

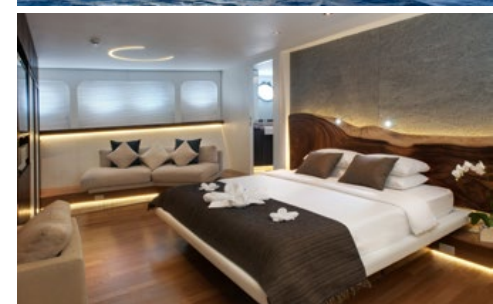




"After years of travelling to the best dive sites in the world and often experiencing poor conditions, we found Wakatobi Dive Resort. They have a perfect balance of luxury with outstanding diving." ~ Kate Pagdget-Koh

An experience without equal

At Wakatobi, you don't compromise on comfort to get away from it all. Our private air charter brings you directly to this luxuriously remote island, where all the indulgences of a five-star resort and luxury liveaboard await. Our dive team and private guides ensure your in-water experiences are perfectly matched to your abilities and interests. Your underwater encounters will create lasting memories that will remain vivid and rewarding long after the visit to Wakatobi is concluded. While at the resort, or on board the dive yacht Pelagian, you need only ask and we will gladly provide any service or facility within our power. This unmatched combination of world-renowned reefs and first-class luxuries put Wakatobi in a category all its own.



www.wakatobi.com

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Cover shot by
Laura Storm

Underwater Photography 2001 - 2018
© PR Productions
Publisher/Editor Peter Rowlands
www.pr-productions.co.uk
peter@uwpmag.com

Editorial

Teamwork in competitions

The title of this section may seem a little odd but, as usual, please bear with me.

The original idea came about when I went on a short press trip with Charles Hood to Iceland way back in 2005 (UwP24 to be precise). We were diving the Silfra Crack and only had a couple of dives allocated on a long weekend trip. The first dive was an amazing experience but photographically frustrating as I didn't want to 'waste' my dive time posing for Charlie and he almost certainly didn't either.

Over an evening aperitif we both independently came to the conclusion that the only way we were to come away with good diver images was to work '10 on and 10 off' i.e. I would pose for him for 10 minutes and then he'd pose for me. The end results were nothing short of amazing. We both knew what shots the other was taking so knew not to duplicate them and as a result we both got a different and therefore non competing set of images.

I got to shoot some special panoramas; one of which was chosen as the front cover of UwP25 and Charlie had me pose between the two tectonic plates with arms outstretched - America on one and Europe on the other. This was used on the cover of Time magazine so it proves how effective 'teaming up' can be. Point made?

Competitions in underwater photography tend to be an individual pastime. True the entered shot might, for example, have been a collaboration between model and photographer but the resulting, submitted image is usually the work and choice of

an individual.

On the Day competitions are probably a prime example of such solo photographic activities but I'm going to suggest an alternative approach which, if I'm right, will be the subject of an article in UwP105.

Ok. Here goes. Let's imagine that an 'On the day' style underwater photography competition has been announced. It's based in one location, but to all intents and purposes, it could be a national competition as long as it's an 'On the Day' format.

A group of underwater photographers start chatting about the up and coming event and feel that they would have a better chance of reaching more varied subjects if they went out on a boat rather than by shore diving. Good idea number one. Split the boat costs by having a small group of underwater photographers on board but this is where the plan can backfire.

Each photographer will more than likely be diving the same site as the others and as a result could well return with some very similar shots. My suggestion is for the group to accept that the competition can only be won by one image. That's it's very nature. Sure there are second and third places but, when the gloves are off, first place is the only place.

With that in mind the group needs to start thinking as a team whose sole aim is to 'win' the competition by entering shots that do not compete with each other. This idea is nothing new and is based on the correctly observed saying 'United we

stand, divided we fall'.

Basically there's no point in entering two similar shots, however good they both are, because they will split the vote. It's very unlikely that a judge will include two similar shots in the winners enclosure. The same is true for 'technique' shots i.e. those which attract because of their unusual style such as long exposure blurs, radial zooms etc etc.

The crucial part of this teamwork is honesty and therefore trust. You have to be honest about the type of shots you are after, i.e. the subjects, the techniques, the lenses and the lighting. I know this goes completely against the grain but it will end up with a much stronger and potentially much more successful entry because you will be eliminating firstly duplicates and secondly only the strongest image will get through.

If everything goes to plan and one of the group wins, they acknowledge the team and the others still get a sense of accomplishment at having been part of the team.

I'll let you know how it went in UwP105.

Recycled lead weights

There's something very satisfying about the SeaShepherd scheme to make dive weights out of the lead used to weigh down captured illegal fishing nets :-)

Peter Rowlands
peter@uwpmag.com

www.uwpmag.com

News, Travel & Events

Spurdog encounters, Scotland

Ever searching for new projects, Shane Wasik owner of Basking Shark Scotland and Dive Oban & Argyll, has been trialling an exciting new shark dive on the North West of Scotland.

Through recent research, a resident population of Spurdogs (*Squalus acanthias*) have been found in the waters around Oban, adding to many wrecks, reefs, walls and abundant marine life of the area. Shane has been trialling out diving with these sharks over the last year, scoping out different locations and factors to be able to find them reliably. The tests have worked out really well which recently culminated in a photography workshop with Lawson Wood and Mike Clark.

Shane says 'Sharks numbers have varied with some days having double figures around the bait, they grown over 5 feet long so they can be a good size too. When in hunting mode the sharks can be very inquisitive, investigating everything including dome ports and the action can be pretty exciting.

We've also found that other sharks come in during the sessions too



©Shane Wasik 2018

such as thornback rays and catsharks. Making it a British shark fest!' Look out for a selection of dates for divers and photographers to book onto individually with group enquires also welcome.

This would make a great addition to a photography weekend including the blackwater and floodlight diving trips.



<http://diveoban.com/diving-with-sharks-spurdogs/scotland.co.uk>



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!



NAD
lembeh

North Sulawesi, Indonesia


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info@nad-lembeh.com
www.nad-lembeh.com

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DIVERS
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DIVE RESORT
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www.alor-divers.com

American Crocodiles at Banco Chinchorro Mexico August 2019

It is possible to get safely face to face with crocodiles and come back with amazing close up photos: Chinchorro Atoll (Banco Chinchorro Biosphere Reserve) is the best place in the world to get close to American crocodiles. Located south of Cancun, Mexico, the Banco Chinchorro Biosphere Reserve is the largest stand – alone reef in the Northern hemisphere and one of the healthiest. Fewer than one thousand divers get to see these remote and unspoiled dive sites per year.

In August 2019, photographer host Gregory Sweeney and 6 guests will travel on a unique adventure to see American Crocodiles and dive remote reefs. This is a safe encounter with guides who have done years of experimentation and careful planning to make this safe. Our outfitter and guide in Xcalak are committed to sustainable tourism remain the only dive operator with an official concession.

On the Chinchorro Banks, guests stay in utilitarian fishing huts on stilts over the shallow waters: 36 nautical miles off shore and across from



Xcalak, Mexico.

Each morning on a dive to the pristine reefs they also hunt the invasive lionfish. In the afternoons the crocs come close and guests photograph the crocs in the 1.2m deep water around our huts. Guests can pair this trip with the Cancun whale shark aggregation.

If ancient reptiles and remote adventure is calling to you, get more information on price and availability from Gregory Sweeney at:

www.GregorySweeney.com

Asia Pacific UW Photo Challenge

Asia Pacific Underwater Photo Challenge (UWPC), aim at finding the excellent underwater photographers, understanding their works thoroughly.

We hope to promote the development of the art of underwater photography in the Asia Pacific Region, make the creation of underwater image culture prosper, promote scuba diving, promote the protection of the marine environment and guide the green and healthy life style through the challenge.

Asia Pacific Underwater Photo Challenge is truly a international competition. Our judges are famous underwater photographers worldwide and this Underwater Photo Challenge is open to all skill levels.

In the past few years, there were hundreds of competitors from China, Hong Kong, Taiwan, South Korea, Australia, USA, Philippines, Singapore, and UK. The Diving and Resort Travel Expo (DRT Show) and EZDIVE magazine now welcome everyone to participate the biggest underwater photo competition: Asia Pacific Underwater Photo Challenge!

www.uwphotochallenge.com



Asian Geographic Magazines

Asian Geographic Magazines is extremely honoured to have emerged the winner of Best Exhibition Organiser under the Experience Excellence (MICE) category at the Singapore Tourism Awards 2018 for having demonstrated excellence in organising and delivering Asia Dive Expo (ADEX) 2017.

We would like to thank our partners, sponsors, exhibitors, stakeholders, the Singapore Tourism Board and, of course, our visitors for supporting and believing in us through the years. We look forward to



bringing you an even greater line-up for our upcoming shows. See you at ADEX 2019!

www.uw360.asia

Join Backscatter's Berkley White & Becca Boring with seasoned wreck diver and underwater photographer Mike Boring on an exhilarating photo expedition to the most iconic wreck diving destination in the world.

Truk Lagoon (Chuuk) has the highest concentration of historic shipwrecks sunk in warm, clear water of any place on earth. Home to the Japanese Navy's Combined Fleet during WWII, Truk Lagoon was the target of a devastating attack by the United States Navy in February 1944. Operation Hailstone resulted in the loss of more than 40 Japanese ships and over 200 airplanes. The combination of history, shipwrecks, marine life, spectacular diving conditions, tropical weather, and beautiful scenery offer an unforgettable experience for divers and underwater photographers.

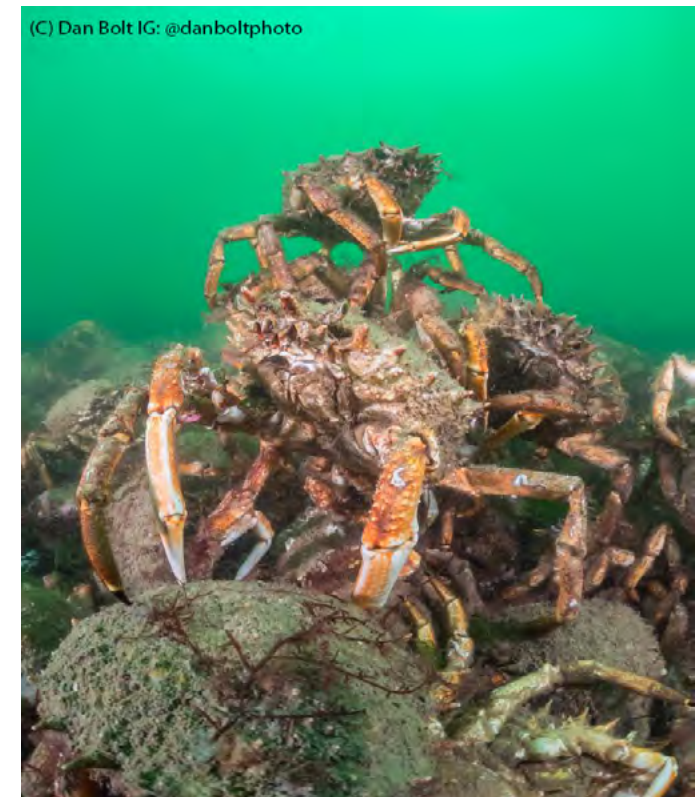
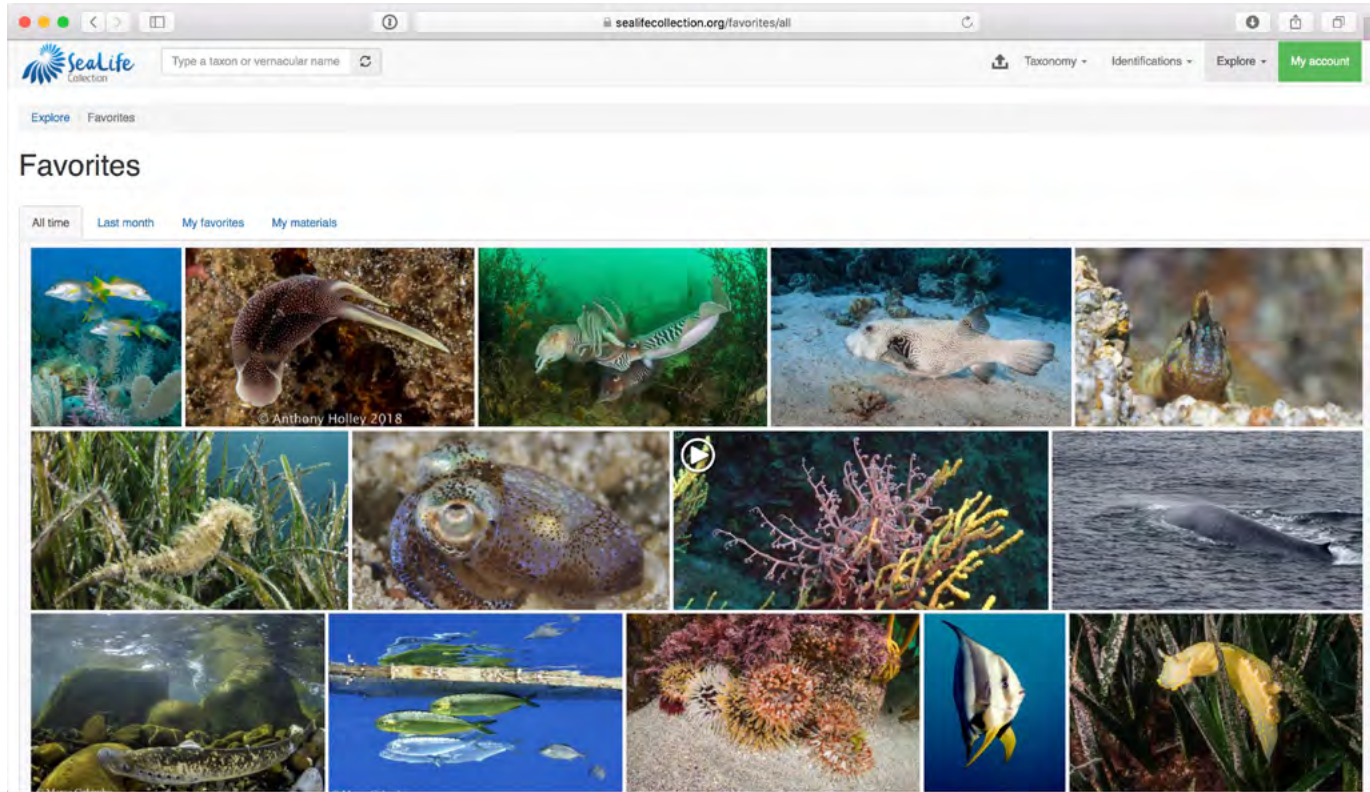
Truk Lagoon offers unique diving opportunities for all levels of divers, with some of the very best wrecks resting in shallow water. The group will be divided up based on individual interests, objectives, and experience level. Whether you plan to dive a single tank, doubles or CCR you'll have a phenomenal time diving the wrecks of Truk Lagoon.

If you have questions about how we'll tailor the itinerary to meet your individual needs, please contact Becca Boring.

The Blue Lagoon Resort offers comfortably furnished rooms with two double beds, shower, full bath, private balcony and a beautiful ocean view. During WWII the grounds were used by the Imperial Japanese Command. Many war relics remain today including armament and defensive fortifications.

<https://www.backscatter.com/reviews/post/Truk-Lagoon-Blue-Lagoon-Resort>

The Sealife Collection



The Sealife Collection is now live on sealifecollection.org

The Sealife Collection provides a collaborative, open content, online media database of all marine species, and is addressed to underwater photographers and scientists, enthusiasts of sealife species.

A critical part of this project is our partnership with WoRMS, which provides the taxonomic backbone to the database and daily updates to the taxonomy.

The initiative has the ambitious goal to represent as many taxa as possible with accurately identified photographs and videos. It

aims to become a useful tool for the underwater photography community as a single platform where users can see images of a taxon published by subscribed members, upload and compare their own photographs, and get support and discussions on identifications.

It includes a verification process for identifications at both the peer level and at specialist taxonomist level. Also includes social tools allowing users to discuss identifications, provide comments and tag 'likes' for particular media.

The Sealife Collection has the ability to produce distribution maps, cope with undescribed and cryptic species and hold vernacular names.

We expect members to extend beyond the community of underwater photographers, who will upload content and populate the database, and to include the scientific, conservation and educational communities.

Becoming a member is free, with different levels of media licensing available, selected by the user on upload.

The project is an initiative of Alive Fundació with the support of the World Register of Marine Species and well-known photographers like Alex Mustard.

Bluewater Photo SoCal Shootout

September 14 - 16, 2018

Bluewater Photo has announced that the 2018 SoCal Shootout Competition will be held September 14 – 16, 2018. Registration is open from now until September 13th.

This competition invites divers from all across Southern California to dive and photograph with the opportunity to enter the contest and win great prizes. Photographers of all levels are welcome and can participate in a number of different categories that are separated by camera type (compact, mirrorless, dSLR) and photo type (macro, wide-angle, behavior, etc).

