desmond Ho
Janolus

*Olympus E-M5 Camera, Olympus 60mm Macro
Lens, Nauticam CMC-1 Lens, Dual Sea & Sea YS-D1
Strobes
Desmond won an Aquatica GH5 Housing with TLC
Arm Sets*

www.bluewaterphotostore.com/2018-socal-shootout-results
www.bluewaterphotostore.com/socal-shootout#2018Sponsors

British & Irish Underwater Photography Competition 2018

This competition engages the British and Irish underwater photography community in a one day competition shoot out. It is accessible to people who live and dive at different locations around Scotland, Wales, Ireland, Northern Ireland and England. The competition includes all who dive in and around England, Wales, Scotland, Northern Ireland and the Republic of Ireland, including the Isle of Man, the Channel Islands, the Isles of Scilly and the other 5000 or so other islands around our shores that are bounded by the Atlantic Ocean, the English Channel and the North Sea.

The judges this year were Paul Colley, Damien McGuirk and Susannah Snowden-Smith.

A late August/ early September on-the-day multi-location competition format reduces the travel and cost burden for competitors, whilst at the same time encouraging a level of participation commensurate with a true championship. The date for 2019 is Sat 7th September.

www.biupc.org



© Trevor Rees



Issue 105/31



Macro winner and Champion - Trevor Rees

Judge Paul Colley: *This image took top marks from two out of the three judges and second place from the third judge, so emerged after only one round of voting as a very clear and worthy winner of the competition. The title British and Irish Underwater Photography Champion 2018 goes to Trevor Rees.*

Wide angle winner - Trevor Rees

Judge Susannah Snowden-Smith: *Great job capturing the atmosphere, with the wreck framing the diver in both the background and foreground. It would have scored even more if the light had been shining right at the fish, and/or the fish was pointed into the scene instead of swimming out of it. But a good job balancing strobe light, natural light and torch light.*

www.uwpmag.com

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SET of Sea & Sea YS 250 PRO, incl.diffusers and TCL ball mounts, 2x batteries, 2x chargers (EU and UK). 5-pin Dual Sync cord-1pc, 5-pin Sync Cord N-2pc, 2sets - Double Ball Arm L and M, YS-TTL Converter, spare ... [More >](#)



FOR SALE – Sea Frogs Panasonic GH5 housing, flat and dome port

Brand new and never taken underwater, 40 metre Sea Frogs (formerly Meikon) housing for the Panasonic GH5. Flat port for macro lenses and dome port for wide angle. No zoom or manual focus controls. Prefer sale in the UK and ... [More >](#)



FOR SALE – Aquatica Macro Port & 2 x Sea & Sea YS -120 Duo Strobes

Aquatica Macro Port (Manual & Autofocus) for any DSLR Aquatica housing with the 4 lugs bayonet fitting. £180. Sea & Sea YS -120 Duo Strobes with instructions & one Diffuser they are in good used condition and in full working ... [More >](#)



FOR SALE – Nauticam Na-d800 Housing for Nikon D800

Nauticam Na-d800 Housing for Nikon D800 Excellent condition. Full overall by Nauticam in December 2017, not in the water since. Vacuum check; electronic monitoring circuit installed, no vacuum system. 2000 euros + shipping ... [More >](#)



FOR SALE – Nauticam flat ports and lenses Sony 28mm and 90mm

Nauticam flat port for Sony 28mm + sony lens 28mm +Nauticam flat port for Sony 90mm + sony lens 90mm+Nauticam trigger flash for sony. SOLD Can be sold separately. Total price 1260€ (does not include insurance and shipping) ... [More >](#)



FOR SALE – SEA & SEA MM2 U/W CAMERA WITH ACCESSORIES

SEA & SEA MM2 U/W CAMERA WITH ACCESSORIES: - Yellow SUB 50 TTL strobe / arm extension - SEA & SEA 16mm Wide angle lens MM-2 - SEA & SEA Macro lens ML-2/3T plus attachments - Removable view finder - ... [More >](#)



FOR SALE – Nikon D500 + Hugaftot D500 setup

This one year old set of equipment is in excellent working condition and will serve great to a new owner. The reason for sale is a switch to a new equipment. Nikon D500 (19k clicks). Sigma 10mm F2.8 Fish Eye. 128Gb XQD Lexar ... [More >](#)

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Sony's FE 12-24mm F/4 G lens

by Phil Rudin

Sony has a new compact ultra wide-angle 12mm to 24mm F/4 G zoom lens which has the shortest focal length of any full-frame E-mount lenses and stunning corner-to-corner resolution at all apertures. This ultra-wide rectilinear lens is designed for the Sony alpha A7/A9 series full-frame sensor cameras. The lens can be used with sensor stabilized cameras and non-stabilized sensor E-mount cameras.

The F/4 aperture remains consistent across the entire range and the zoom ring is well dampened giving a buttery smooth zooming action. The 12-24mm F/4 has a zoom range of 122 to 84 degree on full frame Alpha series cameras making it an excellent ultra wide angle underwater photography lens. Using the 12-24mm F/4 with the E-mount APS-C mirrorless cameras the equivalent focal length range is 18-36mm. While this is a useful zoom range Sony-E series 10mm to 18mm F/4 OSS zoom lens for half the price makes more sense for underwater use with APS-C cameras.

With a minimum focus distance of just 28cm (11 inches) the 12-24mm lens will focus all the way to the Zen Underwater DP-230 dome glass with a maximum reproduction ratio

of 1:7.14. The optical design includes 17 elements in 13 groups including four aspherical elements to control spherical aberration which results in a high degree of sharpness while also limiting distortion. One super ED element and three ED elements reduce surface reflections, flare and ghosting for increased contrast. Color rendering is excellent even in bright lighting conditions.

The seven rounded diaphragm blades offer decent bokeh wide open. This lens features the advanced inner-focus mechanism driven by Sony's Direct Drive SSM system for fast and accurate auto focus lock-on as well as smooth, quiet operation. The lens also weighs a mere 565 grams (1.24lb) with dimensions of 87mm X 117.4mm (3.43 X 4.62") including the built-in hood. By comparison the Canon EF 11-24mm F/4 weighs in at a hefty 1180 grams and is 108mmX132mm while the Nikon 14-24mm F/2.8 and Sigma 14-24 F/2.8 Art weight in at 1000g at 98X131.5mm and 1150g at 96.4X135.1mm respectively.

The Sony FE 12-24 also has improved moisture sealing and dust proofing along with a customizable focus hold button above the AF/MF switch. The front glass element is



Beach Dive, Blue Planet Diving Center, Dubrovnik Croatia., Behind Hotel Dubrovnik Palace, Sony A7 III, Sony FE 12-24 F/4 at 24mm, Nauticam NA-A7III housing, Zen DP-230 Dome Port, Two Inon Z-330 Strobes, ISO-320, F/14, 1/250th sec

a rounded so a filter can be directly mounted to the lens. The supplied lens cap slides over the lens hood and locks securely in place being one of the best caps I have used for a lens with an integrated hood. While the 12-24 zoom range is excellent for U/W work I have also been very impressed with this lens for travel, landscape and architecture. NiSi makes an excellent





150mm filter holder and a verity of filters designed for the this lens if you are interested in travel and landscape. The Sony FE 12-24mm F/4 G ships with front and rear caps, a built in lens hood, plus a quality padded lens bag for storage and transport. The Sony FE 12-24mm F/4 has a retail price of around \$1698.00/£1619.00 and the lens is available from your local authorized Sony dealer.

Zen Underwater Dp-230 Port And Nauticam Gears

Zen Underwater was founded in 2007 with the single goal of designing

and building the highest quality optical glass dome ports available.

I chose to pair the Sony 12-24mm F/4 zoom with the outstanding Zen-DP-230-N-120-1124D Optical Glass Port for Nauticam housings.

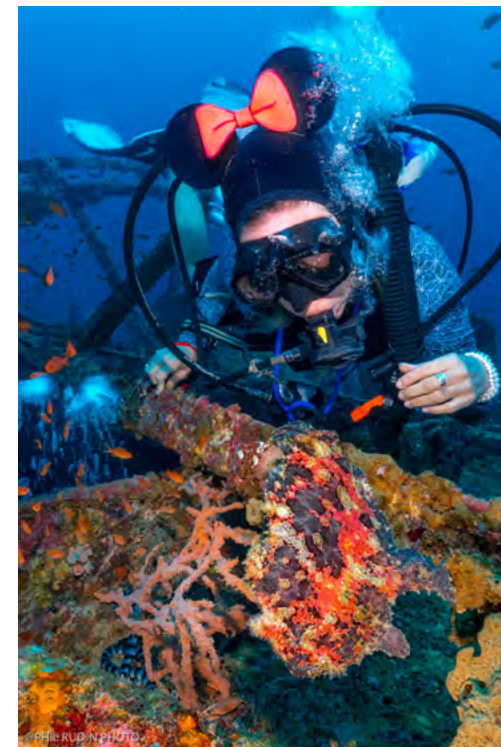
The DP-230 (230mm/9 inch) is the largest dome port in the Ft. Lauderdale, Florida based Zen dome port lineup. This 100 meter rated port is designed for the Nauticam N120 port mount and features a large inner diameter to accept ultra wide zoom lenses like the Canon 11-24mm F/4 and Sony FE 12-24 F/4 which both have fixed lens hoods. Zen Underwater dome ports are state-of-



the-art made from the highest quality materials using cutting edge optical technology.

Like all of the Zen ports I have reviewed for UWPMAG.com the fabrication process begins with BK7 dome glass for outstanding optical performance. I chose the DP-230 port for its large 120mm radius of curvature because it is excellent for full frame cameras using ultra-wide rectilinear lenses.

For shooting over/under images the large glass surface minimizes water beading and creates a smooth transition from air to sea. Annoying reflections off the camera and lens



Alli and the giant Frogfish, Alma Jean Wreck, Philippines, Puerto Gallera. Sony A7 III, Sony FE 12-24 F/4 at 24mm, Nauticam NA-A7III housing, Zen DP-230 Dome Port, Two Inon Z-330 Strobes, ISO-640, F/22, 1/25th sec

often seen in the final image while shooting with acrylic ports at or near the surface have been all but mitigated. Zen Underwater uses a magnesium fluoride broadband antireflective coating on the interior dome element which minimizes the camera/lens reflections.

The Zen DP-230 weights in

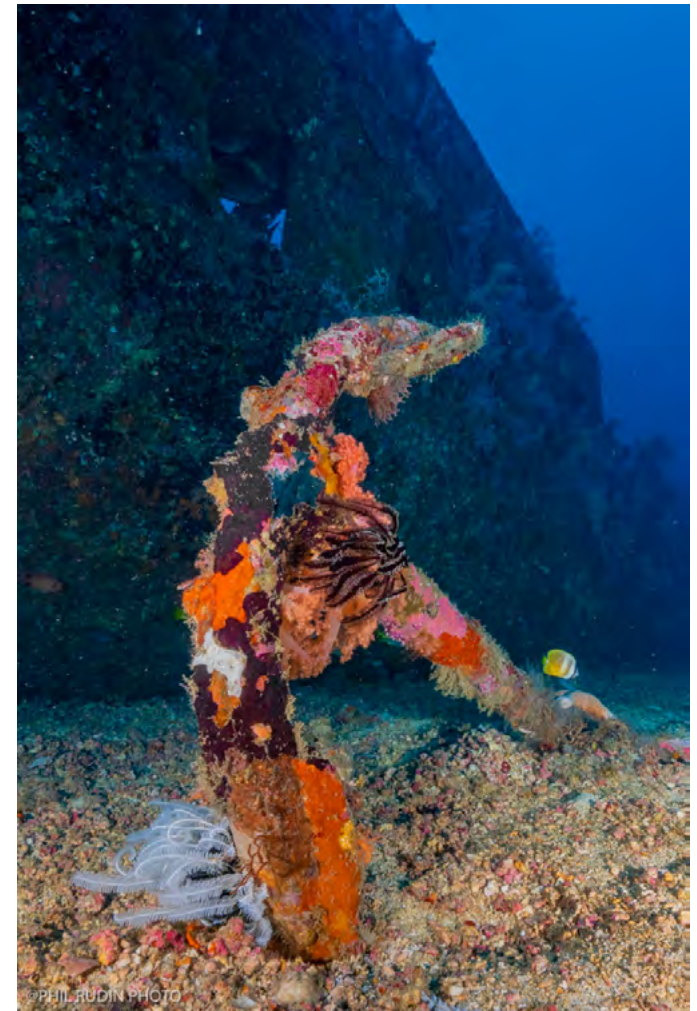


Reef Scene, Puerto Gallera, Philippines, Verde Island, Sony A7 III, Sony FE 12-24 F/4 at 12mm, Nauticam NA-A7III housing, Zen DP-230 Dome Port, Two Inon Z-330 Strobes, ISO-640, F/14, 1/160th sec

at 2.2kg (4.8 lbs) the exterior diameter is 250mm (10”) with an overall height of 110mm (4.3”). The port ships with a quality neoprene protective cover which is secured over the two lens shade blades. The two blades are held in place by eight alan screws which are removable for shooting with Fisheye lenses like the Canon 8-15mm which I use on the Sony system with a Metabones converter. The Zen Underwater DP-230 dome port retails for

\$1899.00/£1775.00.

