Underwater Photography

Sept/Oct 2024
Issue 140

UwP

Indonesia's Leading Dive Resort

Bunaken Oasis offers world-class luxury accommodation with world renowned scuba diving sites in the heart of Indonesia, Bunaken National Park in North Sulawesi. Five-time winner of Indonesia's Leading Dive Resort at the World Travel Awards

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www.bunakenoasis.com

WORLD TRAVEL AWARDS WINNER 2021 Indonesia's Leading Dive Resort

WORLD TRAVEL AWARDS WINNER 2022 Indonesia's Leading Dive Resort

Contents

Cover shot by

Martin Broen

Underwater Photography

A web magazine UwP140 Sept/Oct 2024

Editorial

Shout out for Shootouts

We've all had to learn how to take pictures underwater. In my day it was books and magazine articles plus monthly visits to the British Society of Underwater Photographers meetings in London.

That was fine if you lived in London but for most others it was theroetical rather than practical learning. The opportunity to mingle and learn from other photographers started with competitions like the BSoUP 'Splash In' in the UK and Shootouts in the US.

Sadly the UK based live events have long since faded away but the US Shootouts have gone from strength to strength. They are now supported by the industry's biggest and best manufacturers and most talented educators to provide a very special opportunity to learn and practice new techniques on site with the almost unique opportunity to see and handle the latest underwater photography equipment.

It is the perfect combination of learning and practicing at the same time in an ideal location for underwater photography.

Hats off to all involved because these events take a lot of organisation but they provide an opportunity to learn like no other.

Seeds of local talent

UwP has always tried to encourage contributions from those whose camera set up is either not the latest and shiniest or the largest and most expensive. In addition we always love to hear from those who dive locally in conditions far less favourable than a colourful coral reef.

This issue is a shining example with Tony Reed's excellent images shot in UK waters using not just a compact but a three models old one and then lighting it with a simple hand held video light. The results are exceptional and should inspire compact users to persevere.

Sticking with the 'basic talent grown at home' theme we also have the interview with National Geographic photographer Brian Skerry whose career started in his backyard of Maine - temperate limited waters with just a Nikonos 11 - but his determination and what he learnt in his apprenticeship there would stand him in good stead. He must now be the most influential underwater photographer of our time.

Encouraging and including emerging home grown talent will always be at the top of UwP's agenda.

Video in UwP

It's very hard to cover video techniques in a downloadable publication; including video clips would make the file too large to download.

There is, however, a lot you can learn from listening to other videographers and that's why we have Colin Marshall's interview with Alex del Olmo. It's a text only article but if you are interested in video you will, as I did, come away having a better insight of his techniques. Think of it as a written podcast.

Alex produces videos of a very high standard both visually and emotionally. Camera movements are buttery smooth, macro is rock steady and the soundtracks well chosen.

If you shoot video check out his work in the link below then read his interview and you will improve your footage subliminally.

www.naucratesuw.com

One's enough

Looking at Martin Broen's iconic Cenotes images reminds me of when my late great mentor, Peter Scoones, said, in all seriousness, "Only I should be allowed to go underwater to capture the fragile underwater world for everyone to see and appreciate. That way it will be preserved and protected from the inevitable damage that mass tourism would bring."

Looking at, and being able to appreciate without diving there, the beauty of Martin's images of such a fragile, unique and precious environment, I can't help but think that Mr Scoones was onto something there.

Peter Rowlands
peter@uwpmag.com

News, Travel & Events

World Oceans Underwater Photography Workshop with Jason Washington and Andrew McLachlan

Grand Cayman

September 29 – October 5, 2024

Join Jason Washington and Andrew McLachlan on Grand Cayman for our inaugural World Oceans Underwater Photography Workshop.

Grand Cayman offers world class diving with crystal-clear waters, vibrant coral reefs and abundant marine life. Together our expertise will help you improve your skills, from technical aspects like camera settings and lighting to artistic elements such as composition and framing.

Workshops often cater to different skill levels, from beginners to advanced photographers. Personalized instruction ensures that you receive guidance suited to your experience, helping you advance your skills more effectively to create more dramatic imagery.

Practical, hands-on experience will be the cornerstone of this workshop. You'll have the opportunity to apply what you learn in real-time, with immediate feedback from instructors, which can significantly enhance your learning process and photographic results.