“The limitation of only being able to use photos from that specific weekend really adds to the excitement and fairness of the competition. It adds that extra flare of need to first find a subject or image you’re planning to take, and then also nail the photo!” - Adam Gibson

This contest brings together our local community of divers and underwater photographers, while also promoting local diving and the great underwater environment that we enjoy here in Southern California.

What can you win?

There’s a great list of sponsors

who have chosen to participate in this year’s competition, offering prizes that range from completely free vacations to free gear and local boat trips. With a grand total of over \$24,000 in prizes last year, Bluewater Photo is planning to surpass this total for 2018 – they already have a new record of free trips as prizes! While the full list of sponsors is still coming in, see some of the highlights below.

Platinum Sponsor prizes: A free trip to the Sea of Cortez aboard the Quino El Guardian, multi-night stay packages at Volivoli Beach Resort in Fiji, Clearly Cayman Beach Resorts, and El Galleon Dive Resort, along with numerous high-end video lights and camera products from Kraken and a GH5 Housing with 2 TLC arm sets from Aquatica.

Gold Sponsor prizes: A multi-night stay at Aiyanar Resort in Anilao, 3 night/4 day stay with dives for

2 people at Atmosphere Resort in Dumaguete, multiple products from ThinkTank, two YS-D2 strobes from Sea & Sea, and an Olympus TG-5 camera + housing.

Silver Sponsors: prizes from Ultralight Control Systems, Ikelite, CeeRay dive boat, Channel Island Dive Adventures, Truth Aquatics, 2

trips aboard the CeeRay dive boat, and so much more!

How do I join?

For more information or to sign up to participate in the competition, go to the website or contact Adam at

adam@bluewaterdivetravel.com



BLUEWATER PHOTO
2018 SOCAL SHOOTOUT
September 14-16, 2018

\$24,000+ in sponsored prizes won in 2017!
Registration opens on Aug 1-Sep 13, 2018
Go to: bluewaterphotostore.com/socal-shootout

Michael Alyono - Winner of 2017's 'Compact Wide Angle' category. won a Sea & Sea YS-D2 Strobe

www.bluewaterphotostore.com/socal-shootout

GregorySweeney.com Photography Adventures

*Tiger Shark
& Hammerhead Diving*
March & Oct 2019

Sailfish Hunting Sardines
February 2019

Salmon Sharks in Alaska
June 20-19, 2019

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The salmon sharks we encounter are a mysterious and misunderstood species related to great white and mako sharks. You can witness and



photograph behavior never before documented.

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www.biganimals.com

UK underwater courses with Mario Vitalini



For nearly 30 years Mario has sailed the globe and dived the seas, working as a PADI instructor and dive guide. Today, he shares his passion for underwater photography, teaching students of all experience levels. His students love his real world expertise and patient approach. He has an extensive working knowledge of all underwater camera systems, having spent several years at the UK's largest photo retailer. There's not a camera set up he doesn't know. Join him on a UK course and learn to take better photos

A private underwater photo course is the best way to fully concentrate on your individual needs and level as an underwater photographer and diver. You will advance your skills in a short period of time. Courses are designed around you and you only.

www.scubatravel.com

WORLD SHOOTOUT
UW Photo OLYMPICS
JANUARY - NOVEMBER 1ST, 2018



Submit your best and most impressive underwater images, taken anywhere in the world between November 2nd, 2017- November 1st, 2018 and win some of the most valuable prizes ever awarded to underwater photographers !

Registration can be carried out until November 1st, 2018.

2. Registered before August 30th, get FREE additional set of images in each category you have registered.

3. Images can be submitted to the competition by uploading them to the competition website. Deadline for submitting images to the competition is November 1st, 2018

Categories & Prizes

BEST 5 IMAGES - \$20,000 trip to Papua New Guinea

CHAMPIONSHIP - \$10,000

awaits the winning team

AMATEURS CATEGORY -

Fantasea FA6500 Housing

MACRO CATEGORY - \$1,500

check

VIDEO CLIP CATEGORY -

\$1,000 check

www.worldshootout.org

Underwater Photography Exhibition

Attenborough Nature Reserve - September 2018

Jack Perks is a Nottingham based wildlife cameraman and photographer having worked for Springwatch, Countryfile and The One Show. Although he works with all wildlife underwater is his speciality both marine and closer to home in ponds and rivers.

The corridor in the visitor will have images from all over the UK from Shetland to Cornwall and a range of species.

He'll be doing a talk on the 30th September about his work and signing his books.

Attenborough Nature Centre
Barton Lane
Attenborough
Nottingham
NG9 6DY

www.jackperksphotography.com



AFFINITY
PHOTO

HAMMOND

New Basking Shark Boat



We're delighted to announce the arrival of our brand new basking shark boat 'Cearban Mhor'. It's been a few years of planning, design, discussions and convincing the bank manager to lend us (a lot) money! However finally she's arrived and we're super pleased with her.

Sticking with the trusty Redbay Stormforce platform built to take the worst of the Atlantic, she's 12m long to give us plenty of space on board. She's been custom designed to give indoor cabin seating, a seated shelter deck area and a much larger stern deck space. Space on a boat is always a compromise but we think we have a good combination of indoor shelter and outdoor viewing space.

Powered by twin V8 320hp Yanmar engines gives us plenty torque to carry the heavier boat, passenger and gear loading without stressing the powerplants too much. Of course she's in stealth black with silver decals to go with the companies colour. Sitting on the pontoons she's certainly a head turner!

Whilst being the flagship for our basking shark, wildlife and activity tours, she also gives us lots of options for island exploration and multi-day adventures around the Hebrides. We look forward to welcoming you aboard in the near future.

www.baskingsharkscotland.co.uk

www.uwpmag.com

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FROM HIS INJURIES.

www.seashepherdglobal.org



SEA SHEPHERD

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Photographing Sailfish Hunting Sardine Bait Balls Mexico February 2019

Each year during the winter season, nutrient rich currents flow from South America pushing its way north up onto the shallow shelf off of Isla Mujeres, Mexico drawing in large shoals of sardines and needle fish. Following these baitfish are great numbers of Atlantic sailfish. The



adventure happens when marine life and predators collide in havoc. Photographer host Gregory Sweeney charts 12.5m custom deep sea fishing boats out of Isla Mujeres, Mexico taking 5 guests on the quest to photograph the underwater drama.

Locating the sailfish and sardines can take a combination of a lots of patience, persistence, years of experience, and one last ingredient: frigate birds. A good crew with years of fishing knowledge under their belts, is essential to locate the sailfish and this is why he works with the crews who have been doing this the longest and consistently find great encounters.

The sailfish cooperate as a team to hold the bait ball together. Every

time the bait ball changes direction it encounters another sailfish: that sailfish will throw up its sail-like dorsal fin to scare the bait ball into diverting in another direction. It is truly an amazing experience catching the sailfish working together in photos displaying precision, accuracy, and teamwork to control the bait ball, then demolish it. The underwater images are full of action and drama. There is no better opportunity for video.

This is the ultimate in thrilling marine life encounters: get more information on price and availability from Gregory Sweeney at:

www.PhotographSailfish.com

www.uwpmag.com



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



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Sea Of Cortez - Backpacker Style Adventure Novt 4-11, 2018



This is not your typical Backscatter photo expedition. Our new “Backpacker Series” of trips are professionally crafted to focus more on the adventure and less on dive, shoot, eat, repeat. We’re basically getting back to our roots when we considered meeting the locals and exploring land equally important to a well-appointed underwater camera room or finding the next underwater critter. Our best images have come from spontaneous adventures like these. Some of the best moments in our lives occurred when we put the camera down and just experienced a new adventure. If this speaks to you... this is the trip for you.

The inquisitive colony of California sea lions (*Zalophus californianus*) that call Los Islotes home are in fact the southernmost

breeding colony in the Gulf of California, also known as the Sea of Cortez. With very few natural predators, the colony has a robust population of roughly five hundred individuals. They can be spotted basking on rocky ledges in the sun, whizzing through underwater caves and archways, or entertaining visitors with their jovial personalities.

The Sea of Cortez is home to an incredible variety of marine creatures, one of the most impressive of those being the whale shark. As the largest fish in the sea, whale sharks can exceed 40ft in length and weigh more than 40,000lbs. October to March is whale shark season in La Paz, and we will be sure to spend some time with them during this trip.

<https://www.backscatter.com/reviews/post/Sea-Of-Cortez-Sea-Lions-Whale-Sharks-Mobula-2018>

www.uwpmag.com

WETPIXEL



THE SOURCE

Blue Elements Imaging



Tanya Houppermans began her diving career in 2008 and quickly fell in love with the underwater world. She became a passionate shark conservationist after learning that more than 70 million sharks are killed by humans annually worldwide.

To help with shark conservation efforts, she decided to start photographing sharks to show the public that these misunderstood animals are not the vicious monsters so often portrayed by the media, and that they are actually beautiful, graceful, intelligent creatures that desperately need our help. Tanya's images quickly became recognized around the world and were honored with awards in numerous international photography competitions.

In 2015 Tanya left her career as a mathematician and military defense analyst to pursue underwater photography and marine conservation full time. Her images and articles have appeared in print and online publications worldwide including Scuba Diving, Alert Diver, Tauchen,



Scubashooters, Dive Photo Guide, Ocean Geographic Explorer, and National Geographic. In 2016, she was inducted into the prestigious Ocean Artists Society for using her images to further global marine conservation efforts. Tanya also conducts field work for scientists and researchers by acquiring the images they need to further their studies. She enjoys leading expeditions for other divers and underwater photographers as well, particularly those involving her beloved sharks.

Tanya is currently in the process of continuing her dive education by entering the realm of technical diving, which will allow her to dive deeper and stay underwater longer to capture images of shipwrecks and sea creatures that are not easily accessible through recreational scuba diving.

www.blueelementsimaging.com

www.uwpmag.com



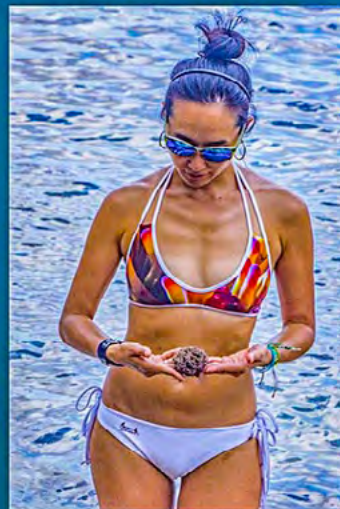
Using the imaging of photo pro TIM ROCK. Ocean Dreams apparel is for lovers of the sea. Buy online now. Shipping worldwide.



www.oceandreamspacific.com



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- NEW!! Bikinis & One Piece Swimsuits
- Ocean T-Shirts
- iPhone Cases
- Bath Towels, Skirts, Bags and lots more



Private Underwater Photography Lessons with Richard Carey

Whether you are just starting out with a camera or looking to take better underwater photographs, Richard also offers private photography lessons and courses.

You will get to join Richard aboard a three or five day liveaboard safari, diving with him for a day or two or even for the entire trip, improving your photography at the Similan Islands and world famous Richelieu Rock on the Similan Explorer.

Unlike other underwater photography courses there is no set program when learning with Richard.

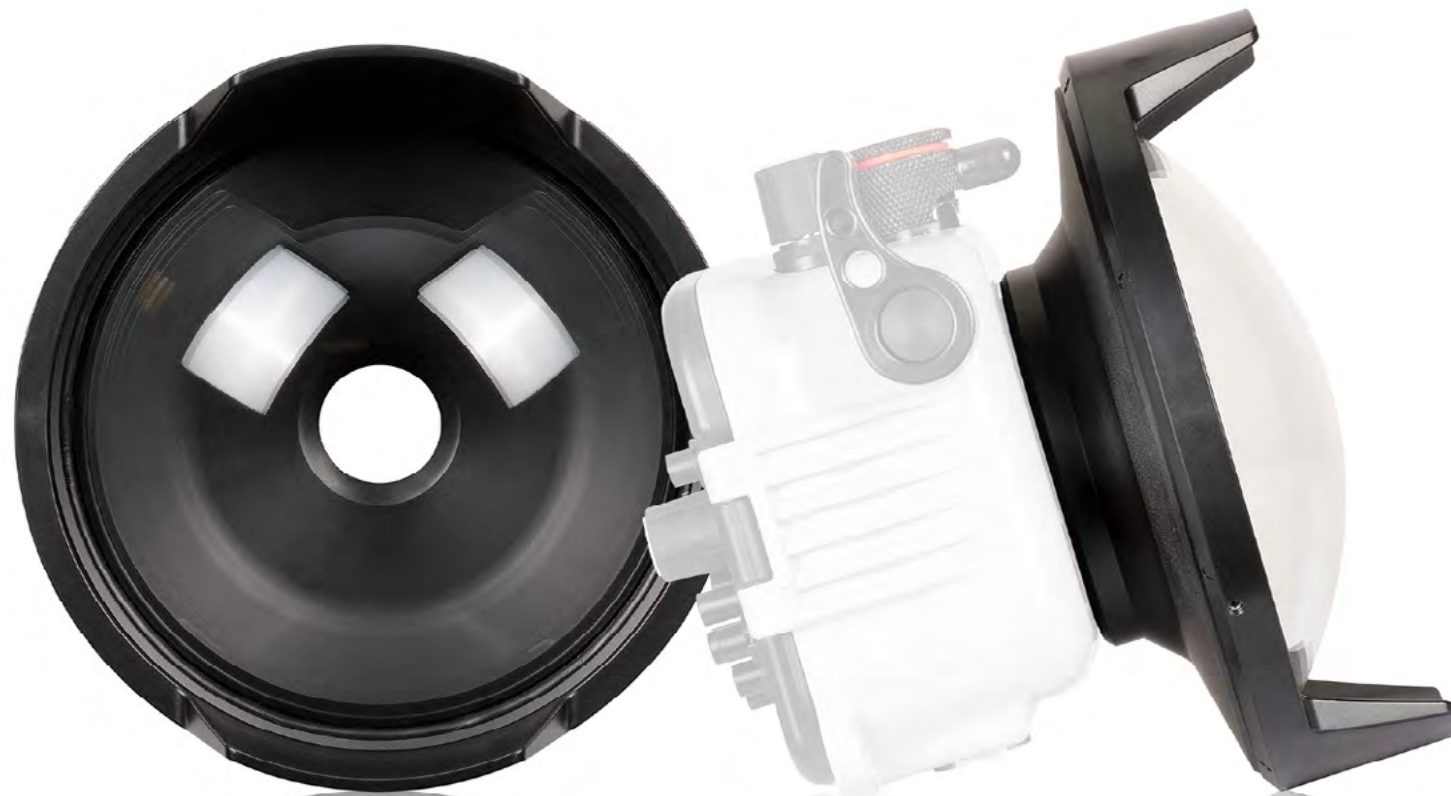
Richard will concentrate on what you want to learn, taking into account your experience level, type of equipment you use and importantly, what interests you the most. You may wish to gain a more thorough understanding of your camera's settings, how to achieve better strobe lighting or focus more on wide angle or macro photography. What ever your goal is, Richard can help you get better underwater shots.

During your day you will discuss theory with Richard then get to dive together and put this theory



into practise. After the dives there is ample time to review your images and discuss what works best and how you can improve. Diving one on one is the best way to get the most out of your lessons. You can dive at your own pace and spend more time practising your shots.

www.richardcareyphotos.com



DC1 6 Inch Dome for Olympus Tough TG-5, TG-4, TG-3

This dome offers the best of everything: wide angle, macro, and over-under all on one dive. This special dome port is compatible with Ikelite housings for Olympus Tough TG-3, TG-4, and TG-5 digital cameras.

Underwater, the dome corrects for refraction to provide the full 25mm wide field of view. That's substantially wider than a flat port, which reduces the field of view to approximately 33mm. The dome supports full zoom through and you can still take advantage of the camera's fantastic microscope macro mode.

At the surface, the large dry dome gives you greater control to get a clean, smooth water line when shooting split shots (half-in, half-out of the water). This type of shot can be impossible to get with a flat port, and extremely difficult with a wet lens or dome where you're fighting double water lines. Read more at Ikelite.com.



RC1 Olympus & Panasonic TTL Receiver for DS Strobes

Enjoy true Olympus or Panasonic LUMIX TTL strobe exposure via fiber optic connection with your compatible Ikelite DS strobe.

With the RC1 TTL Receiver and a compatible camera with RC flash mode, actual exposure data is calibrated and communicated directly by the camera. This is far more accurate and consistent than "slave TTL" modes built into some underwater strobes which watch the camera's built-in flash and react.



New Products

Nauticam NA-RX100VI for Sony RX100 MKVI



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. Nauticam designs are always improving, and 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.

Some users, especially those wearing cold water gloves, prefer shooting from handles such as the Nauticam Flexitray. To better support this style of shooting, a set of stainless steel handle brackets and a mechanical shutter release trigger extension is included with every housing.