To zoom the lens I used the Nauticam SEL1224G zoom gear (\$175.00/£162.00). Nauticam also offers the SEL 1224G focus gear (\$175.00/£162.00) for manual focusing. Nauticam’s recommended port configuration includes the N100 to N120 35.5 mm port adapter with zoom/focus knob which retails for \$420.00/£389.00 and the N-120 40mm extension ring with port lock which



Anchor at the Alma Jane Wreck, Philippines., Puerto Gallera, Sony A7 III, Sony FE 12-24 F/4 at 12mm, Nauticam NA-A7III housing, Zen DP-230 Dome Port, Two Inon Z-330 Strobes, ISO-640, F/20, 1/160th sec

retails for \$300.00/£278.00.

The N100-N120 port adapter allows the 120mm dome port mount to be mated with the 100mm port opening on all Nauticam housings for Sony full frame cameras. This port adapter is for

the Nauticam/Sony NA-A7 II, NA-A7 III and A9 housings allowing the housing wheel to zoom the lens while the port adapter wheel handles manual focusing.

The N100-N120 35.5mm port adapter also features a locking device on the outside of the extension for mounting extensions and ports. Be aware that the older Nauticam NA-A7 housings require a 40mm N100 to N120 port adapter for this lens. With the newer 35.5mm port adapter configuration the two zooming wheels sit quite close together but both can reach easily by using the left forefinger on the front of the focus wheel while using your thumb on the back of the zoom wheel. Using this technique was ideal for me even wearing gloves.

Using Sony's new Direct Drive SSM AF lenses on the A7 III and A7R III camera bodies result in auto focus speed and accuracy that is in a word excellent. I had no need to opt for the manual focus gear which would I think be more useful for video shooters. Nauticam's N-120 40mm extension ring with lock has an improved inner locking device and installs between the N100-N120 35.5mm port adapter and Zen DP-230 dome port. The extension moves the port glass away from the front of the lens to achieve the sharpest image quality possible. This same N-120 40mm extension ring with port lock is also used for the Nauticam/Sony NA-A7 housings.

Field testing the lens and port combination

I tested the Sony 12-24mm lens and Nauticam DP-230 dome port combination during trips to Croatia and the Philippines where I received excellent support from the dive operations listed

below.

My test system included Sony A7-III camera bodies, the Nauticam NA-A7III/A7RIII housing and the additional equipment items listed above. For lighting I also used two Inon Z-330 strobes fired with Nauticam's manual flash trigger for Sony, Nauticam fiber optic cables and four Nauticam eight inch ball arms.

The large interior volume of the DP-230 port was more than buoyant enough to negate the need for my ten inch Nauticam float arms. With the eight inch arm configuration the housing was balanced to my liking and I had no wrist fatigue even after several dives per day. With the air pocket captured by the DP-230 the port had a tendency turn the port glass up a bit this was overcome with little difficulty. You can refer to my article in uwpmag.com issue #104 for more information about the complete camera and housing system used for this review.

To assemble the housing first mount the two piece zoom gear to the lens by sliding the gear ring over the zoom ring on the lens. Next the larger piece with the gear teeth slides into place over the ring and is pushed into alignment. Then the camera body is mounted onto the camera tray without the lens installed but with the body cap left in place.

Be sure that you have a fully charged battery and one or two formatted SD cards in the camera. Slide the camera and tray into place inside the front half of housing and lock the tray with the locking lever. Then mount the Nauticam flash trigger in place on the camera hot shoe making sure that it is pushed all the way forward. If you are preparing the system to go diving turn on the flash trigger and the moisture alarm in the back half of housing then secure the back of the housing to the front using the



Alli near the mast, Alma Jean Wreck, Philippines., Puerto Gallera, Sony A7 III, Sony FE 12-24 F/4 at 24mm, Nauticam NA-A7III housing, Zen DP-230 Dome Port, Two Inon Z-330 Strobes, ISO-640, F/22, 1/25th sec

two locking levers.

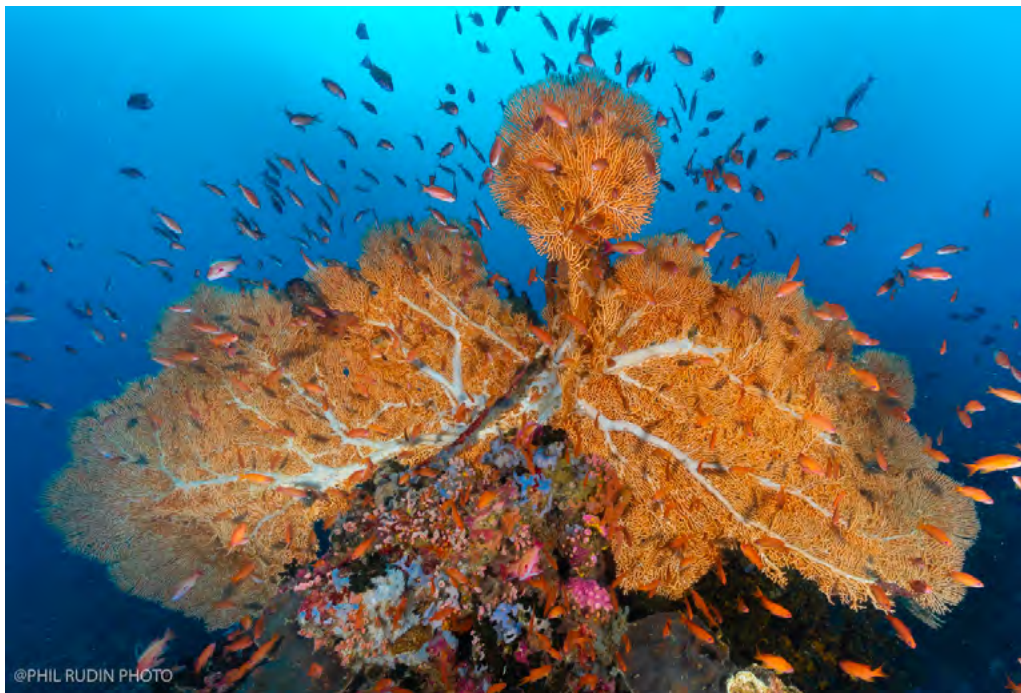
Next mount the Nauticam N100-120 port adapter to the front of the housing using the signature red Nauticam port locking device and

unlock the outside port locking device on the port adapter. Next make sure the port is cleaned and mount the 40mm port extension onto the port securing the locking device.

The lens is then mounted to the camera by removing the rear lens cap and the camera body cap. I turn the housing face down to prevent any dust or water from falling onto the exposed sensor during this process. Next remove the lens cap, slide the port and extension over the lens then align with the marks on the extension ring turning clockwise to secure the port into place. Next close the locking device on the side of the port adapter and make sure the port is secured firmly to the housing.

When this process is complete the port shade blades should be aligned at the top and bottom so that they will not vignette when the lens is zoomed to its widest angle. Next turn on the camera and strobes, then test fire the strobes to be sure everything is working properly. Finally remove the vacuum valve cover, draw the vacuum using the Nauticam pump and replace the cap.

The Sony lens performed very well behind the DP-230mm dome port below water and while shooting over/under images. I shoot split images at F/16 to F/22 for greatest DOF in overhead sunlight keeping the sun to my back when possible. I also use the



Giant Sea Fan, Puerto Gallera, Philippines, Verde Island, Sony A7 III, Sony FE 12-24 F/4 at 12mm, Nauticam NA-A7III housing, Zen DP-230 Dome Port, Two Inon Z-330 Strobes, ISO-640, F/14, 1/125th sec

Inon Z-330 strobes for lighting on the underwater side in some cases.

I found the lens and port combination excellent for wreck scenes, reef scenes, model photography and close focus work. The lens will focus to the port glass and will work well as a close focus wide angle lens for larger subjects like octopi, scorpionfish, turtle portraits and more.

I prefer to use the Canon 8-15mm fisheye lens with a smaller 100-140mm fisheye dome port for smaller

CFWA subjects.

As I stated above the auto focus is fast and very accurate using the A7 III body in both AF-S and AF-C modes. With all of the 35mm full frame sensor cameras I have used the best results for both depth of field and corner sharpness come at F/13 or above. Most non-pixel peeping underwater photographers will be more than happy shooting this lens in the F/8 to F/16 range but for maximum corner sharpness F/13 or greater renders the best results.



Diver on the North Rocks, Rovinj Croatia. Sony A7 III, Sony FE 12-24 F/4 at 12mm, Nauticam NA-A7III housing, Zen DP-230 Dome Port, Two Inon Z-330 Strobes, ISO-320, F/13, 1/30th sec

At the 12mm end of this lens divers and other large subjects become distorted as they are moved away from the center of the frame. The distortion is not as severe as with a fisheye lens but is still something to keep in mind. Going vertically centered, repositioning the subject towards the center of the frame in landscape or

zooming down a bit to the 16-18mm range will help prevent this distortion.

When using this lens I try to remember to select subjects that allow me to take advantage of the entire zoom range not just the ultra wide 12mm end. When shooting a lens this wide using on a camera with on-sensor image stabilization you can get away with shooting at a flash sync speeds as low as 1/10th of a second. Unless I am trying to create image blur I keep the flash sync in the 1/30th to 1/250th range since everything underwater is in motion making image blur common at slower shutter speeds.

With the excellent high dynamic range and low noise levels of both the A7 III and A7R III bumping the ISO to 640 and above to maintain higher F/ numbers is a breeze. I prefer auto white balance which seems most effective when shooting stills and the AF set to the wide focus area setting. I also use multi metering and center metering modes with wide lenses like the Sony 12-24 F/4, Sony 16-35 F/4, Canon 8-15 Fisheye and Zeiss 18mm F/2.8.

I also use Inon 4600K warming filters on my Z-330 strobes to accentuate warm subjects while enriching blue water backgrounds. Inon also offers a 4900K warming filter which is good for enriching skin tones. The tradeoff for these filters appears to be about a one stop loss of light output, a small price to pay for a verity of color output choices.

I also align the front of the Z-330 strobes with the grips on the housing keeping them parallel to each other. This helps to prevent backscatter and harsh side lighting and flare from entering the frame.

For wider shots with greater camera to subject distances I turn the strobes about thirty degrees outward but still in line with the grips this helps to

Diver on the Baron Gautsch Wreck near a lifeboat davit, Rovinj Croatia, Sony A7 III, Sony FE 12-24 F/4 at 12mm, Nauticam NA-A7III housing, Zen DP-230 Dome Port, Two Inon Z-330 Strobes, ISO-320, F/7.1, 1/200th sec

reduce backscatter. When shooting subjects very close to the dome the strobe heads are parallel to dome port but still aligned with the grips.

When using a lens as wide as 12mm (122 degrees) backscatter and flare are common if strobes are not properly positioned for every shot. Just like with fisheye lenses looking into the corners of the EVF or LCD while composing the image is important. Items like your own fin tips, strobe cables, unwanted diver parts, sun flare and more can sneak into the corners of your image and ruin an otherwise excellent composition.

I will admit that I had to rethink and reconfigure my travel kit to accommodate the additional weight and size of the DP-230 dome port.

I opted to cushion the port with bubble wrap and stand it on the side in my ThinkTank Urban Disguise 60V2.0 shoulder bag rather than try to fit it into my Airport Roller bag. With the additional items in my shoulder bag it exceeded the airline weight restrictions by a few kilos, a risk I was willing to except since my shoulder bag is weighed far less often at the airports than my roller bag.

I would highly recommend this lens and port combination over the other Sony Full Frame wide angle lens offerings for underwater use unless for some reason you just can't live without a faster F/2.8 lens.

Thanks to the Nauticam USA team for assistance with equipment used for this review. Visit your authorized Nauticam, Sony and Zen



@PHIL RUDIN PHOTO

Underwater dealers for local pricing and further details.

I would also like to thank Asia Divers and El Galleon Resort in Puerto Galera, Philippines as well as Blue Planet Diving Center, Dubrovnik Croatia and Diving Rovinj, Rovinj Croatia for the excellent diving experiences while compiling information for this review.

Don't settle for 2nd best



Film - No Filter No
White Balance



Digital - No Filter Manual
White Balance



Magic Filter Manual
White Balance

Digital cameras have opened up new possibilities to underwater photographers. For available light photography manual white balance is an invaluable tool for restoring colours. But when you use it without a filter you are not making the most of the technique. You're doing all the hard work without reaping the full rewards. These three photos are all taken of the same wreck in the Red Sea. The left hand image was taken on slide film, which rendered the scene completely blue. The middle image is taken with a digital SLR without a filter, using manual white balance. The white balance has brought out some of the colour of the wreck, but it has also sucked all the blue out of the water behind the wreck, making it almost grey. The right hand image is taken with the same digital camera and lens, but this time using an original Magic Filter. The filter attenuates blue light meaning that the colours of the wreck are brought out and it stands out from the background water, which is recorded as an accurate blue.

www.magic-filters.com

Sony RX100 VI

by Team Backscatter

The Sony RX100 VI follows a long line of excellent cameras that has evolved over the years in the RX100 line. With the Mark VI, Sony has made a major change with an all-new 24-200mm lens, making this the most versatile RX100 camera to date. This is the biggest game changer and has both pluses and minuses. Read on to see how awesome this new lens is, albeit with a few caveats.

All New 24-200 Lens

The new 24-200mm lens from Sony is very impressive for its topside use. Previous models sported a 24-70mm lens which was a bit limiting in reach for many topside applications and limited how tight the camera could shoot macro subjects. Having a 200mm lens camera that can fit in your pocket is pretty darn incredible. With the capability of up to 200mm, working distance is now further away, like an SLR, and helps to avoid spooking skittish critters.