The workshop includes a mix of underwater sessions with question-and-answer periods, we will cover post-processing techniques, image editing, and photo critiques. This holistic approach will ensure a well-rounded learning experience.

Attending a workshop allows you to meet and interact with other photography enthusiasts. This can lead to the exchange of ideas, techniques, and tips, as well as the possibility of forming lasting connections with like-minded individuals.

Combine the travel, adventure, and learning in this underwater photography workshop for a memorable and transformative experience that will enhance your photography skills while you enjoy one of the most beautiful underwater environments in the world.

The maximum number of participants is 12.

$1550.00 USD includes:

- Daily boat dives
- In-depth photographic instruction prior to each dive with in-the-field image review
- Question and answer session (before and after each dive)
- Photo editing session

What's Not Included:

- Flights to and from Grand Cayman
- Accommodation (recommended hotels: Hampton Inn, Sunshine Suites & Indigo Bay)
- Meals
- Car Rental (if required)

www.andrewmclachlan.ca

Jason Washington

Workshop

1-on-1 with Grant Thomas

Direct interaction with a photo pro is the fastest and easiest way to make dramatic improvements in your skills.

Ikelite ambassador Grant Thomas has been internationally recognized for his work, most recently being announced as a finalist in "Wrecks of the World" and "Best 5 Images" categories in the 2020 Underwater World ShootOut.

Grant offers personalized classes

on all aspects of photography and videography. Sessions can take place online or in person (within the UK). Each session is planned with you in advance and tailored to meet your exact needs.

www.grantthomasphotography.com

Six Senses Laamu - Maldives

May 1-31, 2025

Erin Quigley is headed back to the Maldives for the month of May! Join her at the incomparable Six Senses Laamu. Come for a week or stay for the entire month for some well-deserved pampering and dive the spectacular reefs of Laamu Atoll. This is not a structured trip, there is no daily schedule. Hang out with Erin and dive with her in paradise.

Beautifully remote, yet accessible by plane from Malé (MLE) International Airport, Six Senses Laamu is set in a palm-fringed lagoon to fill you with wonder and fuel your wanderlust. Villas with all the creature comforts are set either on stilts over the water or on the beachfront and are an easy wander from the resort's restaurants, lounges, and amazing Maldives attractions and destinations.

Six Senses Laamu is the only dive resort in the Laamu Atoll so we are virtually guaranteed of having the dive sites to ourselves when we go out, something that is extremely rare for a world-class diving area and almost unheard of for a place with mantas year-round.

Six Senses Laamu has 97 spacious water and beachfront villas, carefully designed to harmonize with the outstanding natural beauty of the island. They offer privacy, coziness, and comfort. True to the Six Senses' philosophy of being in harmony with the environment, all of Six Senses Laamu's villas are crafted from local and sustainable materials.

www.backscatter.com

Swimming with Sperm Whales, Dominica

Feb 28 – March 7 2025

For the 4th year, Gregory Sweeney will host a trip to the rainforest island paradise of Dominica in the Caribbean to swim with the resident sperm whales.

Sperm Whale come to the waters around the Island of Dominica in the Caribbean to feed at its surrounding deep sea trench. Rain washes mineral rich water down from the volcanic peaks of the island which spawns squids and marine creatures creating the perfect source of food for the whales. The resident sperm whales are mostly females in extended families of grandmothers, mothers and daughters all working together to protect and raise their young. Mother and calf pairs are common. Sometimes we see the escort males.

We encounter Sperm Whales at the surface where they are resting and often napping between their deep dives to get squid meals. The rules of encounters are easy to follow but strictly adhered to and when a whale became stressed by us, we were able to move on to another area and find other whales. More whale species are possible including humpbacks, false killer whales, and pilot whales.

Our large, comfortable boat has a head, salon, dive platform, and a hydrophone which aids us in finding

the whales. Whale encounters are recorded and each whale is checked for records of past encounters.

Dominica is a nature island and is a destination for hikers and visitors who want to hike the lush forest, waterfalls, volcanic peak views, and natural hot springs flowing into the many rivers. We recommend our visitors book extra days to enjoy this rare example of an undeveloped Caribbean Island with intact parklands. Scuba and shore snorkeling are also available. Beaches are not numerous but there are a few to enjoy.