The RX100VI housings moves to an interchangeable N50 port system, meaning in addition to attaching a number of different wet mount lenses a variety of dedicated ports are also available. A compact camera underwater is only as good as the optics in front of it, and the growing Nauticam accessory lens lineup sets new performance standards with every release.

www.nauticamusa.com

YS-D2 STROBE



- AUDIBLE & VISUAL READY & TTL CONFIRMATION
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- BACKLIT ILLUMINATED REAR CONTROL PANEL
- FASTER RECYCLING TIME
- DS-TTL II WITH +/-2 EV RANGE

SEA&SEA
THE UNDERWATER IMAGING COMPANY

www.sea-sea.com
01803 663012 - sales@sea-sea.com




NA-RX100VI Housing
for Sony RX100VI Camera



nauticam.tmall.com

GoPro Fusion

Grant your audiences new perspectives of your adventures with the GoPro Fusion. Using two slightly offset cameras, the Fusion can capture everything that happens around it in 5.2K resolution up to 30 fps. If you're producing content for viewing in VR headsets, 3K resolution at a smooth 60 fps may be more appealing. 18MP photos can also be captured in both raw and JPEG formats for editing flexibility and easy sharing, respectively.

The Fusion's capture resolution may be high, but sharing your videos and photos is not a chore. With the GoPro app, you can play back and share your content right after capture. With OverCapture, you can extract a moveable 1080p or 720p chunk out of your existing 360 video and create a standard HD video, as if you had a virtual tripod and zoom lens with a camera operator.

To complement the Fusion's spherical video, spherical audio is also recorded. Using multiple microphones



to capture 4-channel audio, the Fusion can record sounds from all directions. Playback of the surround sound offers an immersive sonic experience to go with the spherical video.

www.gopro.com

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Sea & Sea MDX- α 7III



Sea&Sea engineers have designed a unique Buoyancy Pocket, which can also accommodate accessories such as a mobile battery charger**, without compromising the overall size of the housing. The availability of an optional battery charger has addressed battery life of the camera and allows shooting for extended periods without concern of camera power loss.

The internal space also contributes to the reduction of the weight underwater. Combined with the lightweight camera body, we realized a phenomenal underwater weight of 700 grams, eliminating the necessity to attach large floats.

The MDX- α 7III features are:

The Port Lock prevents the port from turning or loosening and the Port Lock lever is specifically located to avoid being unlocked accidentally.

The housing is equipped with a lens-lock release button which makes it possible to change lenses easily,

without opening the housing.

Pulling out the Focus/Zoom Dial gives sufficient room inside the housing to easily accommodate larger diameter lenses.

The camera's diopter adjustment dial can be operated from outside the housing. This feature is useful when two or more people with different eyesight use the housing.

All controls have luminescence stickers which glow in dark environment.

Equipped with the Optical Viewfinder 0.5x as standard. Other optional viewfinders such as the VF180 1.2x, VF45 1.2x and Optical Viewfinder 0.66x, 0.8x can be used.

Some vignetting occurs. When the VF180 1.2x is mounted on housing, the upper part of the camera's viewfinder cannot be viewed due to vignetting.

Sync Cord 2-pin Connector enables use of conventional hardwired Sync cable (Manual mode only).

Equipped with two sacrificial zinc diodes (one on the front case and the other on the rear) to prevent electrolysis damage.

Built-in leak sensor immediately alerts you to water ingress.

Tripod screw mount is located on the centre underside of the housing.

Equipped with under guard to protect from scratch. [Construction] Body: corrosion-resistant aluminum alloy (machined)

Grip: corrosion-resistant die-cast aluminum alloy

[Depth rating] 100m / 330ft

[Dimensions (WxHxD)] 328 x 188 x 131 mm / 12.9 x 7.4 x 5.2 inches

[Weight] Approx. 2,700g / 95oz (Housing only)

www.sea-sea.com

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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

WE ARE UNDERWATER PHOTOGRAPHERS... JUST LIKE YOU.

DC1 6 Inch Dome for Olympus TG-5, TG-4, TG-3



This dome offers the best of everything: wide angle, macro, and over-under all on one dive. This special dome port is compatible with Ikelite housings for Olympus Tough TG-3, TG-4, and TG-5 digital cameras.

Underwater, the dome corrects for refraction to provide the full 25mm wide field of view. That's substantially wider than a flat port, which reduces the field of view to approximately 33mm. The dome supports full zoom through and you can still take advantage of the camera's fantastic microscope macro mode.

At the surface, the large dry dome gives you greater control to get a clean, smooth water line when



shooting split shots (half-in, half-out of the water). This type of shot can be impossible to get with a flat port, and extremely difficult with a wet lens or dome where you're fighting double water lines.

www.ikelite.com

www.uwpmag.com

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



Ikelite High Sensitivity Optical Slave Converter for Remote Triggering of DS Strobes



The High Sensitivity Optical Slave Converter is perfect for use in environments with high ambient light or large distances between your remote strobe and the primary flash.

This is a non-learning, sensor which requires the camera to be in manual flash mode. This Converter will not work with a preflash. The Optical Slave Converter supports manual exposure modes as set on the attached DS strobe. TTL exposure mode is not supported.

If your main aim is to trigger a strobe fiber optically by a compact digital camera's flash, we recommend the Fiber Optic Converter # 4401.1 or RC1 Olympus & Panasonic TTL Receiver # 4412 instead.

If you're shooting a DSLR or mirrorless camera with Nauticam fiber optic converter and want to shoot at

high frame rates (4 FPS or faster), then this Converter is the right option for you. The included fiber optic port allows the attachment of Ikelite, SEA&SEA, Olympus, and certain Nauticam fiber optic cables.

The Converter simply attaches to the strobe's electrical bulkhead in place of a sync cord connector. An optional 3-foot Extension Cord # 4102.03 may be added for more flexible positioning of the sensor window. It can also be used above water for studio photography work.

www.ikelite.com

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THE Z IS SILENT

The advertisement features a vintage-style watch with a blue dial and gold case. The background is a textured, brownish paper with a hand holding a top hat and a mustache. The text is in various fonts, including a large, stylized 'Szantlo' and a banner at the bottom that says 'THE Z IS SILENT'.

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Gates POV cam



Gates Underwater Products – manufacturer of the world’s most reliable underwater housings – today announces the POV CAM Underwater Housing system.

Consisting of two unique housings –UMR20 Recorder and UCK20 Camera Head -- the POV CAM Point Of View system separates operator and subject by up to 60ft / 20m, opening up an array of remote 4K imaging opportunities.

Gates POV CAM system was designed in collaboration with Esprit Films and Television as a purpose-built underwater motion imaging tool for the Panasonic AG-UMR20 Recorder and AG-UCK20GJ 4K camera.

www.gateshousings.com

Aditech Underwater Robot CCROV



The CCROV is a micro-ROV sized vehicle that has all main features inherited from larger underwater systems. It has embedded batteries in the topside tether deployment system allowing for autonomy of 1-2 hours. CCROV is the smallest ROV in the market, with dimension about 208x204x158mm. It’s easily to take everywhere in backpack or suitcase. The operate system is quite user-friendly, could easily be operated through remote control or APP. CCROV can take 4K UHD picture and video by build-in camera and 720P real-time transmission through cable

www.aditech-uw.com



Nauticam NA-A6500 for Sony A6500



“Versatility & Power”

The Sony A6500 is blurring the lines between compact camera, DSLR, and video powerhouse with its 24.2MP APS-C sensor and 4K UHD shooting capability. An ever-expanding selection of lenses allows your pick of the right lens for the job. The 16-50mm PZ kit lens is easily and comfortably controlled in the Nauticam A6500 housing and is expertly complemented by the Nauticam Wet Wide Lens (WWL-1) or Compact Macro Converter (CMC-1) for the ultimate in versatility—all in one dive!

www.reefphoto.com



Nauticam NA-D500 for Nikon D500



“A New Era”

With 153 focus points and 10 fps continuous shooting, there has never been a Nikon DX camera with the level of autofocus and continuous shooting capability as the Nikon D500—not to mention the revolutionary addition of 4K UHD video. This extraordinary camera demands an equally impressive housing, and the Nauticam design team has left no detail overlooked. In addition to the superior ergonomics for which Nauticam is renowned, each NA-D500 comes with an installed manual optical flash trigger—standard!

www.reefphoto.com

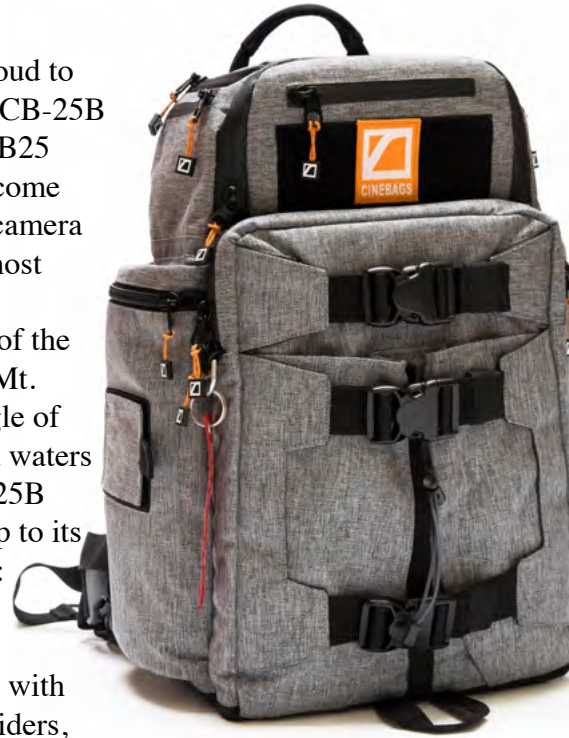
CineBags CB-25B Revolution Backpack

California based bag manufacturer CineBags is proud to introduce its next generation CB-25B Revolution Backpack. The CB25 Revolution Backpack has become a staple among professional camera crews using the bags in the most harsh shooting conditions.

From the rough waters of the Bering Sea to the heights of Mt. Everest, from the humid jungle of Vietnam to the shark infested waters of the Bahamas, the new CB25B Revolution Backpack lives up to its expectations and its motto of: Life on Location.

The new CB25B Revolution Backpack comes with a multitude of removable dividers, that allow for a total customization of the interior, to keep lenses, cameras, and other necessities organized and protected. Padded shoulder and hip straps make the CB25B a comfortable travel bag that also meets airline carry on specifications.

Constructed from lightweight, waterproof fabric, the bag also features a deployable rain cover that covers the entire backpack. Other features include a top carry handle, fleece line pouch, padded hip strap, padded shoulder harness, CineBags keychain, interior dividers, ID Tag, as



well as a padded laptop compartment accommodating MacBooks up to 17”.

The new CB25B Revolution Backpack is available in two new color options, a dark Graphite edition and a light Carbon Edition.

The new CB25B Revolution Backpack is available now through our network of professional camera stores like: AbelCine, B&H, Adorama, Filmtools, Precision Camera, Glazers Camera, and others.

www.cinebags.com



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NA-GFX Housing for
Fujifilm GFX 50S Camera

www.nauticam.cn

Fantasea-AOI UWL-400Q



The Fantasea-AOI UWL-400Q is a super sharp quality “wet” wide angle conversion lens. Featuring a wide field of view and zero minimal focus distance, the UWL-400Q produces breathtaking wide angle and close focus images that are super sharp corner-to-corner and great on the details.

UWL-400Q attaches to the housing lens port thread and can be installed and removed during the dive. The lens is compatible with most all cameras featuring a 24mm lens (or a higher focal range) and can also be used with some cameras featuring a wider lens by zooming in to avoid a vignette.

The lens is compatible with the Fantasea Bayonet System (QRS). Bayonet adaptors can be separately ordered.

www.fantasea.com

Sea Shepherd dive weights direct from Operation Milagro

Purchase authentic Sea Shepherd dive weights direct from Operation Milagro in the Sea of Cortez!

Available in 2, 3 or 4 pound sizes, the weights have Sea Shepherd words and logo stamped on it to let you proudly identify yourself as a supporter.

Operation Heavy Metal is a Sea Shepherd effort to address the materials from illegal fishing gear we retrieved during #OpMilagro. We have been working with legal local fishermen from ABC Pesca to upcycle the lead weights we find on illegal nets and transform them into 2, 3, and 4 pound dive weights.

Something that was used to kill marine wildlife is now being used for divers to see the beauty of the oceans. These materials will never be used to kill again. The effort is also providing alternative income to legal fisherman that have been affected economically while trying to protect the vaquita. You can buy your weight here.



With this weight, you get a Certificate of Authenticity (COA).

We regret that we are only able to ship to addresses in the United States and Puerto Rico at this time.

Price: 2 pound weight \$15, 3 pound weight \$20, 4 pound weight \$25

<https://shop.paulwatson.com/products/sea-shepherd-dive-weights>



Nauticam

innovation underwater

Think beyond what has been done before, work with the most demanding photographer on the planet, deliver beyond expectations, and never rest on past accomplishments.

www.nauticam.com



NA-XH1 Housing for
Fujifilm X-H1 Camera



NA-XH1 Housing
for Canon EOS M50



Nauticam NA-RX100V Sony RX100V



“Amazing 4K Compact”

With the ability to shoot stunning 4K video and 20mp stills, this camera and housing package offers the complete control and image quality of an SLR system at the size and convenience of a compact. Controls are simple, but well thought out with easy to access push buttons. Dual command dials immediately access frequently used manual settings like Manual Focus, F-Stop, and Shutter Speed. The addition of excellent wet lens options make for one powerful, compact package.

www.reefphoto.com

RC1 Olympus & Panasonic TTL Receiver for DS Strobes



Now true Olympus or Panasonic LUMIX TTL strobe exposure is available via fiber optic connection with a Ikelite DS strobe!

With the RC1 TTL Receiver and a compatible camera with RC flash mode, actual exposure data is calibrated and communicated directly by the camera. This is far more accurate and consistent than “slave TTL” modes built into some underwater strobes which watch the camera’s built-in flash and react.

An individual RC1 TTL Receiver and compatible fiber optic cord is needed for each strobe. Use of two strobes requires two receivers.

This product attaches to an Ikelite DS strobe. It is not intended to be attached to a housing and will provide no functionality if attached to a housing bulkhead.

This receiver is not compatible with non-Ikelite strobes or non-digital Ikelite strobes.



RC Mode TTL Strobe Exposure

The receiver makes DS Strobes compatible with the Olympus and Panasonic LUMIX RC flash mode, providing automatic TTL exposure. For accurate performance set the DS strobe to “TTL” and the camera’s flash mode to “RC”. Using the camera’s flash exposure compensation controls to make fine tuned adjustments to the strobe’s intensity.

Manual Strobe Exposure

The strobe’s output may be adjusted using the manual power settings built into the strobe (varies by model). Make sure the camera’s flash mode is set to manual. Choose the minimum flash output necessary in the camera to trigger the DS strobe. This will conserve the camera’s battery power.

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TO PROFESSIONAL



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Issue 104/28

Ikelite housing for Sony Cyber-shot RX100 VI



A full featured and durable underwater housing for Sony Cyber-shot RX100 VI digital cameras. Perfect for scuba, snorkel, surf, pool, and any application in or around the water.

Key Features

- * Durable and corrosion-free ABS-PC construction
- * Depth rated to 200 feet (60m)
- * Ergonomic access to all important camera functions
- * Support for the attachment of external wide angle and macro lenses
- * Compact and lightweight
- * Optional vacuum testing system
- * Made in USA

Sony's 2018 model in the huge RX100 series sports an extended, 24-200mm f/2.8-4.5 zoom lens with enhanced image stabilization. Having a longer zoom reach compared to



previous RX100 models makes this a great choice for overall travel photography.

A large 20MP 1" sensor and incredibly fast autofocus make for great images above and below the surface... plus stunning 4K UHD video recording all in one very compact body.

Our ABS-PC blend housing provides strength and corrosion free performance year with minimal maintenance. The specially formulated color deflects the sun to keep your camera running cooler, longer. Compared to black or clear housings, the light color provides superior contrast for enhanced view of the camera, LCD screen, and o-ring seal.

Ikelite products are designed,



built and tested in the USA. We use locally sourced, top-grade materials. Our housings are built by hand and individually tested for fit, function and waterproof integrity.

www.ikelite.com

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Genuine Ultralight parts

Ultralight Control Systems main components are now lasered with their logo and part number to confirm that they are genuine original parts, designed and manufactured in the USA.

All of their products are made with 6061 aluminum that is machined and then hard anodized, to withstand the harshest treatment.

Ultralight offers a full line of adapters for every underwater strobe and video light. There are also numerous adapters for use on still and video housings. We make trays for 99% of the underwater housing on the market.