School of Barracuda

The wide angle capabilities of the Sony RX100 VI is its main strength. Blue backgrounds are spot on with sharp detail in the sun rays. 1/125, f8, ISO 400. ©Jim Decker





Blenny with Snout

This image was shot at full zoom of 200mm with a Nauticam SMC-1 lens. This image is uncropped from the camera. The depth of field is SLR-like thin, and the Sony RX100 VI is capable of delivering super tight macro shots, unlike any previous RX100 series camera. To focus this shot, I moved the camera until I saw the focus peaking indicate a sharp focus on the eye. 1/500, f11, ISO 100. ©Jim Decker

Finally, Super Macro Capability with an RX camera

One of the shortfalls of previous models of the Sony RX100 VI was the lack of close focus for macro, and the relatively short focal length of the zoom lens at 70mm, which limited how tight of a macro shot one could get. Now with the new 200mm lens, super tight shots are now possible when adding on an accessory macro lens.

However, there are some major caveats and a few drawbacks to shooting macro with an accessory macro lens on the Sony RX100 VI. These lenses work by allowing the camera's lens to focus closer than the minimum focus, thereby allowing you



Scorpionfish

This scorpionfish on the left was shot with just the stock camera lens and the one on the right shot with the Nauticam SMC-1. The stock lens allows for plenty of working distance for fish portrait shots like this with less risk of scaring off the fish. The shot using the Nauticam SMC-1 was the widest and furthest away I could shoot using that lens, which is still pretty tight. For shots that would be framed in between these two shots, a less powerful macro lens will be needed. 1/800, f11, ISO 100. ©Jim Decker

to get closer, and making the image larger on the camera. The more powerful the lens, the closer one can get, and the larger the object appears.

The drawback to this is that the entire focusing range of the lens is shifted closer, so the camera won't focus at far distances any longer with the macro lens installed. This can put the camera in a very narrow range of minimum and maximum focus distance.

In the case of the Sony RX100 VI this is around an inch or so at 200mm with the Nauticam SMC-1 that we tested. While this is great for super tiny critters, you get kind of a donut hole where you can't back up anymore and be in focus for larger critters when a macro lens is in place, and when it's

removed, you're not close enough. Carrying around different powered macro lenses for differently sized critters solves this problem, but these can be a pain to install and uninstall underwater.

For this camera, we recommend the SAGA Trio, which allows for +5, +10, and +15 powered diopters in one easy to deploy the device.

Because of the very limited focusing range of the camera, autofocus is just about useless when used with an external macro lens. The distance to the subject is in such a narrow range and the camera will not focus outside of that range.

Manual focusing and moving the camera in and out until the subject is in focus is really the only way to shoot with an accessory macro lens. Focus



Both of these shots were at the full zoom of 200mm, with the Nauticam SMC-1, lens at minimum focus, photo uncropped. This is the maximum optical reproduction ratio possible with this particular setup. The depth of field is SLR like thin, where the eye and stripe above the mouth couldn't be in focus at the same time. 1/1000, f11, ISO 100. ©Jim Decker

peaking in manual focus mode makes this an easier task. Due to this limitation, moving subjects with a macro lens installed is extremely difficult to do.

How to accommodate a 200mm lens underwater

If you've ever read our Best Underwater Compact Cameras article, you'll have seen it explained in our introduction that having a long zoom range for a compact camera is actually a negative for underwater imaging. The reason why is that all compact cameras need an accessory underwater wide angle lens to shoot proper wide angle.

Long zoom ranges make this hard when the entire zoom range is accommodated in the housing because this positions the external wide lens too far away from the camera's lens for it to work properly. To make it work with an underwater wide lens,

housings will need to have an option for a shorter front dry mount lens port that will limit the zoom to a maximum of about 70mm. The downside is 2 separate lens setups, one for macro, one for wide where it can't be changed in the water.

Speed and Performance—Best Compact We've Seen Yet

24 frames per second RAW, with continuous autofocus, and over a 100 shot buffer make the Sony RX100 VI the fastest performing compact we've seen yet. This level of performance is way ahead of most SLR cameras! While this is great for fast action, if you're using strobes, the speed isn't as relevant as the flash can't recycle that fast.

The speed of shooting and being able to pull off a lot of shots in a row is critical to successful underwater nature photography and getting "the shot" where everything is in just the right position.

While automatic flash control sounds good in theory, it has a long recycle time between shots, not allowing one to pull off a rapid-fire succession of shots. With manual flash, a lower power setting can be used with a quick recycle time to trigger the external strobe. Unfortunately, a downside for performance is no manual flash control with the Sony RX100 VI.

Autofocus is very fast and accurate, even in continuous focus mode (AF-C). When set to the wide area in wide angle shooting, it does a good job of picking up the proper subject most of the time. In cases where it didn't pick up the intended subject, just release the half press focus, re-aim the camera with the area you want to focus on in the center, then try again. Single focus (AF-S) with the point set to the center was very fast and accurate.

4K Video and High-Speed HD

Video on the Sony RX100 VI continues to be among the best a compact camera can offer. The video image quality is excellent and is taken from the full width of the sensor for both 4K and 1080 HD, unlike other compact and SLR cameras where some models use a cropped portion of the sensor and limiting the wide-angle capability. 4K is at 30p and 1080 HD has a frame rate up to 120p which allows for 4x smooth slow motion. Both formats are in H.264 and have a maximum data rate of 100 Mbps, which is comparable to what you'll find in a top end mirrorless or SLR system. Video with lights looks great, with excellent color and contrast. Ambient light only results are a little more mixed and covered in detail in the next section on white balance.



*Fast and accurate focus is critical for getting in-focus shots of fast-moving subjects. 1/125, f8, ISO 400.
©Jim Decker*

Custom White Balance—Improved, But Could Still Be Better

It looks like the Sony RX100 VI has inherited the same new white balance engine present in the top end Sony a7R III. In the past, Sony cameras were not able to execute a custom white balance even in the shallowest of depths. The color temperature would max out at 9,900 Kelvin, and for underwater white balance, we need a limit somewhere in the upper reaches of 50,000 Kelvin plus. This limitation basically made underwater ambient light wide-angle video unusable, as this could not even be recovered in post very well. Now with the Sony RX100 VI when executing a manual white balance at depth, it now reads >9,900 Kelvin, and it is actually making an adjustment above that level. Unfortunately, it's still not perfect with the water color leaning towards magenta instead of blue as you get deeper. This can be fixed in post at least and is an improvement over previous models, but



Ikelite RX100 VI Housing \$495.00.



Nauticam NA-RX100VI Housing \$1,100.00.



Nauticam NA-RX100VI Housing Package \$1,350.00

still lacks the proper color one needs for wide angle ambient light video.

Conclusion

The Sony RX series has been around for quite a while now, and while improvements over the years in performance have been substantial, the Sony RX100 VI takes it in a radically different direction with an all-new lens.

This new lens makes underwater super macro viable with the 200mm focal length when an additional macro lens is added on. It's not the easiest camera to shoot for super macro and we can definitely say you'd have a much easier time shooting super macro with an SLR than with the Sony RX100 VI. On the wide-angle side, photos look excellent with great colors and sharp images.

Manual white balance has been improved, but it still needs more work to match the standard that Canon has set for underwater ambient light color. Video with lights look great, so if you prefer video lights to ambient you'll be very pleased.

Having a camera with a 200mm lens that can fit in your pocket with the level of quality you get

from the Sony RX100 VI is really an incredible thing. Combine that with 24 frames per second RAW with over a 100 shot buffer, there is no better compact camera for carrying around for all of your land adventures. For someone who wants this level of versatility on land and has something they can take underwater all wrapped up in one, this is the best camera for the task. While it probably won't be our favorite compact camera for underwater, it definitely is our favorite for both topside and underwater use.

Team Backscatter
www.backscatter.com



GoPro Hero7 review

by Team Backscatter

GoPro is out with the latest in its HERO line, the GoPro HERO7 Black. Below is everything you need to know when taking this powerful little action camera underwater.

So what's new and exciting about GoPro HERO7 Black? The biggest new features are the Hypersmooth image stabilization, overall improved image quality, and some tweaks to their performance tiers, specifically the GoPro HERO7 Black, GoPro HERO7 Silver, and GoPro HERO7 White editions of the HERO7 camera.

Hypersmooth—Pro Level Gimble Like Image Stabilization

Hypersmooth Image Stabilization is the driving feature of the new Black camera. It's definitely been the most talked about, and it's safe to say that you can believe most of the hype. The new stabilization is really noticeable and instantly provides a very welcome boost to the smoothness of video clips.

Hypersmooth is a bit more obvious topside when encountering bumpy terrain or even just handheld shakiness, but we saw the benefit underwater as well. It adds that extra little layer of polish that grants a

cinematic-style and grace to your shots.

With a firmware update, Hypersmooth is available at all resolutions. Originally, the new stabilization was only available up to a maximum resolution and frame rate of 2.7K at 60 frames a second.

Improved Color, Contrast, & Clarity

For image quality, when we compared to clips from the GoPro HERO6 and GoPro HERO7 Black side-by-side, we can see an immediate improvement to the color, contrast, and clarity coming right out of the camera. The blues are more blue, shadows are darker and blacks richer, while highlights are also capturing more detail. It's not a major difference, but the overall color saturation, contrast detail, and image clarity is a noticeable improvement in our opinion. It just looks a little bit better.

We always say that the two most important aspects of underwater video are color and stability, and the GoPro HERO7 Black has shown us that GoPro has stepped up their game in each of these departments. When



Side by Side - Backscatter Pro Team Member Robin Dodd shooting the GoPro HERO7 Black and GoPro HERO6 side by side to get test footage of how these cameras compare against each other in Monterey, CA. ©Thomas Anderson

you consider this is also one of the most economical and easy ways to get into shooting 4k 60p content underwater, it's pretty easy to see why we're calling this the Best GoPro yet.

Only One HERO7 for Scuba

With the GoPro HERO7 Black, GoPro has discontinued the 5 and 6 models, and instead now offers three different performance tiers of the 7 with the GoPro HERO7 Black, GoPro HERO7 Silver, and GoPro HERO7 White editions. The GoPro HERO7 Black Edition is the only model that is compatible with the Super Suit dive housing. The issue with the Silver and White editions is the inability to remove the protective lens cover, which is required for the camera to fit in the Super Suit. This is the same Super Suit that GoPro HERO5 Black and GoPro HERO6 used, so if you are upgrading camera models, you will not need to purchase a new housing.

Even though the camera itself is waterproof, you need the Super Suit housing to take the camera past its 33 feet or 10-meter depth rating.

The Super Suit is rated to 196 ft or 60 meters. Another benefit of the GoPro Super Suit housing is it enables the use of FLIP Filters to get the best underwater color that we possibly can from this camera.

Even More Features

GoPro added a couple more camera features that are worth mentioning. The TimeWarp video feature is a stabilized time-lapse video mode. It can still do 1080 Full HD 240p frames per second video for ultra slow motion. That's up to 8x slowed down.

The touchscreen feels crisp and responsive. They've updated the layout a bit, but the fundamentals are about the same as the 5 and 6. Settings can be accessed via the menus in the touchscreen.

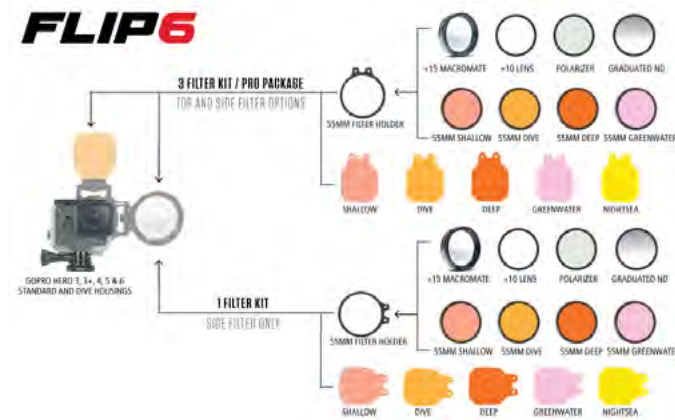


Backscatter Pro Team Member Dylan Silver shooting the GoPro HERO7 Black and FLIP6 Three Filter Kit with the GREENWATER filter to test the new color range of the GoPro HERO7 Black in Monterey, CA. ©Thomas Anderson

Limited Macro Control

There is one camera function that's disappointing. GoPro still has not implemented a way to change the field of view to NARROW without using the touchscreen. Divers can change from wide to linear, but do not have the ability to zoom when the camera is in the Super Suit housing. Macro shooters are going to feel the pain on this one, as they have with the GoPro HERO6. Users can set this field of view before putting the camera in the housing. But if you change a mode and change back, it resets, making it impossible to switch back-and-forth between macro and wide on the same dive.

There are some workarounds, like shooting in 4K Wide and just cropping in post, or setting the camera up and disabling any sleep modes or screensavers that would reset the FOV. Neither of



Flip6 Is Compatible with HERO7 Black Right Out of the Box

these are as seamless as just being able to have a way to set the FOV to narrow using the menu.