Good news has come recently that this area and its unique and valuable marine life will be further protected and extended as a Marine Reserve under the recognition of world organizations. With this change comes uncertainty in regards to the future permit process and availability of in water encounters. Next year might be the last chance to experience being in the water with sperm whales.

This is an exclusive and rare opportunity to photograph sperm whales. Now booking – limited to 5 guests for our 6 days on the water.

www.Gregorysweeney.com

NAD Lembeh Camera Room

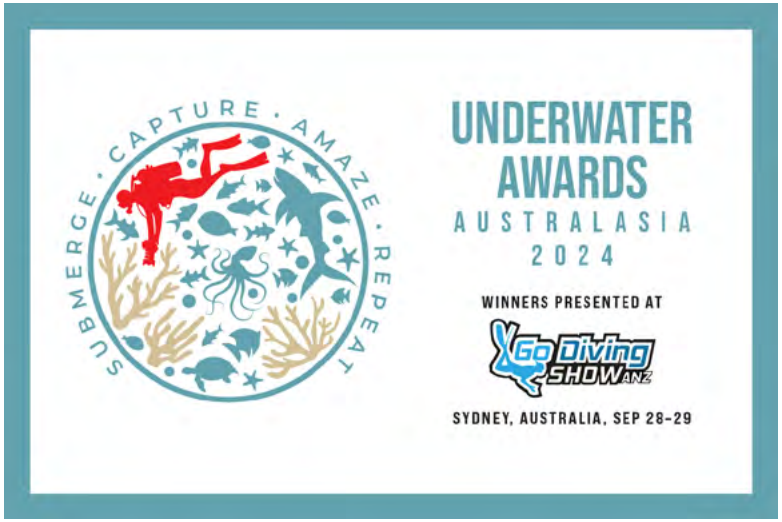
We're very proud of our newly renovated camera room which is possibly the biggest one in the world!

Being the centre piece of the resort, owner and underwater photographer Simon Buxton has tailored this room especially to the underwater photographer's needs – located right next to the restaurant and bar, your babies will never be far away from you and with a total of 30 individual workstations, each of our guests gets a huge space for their precious toys.

Every station comes with led lights, rubber mat, camera towel and 4 international/ 8 European power sockets including USB ports – charging all your gadgets at the same time has never been easier!

www.nad-lembeh.com

Underwater Awards Australasia 2024



The Underwater Awards Australasia 2024 is a new underwater imaging competition focused on the Australasian region—an industry-first three-way collaboration between the long-established Underwater Australasia, leading underwater photography and videography resource DivePhotoGuide, and underwater imaging equipment and dive gear distributor UW Images.

The winners will be presented at Go Diving Show ANZ in September 2024—the inaugural Australian edition of the hugely successful Go Diving Show in the UK. The prestigious judging panel comprises Tobias Friedrich, Jayne Jenkins, Brett Lobwein, Ross Long, Matty Smith and William Tan.

The prizes, worth more than A$50,000 in total, include dive trips with the world's top resorts and liveaboards, as well as the latest underwater photo and video gear. Entrants compete for prizes in 8 categories, with the top image or video among the category winners receiving the distinction of "Best of Show."

The competition calls for passionate underwater shooters from around the world to submit their most captivating and compelling images and videos from the Australasian region. Shooters are invited to immerse themselves in the challenge of capturing the essence of this extraordinary realm, where every frame tells a story of the delicate balance and breathtaking beauty that characterises our oceans.

www.underwatercompetition.com

A Tribute to Chuck Nicklin

On December 7, 2022, the world lost an underwater legend, a dive industry icon, and the founder of the San Diego Undersea Film Exhibition.

Chuck was a pioneer diver, photographer, and a cinematographer dating back to the early 1950s. Among the films he shot were James Bond movies, The Abyss, and The Deep. He founded The Diving Locker, San Diego Undersea Film Exhibition, was a co-founder of San Diego Underwater Photographic Society. Chuck received the trifecta of the most prestigious awards in the dive industry, NOGI, DEMA Reaching Out Award, and the induction into the International Scuba Diving Hall of Fame.