Their system will move from your beginning point and shoot system to your more advanced DSLR system. Upgrading from a compact camera and housing to a DSLR system is a big move financially but it does open up a whole new potential for you. Fortunately if you chose Ultralight for your compact strobe mounting arm system, it will cost very little (or even nothing) to upgrade. The same arms and arm clamps will perform seamlessly from one system to another.

Ultralight Control Systems has been in the underwater photography and scuba diving industry since 1993.



GoPro Fusion

Fusion captures spherical video and photos, recording everything so that you can find the best shots later. Play it back in VR or use OverCapture to create traditional videos and photos you can share right on your phone. With ultra-smooth stabilisation and 5.2K video, Fusion is like having a professional film crew with you wherever you go.

Capture incredible spherical video of everything around you by shooting in every direction at once.

OverCapture lets you frame and punch out the perfect shot from any angle to create amazing traditional



videos right on your phone.

Use your phone for shot preview and playback, OverCapture, editing spherical videos and sharing.

Play back spherical footage that brings everyone into the moment with you.

www.oceanleisurecameras.com

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SEACAM
Panasonic GH 5



The SEACAM silver housing for the Panasonic GH 5 sets new standards in design and ergonomics. Due to the special construction, the mounting of the camera is especially easy.

The housing is milled out of a saltwater-proof light metal alloy twice hardened and high-value anodized.

Special longevity is achieved through use of materials of only the best quality: stainless steel, anodized aluminum, premium synthetics as well as Helicoil threads.

Double sealing with seamless, high-quality precision O-rings protects all shafts and press buttons. The main O-ring is of a particularly strong dimension.

The titanium SAFETY LOCK fastening system safely secures both housing shells.

www.seacam.com

Garmin VIRB 360



This rugged, waterproof camera is true to its name, recording the full 360 degrees — horizontally and vertically. And you can forget about time-consuming post-production work, because VIRB 360 will auto-stitch¹ your 4K footage in camera. If you're looking for higher resolution, you can record video in unstitched 5.7K resolution at 30fps and stitch it together in VIRB Edit.

Get even more control with different recording modes such as time lapse, manual, and the powerful new HyperFrame Director Mode, which gives you the editing power to easily reframe content after filming — using smooth camera pans, incredibly wide angles and even tiny planets.

Even capture 360-degree photos, burst shots, time lapse and Travelapse™ photo capture up to 15 megapixels — stitched in camera.

www.garmin.com

www.uwpmag.com

The leading online resource for
underwater photographers and videographers



TECHNIQUES

Learn the fundamentals of underwater photography and progress to the latest, most innovative techniques taught by the top pros in the industry

ARTICLES

Discover the world of underwater imaging through compelling features from photographers, filmmakers, ocean scientists, industry experts, and more

GALLERIES

Browse the portfolios of the industry's biggest names in underwater photography and share your own work online with like-minded members

TRAVEL

Read about the experiences of accomplished shooters as they visit the world's most iconic dive spots, and get inside tips on maximizing your dive vacation

NEWS

Keep up to date with everything that matters to underwater photographers, from the latest gear and gadgets to the newest developments in marine research

EXPEDITIONS

Journey with us to the hottest dive destinations on the planet and learn better technique from the most talented image makers in the scubaverse

Yamaha RDS250 Seascooter



The Yamaha RDS250 Seascooter delivers a perfect balance of run time and speed. Rated to a depth of 100ft (30m) the RDS250 will cruise at speeds up to 2.5mph (4km/h). Combine that with a run time up to 2 hours and the RDS250 is perfect vehicle for back to back dive days.

Yamaha RDS250 Seascooter

Highlights

Speed up to 2.5 mph / 4 km/h

Weight just 18 lbs / 8.2 kg including battery

Run up to 2 hours with normal use

Waterproof construction prevents accidental flooding

Adjustable buoyancy

GoPro Mount Included (GoPro Camera not included)

www.seascooter.stillwell-solutions.com

Dive Equipment Insurance

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We replace equipment new for old providing that the new replacement cost is insured

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We pay for Unexplained Flood Damage to Cameras and Videos

Underwater camera equipment is available as an 'add on' to your scuba diving equipment insurance policy.

The cover is on the same conditions as dive equipment insurance and because we understand the issues of underwater photography, it includes cover for unexplained flooding.

Underwater camera equipment is rated at 7.5% of the replacement value, plus 9.5% Insurance Premium Tax (IPT).

www.divemasterinsurance.com

DIVE PHOTO GUIDE

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<p>Photographing Animals</p>	<p>Photographing People</p>	<p>Macro Photography</p>
<p>Close Focus Wide Angle</p>	<p>Video Tips for Photographers</p>	

https://www.opticaloceansales.com/handbooks-basics-of-better-uw-photos-en.html?sef_rewrite=1

www.uwpmag.com

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The original arms with the O-ring in the ball.

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the USA

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never equaled”

**Special
GoPro
mounts**

2018 Digital Shootout

Roatan, Honduras

by Robin Dodd

Coverage of the 2018 Digital Shootout Is Now Live at www.thedigitalshootout.com

Held every year in June and sponsored by Backscatter Underwater Video and Photo, full coverage of the world's largest and longest running underwater photography and videography learning event, the Digital Shootout is now live.

This year's event was hosted by Coco View Resort (www.cocoviewresort.com) in Roatan. With excellent diving conditions, a host of new faces and an expanded list of seminars and classes, this year's Digital Shootout was one of the best in the event's 18-year history.

Staffed by some of the industry's top underwater imaging professionals, the Digital Shootout offers shooters of all levels a chance to learn about technique, post-processing, and equipment in a hands-on environment as well as dive and meet with others who share the same passion.

With the largest and most diverse demo gear fleet at an underwater imaging event, the Digital Shootout also gives guests the opportunity to try out new gear.

If you ever wanted to know what it's like to attend a Digital Shootout, check out the Shootout Life section of the site. "I think having a group of people all with same mindset and focus leads to a lot of great camaraderie that you don't get on a run-of-the-mill scuba trip. Everyone has the same goals--to get great images," said Backscatter CEO, Jim Decker. "There were many a late night at the bar with people talking f stops, lenses, and how they just got or just missed the shot. At the end of the event the final awards presentation was shown on a 12 foot wide screen in the ocean for a unique experience, followed by an awesome after party. It was a great group of people and certainly the highlight of the year for me."

Official Group Photo - The Digital Shootout 2018, CoCo View Resort, Roatan, Honduras

Backscatter Media Producer Robin Dodd gets up close with a pair of green moray eels, which were encountered on most dives during the 2018 Digital Shootout - Shot by Backscatter CEO Jim Decker





Digital Shootout staff member Joel Penner shot an awesome Day in the Life video to give a non-attendee a taste of what it's like to be at the Digital Shootout at:
www.thedigitalshootout.com/roatan-2018/shootout-life/

Learning—The Core Mission of the Digital Shootout

The learning aspect is the main draw to the event and the primary focus.

This year's event included seminars and classes on the fundamentals of underwater photography, organizing and editing images in Lightroom and Photoshop, creative lighting, split shots, advanced video, editing video in Adobe Premier, visual storytelling and more. Among the teaching staff were Backscatter founder Berkley White, Backscatter CEO Jim Decker, Adobe Certified Expert expert Erin Quigley, Brazilian Emmy award-winning filmmaker Cristian Dimitrius and pro videographer Steffan Schulz.

"It was great to see the participants improve throughout the week," said Backscatter CEO Jim Decker. "I'm really proud of the progress everyone made, and it shows in the contest results."



Demo Gear and Gear Tests

Every year one of the most popular parts of the shootout is the demo gear. "We had a great lineup of gear this year from Nauticam, Olympus, Light & Motion and Pegasus Thrusters," said Backscatter Media Producer Robin Dodd. "If you ever wanted to try anything from a compact, mirrorless, SLR, video lights, fluoro lights, and even underwater scooters, it was here and available. There's so much demo gear that people were able try out gear multiple times throughout the event. There's no other place you can try out so much diverse gear in one spot than at the Digital Shootout."

If you ever wanted to see what a million dollars plus of underwater imaging gear looks like

take a look at the group photo

. With so much underwater imaging gear in one place at the same time, the Backscatter and demo gear staff engage in a lot of testing and familiarizing ourselves with the newest and hottest items out in the wild.

"The gear test section of the website always proves to be one of the most popular sections of the shootout site," said Backscatter Resident Photographer Dylan Silver. "Everyone wants to see images from the latest gear and see how it performed at the event." Check out all the gear tested at <http://www.thedigitalshootout.com/roatan-2018/gear-tests/>.

Contest Results

Contest? What contest? While there is an imaging contest at the end of the week, this is primarily a learning event, not a competition. While there might be some serious people putting in a lot of work, the atmosphere is friendly and supportive, with many past winners and advanced shooters giving advice to others. We wouldn't want to have it any other way.

This year's highest honor, the Jim Watt award, was presented to 17-year-old Alex Seys, the youngest participant to ever win best-in-show, for his incredible macro video compilation. "A big congratulations to Alex for being our youngest best of show winner ever, and with a video, which is also a first," said Backscatter CEO Jim Decker."

Alex has been coming to the shootout for years and has been working really hard at improving his skills and it really shows." Previously the award has never been given to a videographer.

Check out Alex's video and all the winners at <http://www.thedigitalshootout.com/roatan-2018/contest-results/>.

Rolex Our World and Boston Sea Rovers Scholarship Winners Attend the Digital Shootout

Yann Herrera, the Our World Underwater North American Rolex Scholar, and Jake Stout, intern and scholarship winner for Boston Sea Rovers were sponsored by Backscatter with scholarships to attend the event. For both of them, it was their first time shooting underwater. "We feel honored to have Yann and Jake attend the Digital Shootout on scholarship this year," said Jim Decker, CEO of Backscatter. "They did very well especially considering this was both their first time shooting underwater! We know that time and money can be

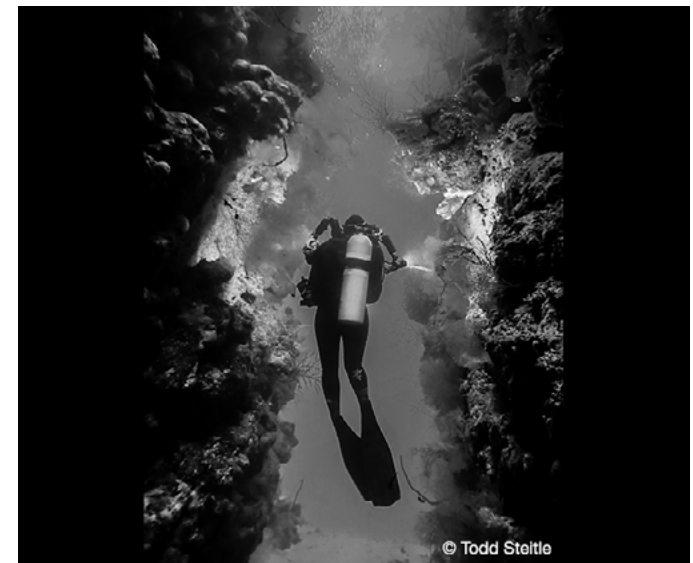
Wide Angle Traditional



Wide Angle Unrestricted



Point & Shoot



Sharks



a difficult barrier for young people to be able to get into underwater imaging, and we want to encourage the next generation of underwater image makers and ocean advocates be able to get out there and shoot."

2018 Monterey Shootout

The Monterey Shootout is a four-day weekend of diving, educational seminars, celebration, and a chance to win over \$30,000 in prizes, even with the simplest of underwater cameras.

This year, 159 participants brought their friends and families to share the fun and see what amazing images can be made in a tight 36-hour window of diving.

The ocean and weather cooperated by giving us small pockets of good visibility and a full on jellyfish invasion. Record numbers of photographers joined the Thursday, Friday, and Sunday seminars to dial-in their techniques and captured stunning images for the contest.

Hanging out on the beach and boats with like-minded divers gives us cold-water enthusiasts a real sense of community. After two days of diving, over 200 people gathered back at the Backscatter mother ship for a night of celebration and drinks stiff enough to heat up the most waterlogged diver. This is the most welcoming and enthusiastic group of underwater photographers in the USA!

The Monterey Shootout is primarily an educational and social event, but the serious level of prizes is what drives these cold-water photographers to envision images weeks in advance and feel the motivation from competition nipping at their heels. It is with great thanks and appreciation that we honor the generous support of all of our sponsors. Thank you sponsors for motivating our diving community to new personal bests in image making!

Advanced Wide Angle Traditional



Advanced Macro Traditional



Advanced Wide Angle Unrestricted



Advanced Macro Unrestricted



Comments From The Photo Judges

This year's photo judges included Chuck Davis, Scott Campbell, Jim Decker, Jennifer Penner and Berkley White. Judging is no easy task, especially when there's serious creative effort on display from over 600 entries. Jellies, fringe-heads, and whiskered animals stole the show, as they were more compelling than abstracts that have won in previous years. The rule in the photo judging room was "Would I put this image on my wall?" The judges commented on how they've seen a significant improvement on macro lighting with snoots and controlled lighting placement in both macro and wide angle. It was also noted that the Advanced Macro Traditional category had much fewer entries than previous years. It was theorized that the advanced shooters were either focusing on video or getting cold feet in the competition with their content. The Intermediate category had the largest set of solid images and the longest deliberation to determine a winner. Wide-angle images were the most compelling and were pushed forward for consideration for the Best-of-Show. Ultimately, the winning photos displayed a balance of technical skill and artful composition that would stand the test of time.

Art Haseltine Best Of Show Award

Art Haseltine was a very dear friend to the Monterey diving community. His passion for cold water diving, and photography is legendary with local divers. Anyone who has ever met Art will remember him for his warm and gracious demeanor, and nothing but kindness. Art worked as a marine biologist for the California Department of Fish

Intermediate Wide Angle Unrestricted



and Game for 22 years. Most of that time was spent doing research on shellfish aquaculture at the Department's Granite Canyon laboratory south of Carmel. As an underwater photographer, his photographic style was influenced by the black and white legacy of the Monterey Peninsula. His subject matter was from the eye of a marine biologist; but his final product - the fine art black and white print - was from the imagination of the artist.

An early practitioner of medium format underwater photography, when you only had 12-24 exposures per dive and a darkroom was necessary for film processing, Art also pioneered aerial kite photography years before drones were commonplace. His indelible mark on Monterey diving and underwater photography will always be remembered. It's with great pleasure that we dedicate this year's Best-of-Show in his honor.

www.montereyshootout.com

Beginner Wide Angle Traditional



Beginner Wide Angle Unrestricted



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Sony Alpha A7MKIII & Nauticam NA-A7III

by Phil Rudin

Sony has recently introduced what they are calling their “entry level” \$2000.00 A7MKIII mirrorless camera body. This camera rides in on the heels of the highly successful \$3200.00 Sony A7RIII introduced in Oct. 2017 and reviewed by me in the past two issues of uwpmag.com using Acquapazza and Ikelite housings. This camera is part of the third generation of Sony full frame mirrorless cameras.

The Sony A7, A7r and A7s released in early 2013 were the first mirrorless interchangeable lens cameras to feature a full-frame (35mm) sensor in a mirrorless camera body the size of the current Olympus E-M1II & E-M5II mirrorless cameras. Sony has made it quite clear that they intend to surpass Canon and Nikon in the Pro/Prosumer markets by focusing heavily on full-frame mirrorless cameras and high quality lenses. Evidence of Sony’s progress since 2013 is that the A7RIII is tied with the Nikon D850 at the top of the DXO Mark full frame sensor ratings with an overall score of 100 and the A7III is not far behind at an overall score of 96. Those rankings are higher than any of the current Canon cameras and in the case of the A7III ahead of any camera in its price range.

The Sony A9 sports camera can shoot 20 frames a second and has higher DXO marks than any other manufactures high speed sports camera. All three of these Sony cameras have also been awarded DPReview’s Gold Award when tested. The latest line of Sony G-master lenses like the new 400



mm F/2.8 GM OSS are also receiving rave reviews for both quality and innovation.

Another sign that Sony has arrived is the fact that many lens manufactures like Sigma, Zeiss, Rokinson, Tamron, Venus Optics and more have all jumped on the Sony bandwagon with Sony FE full frame direct mount lenses.

The final sign that the big two DSLR companies are feeling the heat is the recent announcement by Nikon of a high end mirrorless system and rumors of a Canon release by the end of the year. I think Sony has a ways to go before they meet the goal of toppling one of the big two but by all accounts they appear hungry and very motivated.

Sony Alpha A7MKIII camera

Sony is calling the A7MKIII their “Entry



Level” camera but it is much more than that. The A7III combines the most compelling features of the Flagship Sony A9 and A7RIII cameras into a very well balanced system perfect for all but the most extreme underwater photo needs. I would like to point out some of the most useful improvements over the Sony A7II which I reviewed for UWPMAG in the Sep/Oct 2015 issue #86.