Conclusion

Overall, it's easy to say that the GoPro HERO7 Black is the best GoPro yet. Hypersmooth gives clips buttery stability. The image quality packs solid contrast, clarity, and color, especially when paired with FLIP Filters. It's got some creative features and modes to use for creating stories and compelling shots. Whether it's your first underwater camera system or just a component of something larger, it's worth packing for your next dive.

Team Backscatter
www.backscatter.com

www.backscatter.com/reviews/post/GoPro-HERO7-Underwater-Camera-Review

Nikon Z7 & Nauticam NA-Z7

sneak preview

by Phil Rudin

Underwater Photography Magazine has over 8,000 regular readers and they are all underwater Photo and video enthusiasts. No other diving publication can say that, the staff at UWP focuses on bringing our readers the most current and interesting information we can provide to the underwater photo community.

Once a year UWP makes the pilgrimage to The Diving Equipment & Marketing Association Show which is just around the corner and I know you equipment junkies are out there waiting to hear about the latest toys.

From November 14-17 UWP Editor Peter Rowlands and I will once again meet on the floor at the Las Vegas Convention Center to inspect the latest in equipment and training from manufacturers and professionals around the world.

Produced by DEMA, the annual show is the largest trade-only event in the world for companies doing business in the scuba diving, ocean water sports and adventure/dive travel industries.

Within the DEMA show one of the largest and most well attended

areas is the Image Resource Center (IRC) where all of the Photo and video manufacturers display the latest equipment.

Focusing on photo equipment and education a large seating area in the center of the IRC is used for hourly seminars by some of the worlds leading photographers and videographers. If you are planning to attend DEMA 2018 I would encourage you to consult the IRC Guest Speaker schedule and arrive early because the seats will go fast.

New products coming out of the DEMA 2018 show will undoubtedly be featured prominently in 2019 issues of uwpmag.com. One of the most interesting new stories for 2019 will be the competition in what has been broadly referred to as the "Mirrorless Wars".

Sony has owned the mirrorless "full frame" market for over five years now gaining higher levels of market share and product credibility each year. They now occupy the number



one spot in the 35mm full frame market segment outselling all other mirrorless and DSLR camera bodies.

During the past two or three months other established manufacturers have all announced the intention to take the full frame mirrorless plunge creating the largest transformation in the camera industry since post World War II.

This sudden leap into the mirrorless market with the announcement of the Canon R-mount, Nikon-Z mount and Panasonic-L mount cameras has produced quite a ripple effect across the entire photography community. All three of these new lens mount designs require new native lenses and it is unlikely that the first wave or two of new lenses will be suited to underwater

photography.

A prime example of new lens rollouts is that after five years Sony still doesn't offer a Full frame FE Fisheye lens or Fisheye zoom. Like the first Sony FF mirrorless cameras when they were introduced Canon and Nikon have launched a verity of lens adapters for use with their current full frame DSLR lenses.

One of the advantages of these new camera systems is that current Canon and Nikon DSLR users can move DSLR glass, ports, extensions and more over to a new mirrorless housing system while waiting for new native glass to be introduced. Canon and Nikon have each taken a different approach to the rollout of new full frame mirrorless system.

Nikon was first to announce



two new mirrorless bodies the 24.5MP Z6 for \$2000.00/£2100.00 and the 45.7MP Z7 for \$3400.00/£3400.00. Introductory Kit packages include the body only, the body and optional FTZ DSLR lens adapter and body, adapter and native Z lens or lenses.

Within weeks Canon introduced the EOS R a 30.3MP mirrorless body for \$2300.00/£2350.00 which also offers an optional EF-EOS-R adapter and kit with lens. Nikon offers the Z6 & Z7 kits with a 24-70 F/4 lens and Canon EOS R offers a 24-105 F/4 kit lens package.

Panasonic has taken a different full frame approach entering into a lens mount alliance with Leica and Sigma which extends the current Leica-L lens line rather than introducing a completely new lens mount. This is an approach much like the one taken by Olympus and Panasonic when they first introduced the M4/3 open lens alliance. The open M43 lens platform has allowed dozens of lens manufactures to compete in the M43 space and now hundreds of different lenses are offered.

While the Canon EOS R and Nikon Z bodies



are now available world wide the Panasonic L-mount is still in the development stage with no rollout date or pricing at this time. That may change by the time this article is published but I'm not holding my breath.

Fujifilm has announced its intention to pass on the 35mm full frame segment of the camera market and concentrate on their current APS-C and medium format camera offerings. The Fuji line includes some excellent cameras like the APS-C XH-1 and XT-2 along with the medium format GFX 50S, which are all currently supported for underwater use by Nauticam.

Finally Olympus appears to be sticking to M43ds, not choosing to join the L-mount alliance with Panasonic, Leica and Sigma at this time.

Nauticam's NA-Z7 Housing

Nauticam USA sent me a demo Nauticam NA-Z7 housing and Nikon Z7 camera prior to its introduction for a short trial run.

The NA-A7 housing is impressive and the

first thing that caught my attention was the large N-120 port mount which offers full support for Nikon Z-mount and F-mount lenses. For Nikon shooters this means that all of their current DSLR lenses can be used with the same Nauticam ports and extensions they already own. This makes the jump into NA-Z7 housing much more cost effective and as Z-mount lenses become available support for those lenses will be integrated into the port system.

The Nauticam NA-Z7's N-120 port mount extends about 25mm from the front of the housing to allow space for the Nikon FTZ DSLR lens adapter with its tripod mount. This means no port adapter will be required between current DSLR ports and the housing. The large N-120 port mount also allows room for oversized lenses like the Nikon AF-S 14-24mm F/2.8 ED with its large fixed hood.

The NA-Z7 housing has very intelligent control placement with a nifty ISO thumb control lever and Z-lens and F-lens levers to install and remove lenses from the front of the housing. Other well thought out controls include the LCD to EVF control switch which is frequently used

on mirrorless camera housings and the well placed in/out zoom control.

The Nikon Z7 Electronic Viewfinder is excellent and looks massive when viewed through one of Nauticam's optional 45 or 180 degree optical viewfinders. The NA-Z7 housing includes Nauticam's preinstalled and independently powered manual flash trigger for use with optically triggered

strobes like the Inon Z-330. Nauticam also offers their optional optical TTL converter for Nikon. The Nauticam NA-Z7/Z6 housing retails for \$3450.00/£3190.00.

Nauticam MWL-1 Macro to Wide Angle Lens

The Nauticam MWL-1 Macro to Wide Angle Lens is also being introduced at DEMA 2018. This lens has been added to Nauticam's excellent lineup of water contact optics which includes the Flagship WACP, WWL-1, SMC-1 & 2, CMC-1 & 2 plus more.

My NA-Z7 test housing included the Nikon Z7 body a Nikon AF-S



Snowflake Coral, Blue Heron Bridge, Florida, Nauticam NA-Z7 Housing, Nikon Z7, Nikon 60mm F/2.8 macro with FTZ Adapter, Two Inon-330 Strobes, ISO-640, F/22, 1/200th sec

60mm F/2.8G ED Micro lens with Nikon's FTZ DSLR lens adapter and the N-120 macro port 60. When using the Nikon 60mm macro with the Z7 body the angle of view with the MWL-1 lens is 150 degrees.

This lens can focus all the way to the front lens element, so talk about close focus wide angle. The MWL-1 has a total diameter of only 108mm including the built-in adjustable lens hood and an overall length of 120mm. It weighs 1.20kg in air and 0.58kg in water with a maximum depth rating of 100 meters.

The MWL-1 macro lens can be mounted to Nauticam's current single and dual flip adapters using



the M67 threads or used with the bayonet mount converter and bayonet mounting ring included with the MWL-1.

The MWL-1 includes a neoprene port cover, a rear cap, a fiber cleaning cloth, and the bayonet mounting system which all ship in a neoprene protective storage and transport bag.

Similar to other Nauticam water contact optics the MWL-1 is made from precision ground optical glass with an advanced anti-reflective coating that eliminates glare and internal reflections.

With the addition of the Nauticam MWL-1 wet lens photographers will no longer be



Blue Heron Bridge, Florida, Nauticam NA-Z7 Housing, Nikon Z7, Nikon 60mm F/2.8 macro with FTZ Adapter, MWL-1, Two Inon-330 Strobes, ISO-640, F/22, 1/200th sec.

locked into choosing between a macro or wide angle lens for each dive.

When paired with the recommended optics like the Nikon 60mm F/2.8G ED macro the MWL-1 will allow you to shoot super wide angle, macro and CFWA all on the same dive. Imagine being able to carry only one lens and one small port on a dive holiday.

Adding one of Nauticam's



Cushion Sea Star, Blue Heron Bridge, Florida, Nauticam NA-Z7 Housing, Nikon Z7, Nikon 60mm F/2.8 macro with FTZ Adapter, Two Inon-330 Strobes, ISO-640, F/22, 1/200th sec.

impressive SMC/CMC-1 or SMC/CMC-2 macro accessory lenses can expand the system even further to include super macro while maintaining a compact and light weight system.

With the Olympus and Panasonic 30mm macro lenses the MWL-1 maintains the 150 degree AOV on M43's.

With APS-C sensor cameras and recommended macro lenses most have a 115 degree AOV while compatible compact cameras have a 130 degree AOV. The Sony DSC-RX100 VI has a 150 degree AOV when used with the N-50 short port. The MWL-1 macro to wide angle lens retails for \$1850.00/£1710.00.

Nauticam SMC-2 Macro Accessory Lens

Nauticam revealed prototypes for the N100 0.36X Wide Angle Converter Port and the SMC-2 4X magnification accessory macro lens at the 2017



Shot as left plus the Nauticam SMC-2 macro lens

DEMA show. While both finished products are now available and shipping world wide I can tell you from my own observations that the development of these stellar optics takes a lot of time and design effort.

Nauticam USA sent me a prototype of the WWL-1 water contact optic for testing more than eighteen months before the final product release. The prototype by the way only vaguely resembled the final product when it was released.

Nauticam's SMC-2 four times magnification accessory macro lens is a total breakthrough in water contact optics building on the success of the SMC-1 macro lens. Nauticam's SMC-2 fully addresses the complicated physics involved with designing lenses for in water shooting and the end product has once again raised the bar for Nauticam super macro optics.

The SMC-2 has higher magnification on full frame cameras than any of the other popular super macro optic now available. The SMC-2 also has better edge to edge image quality while maintaining



higher contrast and less color fringing. What also impressed me is the increased working distance between the subject and lens with such a high level of magnification. This is a huge advantage when working close to fragile subject and adds more room for better creative lighting.

Combined with 100 or 105mm macro lenses on full frame cameras like the Nikon Z7 the SMC-2 converts the optical system to increase magnification from 1:1 to around 4:1. The Nauticam SMC-2 is depth rated to 100 meters, weights 0.54kg, retails for \$850.00/£796.00 including the front and rear storage caps, protective neoprene storage bag and a 67mm ring for mounting the lens directly to the macro port.

Contact your local Nauticam retailer for further information or consult the nauticam.com web site for further details on all of the Nauticam products listed above.

I trust that in the new year uwpmag.com will be bring more detailed field reviews for these and the many other new products we expect will revealed at DEMA 2018.

Phil Rudin

www.uwpmag.com



martinha.org

WHERE IS MARTINHA?

Martinha is a female common dolphin who was rescued following a stranding in 2007, on the Portuguese coast. She underwent rehabilitation at a local marine wildlife rescue centre. However, she was not released back into the wild and was kept for years in a tiny concrete tank. We are gravely concerned for her welfare, as we do not know where she is currently being held. We are asking "Where is Martinha?"

[You can help us find her! Sign the petition.](#)



Martinha's

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ACTIONS



TANKS



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RGBBlue LM5K Twin Light

by Phil Rudin

AOI Japan Co. Ltd. is a company that many have only associated with its line of Acrylic and glass dome ports. Starting with ports for Olympus OM-D and Pen mirrorless camera housing, compact camera housings and recently released ports for the Fantasea Line housings.

What you may not know is that AOI also produce the expanding line of RGBBlue Video lights, Spot Beam lights, Twin beam lights, Screen Magnifier systems, compact tripods for U/W use, snoots and more. AOI distributes products in Asia, Europe, Oceania and The Americas. RGBBlue's excellent Twin Light is the subject of this review.

In issue #104 of uwpmag.com I reviewed RGBBlue System02-2 video lights for both stills and video. I have been seeing video lights used more and more for stills both on and off camera. For still imaging video lights work equally well for both wide angle and macro. Many macro shooters have also been using small video lights handheld or on tiny tripods for back and side lighting while shooting macro stills and video.

The RGBBlue System03 (Premium Color) twin lights are module lights

consisting of the LM5K1300V light module and the MB3500B battery module. For those like myself who already have access to the RGBBlue System02-2 video lights the MB6700B battery module from that light works equally well.

The first thing you will notice about these lights is the excellent build quality, small size and the portability of the system. The RGBBlue system03 packaging is first rate and contains the "Exclusive case L" (for light I believe).