Chuck's book, Camera Man, chronicles his adventurous life, as he revisits the dawning days of scuba diving. He shares stories of how his career as an underwater camera man unfolded, from the day he became known as "the man who rode a whale," to his adventures traveling around the world diving and filming majestic humpback whales and fierce great white sharks.

www.sdufex.com/tribute-to-chuck-nicklin

Capturing Critters in Lembeh Workshop 2025

Sep 13, 2023

Capturing Critters in Lembeh UW photography workshop is back in January 2025 for what will be our 12th year running!! As each year passes, we find it harder to believe that what started out as a seed of an idea to host three photo pros, has now been running for over a decade!

In 2025 we will be hosting three more world-class Photo Pros here at Lembeh Resort. We are extremely excited to welcome Ron Watkins (USA), Paul Duxfield (UK), and Renee Capozzola (USA). The week-long workshop will once again be packed with incredible diving, Pro presentations, and one-on-one instruction and feedback.

www.lembehresort.com

The 7th Open Fotosub Online in El Hierro is underway

The waters of El Hierro will welcome photographers once again wishing to participate in the 7th Open Fotosub Online, an event organised by the Island Council's Tourism Board that attracts a diverse range of underwater photographers every year, from expert champions to those new to underwater imaging. All participants will compete for a share of the numerous prizes totalling €10,000 in cash, particularly highlighting the award for "Best Photographer of the Open Fotosub Online," which carries a prize of €2,500.

Photographers looking to take part must dive around the Island between 1 August and 31 October, always with the support of authorised diving centres. Contestants can submit a maximum of five images each month throughout the three months of the event, aligning with five photographic categories: Landscape, Vertebrates, Invertebrates, Algae, and Compact Cameras. These images must adhere to straightforward editing guidelines, and participants will need to take a "test" photo to validate their entry; the remainder will depend on the artist's skill and creativity.

All photographs will be displayed on the event's website, online.fotosubelhierro.es, and each month they will be voted on by a pre-selection jury and by the website users. These votes will determine the finalists, whose works will be evaluated in November by a panel of recognised specialists. They will assess the creativity, technique, and mastery with which the island's underwater environments and its inhabitants are presented, deciding which images deserve the significant prizes of the Open Fotosub Online.

This event not only promotes the art of photography but also seeks to raise awareness of the richness of marine ecosystems and the importance of their preservation. Don't miss the chance to be a part of this unique event that celebrates the natural heritage of El Hierro and showcases photographic talent from around the world.

Join the 7th Open Fotosub Online and share your vision of the underwater world!

www.online.fotosubelhierro.es

Swim with Humpback Whales

onboard

Marine Mammal Biologists and Pro Photography Support

ONLY 2 SPACES LEFT

@island.exposure

www.islandexposure.us

contact info@islandexposure.us

Join us

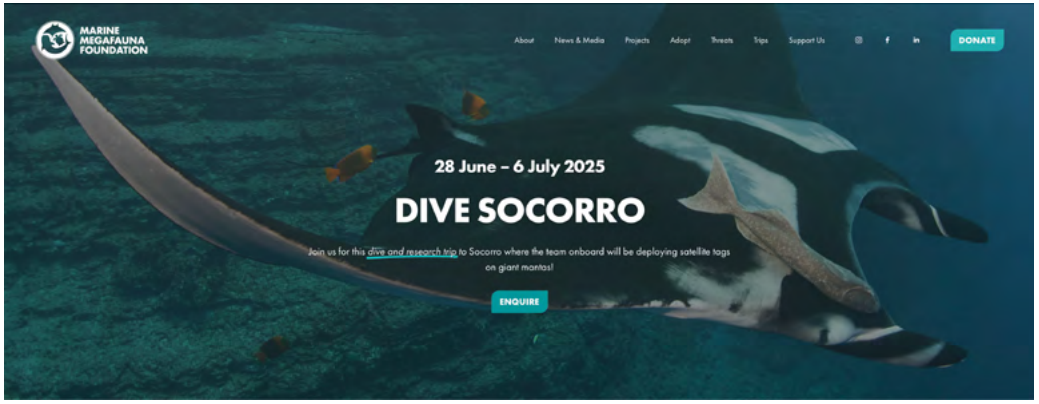
February 1-8, 2025

on the Silver Bank

Dominican Republic

Dive Socorro, Mexico

June 28 – July 6 2025



Socorro is where the wild (and big) things are. A megafauna trip of epic proportions is where we can expect close encounters with giant manta rays and dolphins and exciting sightings of sharks and other marine mammals set on the backdrop of dramatic oceanic islands, pinnacles, and geological formations.