The Sony A7III is the second generation in the Alpha line to offer 5-axis sensor-based image-stabilization on a full-frame 24.2MP CMOS sensor. The new A7III uses a back-illuminated sensor with a gapless on-chip lens design which is similar to the one used in the A7RIII. This allows twice the readout speed and a 1.8 higher data processing capability than the design found in the A7II. Sony claims 15-stops of dynamic range or 1.5-stops more than the A7II with a 40% faster startup time.

The expanded ISO range for stills photography is 50-204800 compared to 50-25600 in the A7II making the A7III a low light monster for both stills and video. Like the other A7-series bodies a big advantage of the A7III, A7rIII and A9 lineup is that all three cameras appear to be built with the same magnesium-alloy chassis. All three have almost the same button placement so one housing can be used for the A7 III and A7R III cameras.

Nauticam offers an NA-A9 housing for those interested in the high speed sports camera. The A7III has a significant update to the auto focus which is much like the one in the A9. The AF system features 693 phase detection points and 425 contrast detection points for much faster and more accurate auto focusing. This is up from the 117 and 25 found on the A7II. The A7III has a continuous shooting speed of 10fps with AF/AE tracking up from 5fps for the A7II and works with both mechanical and electronic shutter. The buffer is also greatly improved holding up to 177 JPGs, 89 compressed RAW or 40 uncompressed RAW files.

The video capability of the A7II was at best average by today's standards while the A7III brings a great deal of improvements. The A7III can record 4K video with no sensor crop in 24/25fps while performing full pixel readout, which equates to 6K of capture downsampled to 4K. At 30p you have a 1.2X crop with 5K of information. Picture profile additions include S-Log3 and HLG for HDR compatible TV's. In 1080p the A7III can record up to 120fps for slow motion.

The new bigger NP-FZ100 battery also used in the A7RIII and A9 is perhaps the greatest improvement for underwater use. By far my biggest grip with the A7II and A7RII was battery life. Sony claims the new battery allows 710 LCD shots or 610



with the EVF. I found the number to be even greater far exceeding the A7II battery life.

The EVF OLED panel remains at 2.3M dots but has higher magnification than the A7II EVF. The menu system has also been improved over the A7II but still remains challenging because of the deep and diverse feature set.

If you are moving over from a DSLR I am sure it will take many trips through the menus to fully understand how programmable this camera can be. The A7III has a weather resistant body and many W/R lenses. Weather sealing for the cameras bodies is an area where Sony still needs to improve.

Nauticam NA-A7III / A7III Housing

For the purpose of this review I will refer to the test housing as the Nauticam NA-A7III, it is actually branded and sold as Nauticam NA-A7RIII but works equally well with both Sony cameras.

Like whisky, friends and wisdom, Nauticam has always continued to improve with age. My first Nauticam NA-NEX5 housing review for uwpmag.com dates back to 2010 and I am always amazed to



see the subtle improvements introduced with each new generation of housings and accessories. The latest N120 port extensions are just one example with an improved longer and easier to access locking device.

The NA-A7III housing has a second M16 mounting point not found on the NA-A7II housing. These subtle improvements help the user focus less

on the equipment and more on the creative process.

The Nauticam NA-A7III housing is designed to accommodate the deeper grip on all of the MarkIII camera bodies. The NA-A7III housing has the same features as the excellent lineup of Nauticam DSLR housings but is built using an N100 port mounting rather than the N120 DSLR mount. This places the housing size squarely between housings like the Nauticam NA-EM1III M43 housing with its N85 port mount and the NA-6DMKII and NA-D750 DSLR housings with the N120 port mount. The weight for the Olympus NA-EM1III housing is 1.95k, the Sony NA-A7III is 2.43k and both Canon and Nikon DSLR housings are 3.05k.

The NA-A7III housing has the same excellent twin locking system used on all Nauticam DSLR housings. This secures the front half of the housing to the rear by turning the locking device 90 degrees. To unlock push in the two red safety locking buttons and turn the locks. The housing has corresponding levers, push buttons, control dials and switches for every function on the camera body. These controls are very well placed and should be easy to use even with thick gloves.

The rear half of the housing has a large LCD window and a quality optical glass pickup finder for viewing the EVF. I have replaced the pickup finder with Nauticam's excellent 45 degree optical viewfinder. This is at least the sixth Nauticam housing I have used with the same optional 45 degree viewfinder. Switching between the pickup finder and the 45 degree viewfinder takes me less than a minute and does not require tools. Once installed the larger viewfinder really helps those of use with aging eyes who are seeking better critical focus and composition.



Nauticam also offers an optional 180 degree optical viewfinder. Both of the viewfinders have a plus & minus diopter control which can be adjusted underwater. The signature Nauticam red port locking lever is on the front left hand side of the housing and the lens release button is on the right

viewed from the front of the housing. These allow you to remove the port and install lenses without removing the camera or even opening the housing. This is a very useful feature because larger lenses like the Sony FE 12-24mm F/4 zoom must be mounted from the front of the housing.

An M14 accessory port is located on the top of the housing for the integrated vacuum system check and leak detection valve. The switch to turn on the vacuum system electronics is located in the rear half of the housing along with the audible alarm, LED warning light and battery mount. The vacuum system is an accessory I highly recommend since the housing already comes with all of the electronics and flood alarm built in. The M14 or M16 vacuum valve kit with the vacuum pump and tool for user installation cost around \$220.00.

Two M16 accessory ports are located on the front and rear halves of the housing. These two ports can be used for electronic bulkheads to connect with the Sony hot-shoe allowing manual flash connection with Nikonos, Ikelite and S-6 sync cords. The ports can also be used for HDMI cables, surface monitor cables to connect devices like Atoms Ninja2, small monitor housings like the Nauticam NA-DP4, hydrophones, remote triggers and more. The included rubberized handgrips are removable and include stainless mounting plates to reinforce the stability of the handgrips. The handgrips are very comfortable, they adjust depending on your hand size and the thickness gloves you may be wearing. The grips include standard ball head mounts for strobe and video support arms as well as other accessories. Two additional ball mounts can be added to the housing over the support brackets for the handgrips.

The top of the housing also features two threaded fiber optic ports with caps for optical sync cords. Compatible strobes are triggered using the optional Nauticam flash trigger for Sony Alpha 7-series cameras and Nauticam universal fiber optic cables. The Nauticam Mini flash for Sony Alpha-7 (\$220.00 US) triggers a verity of strobes with fiber



optic compatibility including Inon Z-330, Z-240 type4, S-2000 and D-2000 type4 as well as Sea & Sea YS-250, YS-D1 and YS-01 strobes (will not trigger S&S YS-D2). The Mini flash trigger is a manual flash and has NO TTL function. The Mini flash ships with two batteries that provide thousands of flashes per battery set. The Mini flash trigger recycles much faster than an on-board camera flash allowing you to shoot at 10 frames a second or higher if your external strobes can keep up.

Nauticam offers an N100 to N120 by 35.5 mm port adapter for the NA-A7II and NA-A7III series housings. Nauticam and Zen Underwater have a verity of port options for the NA-A7III housing using both the N100 mm and N120 mm DSLR port mount options. This will allow owners moving over from Nauticam DSLR housings to use some of their ports and to migrate some DSLR lenses by using the Metabones EF or Sigma MC-11 lens adapters. Make sure that if you are migrating from an A7 housing to an A7III housing that you check the new and expanding A7III port chart as some lens

configurations differ.

The Nauticam NA-A7III housing retails for \$2850.00 or £2634.00 (inc VAT). Compared to DSLR housings the Nauticam NA-A7III housing is \$550.00 less than the Nauticam NA-6DMKII housing for Canon's 26.2MP 6D MKII full frame DSLR camera and \$650.00 less than the Nauticam NA-D750 housing for the Nikon 24.3MP D-750 which uses an older 24.3MP Sony sensor. The reason I mention these cameras is that they are the only two full frame cameras that both retailed for the same \$1999.00 price point as the Sony A7III when introduced. The only other mirrorless full frame cameras are the Leica rangefinder cameras that start at about \$6000.00 and top out at over \$10,000.00. As of this writing Nikon is about to ship their first full frame mirrorless body.

It is not hard to imagine that an A7sIII emphasizing video is in the works and that it will be built on the same chassis as the A7III and A7RIII. Having one housing, one lens set and one port set that will work with all three of these quite different and quite tiny camera bodies will be a remarkable advantage for working photographers.

Field Testing

Let me start by say that it appears Sony has arrived and that the A7III system is no longer a work in progress. While the A7III is a huge improvement over the A7II I reviewed in 2015 Sony is still filling in its lens lineup which is incomplete compared to Canon, Nikon, Olympus and more. Sony has been concentrating on the full frame premium lenses line and each new release has been very well received. I hope to see a pro macro in the 60mm range and a fisheye or fisheye zoom by the end of 2019.

For this review I selected the Sony FE 90mm F/2.8 macro G OSS lens which easily handles the larger A7RIII 42.4MP sensor and is without question the best macro lens I have ever used with any camera. The 90macro was paired with the dedicated Nauticam N100 macro port with 67 mm threads for the Nauticam flip adapter and closeup lenses.

This is the first review where I have used the super wide (122-84 AOV) rectilinear Sony FE 12-24mm F/4 G zoom. This lens was paired with the Zen Underwater N120 mount 230 mm optical glass port and the Nauticam N120 40 mm port extension. All of the N120 ports require the N100 to N120 35.5 port adapter I referenced above. Simple physics require full frame lenses to be

made larger than lenses for sub full frame cameras, this is true for both mirrorless and DSLR cameras. But while lenses like the Sony 12-24mm F/4 zoom may be about the same size, the weight difference can be noticeable.

The Sony 12-24 F/4 weighs in at only 565g while lenses like the Canon 11-24 F/4, Nikon 16-35 F/4 and Nikon 14-24 F/2.8 weigh-in at 1180g, 680g and 1000g respectively. Sigma's 12-24 F/4 "art" lens for Canon and Nikon weights in at 1150g. Not apples to apples but about as close as I could get within the AOV range.

In addition the Nauticam port charts indicate that the 230 mm port gives the most well optimized results for the Sony 12-24 F/4 zoom while the Canon 11-24 F/4 and Nikon 14-24 F/2.8 zooms need to be used with the Nauticam N120 250 mm dome port

Blue Planet Diving Center Boat, Dubrovnic, Croatia, Sony A7 III, Sony FE 12-24mm F/4 at 24mm, Nauticam housing, Two Inon Z-330 Strobes, ISO-320, F/14, 1/250th sec

Nudibranch, Puerto Galera, Philippines, Sony A7 III, Sony FE 90mm macro, Nauticam housing, Nauticam SMC-1 Closeup Lens, Two Inon Z-330 Strobes, ISO-100, F/14, 1/160th sec.



for the most optimized results. These two lenses also require longer port extensions. Sony's 12-24mm F/4 zoom is a great investment, providing excellent image quality and a more useful zoom range for underwater work than the 16-35mm F/4 and F/2.8 offerings. This lens would be my first choice hands down for super wide rectilinear work.

Sony has yet to announce any FE fisheye lenses so I have been using the Canon 8-15mm F/4L Fisheye with a Metabones IV lens adapter. The Canon Fisheye zoom is paired with a Nauticam N120 140 mm Fisheye port with removable port shade and an N120 30 mm port extension. I am also experimenting with a port solution for the just released Rokinon AF 24mm F/2.8 FE lens. This lens is quite tiny as full frame lenses go and an excellent travel lens. I am also using the Nauticam SMC-1 closeup lens and Nauticam flip adapter with the 90mm macro setup.

I use an RGBBlue System02-2 video light on low power as a focus light when needed and for night dives. I also use two RGBBlue System02-2 lights for video. As some of you may remember I am by no means an accomplished videographer but this camera begs to be used for both stills and video. I have reviewed the RGBBlue video lights for this issue and a short example video is linked in that review. My recommendation is to shoot video using manual focus or back focus in AF then shoot without the AF.

I own two Inon Z-330 strobes and all of the stills for this review were captured with the Z-330's using 4600K and 4900K dome filters. I now have over 100 dives with the Inon Z-330's and they have exceeded my expectations for recycle times, quality of light, battery life and ruggedness in the field.

I configure the 90mm macro lens with the auto



Model on the Baron Gautsch Wreck, Rovinj, Croatia, Sony A7 III, Sony FE 12-24mm F/4 at 12mm, Nauticam housing, Two Inon Z-330 Strobes, ISO-320, F/10, 1/200th sec.

focus limiter set to the 1:1 to 0.5m focus distance which renders everything from life size, 1:1 to about 1:10 in focus. I find that most of the macro/closeup subjects I want to photograph fall well within this shooting range.



Giant Feather Duster Worm, Dubrovnik, Croatia, Sony A7 III, Sony FE 12-24mm F/4 at 24mm, Nauticam housing, Two Inon Z-330 Strobes, ISO-320, F/14, 1/125th sec.

As I have said in past reviews it takes a few dives to get the hang of shooting within this rather short focusing range. By using the focus limiter I find that the lens is less likely to hunt and that the lens acquires focus more quickly than when it is

Ring Pipefish, Puerto Galera, Philippines, Sony A7 III, Sony FE 90mm macro, Nauticam housing, Two Inon Z-330 Strobes, ISO-100, F/22, 1/250th sec.



set from 1:1 to infinity. I also find that if I am more than half a meter from the subject I am probably using the wrong lens for the subject size. I have also equipped the macro lens with a focus gear and switch from AF to manual in the super menu. This allows me to rack the lens out to 1:1 and just leave it there when I want to use the SMC-1 for greater magnification. Once I have a subject in focus at 1:1 I can add the SMC-1 and just move the port closer to the subject to regain focus in the viewfinder. I also use the SMC-1 with AF but some subjects are easier to acquire in manual. I shoot macro with the AF-Continuous setting for blazing speed and accuracy.

The A7 III with the 90mm macro is much faster and more accurate than with the A7R III. The included photo of the Ringed Pipefish is a great example of the AF quality. This fish is about three millimeters in diameter and constantly moving, in AF-C the focus locked on the eye area of the moving fish and never strayed to the background.

With the Sony A7II battery life and focus speed were frustrating using the 90macro lens this is no longer the case for me with the A7III. I still believe the Nikon D5, D500 & D850 have the best focus

speed with most macro lenses but the A7III has greatly closed the gap between these cameras and will not disappoint.

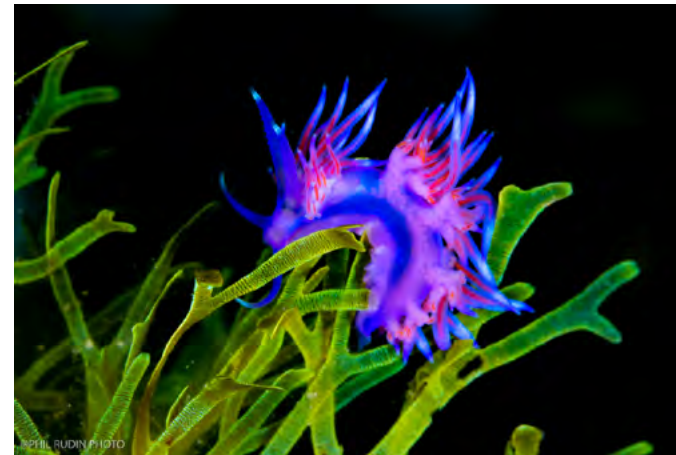
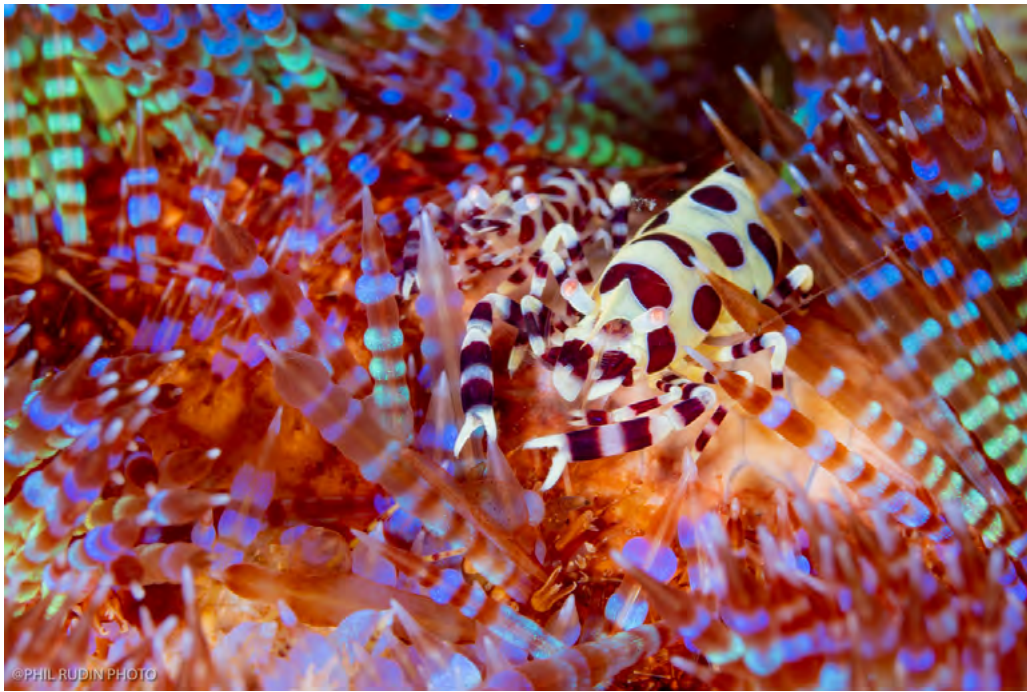
The Sony 12 to 24mm F/4 with the Nauticam zoom gear has a buttery smooth zoom action and outstanding auto focus all the way to the dome. I found the best results for both depth of field and corner sharpness at F/13 or above. Most photographers will be more than happy in the F/8 to F/16 range but for best corner sharpness F/13 or greater renders the best results. The F/13 and above settings are the case not only with Sony cameras but with all of the FF cameras I have used with like AOV lenses. For stills I used my two Inon Z-330 strobes with two Nauticam 10 inch carbon fiber float arms and two 8 inch double ball arms. The carbon fiber arms and the 230 mm port were a bit to buoyant for my taste and I ended up using four 8 inch double arms when shooting with the big port.