The Exclusive L is a zipper case with an impact resistant cutout foam insert which holds the light and all of the standard accessories included with the kit. In addition too the twin light heads and battery module the kit includes storage caps for both modules require by law for air travel, a 100 to 240 Volt AC charging kit with three different removable power plugs, RGB-MK01 maintenance kit

Chromodoris Lochi, Puerto Galera Philippines, Sony A7 III, Sony 90mm F/2.8 macro, Nauticam NA-A7RIII housing, RGBBlue PC Twin Lights, ISO-400, F/8, 1/100th sec



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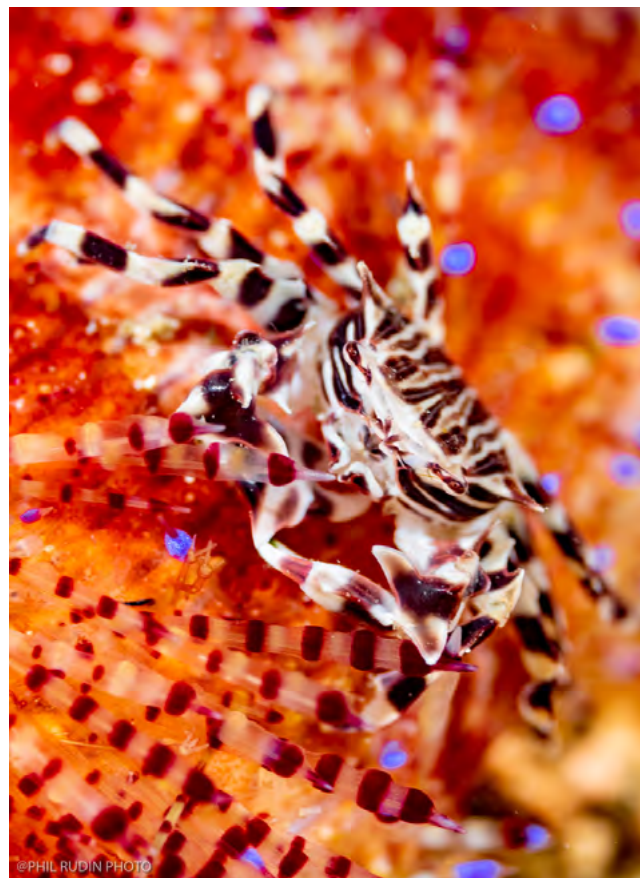
and YS adapter set. The maintenance kit includes a spare O-ring, O-ring remover, silicone grease and lintless cotton swabs.

The YS adapter set is for mounting the battery module onto the housing using the Sea & Sea type mount or a ball mount.

RGBLue System03 Premium Color Twin Lights

The RGBLue LM5K1300V twin light consists of the module head which connects to the battery and two small light heads. The two light heads are connected to the module by coiled cords which are each about 20cm in length when not stretched out. Each head has a small YS type mounting point which allows it to be used with RGBLue adapters like the micro ball adapter and the rotating ring adapter set.

While the twin lights have an emission angle of 100



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Zebra Crab On Fire Urchin, Puerto Galera Philippines, Sony A7 III, Sony 90mm F/2.8 macro, Nauticam NA-A7RIII housing, RGBLue PC Twin Lights, ISO-400, F/6.3, 1/80th sec

degrees and could be used for some wide angle the more practical application will be for macro work.

The color temperature of the System03 Premium Color twin lights is 4200K with a color rendering index (CRI) of Ra95. The total luminous flux range (lumens) for the system03 twin light is from 600lm to 2200lm depending on whether it is set to the step or non-step control.



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Doriprismatica, Puerto Galera Philippines, Sony A7 III, Sony 90mm F/2.8 macro, Nauticam NA-A7RIII housing, RGBLue PC Twin Lights, ISO-640, F/6.3, 1/200th sec

With the four-step brightness control continuous lighting starts at 800lm with an approximated run time up to 310 minute, at 1200lm/160min, at 1400lm/95min and at 1800lm/60min. In non-step continuous lighting brightness run times are 600lm/550 minutes and 2200lm for 45 minutes. Lighting run times are standard values when starting with a fully charged BM3500B



White Spotted Pufferfish, Puerto Galera Philippines, Sony A7 III, Sony 90mm F/2.8 macro, Nauticam NA-A7RIII housing, RGBLue PC Twin Lights, ISO-400, F/9, 1/125th sec



Thorny Seahorse, Puerto Galera Philippines, Sony A7 III, Sony 90mm F/2.8 macro, Nauticam NA-A7RIII housing, RGBLue PC Twin Lights, ISO-400, F/9, 1/125th sec

battery. Run times were provided by RGBLue and may vary depending on a variety of conditions. The BM3500B is a rechargeable lithium-ion 3200mA/7.2V battery module and the System03 is depth rated to 100 meters.

The LM5K1300V twin light module mounts to the BM3500B battery module by aligning the small LED light on top of the module with the open mark on the battery module front ring. Press the light head into battery module until the yellow O-ring

is seated in place then rotate the battery front ring counter-clockwise until the red lock on the bottom on the light head snaps into place. You should hear the lock snap into the locked position.

To remove the light module press the red lock forward and rotate the front ring clockwise until the open dot aligns with the LED. Then just pull the light head off. After diving the light should be submerged in fresh water to clean off any salt residue. The light head and battery pack

should remain assembled during the cleaning process and not disassembled until fully dried.

On top of the RGBLue twin light module is a small LED indicator located between the up/down push button controls.

Viewed from the top with the light facing away the right button is the up button and the left is the down button. To turn the light on just push and hold both up/down buttons until the LED flashes. Then push the up button once and the LED will glow

continuously. To activate the light in the four-step mode push and release the up button and the lights will turn on at the lowest power level. Then each time the up button is pushed the power will increase by one stop through the four power levels.

To lower the power from the max of 1800lm just push the down button and the power is reduced by one stop through the four steps. For the non-step mode follow the same startup process, when the LED glows continually push and hold the



Phyllidia, Puerto Galera Philippines, Sony A7 III, Sony 90mm F/2.8 macro, Nauticam NA-A7RIII housing, RGBLue PC Twin Lights, ISO-640, F/5.6, 1/400th sec

up button and the light increases in intensity until maxing out at 2200lm. Keep in mind that the twin light will begin to heat up when turned on out of the water so don't leave it on too long especially at the higher power settings.

When the light is turned on and the battery is at a 50% or greater power level the LED glows blue. Below 50% the LED shifts from blue to purple then yellow and then to red as the power drains. The LED turns red when the battery module drops to

5% power remaining.

At 5% the light output is automatically reduced to 600lm and will remain running for about an hour. If an error is detected such as in the startup sequence the LED flashes red. When the light is first turned on the LED will only flash for about five seconds and if the up button is not pushed within that five seconds the LED shuts down and the process needs to be started over.

The light weighs 570g on land, 240g underwater and dimensions



Small Reef Cuttlefish capturing a Fish, Puerto Galera Philippines, Sony A7 III, Sony 90mm F/2.8 macro, Nauticam NA-A7RIII housing, RGBLue PC Twin Lights, ISO-400, F/4.5, 1/200th sec

your priorities. Quality of the light or CRI should be high on your list of considerations when buying a video light. Like having more megapixels simply having higher number of lumens does not always make the product better. Chances are if you go shopping for video lights that don't display the CRI number in their literature it is likely because the CRI numbers are not so good.

without accessories is a maximum of 64.2mm X 150mm.

If you are not familiar with the Color Rendering Index (CRI) in a nutshell it is a quantitative measurement of the ability of a light source to reveal colors as faithfully as an ideal natural light source. Higher number ratings indicate better light quality with Ra80 and above being very good and Ra90 and above being excellent. With an Ra95 rating you can expect the very best in light quality from the RGBLue twin light system.

If the first question that comes to your mind when shopping for a video light is how many lumens the light has you may want to rethink

RGBLue also offers System03 Twin Lights without the Premium Color option. All of the physical specs remain the same except for the CRI rating which is Ra80, the color temperature which is 5000K and higher brightness values. The higher brightness values in step mode are 1000lm/310 minutes, 1400lm/160min, 1600lm/95min and 2200lm/60min. In non-stop 800lm/550mins, 2600lm/45mins. The cost difference is about \$25.00 US less for the NON-Premium Color model.

Additional accessories include light arm extensions, color filters, four color filter wheel, filter ring, threaded macro snoot, macro light blade and more.

Field Testing the RGBLue System03 Twin Light

I tested the System03 Premium Color twin lights using the Sony A7 III camera, Sony 90mm F/2.8 macro lens and an Nauticam NA-A7R III housing with macro port.

I also used the optional RGB-RR01 Rotation Ring Adapter Set (\$94.00 US) to mount the lighting system to my macro port. The Ring adapter mounts to the macro port using the standard 67mm threads which most macro ports have. The Ring Adapter has two mounting arms that except the mini YS mounts on the two small lights. Once the ring is mounted to the port and the lights are mounted to the ring they can be rotated 360 degrees around the port glass and locked down using two small threaded locks.

You can mount both light heads on one side of the lens, over/under, side to side, rabbit ears and more. The ring also has 67mm threads to allow a wet closeup lens to be mounted. For my tests I used the Nauticam SMC-1 with the supplied ring adapter. I was not able to use my Nauticam flip-adapter because it interferes with the small adjustable arms on the RGBLue ring adapter.

I found the best results for most macro was with the lights locked at the ten and two positions above the lens. In addition to the light heads being able to move in (towards the lens) and out you can also move the small arms forward and back.

Moving the arms forward while using the SMC-1 closeup lens prevented shadows from being cast onto the subject by the extension of the SMC-1 lens. Once the SMC-1 was removed the arms could be moved back for greater control of the light pattern.

This system is very compact and light



compared to using two strobes both above and below water. I was able to move the system into smaller tighter areas because of the compact size.

Like all of the constant light sources I have tested in past reviews the LED lights are just not as powerful as a burst from a strobe. As a result proper exposures can only be achieved by bumping up the ISO from what I would normally use with strobes and/or opening up my aperture value from my normal F/11 to F/22 to F/8 to F/11. I tried aperture settings as low as F/4.5 and shutter speeds as low as 1/60th of a second. At F/4.5 on a full frame camera depth of field is razor thin and shutter speed settings below about 1/125th of a second were soft because of the constant light exposure rather than a 1/1000th of a second light burst from most strobes.

I shot everything at around ISO-400 and my recommendation for full frame would be to start at ISO-640 and tweak for higher shutter speeds. I found the color from the light heads to be excellent



just as the Ra95 rating would indicate. I did very little color correction in post finding the colors in my images to be quite pleasing for my taste.

Most of my dives I used the non-stop high setting of 2200lm's and turned the light down or off between subjects. This would allow enough power for an average of two macro dives without a battery change. I was also able to remove one or both of the light heads underwater if I wanted to back light or side light.



This system is much more versatile than the continuous ring light systems I have tested in the past and very much like the above water macro lighting systems that many readers may have used in the past.

I did not shoot video for this review and I hope at some point I will be able to do a followup review of the video capability.

All of the RGBBlue products I have used to date have been very well built and quite robust. The RGBBlue System03 twin light has impressed and lived up to the quality standards I now expect from all RGBBlue products.

The RGBBlue System03 Premium Color twin light retails for around

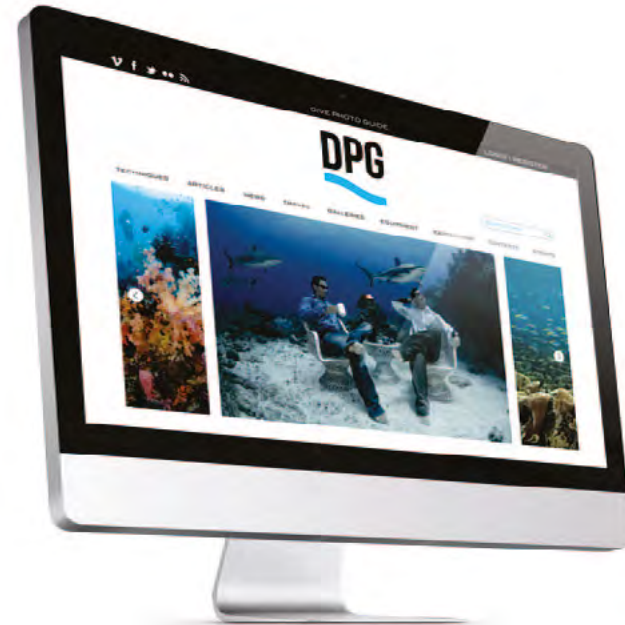
\$968.00/£995.00. Anyone looking for a high quality continuous lighting source for macro should definitely go to the RGBBlue web site or contact a retailer for additional product information and pricing.

I would like to thank RGBBlue (rgblue.jp) for all of the assistance with the equipment for this review. The rgblue.jp web site is in English and Japanese for those interested in more information about all of the excellent RGBBlue products.

Phil Rudin

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Shark Research

by Chris Schenker

There are many great places to dive with sharks in the world. Some of them, like the Bahamas, are known for clear, shallow dives with species like tigers and great hammerheads. Others, like South Africa and Australia, promise encounters with white sharks, but at the cost of cold seas, limited visibility, and cages. Adding even more variety are places like Cocos and the Galapagos, where large schools of hammerheads can be seen if one is willing to brave difficult diving conditions. The only thing that most of these destinations share in common is the difficulty in reaching them. For most photographers, travelling to any of these places requires at least one international flight, as well as one or more domestic flights on smaller carriers; besides the added expense, there's also the added worry of damaging camera equipment or dealing with overweight fees.

One destination that stands apart as boasting great shark diving while still being easy to get to is South Florida. Although often used as a jumping off point for the Bahamas, the southeastern tip of the United States deserves attention in its own right. From Jupiter in the north to the Keys in the south, there be (many) sharks in these waters.