Socorro and Mexico's Revillagigedo Archipelago were recently upgraded to UNESCO World Heritage status and are world-famous for megafauna sightings. Regular encounters with giant manta rays, hammerhead sharks, silky sharks, whale sharks, dolphins, and whales are the main attractions.

Trip Highlights:

Led by world-renowned marine researcher, and MMF co-founder, Dr. Simon J Pierce.

Joining the trip will be Pelagios Kakunjá researcher, Dr Madalena Cabral, who will be deploying satellite tags on giant manta rays for her research.

The opportunity to experience extraordinary encounters with marine megafauna like giant manta rays, dolphins, schooling sharks, and migrating whales in their natural habitat.

Travelling aboard The Nautilus UnderSea, a legendary exploration vessel that has been hosting scientific and filming expeditions since 1968.

100% of profit from the trip supports MMF's marine research.

www.marinemegafauna.org

WWW.UNDERWATERCOMPETITION.COM/UWAA

SUBMERGE · CAPTURE · AMAZE · REPEAT

UNDERWATER AWARDS

AUSTRALASIA 2024

WINNERS PRESENTED AT
GO DIVING SHOW ANZ

Go Diving SHOW ANZ

SYDNEY, AUSTRALIA
SEPTEMBER 28–29

JUDGING PANEL (L–R)

- Tobias Friedrich
- Jayne Jenkins
- Brett Lobwein
- Ross Long
- Matty Smith
- William Tan

EIGHT CATEGORIES +
PRIZES WORTH A$50,000

underwater www.underwater.com.au dive in. explore. discover.

UW Images www.uwimages.com.au

DIVE PHOTO GUIDE www.divephotoguide.com

ORGANISERS

San Diego Undersea Film Exhibition

Qualcomm Hall (5775 Morehouse Drive), San Diego
Fri October 4th (7pm) & Sat October 5th (5:30pm) 2024

Tickets for our 25th Anniversary Underwater Film Festival are now on sale!

Different films screened each night, with Emmy Award winning MC Jonathan Bird!

To celebrate our 25th anniversary, we are making this event extra special. After the show on Saturday night, starting at 8pm we are holding an optional ticketed reception at Qualcomm Hall. Snacks, drinks, and your chance to meet up with old friends and filmmakers.

Tickets for the reception are on sale now only through September 25th, so please order yours as soon as possible.

Be a part of the SDUFEX community - pre-order an SDUFEX T-shirt to pick up at the show!

Our virtual festival will be available Monday, October 7th and will feature 12 all new films as well as 20 of the in-person films.

www.sdufex.com

www.uwpmag.com

Photographic Specialists in the Lembeh Straits!

NAD lembeh

North Sulawesi, Indonesia

- Private Diving Experience: 2:1 diveguide ratio as standard
- Photo Trained Guides
- Huge Camera Room
- Very Few Stairs
- Small Resort - only 15 rooms

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Come and Dive with our amazing Team!

www.nad-lembeh.com

New Products

Nauticam NA-Z6III housing for Nikon Z6III

The Nauticam NA-Z6III underwater housing is the ultimate companion for Nikon Z6III users who seek to explore the underwater world with precision and reliability. Engineered with professional photographers and videographers in mind, this housing delivers exceptional performance and durability in challenging underwater conditions.

Crafted from high-quality aluminum, the NA-Z6III boasts a robust and corrosion-resistant design, ensuring long-lasting protection for your Nikon Z6III camera. Its form-fitting construction provides a snug fit, minimizing bulk and enhancing maneuverability underwater. The housing is rated to a depth of 100 meters (330 feet), making it suitable for deep-sea exploration as well as shallow-water dives.

One of the standout features of the Nauticam NA-Z6III is its comprehensive control system. Every key function of the Nikon Z6III is accessible through the housing, including dials, buttons, and touchscreen capabilities. This allows photographers to adjust settings quickly and accurately, even while wearing gloves. The housing's ergonomic design places controls at your fingertips, reducing fatigue during extended dives.