For those of you thinking about moving from a sub-full frame system to full frame system the reduced depth of field at any given F/stop over sub-full frame can present a few issues. First high megapixel cameras including the A7III and



Flabelina With Skeleton Shrimp, Puerto Galera, Philippines, Sony A7 III, Sony FE 90mm macro, Nauticam housing, Nauticam SMC-1 Closeup Lens, Two Inon Z-330 Strobes, ISO-100, F/22, 1/250th sec.

especially the A7RIII tend to highlight flaws associated with budget lenses, so chose wisely when making lens purchases. Second the shallower DOF associated with full frame cameras requires more critical focus so taking a machine-gun approach to



Flabelina Affinis on algae, Dubrovnic, Croatia, Sony A7 III, Sony FE 90mm macro, Nauticam housing, Two Inon Z-330 Strobes, ISO-100, F/18, 1/250th sec.

Colman Shrimp, Puerto Galera, Philippines, Sony A7 III, Sony FE 90mm macro, Nauticam housing, Two Inon Z-330 Strobes, ISO-100, F/22, 1/250th sec.

shooting may result in high numbers of poorly focused images.

In the water the NA-A7III is well balanced and a dream to use. All of the controls fall easily at your finger tips and after a few dives I did not find myself having to look away from the viewfinder to change my settings at all. The back focus control falls under the right thumb and works easily. I did bump the lower video record control on the back focus lever once or twice while shooting stills and ended up recorded unwanted videos. While I have attempted to move the video start button for the A7III to work only when the mode dial is set to video I

have had no success. I can't seem to find a way to reassign the video button in the manual control mode either. As I said above the camera menu is a bit daunting to deal with but I am sure I will get this issue figured out at some point. After a few dives I learned to keep away from the video start control so this is no longer an issue for me.

The A7III/NA-A7III combo is an excellent balance between image quality, size, weight and cost. I now have over 100 dives using both the A7III and the A7RIII and I find the upsides for the more expensive A7RIII only out weigh the A7III if you are making extremely large prints.

I'm talking forty inches (100cm) or more on the long side. While the EVF on the A7RIII is much crisper I would be hard pressed to see many other big differences for underwater photography. The difference in AF speed when using the 90mm macro with the A7 III makes it the better choice for me as a macro enthusiast.

While 20MP seems to be the sweet spot for M43 cameras and 24MP for APS-C cameras image quality between these two formats is all but the same to me. The under \$2000.00 24.2MP A7III full frame cameras offer a clear jump in overall image quality and low light ability versus any of the sub full frame offerings at very close to the same overall cost depending on lens selection.

If you are seeking the very best in image quality and a full frame camera with quality lenses is within your budget the Sony Alpha III series cameras should be at or near the top of your wish list.

Thanks to the Nauticam USA team for assistance with equipment used for this review. I would also like to thank Asia Divers and El Galleon Resort in Puerto Galera Philippines. Also Blue Planet Diving Center in Dubrovnik Croatia and Diving Rovinj in Rovinj Croatia for the excellent diving experiences to compile this review.

Phil Rudin

www.nauticamusa.com

www.uwpmag.com

Backscatter M52 Wide Lens

by Jim Decker

The new Backscatter M52 Wide Lens was developed specifically with the TG-5 in mind. It has a max angle of coverage of 120 degrees with sharp corners and no vignetting when the zoom on the camera is at full wide. The camera can be partially zoomed to get a tighter shot without having to remove the lens. As with any thread-on wide-angle lens, the dome shade needs to be lined up after installation. The dome shade has the perfect balance of tension to prevent it from rotating after installation.

I shot a variety of shots with this new lens. I was able to get closer to wide-angle scenes to get more light from my strobes and increase contrast in wide angle video shots by being closer to my subjects. Since water filters out light, getting closer to your subject will increase the clarity and contrast of the image.

The size of the lens tends to be a bit smaller than some of the other wide-angle lenses on the market for the TG-5 making it easy to pack. With the sharp corners and partial zoom through, the Backscatter M52 Wide Lens makes a perfect companion for the TG-5.

We've been hunting for a great wide-angle option for the Olympus

TG-5 since that camera's release. We've tried several different versions of wet optics, and we couldn't find one that hit the nail on the head. So, we designed our own.

The Backscatter M52 Wide Angle Lens is meant for beginner and intermediate shooters who want to use their TG-5 to shoot large animals and big scenes. It's easy to use and tack sharp. Just thread the 52mm threads onto the front of your housing, spin the shade so it's vertical and start shooting. While other lenses require the user to zoom in or unscrew screws to make adjustments, the M52 is ready to shoot right out of the box. And, it comes with a solid carrying case.

The M52 essentially doubles the field of view of the Olympus TG-5 camera. With high quality optical glass, it jumps the camera's native lens, which clocks in around 60-degrees underwater, all the way to 120 degrees. For beginner shooters, we've found this is an ideal width for getting close to your subjects. Keep in mind that shooting a wider scene requires more light! We highly recommend using top-level strobes like the Sea & Sea YS-D2s with this lens.

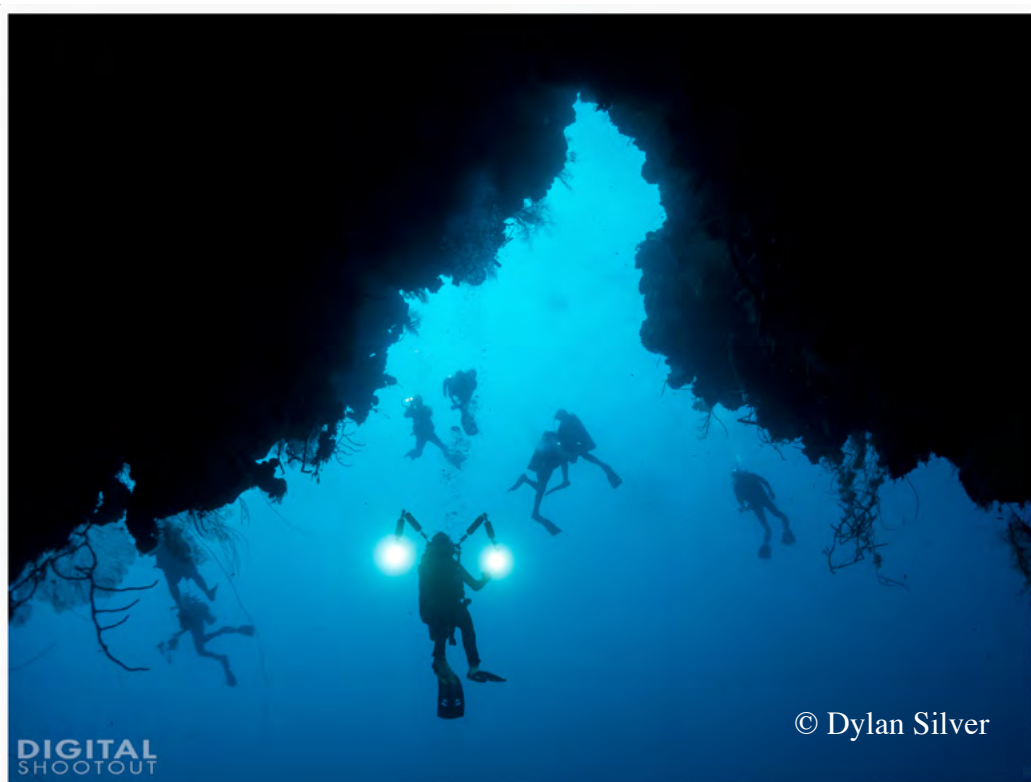
Our newest Backscatter



© ROBIN DODD

accessory, the M52 Lens, is a super simple yet hugely impactful optic that pairs well with the most popular

underwater compact camera in the world, the Olympus TG-5. This lens is the perfect compliment to any



© Dylan Silver

DIGITAL SHOOTOUT



© Jim Decker

DIGITAL SHOOTOUT



compact camera that uses a 52mm threaded port on its housing, but the Olympus TG-5 is the most common currently produced camera where that will apply. By threading on this lens you can expand the camera's field of view out to 120 degrees. This is not quite fisheye-wide, but it is still wide enough for large subjects and opening up the opportunity for entirely new shooting styles with your camera.

For those of you TG-5 shooters who have already

mastered macro and are looking for a new challenge, pick up this lens and starting thinking WIDE!

Jim Decker
www.backscatter.com



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

RGBLue video lights

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 the Olympus mirrorless camera housings ports, 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 RGBLue 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. RGBLue's excellent video lights are the subject of this review.

The last time I did a dedicated video light review was for UwP76 in Jan/Feb 2014. Since the 2014 review in addition to video lighting 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 been using small video lights handheld or on tiny tripods for back and side lighting while shooting both stills and video. Adding snoots, color

gels, diffusers and other tools opens a even wider range of possibilities.

The RGBLue System02-2 video lights are second generation module lights consisting of the LM5K3000M light module and the BM6700B battery module. The first thing you will notice about these lights is the excellent build quality, small size and the portability of the system.

The RGBLue system02-2-PC 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 to the light and battery modules the kit includes caps for both modules required by law for air travel, a 100V to 240V AC adapter charging kit with with three different removable power plugs for different areas of the world. Also included is a maintenance kit with a spare O-ring, O-ring remover, silicone grease, lintless cotton swabs, a YS type adapter set for mounting the light and a useful hand grip.

RGBLue also includes a condenser lens which reduces the emission angle of the light from 100



degrees to 60 degrees. The condenser lens is extremely well made and threads into the front of the light module. The double structure of the optical lens and diffuser layer ensures flat light distribution without color irregularities. The condenser is also threaded to accept the optional RGBLue snoot kit which has a 16mm and 8mm beam openings with an option for a 4mm beam opening. The condenser also increases the luminance of the light which is great for macro work.

The gun-type hand grip is equipped with a clip mechanism which allows it to be directly mounted to the BCD. I attached the light grip to my BCD several times when I was using the light as a torch for night diving. The clip mount is first rate and stayed positively secured to the BC without fear of loss during the dives.



In addition to the provided accessories there is a large list of optional accessories to cover just about any shooters needs. Some of these include red, ND and color temperature converting filters, a searchlight adapter that reduces AOV to 30 degrees for illuminating at a distance, mounting bases for dual

lights or video light and strobe, a snoot set with three different angles of light emitted while used with the condenser lens, a three way flip adapter, a light blade with 360 degree rotation to block out part of the light, additional mounting ball adapters and an fiber optic remote control.

The fiber optic remote control uses standard fiber optic cables with the Sea & Sea type connection to control up to two System01 or System02 lights. The controller is equipped with a stainless mounting bracket and is powered by a single AA-size battery. The controller allows you to increase or decrease the power for up to two lights while they are extended on support arms or mounted off camera.

RGBLue System02-2

The color temperature of the System 02-2 lights is 5000K with a color rendering index (CRI) of Ra80. The total luminous flux range (lumens) for the system02-2 light is from 600 to 3000lm depending on whether it is set to the step or non-step control.

With the four-step brightness control continuous lighting starts at 1000lm with a run time up to 600 minute, at 1500/240min, at 2000lm/180min and at 2500lm/120min. In non-step continuous lighting brightness run times are 600lm/1000 minutes and 3000lm for 90 minutes.

Lighting run times are standard values when starting with a fully charged BM6700G battery. Run times are provided by RGBLue and may vary depending on a variety of conditions. The BM6700G is a rechargeable lithium-ion 6400mA/7.2V battery module and the System02-2 is depth rated to 100 meters.



The LM5K3000M light module mounts to the BM6700G 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. The same process is used to mount any of the accessory light heads including the System03 Twin Light Head for macro.

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 all the RGBLue light modules their



Cenote Guide Miki, Tajma Ha, Yucatan Mexico, Acquapazza Housing, 170mm Dome Port, Two RGBLue02-2 Video Lights, Sony A7R III, Sony FE 16-35mm F/4 at 16mm, ISO-3200, F/6.3, 1/20th sec.

is a small LED indicator 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



<https://youtu.be/68dAOVk82TQ>

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 light will be at the lowest power. 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 2500lm 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 up button and the light increases in intensity until maxing out at 3000lm. Keep in mind that the 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. Also when the light is first turned on the LED will only



Coral Hawkfish, Puerto Galera, Philippines, Sony A7 III, Sony 90mm Macro, Nauticam housing, One RGBBlue02-2 Video light, ISO-640, F/7.1, 1/60th sec.

flash for about five seconds. If the up button is not pushed within the five seconds the LED shuts down and the process needs to be started again.

The light weighs 565g on land and 205g underwater. The dimensions without accessories is a maximum of 68mm X 135mm. RGBBlue also offers a System02-2 Premium Color version that uses the same BM6700B battery module with light module LM4.2K2200G. This light module has a 4200K light temperature and a color rendering index of Ra95 with a luminous flux of 300lm to 2200lm.

If you are not familiar with the term Color Rendering Index (CRI) this is a quantitative measurement of the ability of a light source to reveal colors as faithfully as an ideal natural light source. The higher the number the better the light quality with Ra80 and above being very good and Ra90 and above being excellent.

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 your priorities. Quality of the light or CRI should be number one or two on the

top of your list of considerations when buying a video light. Like having more megapixels simply having higher 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.

Field Testing the RGBLue System02-2 Lights

I tested the System02-2 lights using Sony A7R III and A7 III cameras with Acquapazza, Ikelite and Nauticam housings. I used Nauticam and Ikelite support arms with standard ball mounting heads.

Because the lights are so light and compact I did not need to use any buoyancy arms opting instead to use two eight inch arm sections on each light. This allowed me to move the system through the water more efficiently and with less drag.

Panning with the lights was smooth and effortless allowing for great transitions. I used the lights to shoot both stills and video during several dives. I found the color rendering to be excellent especially on my model Miki's skin tones. These lights would work great as a constant light source for shooting models in a swimming pool or shallow water beach location as long as the lights are

close enough to the model for proper exposure.

The Mexican Cenote video was shoot with the Sony A7R III and the Sony FE 16-35mm F/4 lens from a depth of around one meter to twenty meters with and without ambient light. The balance between ambient and video lighting was excellent within two to three meters of the model.

At over three meters the light falloff started to become noticeable when the lights were set to 2500lm without the condensers.

The still shots from the Cenotes were taken between ISO-640 and ISO-6400 with the Sony A7R III and FE 16-35 F/4. The A7R III and the A7 III both have excellent image quality in this ISO range for shooting both wide angle or macro.

The RGBLue System02-2 lights would work well with any cameras having executable image quality up to ISO-6400. Besides the excellent color quality and small size the RGBLue lights are very robust with excellent build quality. Run time is also quite good for the size of the MB6700B battery module.

The RGBLue System02-2 video light retails for around \$750.00/£750.00. Anyone looking for a high quality video light should definitely go to the RGBLue web site or contact a retailer for additional product information and pricing.



Cenote Guide Miki, Dos Ojos, Yucatan Mexico, Acquapazza Housing, 170mm Dome Port, Two RGBLue02-2 Video Lights, Sony A7R III, Sony FE 16-35mm F/4 at 17mm, ISO-6400, F/9, 1/30th sec.

I would like to thank RGBLue (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 RGBLue products.

I would also like to thank Miki Kurimoto Owner of Scuba Freedom in Playa Del Carmen, Mexico. Miki is an



Nudibranch, Puerto Galera, Philippines, Sony A7 III, Sony 90mm Macro, Nauticam housing, One RGBLue02-2 Video light, ISO-640, F/7.1, 1/320th sec.

excellent guide for all Cenote diving needs while in the Yucatan. Miki can be reached scubafreedom.com, jp.scubafreedom.com for Japanese and at her Miki Kurimoto FaceBook page.