As a student at the University of Miami for the last three years, I've been lucky enough to share the water with these beautiful creatures on a number of occasions, and although it's only a small sample of what the area has to offer, hopefully I can convince you to consider South Florida for your next shark diving fix.



Swimming in open water with tiger sharks is an experience not to be forgotten. Nikon D7000, Nauticam Housing, Tokina 10-17 at 15mm, Sea & Sea YS-D1 strobe. ISO 250, f/ 8.0, 1/125 sec.

Jupiter, at the very northern tip of Palm Beach county, is one of the region's best megafauna destinations. This is the closest point in Florida to the Gulf Stream, and the constant stream of warm water and nutrients supports a healthy ecosystem. At the top of this ecosystem, of course, are sharks, and there are a number of ways to interact with the species that call these waters home. Baited shark dives are a popular option, and with several

different charters running trips weekly, there's no shortage of choice. On my half day trip with Emerald Charters, we dove the same site back to back, as the action was simply too good to leave. A metal bait box had been left at the site several hours before our dive, and the sharks, evidently regulars, were quick to arrive as soon as we descended.

Wearing a chainmail suit, our divemaster drew the sharks in with bait while we watched from



Although smaller than their tiger shark cousins, lemon sharks are no less inquisitive. Nikon D7000, Nauticam Housing, Tokina 10-17 at 15mm, Sea & Sea YS-D1 strobe. ISO 250, f/ 8.0, 1/125 sec.

the side of an upturned tug boat. The action was mostly lemons to begin with, but everyone's excitement went up a notch when two adult tiger sharks made their entrance. Dwarfing the lemons and nurse sharks present, both tigers had an air of supreme confidence about them as they swam unhurriedly through the water. The larger of the two, a male, was about eleven feet in length, and, even though they get plenty bigger, I can assure you that an eleven footer is still nothing to scoff at! Not showing the least bit of shyness, the tigers would

alternate roles as one went straight for the bait, while the other circled and watched us from behind, obviously curious about these strange, bubble blowing visitors. The divemaster encouraged this curiosity (within safe limits), repeatedly guiding the sharks close to our lenses and creating some great photo opportunities in the process.

The sharks stuck around during our surface interval, and we followed the same routine on the second dive. This time, however, the bait box had to come up, too, and the sharks



This tiger shark enjoys a good nose rub! Nikon D7000, Nauticam Housing, Tokina 10-17 at 15mm, Sea & Sea YS-D1 strobe. ISO 250, f/ 8.0, 1/125 sec.

followed us up with it. My adrenaline was pumping as I hung suspended in the water column with half a dozen lemon sharks and two tiger sharks all zooming in and out, trying to get one last piece of free fish before the end of the buffet. The close up action made for some great images, but keeping an eye on the two tiger sharks occupied the majority of my attention. It was an experience I'll never forget.

Jupiter also has a host of great reef and wreck diving, and the megafauna you're likely to encounter changes seasonally. Goliath groupers

congregate on the area's wrecks in huge numbers in late August through early October, lemon sharks aggregate in January and February, and green sea turtles, loggerheads, and leatherbacks nest from May until July. If you're looking for big stuff, sharks or otherwise, there is a never a bad time of year to visit Jupiter.

Moving down the coast, Palm Beach has no shortage of great shark diving either. Similar to Jupiter in topography, most of the dives in West Palm are drifts on wrecks or deep ledges, and it's difficult not



© Christopher Schenker

Ryan the divemaster tempts a dusky shark with a piece of bait. Nikon D7000, Nauticam Housing, Tokina 10-17 at 10mm, Sea & Sea YS-D1 strobe. ISO 320, f/ 8.0, 1/200 sec.

to encounter sharks as they coast by in the current. There are many great day boats in the area, but for the underwater photographer, I believe Ryan Walton of Deep Obsession Charters deserves special consideration. Like many other charters, Ryan conducts baited dives in open water, but he also gives participants the choice of scuba or snorkeling. In my mind, this is a game changer, as sharks are more inquisitive and come in closer to divers who aren't blowing noisy bubbles. Along with the added freedom of movement,

I think this makes snorkeling the clear choice for photographers who want to maximize their productivity.

On my day out with Deep Obsession, I spent over two hours in the water with lemons, black tips, silkies, and one very large dusky shark. The interactions were some of the best I've ever had, and most of the people who started the dive on scuba quickly ended up switching to snorkeling. Individual sharks came and went, but there was one female dusky shark that stuck around and never tired of bumping her nose



© Christopher Schenker

Ditching scuba and snorkeling with sharks often leads to better interactions. Nikon D7000, Nauticam Housing, Tokina 10-17 at 10mm, Sea & Sea YS-D1 strobe. ISO 250, f/ 8.0, 1/200 sec.

off of my dome port. Dusky sharks have a beautiful, fluid motion about them, and the only species I've swam with that compares is the blue shark (but I don't have to brave my frigid home waters of New England to see duskies!). The sharks didn't want to leave, and neither did we, but after more than two hours in the water, it was time to head back to port.

Although not known as a big animals destination, the Florida Keys still has plenty to offer the intrepid shark enthusiast, delivering more relaxed encounters with sharks in the

setting of beautiful coral reefs. Nurse sharks are common in Key Largo, and rarely does a dive go by without spotting at least one. Some reefs even have resident nurse sharks that can consistently be found under the same ledge! Venturing further south, Looe Key is one of the healthiest reefs in the Keys, and this has a notable impact on the density of large marine life. On a single morning at Looe Key, I saw nurse sharks, blacktip reef sharks, a lone lemon shark, and one rather portly goliath grouper. It may not be the same high current,



An SRC intern takes blood from the caudal vein of the shark. We process blood on board, separating the plasma from red blood cells for different studies. These samples can reveal pregnancy hormones in females, diet patterns, energy stores, and immune health. Nikon D7000, Nauticam Housing, Tokina 10-17 at 16mm, Sea & Sea YS-D1 strobe. ISO 100, f/ 11, 1/125 sec.

adrenaline pumping diving as up north, but if you want easy dives on gorgeous reefs with a few sharks mixed in, the Keys may be just the spot for you.

As rosy as this may all sound, not all is well in paradise. Shark populations in South Florida are subject to many of the same threats as other shark populations around the world, including overfishing, both commercial and recreational,

pollution, habitat degradation, and climate change. Although our knowledge is still limited, the hope is that by understanding how populations are impacted by these stressors, we may respond with targeted conservation methods in the future.

One bright spot is that there are many organizations in South Florida pursuing this goal. Foremost among them is the University of Miami's



We take three basic length measurements of each animal. Here we are measuring the distance from the snout to where the upper and lower lobes of the caudal fin (tail) meet, which is termed the “fork length”. We also measure the “pre-caudal length”, the distance from the snout to where the caudal fin begins, and the “stretched total length,” all the way to the tip of the tail. Nikon D7000, Nauticam Housing, Tokina 10-17 at 14mm, Sea & Sea YS-D1 strobe. ISO 100, f/ 11, 1/200 sec.



© SharkTagging.com - Chris Schenker

A water pump is placed in the shark's mouth to flush oxygenated ocean water over its gills during the quick work-up. This allows the shark to breathe, and helps keep it calm, reducing stress and promoting vitality. Nikon D7000, Nauticam Housing, Tokina 10-17 at 14mm, Sea & Sea YS-D1 strobe. ISO 100, f/ 11, 1/400 sec.

Shark Research Center (SRC), a research group committed to advancing ocean conservation worldwide, but which focuses mainly on shark science and conservation. Directed by Dr. Neil Hammerschlag, SRC conducts cutting-edge shark research, fosters scientific literacy and environmental advocacy, and is comprised of university faculty, graduate students, undergraduate students, and volunteers.

I have been privileged to serve as a photographer

and research intern with SRC for the last two years. Traveling from all over the country, thousands of school children come out on research boats with SRC every year to tag, sample, and study sharks. As the photographer on these trips, it is my duty to document the day in photos and assist with several measurements of the eyes and caudal fin. Photos from the day serve as a memento to remind citizen scientists of their role in



© SharkTagging.com - Chris Schenker

After samples are taken, the shark is carefully released back into the ocean. The whole process occurs in about five minutes or less. Nikon D7000, Nauticam Housing, Tokina 10-17 at 14mm, Sea & Sea YS-D1 strobe. ISO 100, f/ 10, 1/400 sec.

ocean conservation, as well as a vehicle for SRC's public outreach efforts. SRC's work has implications for shark populations around the world, such as a recent study that found toxic levels of mercury and BMAA (both linked to neurodegenerative diseases like Alzheimer's) in sharks from the Atlantic and Pacific. Unless the general public is engaged to take a more active interest in sharks' wellbeing, however, science alone can only do so much. The goal of

SRC's media presence is to bridge this gap and generate both an appreciation of sharks and an understanding of the challenges they face.

As photographers, it is easy to get wrapped up in producing winning images for competitions and our own portfolios. Although there is nothing wrong with this, I think that we as underwater photographers owe a debt to the aquatic environments that we're lucky enough to experience in a way so

few others are able to. It's incredibly rewarding to combine photography and conservation, and I would encourage every reader to think about how your images could be helping to protect the oceans, rivers, lakes, and streams that we all cherish.

If you would like to donate, learn more about the Shark Research Center, or get involved, please visit

www.sharktagging.com

Chris Schenker



We've got you covered!



Magic filters are now available in 3 options. Original Magic for use in blue water with DSLR and compact cameras with Manual White Balance, Auto-Magic for compact cameras in automatic point and shoot mode. GreenWater Magic for use in green water with DSLR and compact cameras with Manual White Balance. Prices start at just £22.

The Auto-Magic formula is now available in a Plexiglass filter that can be added or removed underwater.

www.magic-filters.com

Chinchorro Crocodiles

by Steve Taylor

I was looking for something new. Having done my share of trips from live-aboard boats and dive lodges, I was looking something off the beaten path. The trip to the remote Chinchorro atoll, to dive with and photograph saltwater crocodiles, seemed perfect. The American saltwater crocodile (*Crocodylus acutus*) is one of the largest species of crocodile, growing to over 6 meters and weighing up to 900 kilograms. Despite their enormous size and potential dangerousness, they rarely attack large animals (or humans), preferring to eat fish, reptiles, birds, or small mammals. Such large creatures can move remarkably fast over short distances.

I was looking forward to the unique opportunity of having close encounters with these large apex predators. I flew into Cancun where six of us, plus our guide, boarded a van for a four-hour drive south to Xcalak (pronounced Ish-kalak), a small fishing village on the Caribbean coast of Mexico, on the southern end of the Costa Maya, near the border with Belize.

Entering the village, barking dogs chased our van as we drove down the rough dirt road in the humid

tropical heat. The dive lodge at Xcalak was modest but well-equipped. Disembarking, we were overwhelmed by the sulfurous stink of rotting Sargassum seaweed, which had drifted north from South America. Thick swathes of Sargassum covered the beaches, but that was not a problem because soon we would be escaping to the clear waters of Chinchorro, far off the coast. Insects hummed in the hot sun as we assembled our dive kits and stowed our gear on the boat.

Although it was summer, which is the best season for diving Chinchorro, the ever-changing sea conditions meant that there was no guarantee that the sea would be sufficiently calm to take the journey in the small open boat. Fortunately, we were in luck; the sea was not too rough and the trip was on. Captain Ernesto gave a briefing and we were on our way.

A fishing shack served as our home during our stay at Banco Chinchorro.

Crocodile lunging at lionfish bait dangled from the boat.

Nikon D810 camera, Nauticam housing, Sea & Sea YS-D2 strobes, F16, 1/90, ISO 160, Sigma 15mm





*Diver spearing lionfish to use as crocodile bait..
Nikon D810 camera , Nauticam housing, Sigma 15mm . Sea & Sea YS-D2
strobes, F9.5, 1/90, ISO 64*

From Xcalak we rode the open boat over choppy seas for almost three hours until we reached Banco Chinchorro, located 35km off the Mexican coast. The atoll is a marine sanctuary covering an area of 800 square kilometers, where diving is allowed only if special permits are obtained from the Mexican Federal Government.

Chinchorro is known for many things; its pristine coral reefs, numerous ship wrecks and, of course, its American saltwater crocodiles,

which inhabit the mangrove swamps and lagoons. There are no permanent settlements on the islands, although there is a ranger station on Cayo Centro, one of Chinchorro's three small islands. At the southwestern end of Cayo Centro there was a collection of rickety wooden fishing shacks, perched on stilts in the shallows, near the mangrove swamps. The fishing shacks provided short-term lodging for the fishermen, who came out from the mainland.

When we arrived at our



*Crocodile lunging at lionfish bait dangled from the boat.
Nikon D810 camera , Nauticam housing, Sigma 15mm . Sea & Sea YS-D2
strobes, F16, 1/90, ISO 160*

designated shack, several crocs lazily swam about, waiting for the fishermen to clean their catch. We spent the next few days staying in one of the fishing shacks, sleeping in hammocks. Accommodation was spartan; no running water or bathing

facilities, a crude toilet, and limited electricity, available only when the small generator was operated during the evenings. And there was no alcohol. There is an agreement in the Chinchorro fishing community that alcohol is not permitted, presumably



The mangrove swamps were home to numerous large crocodiles. F5.6, 1/750, ISO 80, Nikkor 70-300mm @ 250mm

to prevent inebriated shack-dwellers from toppling overboard into croc infested waters. As our dive guide had warned us, there would be no lattes or Wifi. Spartan indeed. However, the food was fresh and plentiful, including fish caught by the fishermen.