The Nauticam NA-Z6III is equipped with an integrated vacuum check and leak detection system, providing real-time monitoring of the housing's integrity. This advanced feature offers peace of mind by ensuring that your camera remains completely sealed and safe from water ingress. The vacuum system also simplifies pre-dive checks, allowing you to confirm that the housing is properly sealed before entering the water.

www.nauticam.com

AOI Mounts for DJI Osmo Action 4 or 3 and the QRS-02-MB4 for Insta360 Ace or Ace Pro

AOI have announced the QRS-02-MB3 for DJI Osmo Action 4 or 3 and the QRS-02-MB4 for Insta360 Ace or Ace Pro. Users of these cameras will now be able to experience the benefits of the AOI UWL-03 and AOI UCL-03. These adapters are designed to work with the original protective housing offered by the brands, not aftermarket products.

The AOI UWL-03, a wide-angle correction lens, and the AOI UCL-03, a close-focus lens enable users to achieve results previously unheard of with action cameras. Both lenses work seamlessly with an adapter that employs the AOI Quick Release System (QRS), providing a safe and speedy means of removing or installing the lenses. In addition to these advancements, AOI has developed an exciting range of accessories for action camera users, based on insights gained from our community. These accessories include tripods, lens holders, arms, connectors, and more. The Quick Release System design philosophy has been embedded into many of these accessories, offering a reassuring and swift solution.

These exciting products will hit the market by the end of August 2024. Reach out to your local AOI dealer or connect with us via email or social media for more information.

www.aoi-uw.com

www.uwpmag.com

RICOH G900 II

Ricoh is pleased to announce the launch of the RICOH G900 II. This heavy-duty digital camera is designed to be highly resistant to water, dust, shock and chemicals, making it ideal for use at demanding worksites subjected to water, rain, dust and dirt, and in industries such as construction, disaster relief and healthcare.

The RICOH G900 II features shock-resistant performance to withstand a fall from 2.1 meters and is waterproof to 20 metres.

Its accessible button positioning enhances operability, and its flawlessly contoured grip ensures a firm hold on the camera. It also inherits the wide neck strap of its predecessor, which enables two-point, cross-shoulder suspension to the ease of carrying and handling.

In addition to outdoor applications at civil engineering, construction and disaster relief sites, the RICOH G900 II can also be used in a wide range of indoor industries, at locations such as high-security workplaces thanks to the password-protected Camera Lock function inherited from its predecessor, and medical and manufacturing facilities requiring thorough cleansing and sterilization of equipment.

In addition, when connected to a computer, it also functions as a web camera. Using its high-power, output-adjustable Ring Light unit and macro shooting capability from a minimum focusing distance of one centimeter, the user can deliver a well-illuminated, enlarged view of a small item to an audience during online business meetings.

Ricoh

Nemo Photo, UK

Hi we're Nemo Photo, based in the UK. We're a new company but we're old faces. Nemo Photo is run by Steve and Adam who have over 3 decades of experience selling underwater camera equipment.

We are an official reseller of Ikelite and we also sell many other brands including Backscatter, Inon, OM-System(Olympus) & Seafrogs. We sell housings, video lights, strobes, arm systems, wet lenses and compact camera packages like the very popular TG-7.

We have an online shop and you're always welcome to phone or email us with any questions you may have. We attended the Go Diving Show in March and we'll be attending again next year.

We look forward to helping with your underwater photographic requirements.

www.nemophoto.co.uk

BACKSCATTER

THE BEST BANG FOR YOUR BUCK

OLYMPUS E-M10 IV

Nauticam NA-R5II housing for Canon EOS R5II

The Canon EOS R5II is the next iteration of the widely popular Canon EOS R5 and retains many of the features that were attractive to underwater image makers. Firstly, and most excitingly video shooters now have access to 8K 60 Raw/4K 60 SRAW/4K 120 10-bit Video. The Canon EOS R5II retains its 45MP full-frame mirrorless sensor that utilizes Canon's new RF lens mount and also has next-generation Dual Pixel autofocus.

More details on the Nauticam NA-R5II Underwater Housing coming soon!