Phil Rudin

www.rgblue.jp

www.uwpmag.com

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

Microcosm

By Laura Storm

It's waterlily season. There's just enough depth to float over the stunning central arm of Bosherton's famous protected lakes. Underwater, unopened lily buds are making their journey upward towards the sun. Others have already opened, fresh white blossom in unexpected places. From the surface, a carpet of lush green leaf pads guard this hidden world beneath.

It's a rare privilege to be in the water photographing such a unique ecosystem. We're working in close collaboration with the National Trust's conservation team, based at the Stackpole Estate in Wales. Our window of opportunity to capture images of this sensitive environment is tight. In a few short weeks the show will be over. But right now, it's curtain up!

The lily pads form a dense canopy – akin to that of trees in a rainforest. Thick stalks twist and turn, wrapping themselves around each other, creeping through gaps they find. There are snails everywhere and tiny schools of juvenile Roach and Sticklebacks dart about, surprised to see us in their sheltered territory. What



What Lies Beneath - Other than the seasonal extravaganza, there are few clues to suggest that there's a magical, submerged world safeguarding ancient secrets, myths and valuable inhabitants.

Panasonic GF1 in a INON X-2 housing. Panasonic Lumix 7-14mm lens. Manual exposure: f/8.0, 1/80 sec, ISO 100. Natural light. Image from Mark Harris

is also surprising are the colours. The leaves and stalks are a completely different palette to the dark greens showing above. Yellows and other shades of green dominate but there are purples and pink and vivid splashes of russet reds and orange. The visibility is fantastic. Crystal clear, spring-fed aqua pure – an underwater



Creative Splash – Making the most of clouds skidding across the sky whilst trying to put some of our storyboarded ideas into practice.

Canon EOS 550D in a Sea & Sea RDX 550D housing. Sigma 15mm fisheye lens. Manual exposure: f/9.0, 1/160 sec, ISO 100. Natural light image.



Float – Waterlilies require little energy to absorb, move or store water, since it is abundantly available all around them. Unlike land-based plants, they don't need adaptations like strong woody stems or deeply anchored roots. But in order to successfully pollinate, their flowers have evolved to float, allowing access to insects and wind.

Canon EOS 550D in a Sea & Sea RDX 550D housing. Sigma 15mm fisheye lens. Manual exposure: f/8.0, 1/160 sec, ISO 400. Natural light image.

photographer's dream!

While the lilies prefer to hug the margins of their habitat, other aquatic rarities are firmly rooted everywhere else. Vast beds of stonewort compete for light and space. Here and there, depressions appear, dips hollowed out by sleepy pike that use the springy, plant-like algae as a day bed. They are so perfectly camouflaged that we almost miss seeing one. It's huge! As you would hope a freshwater predator would be in such a blissful home. It's a sign there's plenty of food, that this is an ecosystem



Halo - If you look closely at the flower here, you can see how the light bounces off its white petals creating a snowy halo around the lily. *Canon EOS 550D. Sea & Sea RDX 550D. Sigma 15mm Fisheye lens. 2 x INON s2000 strobes. Light & Motion Sola 800 Photo light. Manual exposure: f/11, 1/200 sec, ISO 200*

in balance. But like a torpedo, the pike fires itself off and out of sight before we can capture its portrait.

Photographing the scene is surprisingly challenging. We've modified our kit to minimize any risk of entanglement, so we're a little less mobile without our long-bladed, specialist fins. Strange micro blobs periodically stick to our camera

ports and we have to keep wiping them off. They're alive! They are so tiny and impossible to identify. Thin bubble streams rise up from the benthic zone of the lake. Natural aeration. This is such an interesting place to be!

Setting up a rather basic day camp for our photographic and freedive kit has only been made possible with help from the National Trust rangers.

Bud - Just starting to open, this particular lily bud will never reach the surface. With its short flowering life of just a few days, it will bloom and die underwater.

Canon EOS 550D. Sea & Sea RDX 550D. Sigma 15mm Fisheye lens. 2 x INON s2000 strobes. Light & Motion Sola 800 Photo light. Manual exposure: f/7.1, 1/125 sec, ISO 200



A guided 4X4 off-road trip, across fields and mucky terrain has saved us from a logistical nightmare. We've been treated to a detailed recce of the lakes, aided by aerial maps that highlight the best place to access the ecosystem. Valuable insights imparted, we're now appreciating the time spent preparing for this unusual project.

The water level is critical to the success of our venture. Though the winter months, the level rises in relation to seasonal rainfall but of course, there are no lilies on show. Once the summer arrives, water begins to seep away through deep fissures in the lakebed; the rate of evaporation increases and the weedy-looking stonewort continues to grow until it more or less breaks the surface. Timing of the flowering season is paramount. We have on average about a metre from the surface to move around in. In a week, it will be less again.

There's also the light play to contend with. Above the water, it's an ever-changing ballet of sun peeking out and clouds zooming in. Underwater, much lies in the shadows created by the expanse of floating lily pads. On the pancake-flat surface, the glare of reflected light is at times blindingly intense, making it impossible to view our LCD displays in the moment. We're mixing up what we do, ambient light and strobe, pushing the ISO range and constantly tweaking f/stops, shutter speed and strobe arrangement.

The lakes are in effect, flooded valleys. And whilst they interconnect, each one plays host to an individual food web determined by the water



Whiter Shade Of Pale - The lily in this image was in full bloom about a metre below the surface. They are so light reflective that even shooting CFWA using only natural light, the finer details show.

Canon EOS 550D in a Sea & Sea RDX 550D housing. Sigma 15mm fisheye lens. Manual exposure: f/8.0, 1/125 sec, ISO 100. Natural light image.

preferences of the animals and plants found there. Alkalinity, salinity (or lack of) and relatively low nutrients play a part in that. But also there are input streams and springs, a wide temperature range and in places, outflow - and therefore access to the ocean. This last aspect has an intriguing and magical element to it, but more about that later.

For a number of years, it's been a personal dream to capture images of

aquatic plants like these lilies. When we landed this opportunity, we spent a number of evenings storyboarding ideas. Not only to give ourselves a fighting chance to get things right but also to deliver fresh images that could be used by the Trust in their conservation efforts. Bringing this secret world to life helps to raise awareness about the importance of freshwater marl lakes and that was one of our goals.



Canopy - Spreading out across the surface, lily pads have a profound effect on their ecosystem. The shade they create reduces both water temperature and light, making the immediate space beneath them less attractive to rival plants. Canon EOS 550D in a Sea & Sea RDX 550D housing. Sigma 15mm fisheye lens. Manual exposure: f/9.0, 1/160 sec, ISO 400. Natural light image.

Above the waterline, visitors are arriving from far and wide to see the star of the show. As they walk across the causeway and look out over the lakes, their first glimpse draws a universal gasp of appreciation. They're witnessing the early flush of lilies in bloom. Fresh and full of promise, waterlilies symbolize rebirth and optimism, peace and purity. They've long been a source of aesthetic inspiration, valued by artists, poets and nature lovers. Time hasn't

diluted the allure. But the topside view is only half the story. Capturing this seldom seen visage helps to tell the rest.

Starting with a little flower power, the European white waterlily holds a few secrets. Its star-shaped innocence has unusual medicinal properties. The flower petals contain powerful alkaloid phytochemicals and the rooted rhizomes are known to have an anaphrodisiac effect when crushed and mixed with wine.



On Reflection – Buds, flowers, underwater blooms, new leaves and old. Capturing fresh scenes for the National Trust with images that bring to life the many facets of a European white waterlily's journey. Canon EOS 550D in a Sea & Sea RDX 550D housing. Sigma 15mm fisheye lens. Manual exposure: f/8.0, 1/125 sec, ISO 400. Natural light image.

Legend has it that this remedy was used hundreds of years ago by monks and nuns, to quell libido. Much more recently, scientists have pieced together data that suggests the oldest flower, dating back to the time when dinosaurs ruled the land, looked like a waterlily. This 140 million-year-old parent plant transformed our world into the ecologically diverse planet it is today. Their arrival had a dramatic effect on ecosystems, the climate and biodiversity. Including the evolution

of pollinating insects, like the bees that still have a soft spot for waterlily pollen today. Once open, each lily flower lasts for between 3 and 5 days before it fades, sinks beneath the surface where it then develops into its fruity seedpod and the cycle of life can start over.

Capturing nature's white colour spectrum is never easy. Underwater, it's double the trouble. Highlights can easily blow out; pale shades bounce light off their surface into

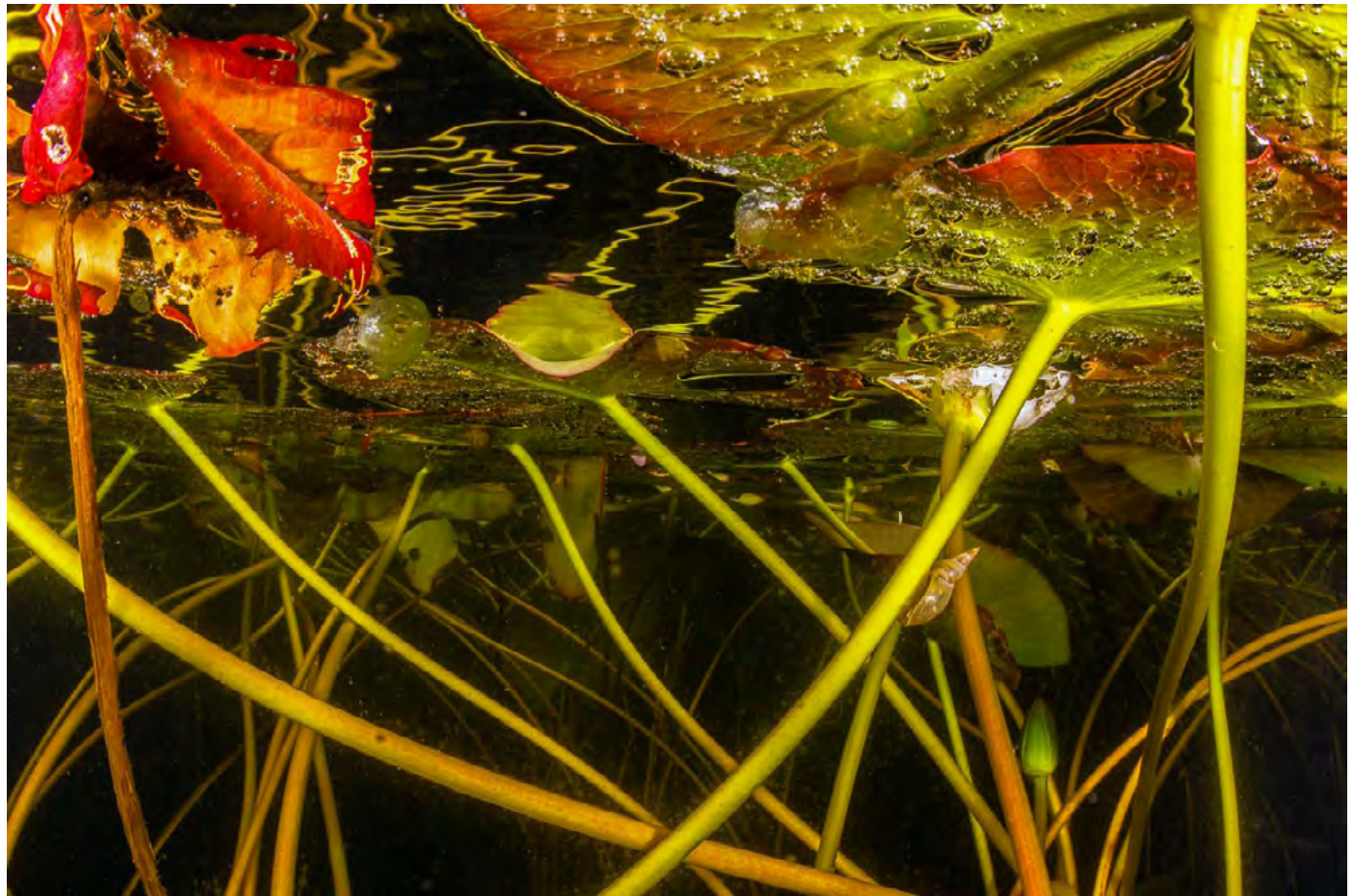
the immediate surrounding space. It sometimes creates an effect like a microscopic snowstorm or backscatter halo around the subject, even more so when strobe is introduced. Balancing the light was probably the trickiest issue we had to contend with. The tiniest kiss of sunlight filtering through the water was often enough to light a lily's brilliant white petals.

Other insects and invertebrate life thrive around the lily pads. Water bugs and beetles, aquatic aphids, damselflies and dragonflies, algae and sponges all make their home in, on or underneath the broad leaves. Their spread provides shelter for small fish and acts as a weightless, buoyant hatchery for insect eggs, a floating hideaway, a chance for Jack pikes to avoid mum and dad's cannibalistic nature.

Young leaves are typically purple or a muted red. As they move upwards through the water column to where they rest on the surface, they morph on top into a chlorophyll-rich green. Later, when they begin to age and wilt, they appear to change again, caramelised by the sun into the burnt oranges we first noticed. During the long winter months, the leaves die away completely and disappear from view. But life in other parts of this sunken refuge goes on.

With their roots and rhizomes tethered to the bottom of the lake, only the shoots and some stems are visible to us. We know there are eels lurking close by but they're hidden, inaccessible in the tangle beneath. They are critically endangered. And they have an incredible, almost unbelievable adventure ahead.

European eels spend much of their adult life in the muddy recesses of our lakes and rivers. At around 10 yrs. old they arrive at a defining moment.



Revelation - Brilliant leaf hues morph through a rainbow spectrum of colours. Young leaves start out with hints of purple, then turn various shades of green until they age yellow, orange and red. The underwater view provides a totally different perspective to that typically seen topside.

Canon EOS 550D. Sea & Sea RDX 550D. Sigma 15mm Fisheye lens. 2 x INON s2000 strobes. Light & Motion Sola 800 Photo light. Manual exposure: f/14, 1/160 sec, ISO 200

Just before they reach sexual maturity they journey across the Atlantic to the Sargasso Sea. Close to Bermuda, there's a particular spot they favour. It's an ocean gyre with unique conditions that set it apart from the surrounding waters. It's very warm and very salty. Eel nirvana. There, the adults spawn and die in their revolution of life and death.

Freshly spawned, the tiny, transparent elver offspring journey back. They ride the Gulf Stream ocean current thousands of kilometres, until they reach the western shores of Europe in the Spring. Wales and Bosherton's protected lakes welcome them home. They wriggle their way into the murk beneath us, obscured from view by the fluffy

mattress of stonewort and the chaos of tender waterlily shoots.

One of the limitations we encountered was shooting the scene using a single dedicated, big picture lens. I don't mean to imply that you can't indulge in a wide range of creative styles, for wide angle has many applications. More that we were hoping to include macro work in the mix. But we had determined early on that switching to close-up lenses in the field was going to be a recipe for disaster. There simply wasn't enough time to dry everything off, let alone protect electronics from the multitude of environmental hazards; wind, buzzing insects, dog walkers, brambles, dust and sticky mud. To kick off with, I had rigged my camera with a 15mm fisheye (one of my favourites) and my partner in crime was using a Panasonic Lumix 7-14mm rectilinear lens on his. And so we rolled with those, embracing the challenge.

A few hours later, we were warming up from our long stint in 14°C. The time had flown, as happens when you're immersed in something you love doing. We radio back to base that we're done and dusted before lugging all our kit to the pick-up point.

We're smitten with this underwater sanctuary. Our inaugural time in these special lakes has been

a fascinating and in many ways, original experience. This phase of our project has been to highlight a particular, seldom seen perspective in the hope that it will generate a better understanding of freshwater habitats, their importance and why we should protect them. It's evident that the extensive conservation work and careful management of the nature reserve is already paying off and it feels good to be able to contribute further to that in our small way.

Heartfelt thanks goes out to the amazing team at Bosherton, to the National Trust and to the lilies.