In addition to our group of six divers and guide, there were three of our crew and a number of fishermen in the shack. Staying in such a crowded rustic shack was an interesting experience. Fortunately, I brought ear plugs; at night the little

shack was filled with loud snoring, which seemed to emanate from every hammock.

Each morning, before snorkeling with crocs, we departed our shack in the boat to scuba dive the coral reefs, hunting for lionfish, an invasive species, which were speared to use as croc bait. The coral reefs were lush and healthy, and the marine life was plentiful. Several nurse sharks followed us, hoping to snatch our speared fish.

Returning by boat to the shack, a lionfish fish was skinned and tied to a long nylon line. One of



Iguana on the lookout for a meal on one of the small islands of Chinchorro. F5.6, 1/750, ISO 2000, Nikkor 70-300mm @ 300mm

West Indian manatees can be found in the shallows of Xcalak. Nikon D810 camera , Nauticam housing, Sea & Sea YS-D2 strobes, F19, 1/190, ISO 250, Sigma 15mm





A crocodile flashes its teeth as a photographer lines up her shot. F5.6, 1/500, ISO 560, Nikkor 70-300mm @ 180mm, circular polarizing filter

the crew would repeatedly cast the line out into the water, toward the mangroves. The slapping sound of the fish striking the water attracted the crocs. Large black frigate birds, with their long slender wings and forked tails, wheeled overhead as we waited for a croc to appear.

Eventually, a large male was lured out of the mangroves. Being highly territorial, it chased away the smaller crocs and pursued the bait. Once the croc reached our boat moored at the shack, we donned our snorkel gear and, taking turns in pairs, slipped into the bright green water to take photographs. We were in the shallows, with the bottom consisting

of sea grass. As the croc swam over the shallows toward us, we readied our cameras.

To ensure our safety, one of the crew was also in the water, using a large wooden pole to push away the croc if it came too close. The pole looked rather pitiful as a means of protecting us from the croc, which was over 3 meters long, with massive jaws full of big white teeth, and likely weighed more than 200 kilograms. However, the croc was more interested in the bait than in divers. On one occasion the croc lurched for the bait and missed, slamming into my camera. Even then the croc was interested only in the bait. My dome



Nurse sharks followed the divers, hoping to snap up the speared lionfish. Nikon D810 camera, Nauticam housing, Sigma 15mm, Sea & Sea YS-D2 strobes, F13, 1/90, ISO 200

port sustained a few minor scratches from the encounter but there was no camera chomping.

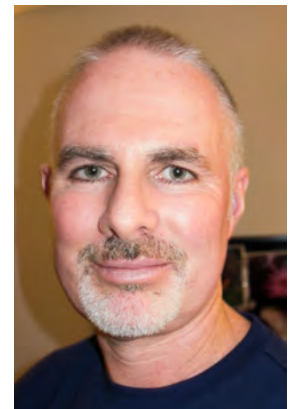
The croc snapped as one of the crew members dangled the lionfish bait just out of reach of its jaws. Until that time, I'd never been underwater with a croc right in my face. As I stared down its throat, I was impressed by the size of the teeth. Eventually, the croc was allowed to devour the bait. Lifting its head high in the air, the croc gulped down the lionfish. To keep balance as it ate, the croc reared its tail in the air as its head tilted up. In this pose the crocodile looked something like a sea serpent.

On one hot afternoon we failed to lure any crocs with our bait. Leaving the sleepy crocs in their

mangrove swamp, we took our boat to the ranger station. Walking down the sandy beach by a small, shallow lagoon we saw several crocs lazing in the shallows. These crocs, along with numerous endemic giant iguanas, provided further photo opportunities.

After three days in the fishing shack we were ready to return to the mainland, where we spent a day diving the reefs around Xcalak. We came across schools of large majestic tarpon, swirling past in flashes of silver. The highlight of the day was an encounter with large West Indian manatee. This magnificent creature spent some time with us before swimming off, surprisingly swift and agile in its movements. The following day we were back in the van, heading back to Cancun and then, for me, back to Vancouver, where I looked forward to planning my next big animal adventure.

Steve Taylor



Cape Town

with Kate Jonker

Cape Town, known as South Africa's Mother City, is a colourful and cosmopolitan travel destination. Surrounded by incredible scenery and tourist attractions such as Table Mountain, Robben Island and Cape Point, it is often overlooked by visiting divers who come to South Africa for the annual sardine run or to dive with sharks at Protea Banks or Aliwal Shoal.

Cape Town's natural beauty stretches far beyond the shoreline and is reflected beneath the waves, providing divers and photographers with a vibrant and diverse underwater playground. There are fascinating wrecks, glittering kelp forests and colourful reefs to be explored, offering underwater photographers with incredible wide angle and macro opportunities,

Wide Angle Photography

Many of the reefs have fantastic topography well suited for wide angle photography. Most reefs are covered in colourful marine life, anemones, sponges and soft corals in beautiful pinks, purples, yellows and oranges. Orange sea fans add

to the riot of colour on the reefs, which contrasts beautifully against the green, temperate waters. Reefs well worth visiting include Atlantis, Photographer's Reef and Whittle Rock in Simon's Town; Steenbras Deep in Gordon's Bay and Star Walls in Hout Bay.

The wrecks of Smitswinkel Bay in Simon's Town and in Hout Bay provide those with a lust for rust the chance to explore and photograph unique wrecks, many of which are covered in colourful soft corals, sponges and anemones. They also attract schools of fish, providing a confetti of silver glitter against the hulks of the wrecks themselves.

There are also numerous kelp forests to explore and these provide remarkable wide angle opportunities. The forests are home to many fish species, smaller sharks and seals.

Divers on their way back from Blousteen dive site, Gordon's Bay

Exploring Steenbras Deep in Gordon's Bay

Canon EOS7d Mark II, Sea & Sea, Dual Inon Z240s, Tokina 10 – 17mm fisheye at 10mm, f8, 1/60. ISO 320





Cape Fur Seal, Hout Bay

Canon EOS7d Mark II, Sea & Sea, Natural light, Tokina 10 – 17mm fisheye at 10mm, f4.5, 1/400. ISO 320

The reefs upon which the kelp forests grow are covered with vibrant jewel-like anemones, starfish, sea urchins, sponges and feather stars. There is nothing more beautiful than photographing the sun's rays as they filter through the kelp fronds, lighting up the reef below. Many of the reefs

such as Pyramid Rock, Castle Rock and D-Frame in Simon's Town and Blousteen in Gordon's Bay provide incredible kelp forest dives.

A trip to Cape Town would not be complete without a snorkel or a dive with the Cape fur seals. They are playful and inquisitive and a lot of fun

to photograph. The best dive sites to see these 'puppies of the sea' are Partridge Point in Simon's Town and Duiker Island in Hout Bay. Seals are plentiful in Cape Town and it is not unusual to have seals swoop down and inspect you at any of the dive sites in Simon's Town, Gordon's



Blue Shark, Cape Point

Canon EOS7d Mark II, Sea & Sea, Dual Inon Z240s, Tokina 10 – 17mm fisheye at 10mm, f11, 1/160. ISO 320

Bay or Hout Bay.

Dives "into the blue" to see the blue sharks and makos are very exciting. The dive boats take divers out to the edge of the warm Agulhas current some 20 nautical miles off



*Klipfish at Steenbras Deep, Gordon's Bay
Canon EOS7d Mark II, Sea & Sea, Dual Inon Z240s, Canon 100mm macro, f9, 1/160. ISO 100*

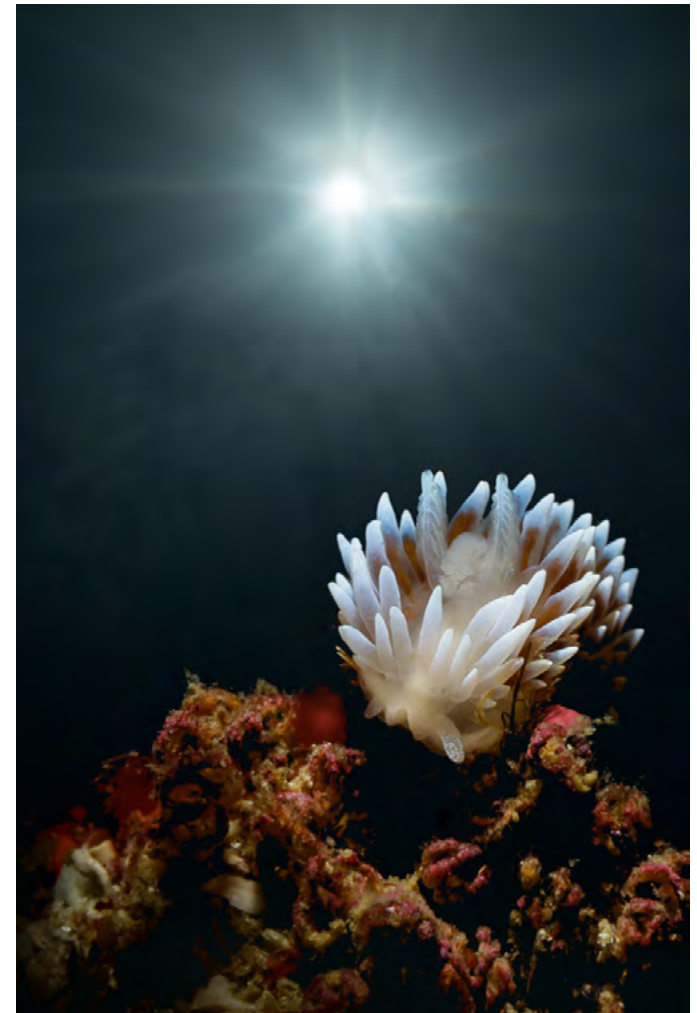
Cape Point. This warmer water tends to be clearer and bluer, providing a wonderful blue backdrop to the sharks one can encounter out there.

Macro Photography

There are many colourful and fascinating macro subjects to photograph in Cape Town's nutrient-rich waters. Macro life is plentiful and

incredibly diverse, with a large number of unique species that can only be found on the reefs in Simon's Town, Gordon's Bay and Hout Bay.

As diving conditions can be unpredictable, many dive shops advise their customers "when in doubt, go macro". Underwater photographers will be kept busy an entire dive with the numerous critters that can be found on the reefs and in the kelp forests.



*Double Exposure – Silvertip Nudibranch at
Blousteen, Gordon's Bay
Canon EOS7d Mark II, Sea & Sea, Single Inon Z240
with Iardino's snoot, Canon 60mm macro and Tokina
10 – 17mm fisheye, f18 and f22, 1/250 and 1/800. ISO
100*

For nudibranch fanatics, 'nudis' can be found everywhere. They range in size from just a few millimetres to just over 10cm in length. Most famous are the beautiful blue and yellow gasflame

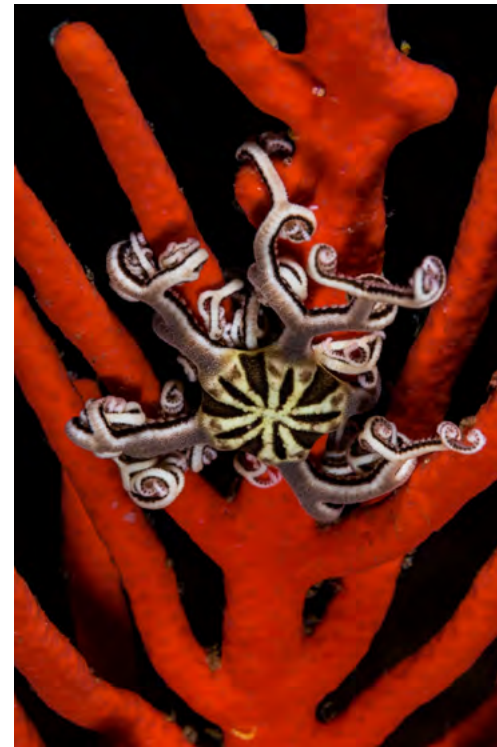


Gasflame Nudibranch at Whittle Rock, Simon's Town
Canon EOS7d Mark II, Sea & Sea, Dual Inon Z240s, Tokina 10 – 17mm at 17mm, f8, 1/125. ISO 320

nudibranchs, inkspot nudibranchs, Cape dorids, frilly nudibranchs, coral nudibranchs, whip fan nudibranchs and variable dorids. There is even a nudibranch called the Mandela nudibranch that can be found on some reefs, most notably at Steenbras Deep in Gordon's Bay. The best dive sites for nudibranchs include Steenbras Deep, Blousteen and Stone Dog in Gordon's Bay as well as Photographer's Reef, A-Frame and Roman Rock in Simon's Town.

Other macro life includes pipefish, spider crabs, common and

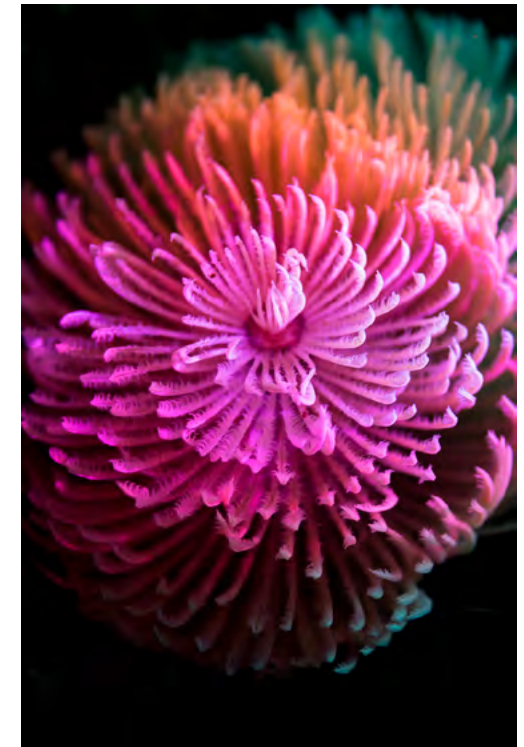
bobtail cuttlefish, octopus, sea spiders, flatworms, strawberry anemones, feather stars, amphipods, tubular hydroids, basket stars and quirky little fish such as tiny smoothskin scorpion fish, rock suckers (which are all head and no body!), blennies and Cape triplefins as well as the many colourful and inquisitive species of klip fish. The strange and unusual horse fish and white sea catfish can also be spotted on deeper reefs such as Steenbras Deep in Gordon's Bay as well as at Whittle Rock in Simon's Town.



Baby Basket Star at Atlantis, Simon's Town
Canon EOS7d Mark II, Sea & Sea, Dual Sea & Sea YS-D1 Strobes, Canon 60mm macro, f18, 1/200. ISO 160

Where to dive

It is important to note that when you visit will determine the best place to dive. In summer (October to April), the predominant wind is the south easterly and this brings flatter sea and clearer conditions to Hout Bay on the western side of the Cape Peninsula and Gordon's Bay on the eastern



Feather Duster Fan Worm at Stone Dog, Gordon's Bay
Canon EOS7d Mark II, Sea & Sea, Dual Mini Gear MS-03 snoot torches with colour filters, Canon 60mm macro, f4.5, 1/400. ISO 160

side of False Bay. In winter (May to September), the predominant wind is the north westerly, which brings flatter sea and clearer water to the area surrounding Simon's Town on the western side of False Bay.

It is a good idea to contact your dive centre the day before to find out where you will be diving as some sites are more suited to macro photography.



Speckled Klipfish at Roman's Rock, Simon's Town
Canon EOS7d Mark II, Sea & Sea, Single Inon Z240 , Canon 60mm macro, f2.8, 1/250 ISO 100

Visibility is also quite changeable and can vary from 5m to 20m at any time of the year, and enquiring about the destination and visibility could help you decide what lense to use.

Water temperatures

Ocean temperatures can range quite drastically from area to area. The water along the western side of the Cape Peninsula is brought up from the Antarctic by the cold Benguela current and you can expect water temperatures of between 8°C and

13°C when diving from Hout Bay in summer.

The water in False Bay is much warmer and temperatures along the Simon's Town and Gordon's Bay coastlines average between 12°C and 15°C in winter and up to 19°C in summer.

What to wear

To remain comfortable whilst diving in Cape Town, a 7mm wetsuit or semi-dry with booties, hood and gloves are advised. A dive computer



Exploring the reef at Steenbras River Mouth, Gordon's Bay
Canon EOS7d Mark II, Sea & Sea, Dual Inon Z240s, Tokina 10 – 17mm fisheye, f8, 1/100. ISO 320

and deployable surface marker buoy with reel are also recommended for all divers.

The diving

Most diving is done from eight-metre-long rubber ducks, known as RIBs or zodiacs in other parts of the world. The standard procedure is for divers to put their gear together on land, after which it is loaded onto the boat where the skipper will secure it to dive racks. Many dive operators provide plastic crates for larger

cameras and some divers with smaller compacts often bring their cameras on board in soft, padded cooler bags.

Divers then don wetsuits and booties and climb on board. Most boats launch from either the Simon's Town, Hout Bay or Gordon's Bay harbours and once at the dive site, the divers kit up for the dive, usually with the assistance of a dive guide or the skipper. When everyone is ready to enter the water, the skipper will slowly count "one, two, three, go!" and the divers all roll backwards into the water at the same time, on

Cape Town's beauty is reflected beneath the waves. Gordon's Bay, eastern side of False Bay



the word "go". Underwater photographers can either roll backwards with their cameras or have them handed to them by the skipper.

Divers can usually choose to dive with a dive guide or dive in buddy pairs, exploring the reefs at their own pace. This is a suitable arrangement for photographers and more experienced divers who can take their time instead of rushing to keep up with the dive guide. At the end of the dive, buddy pairs deploy their surface marker buoy and the dive boat will come to pick them up. It is therefore important for all divers to have their own dive computers and surface marker buoys with them on every dive. Dives tend to be limited by bottom time or a maximum of 60 minutes, whichever comes first.

Underwater photographers are well looked after at all the top dive centres and the skippers and boat crew are used to handling cameras and underwater photography equipment. The operators are incredibly well organised and diving here is enjoyable, relaxed and stress free.

Cape Town should not be overlooked by visiting divers, and

with year round diving – whether it be kelp forests, reefs or wrecks, shallow or deep, wide angle or macro – there is something for everyone in this beautiful underwater paradise!

Kate Jonker

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iBook Review

SS Thistlegorm

by Simon Brown, Jon Henderson, Alex Mustard and Mike Postons
by Peter Rowlands

New technology in the hands of enthusiasts usually results in a 'because we can' delivery. New discoveries in the hands of academics can slow the wheels immeasurably but combine that same new technology with the right selection of intelligent enthusiasts and clear thinking academics, time it perfectly with the miracle of iBooks and you get "SS Thistlegorm", the ultimate visual guide to the world's greatest shipwreck.

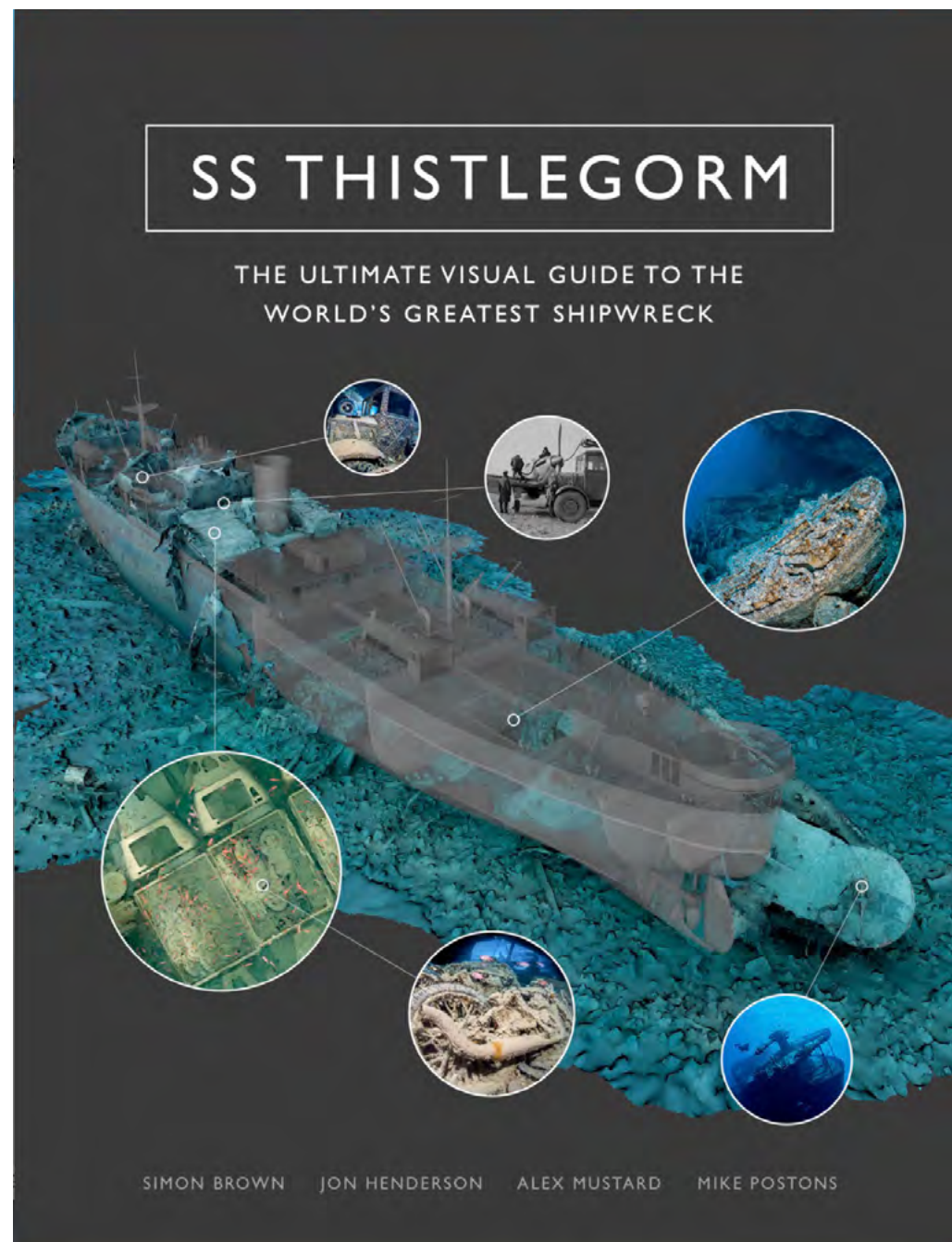
The new technology is 3D photogrammetry and 360° immersive video combined with good old fashioned research. The result is a multi level academic record, visual exploration and compelling presentation which can be sampled or devoured and will leave you with a lasting impression of quality and respect for we must never forget the nine men who lost their lives and that their range was 17 to 68 years of age.

In so many ways the wreck of SS Thistlegorm is THE classic to divers and non divers alike. Great vessel, great cargo, great story, great location and now great documentation.

Everyone involved in this production should take a bow for raising the bar on what can be achieved when emerging new technologies come our way.

With the Festive Season approaching I'm going to, but it doesn't seem quite right, to lower the tone of this review to a 'must by' recommendation but it is the perfect present. Perfect for yourself to remind you of the great dives you had on her, perfect for your non diving partner or friend to say this is why I find diving so enveloping and perfect indeed for anyone because I defy anyone not to be gripped by the story, the visuals and the presentation.

"SS Thistlegorm", the ultimate visual guide to the world's greatest shipwreck costs £19.99 and is available through iTunes. It can only be viewed on an iOS device with Apple Books on iOS 12 or later, or an iPad with iBooks 2 or later and iOS 5 or later, an iPhone with iOS 8.4 or later or a Mac with OS X 10.9 or later.



<https://itunes.apple.com/gb/book/ss-thistlegorm/id1438769165?mt=11>

Guidelines for contributors

The response to UwP has been nothing short of fantastic. We are looking for interesting, well illustrated articles about underwater photography. We are looking for work from existing names but would also like to discover some of the new talent out there and that could be you! UwP is the perfect publication for you to increase your profile in the underwater photography community.

The type of articles we're looking for fall into five main categories:

Uw photo techniques - Balanced light, composition, etc

Locations - Photo friendly dive sites, countries or liveaboards,

Subjects -, Anything from whale sharks to nudibranchs in full detail

Equipment reviews - Detailed appraisals of the latest equipment

Personalities - Interviews/features about leading underwater photographers

**If you have an idea for an article,
contact me first before putting pen to paper.
E mail peter@uwpmag.com**

How to submit articles

To keep UwP simple and financially viable, we can only accept submissions by e mail and they need to be done in the following way:

1. The text should be saved as a TEXT file and attached to the e mail

2. Images must be attached to the e mail and they need to be 150dpi

Size - Maximum length 20cm i.e. horizontal pictures would be 20 cm wide and verticals would be 20cm high.

File type - Save your image as a JPG file and set the compression to "Medium" quality. This should result in images no larger than about 120k which can be transmitted quickly. If we want larger sizes we will contact you.

3. Captions - **Each and every image MUST have full photographic details** including camera, housing, lens, lighting, film, aperture, shutter speed and exposure mode. These must also be copied and pasted into the body of the e mail.

Parting Shots

by Gerard Wijnsma

As is normal in the tropics, night falls early and quickly. On a club trip to Bonaire in the Dutch Caribbean (one of the ABC Islands for the Americans) we took opportunity of this to sneak in a night dive before tea (or dinner for the Americans).

The viz was good, and with another buddy pair we gently worked our way into the current. For night dives I normally take a short macro (60mm). I amused myself by trying to sneak up on fishes in their sleeping place. I tried using the red light of the focus light, but since it was not yet completely dark not too successful. I tried my luck on some less moving subject when the other buddy pair were violently shaking their lights about.

A tarpon (*Megalops atlanticus*) was swimming around trying to hunt fish that were disturbed by our lights. When the tarpon was far away, you could just make out the reflection of the eyes. It moved in and out at slow pace but with sharp turns and reactions, it is nowhere near the sluggish fish it seems during the day.

Getting sharp shots of a silvery fish in the dark turned out to be a struggle. Strobes were not really powerful enough to light them up from afar



Canon 70d, 60mm in Ikelite housing, dual DS51 strobes

and they were pretty fast (and big) up close. The first parting shot illustrates that. Just silvery scales that makes an nice abstract. The second shot is just before the tarpon strikes. Because there is also video footage of bits of the dive, I can report that this prey did escape.



**Do you have a shot which has a story within a story?
If so e mail it with up to 500 words of text and yours could be the next Parting Shot.**

peter@uwpmag.com

and yours could be in UwP106

Gerard Wijnsma

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