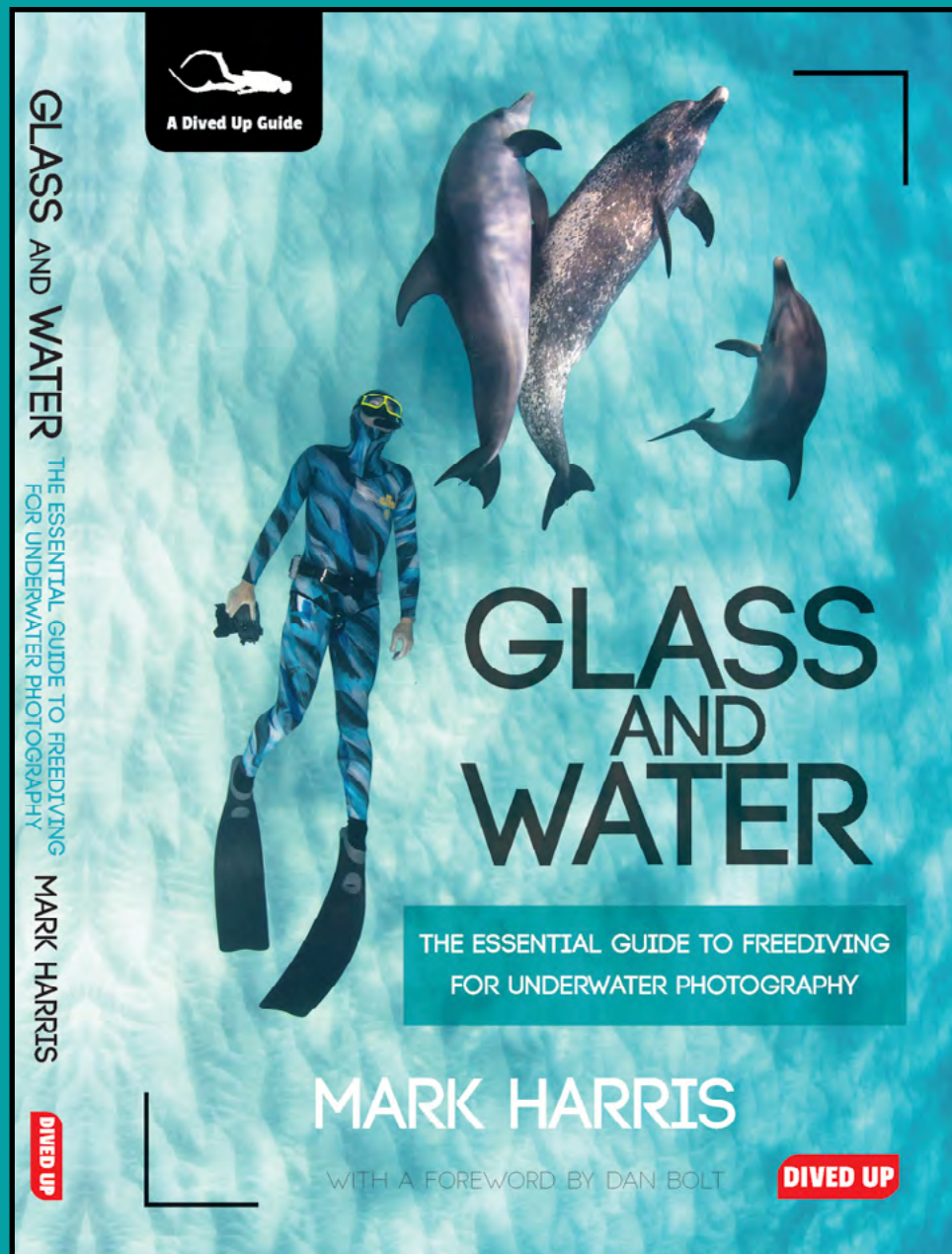
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Diving the Farnes

by Jean Michel Machefert

Since the autumn of 2016 my wife and I have been diving for one week each year at the Farne Islands in Northumberland, UK. Our first trip in 2016 was reported in UWP96.

The last 2 years our trips were scheduled at the end of September beginning of October in order to see and play with the seal pups who are especially friendly and ready to play at this time of year.

At other times the seals are still on the islands but the older seals spend their time either fishing at sea for several days (sometimes several weeks) or in digesting, lying on the shore. The babies under one year are always a little bit shy with the divers and the pups over one year behave more as teenagers and are by far less interested by the divers as they were when they were 10 months old. So there are some seals underwater and some of them continue to play with divers, but less than in autumn. We really have the feeling that for the seal pups a diver is a kind of toy and for sure we make them laugh!

The Farne Islands are also well known for bird watching, since several thousands of sea birds as puffins, guillemots, shag... are nesting on the islands before leaving the place for some overseas adventures. The best period for watching is in springtime before mid-July. After the 15th of July almost all the birds leave the islands.

Knowing that this year we decided to give our preference to bird watching by going the first week of July and also for diving. What was there to see if the seals are not ready to play in water with us?

Indeed plenty of things! First of all the Farne



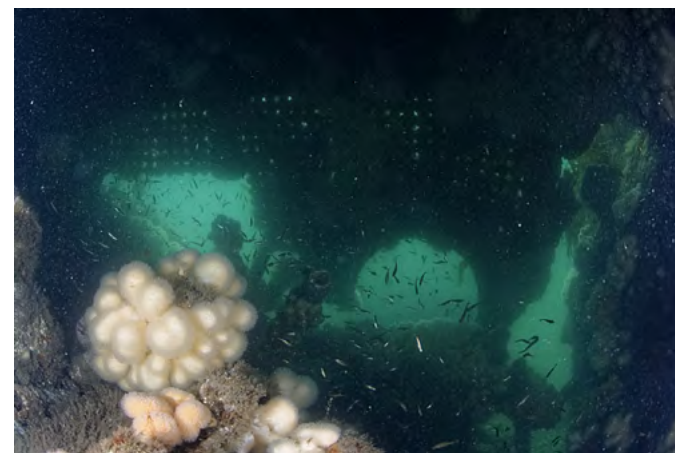
Happy puffin, Nikon D2x, ISO 200, Sigma 200-500mm at 500mm, 1/1000, F9.



Seal pup at the sunset, Nikon D2x, ISO 400, Sigma 200-500mm at 400mm, 1/800, F6.3.



Diver over boulder, Nikon D2x, housing Aquatica, Nikkor 10.5mm, 1/ 60, f 11 , ISO 400 , 2 strobes nikon Sb 910, Patima housings, 1/2 and 1/4 power



Inside the wreck of the Coryton, Nikon D2x, housing Aquatica, Nikkor 10.5mm, 1/ 60, f 9 , ISO 400 , 2 strobes nikon Sb 910, Patima housings, 1/2 and 1/4 pwr

Islands are really dangerous for ships and more than 1000 wrecks lie in this area and since the islands are the eastern remaining part of the 300 million years old "great whin sill" made of very hard volcanic rocks (dolerite) the underwater edges of the islands forms cliffs and plenty of big boulders

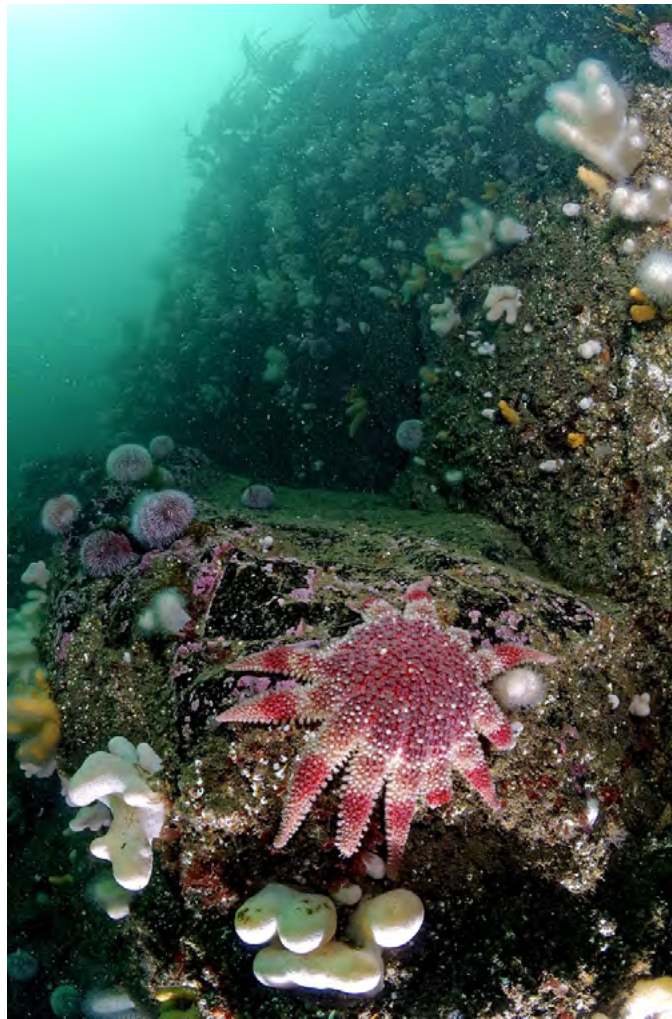
relics of the erosion process of the volcanic still lie on the bottom of the sea. Of course by looking at the diving guides written by British divers the best scenic dives of the world can be done here. As French divers we need to check if this is true or if this is chauvinism.

For the first dives we went on the very comfortable catamaran of Sovereign Diving driven by Ron; a highly experienced diver and skipper to the outer islands for beautiful dives along underwater cliffs fully covered with white and colourful life, plenty of dead man fingers (a nightmare for photographers when they are bright white and stay on black volcanic rocks!).

By looking carefully between the soft corals there are plenty of small animals such as crabs and bigger ones such as the beautiful starfishes like the common sunstar (Crossaster Papposus) typical from the cold waters and almost impossible to see in the French waters. Of course from time to time a seal arrives always from behind biting the fins of the divers before disappearing at full speed and too fast for a portrait shot. This is really interesting to see that the fascination for seals in autumn let us miss or at least not appreciate as it should be such beautiful sceneries. Since we are French we can confirm without any suspicion for chauvinism that such dives are really among the most beautiful in temperate seas.

Then for changing a little bit from the cliff dives we went for a drift dive in a gully between two flat and low rocky islands in the location named Whirl Rocks (you can imagine how still the water can be at this place!). Even in July some seals are here playing in the gully. Most of the time they stay at few meters from us (a little bit far for a photographer but good for seeing them) and time to time one of them comes close to look at us (then the photographer is happy as soon as he is ready for a very fast portrait shooting). Really nice as usual... As soon as we go out of the gully there are no more seals underwater.

As said before there are also plenty of wrecks



Scenery with star fish, Nikon D2x, housing Aquatica, Nikkor 10.5mm, 1/ 60, f 14 , ISO 400 , 2 strobes nikon Sb 910, Patima housings, 1/2 and 1/4 power

in the area. The most famous shipwreck was the Forfarshire in 1838 with the saving of nine crew members by the heroin Grace Darling.

We will not dive on the Forfarshire but on the Coryton. The Coryton was a commercial ship 121m long transporting 3000t of wheat heading to



Boiler of the wreck of the Coryton, Nikon D2x, housing Aquatica, Nikkor 10.5mm, 1/ 60, f 11 , ISO 400 , 2 strobes nikon Sb 910, Patima housings, 1/2 and 1/4 power

Hull when machine gunned by German bombers on Sunday 16th February 1941 at the north of the Farne Islands. The ship was badly damaged and Captain Evans choose to beach the boat in Budle Bay (a sandy bay between Seahouses and Holy Island).



Top of the boiler of the wreck of the Coryton, Nikon D2x, housing Aquatica, Nikkor 10.5mm, 1/ 60, f 14 , ISO 400 , 2 strobes nikon Sb 910, Patima housings, 1/2 and 1/4 power

Unfortunately the seabed is quite shallow in front of Budle Bay and the Coryton sank 300m from the shore. The weather worsened and the ship began to break up. 39 crew members were saved by the life boats coming from Holy Island and from north Sunderland. Captain Evans decided to remain on the Coryton, but then the storm increased and sadly his body was found ashore the next day.

Now the Coryton lies in less than 10m of water on a sandy bed broken in three parts. The rear is often covered by shifting sands and now only the

bow section and the boilers stand up from the sandy sea bed. We dived on the boilers that are split open with a huge quantity of broken condenser pipes laying at the bottom. But this wreck is not dead, plenty of dead mens fingers and soft corals are growing on all the relics transforming them into beautiful gardens where plenty of small fish are living. At the top of the boilers close to the sun big kelps are seen.

During the week we also dived at Gun Rocks on the wreck site where more than 20 cannons, a lot of cannon



Cannon muzzle from a wreck of the 18th century at gun rocks, Nikon D2x, housing Aquatica, Nikkor 10.5mm, 1/ 60, f 10 , ISO 400 , 2 strobes nikon Sb 910, Patima housings, 1/2 and 1/4 power

balls and such artefacts as parts of swords were discovered scattered around the rocks.

Documents written at the end of the 18th century report a loss of a Dutch merchant vessel without any survivors at the beginning of the 18th century and in the 19th century it was then reported without any explanation that the wreck on Gun Rocks was associated with the Spanish Armada. With different archaeological surveys in 1970 and in November 2013 by the Wessex Archaeology Portway House for the English Heritage (<https://>

www.wessexarch.co.uk/our-work/gun-rocks-farne-islands) it is now confirmed that the wreck is a Dutch merchant ship sunk at the beginning of the 18th century.

A dive on the wreck is quite amazing with a bored muzzle of a cannon pointing out of the kelp in shallow water and also beautiful scenery on boulders and cliffs with plenty of soft corals and also some urchins with beautiful spines.

To conclude this week of dives at the Farnes without many seals it was really a nice moment with plenty



Flying puffin, Nikon D2x, ISO 320, Sigma 200-500mm at 500mm, 1/800, F13.



Seal on the rocks, Nikon D2x, ISO 200, Sigma 200-500mm at 500mm, 1/1000, F6.7.



Seal in a gully, Nikon D2x, housing Aquatica, Nikkor 10.5mm, 1/ 160, f 14 , ISO 400 , 2 strobes nikon Sb 910, Patima housings, 1/2 and 1/4 power



Diver & cliff with soft corals, Nikon D2x, housing Aquatica, Nikkor 10.5mm, 1/ 60, f 11 , ISO 400 , 2 strobes nikon Sb 910, Patima housings, 1/2 and 1/4 pwr

of beautiful and unique scenery and for sure we did not have any regret to be there in July and not at the season of the playful seal pups. Now we can confirm without any chauvinism (we are not British!) that the dives in the Farne Islands are for sure among the most beautiful in the world of temperate waters.

Moreover as soon as we were out of the water it was a pleasure to see thousands of puffins, guillemots and other seabirds on the islands. To

be honest we need to come at the Farne islands at least 2 times a year to experience the full benefit of nature!

Also as French divers we really appreciated the organisation of the dives in the Farne Islands with skilled and experienced skippers coming to pick up safely the divers as soon as they are at the surface and with boats always equipped with lifts which are really a must for photographers and divers with quite heavy equipment as we have. The water was at 12°C which was comfortable with dry suits (and heating vests for the chilliest!) and the air at 25°C and even more. The only problem with such weather and difference of temperature is the moisture in the plastics housings if not filled with silica gel.



Jean Michel began to dive in caves, lakes and the oceans in 1987. He started underwater photography in 1992 using a Nikonos IV. After shooting many years with a Nikon D70 he now uses a Nikon D2x in an Aquatica housing with 2 Nikon SB910 strobes in Patima housing.

Jean Michel Machefert

www.jmfrog.com

www.uwpmag.com

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 Shot

by Lee Newman

In the summer, easily the most talked about dive-related subject is visibility. Challenged by successive blooms of algae, the visibility often falls to just a few feet in the waters around Vancouver. The algae blooms start in the Spring, usually around April, when the rivers and streams swollen with snow-melt deliver an abundance of nutrients to the ocean.

The first of the blooms is usually brown - a combination of silt from run-off and phytoplankton. As the Spring rains give way to increased sunshine, the available nutrients cause a bloom of green phytoplankton that typically lasts for most of the summer.

For about eight weeks - in July and August, Vancouver enjoys mostly sunny days with very little, if any, rain - and it is these conditions that cause the red-tides. The red-tide can vary in colour and also in the species responsible. With the poor visibility, many of the area's divers reluctantly relinquish their sites to boaters and 'sea-sweepers'. However, some - myself included, steadfastly refuse to give up on summer diving and go regardless of the turbid water.

On a weekend in mid-July, on a routine dive at Porteau Cove Provincial Park, we experienced the horrible visibility associated with a dense red-tide at about 20', down about 30'. After that, we found ourselves under the bloom in relatively clear water (for summer, anyway) - with about 20' of visibility. Above our heads was the swirling red-tide. It looked like a storm at sunset - and me with no camera!

The following weekend we went back, this time armed with my camera and Tokina 10-17, hoping that the red-tide was still there. It was! We again groped our way through the bloom and into the clearer water below and proceeded to make some images. With Lisa's exhaust bubbles punching holes in the bloom, and the algae moving with the water (mostly tidal action), framing a shot became an exercise in pre-planning.



The author's wife, Lisa, under the red-tide. Canon 7D, Tokina 10-17 @10mm, 1/25th, f5, ISO 640, a single Ikelite DS-160 at reduced output.

I had to anticipate where I wanted to shoot, get in position and then wave Lisa into position before the bloom changed significantly. It was very exciting in a creative kind of way!

Luckily, during the summer the ocean tends to stratify with regard to temperature - despite the relatively large tidal exchanges. The temperature stratification of the water also tends to stratify the algae blooms - forming a layer of brown, green or red, which rises and falls with the tides. As long as you can get under it - and assuming there is still some ambient light, there are plenty of reasons to dive, and shoot!

Lee Newman

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 UWP105**