Canon EOS R5II Specifications:

45MP Full-Frame Stacked BSI CMOS Sensor

DIGIC Accelerator Processing

Dual Pixel Intelligent AF, Eye Control

8K 60 Raw/4K 60 SRAW/4K 120 10-Bit Video

Up to 30 fps, Pre-Continuous Shoot Mode

5.76m-Dot EVF with OVF Sim. View Assist

3.2" Vari-Angle Touchscreen LCD

In-Camera Upscaling to 179MP

CFexpress & SD UHS-II Memory Card Slots

Wi-Fi 6E/Wi-Fi 6 Support

www.nauticam.com

Canon EOS R5 II first look

We are happy to announce our first dive with the much anticipated Canon EOS R5 II, the successor to the very popular Canon EOS R5 that was released back in the summer of 2020.

We spent this dive shooting just photos with the Canon EOS R5 II and were immediately impressed by the fast and accurate continuous autofocus system. The camera was easily able to stick onto subjects and would not lose focus even when other subjects moved in and out of the frame. We also appreciated the updated electronic viewfinder (EVF). It was clear, and didn't have contrast issues, even when diving in the high dynamic range environment of the kelp forest. We are excited to get this camera in the water more so that we can truly put it through its paces. Stay tuned for our full review as we continue to test the Canon EOS R5 II.

The Canon EOS R5 II is proving to be a strong performer for underwater video too. The in-camera white balance system consistently produces vibrant, accurate colors. The Canon EOS R5 II now has five white balance banks compared to the original Canon EOS R5. Another upgrade is the ability to shoot in Canon C-LOG 2 for extended dynamic range. In our tests, we found that the color in

the standard picture profile is much preferred, and this will also save you a lot of time in post-processing. We were impressed with the camera's autofocus capabilities while shooting video, which handled the challenging conditions of Monterey Bay with minimal hunting. Additionally, the Canon EOS R5 II maintained a stable operating temperature throughout our 4K 60P shoot.

Overall, we're excited about the potential of this camera for underwater videography and look forward to exploring its capabilities further.

www.backscatter.com

Sea & Sea LX lights

There are three versions of this multi purpose video/divelight with 1200, 2400 and 4000 lumens output.

Press button controls provide 4-step dimming or as accurate as 1% steps and there is a memory function to return to the same power when the unit is turned back on again.

In addition they can detect the light from your camera's flash and automatically turn off the light, preventing it from being captured in your images.

The light source is COB (LED), which has an established reputation for uniform light distribution. SEA&SEA's original design customizes the COB into a doughnut shape. The wide light source is placed in the doughnut, and the spot LEDs are placed in the center of the emitting surface, corresponding to the "hole" in the center of the light source.

Whether wide or spot, the optical axis is at the center of the light-emitting surface, ensuring optimum lighting at all times.

COB" is an abbreviation for "Chip on board," as the name suggests, multiple LED chips are placed directly on the board. Since multiple LED chips are arranged in a concentrated manner, high luminance is achieved. In addition, since the light is emitted from a surface, a large surface can be illuminated evenly. SEA&SEA is the first in Japan to lay out "COB" in a doughnut shape. Even with wide light, shadows are less likely to form in the center, resulting in uniform light.

www.seaandsea.jp

Isotta housing for Nikon Z8

The Isotta housing Z8 for the Nikon Z8 is made from carefully selected aircraft grade aluminum alloy and premium grade stainless steel. It is machined on the latest 5 axis computer assisted machines available, and is protected by anodizing it. While anodizing will protect the housing from the environment, it will fade and discolor if left exposed to the elements, and so for further protection.

The housing for Nikon Z8 is closed with Isotta's single handed one-turn knob. It's the only single latch closing mechanism in the DSLR housing market. It's fast, simple and secure thanks to its double steel pins at the bottom of the housing.

The housing for Nikon Z8 is compatible with the optional LED trigger for manual flash control. It also offers the possibility to use external strobes via two standard optical light ports as well as two optional Nikonos sync cord bulkheads.

Working depth is 100 metres. Different accessories can be fitted by means of one M8 hole positioned on the upper side of the housing and two threaded M6 holes located on housing bottom side. Three M16x1 threaded holes can be used for different needs such as to accomodate a vacuum.

www.backscatter.com
www.uwcamerastore.com

Nauticam NA-A1 housing for Sony a1

"Do-Everything Powerhouse"

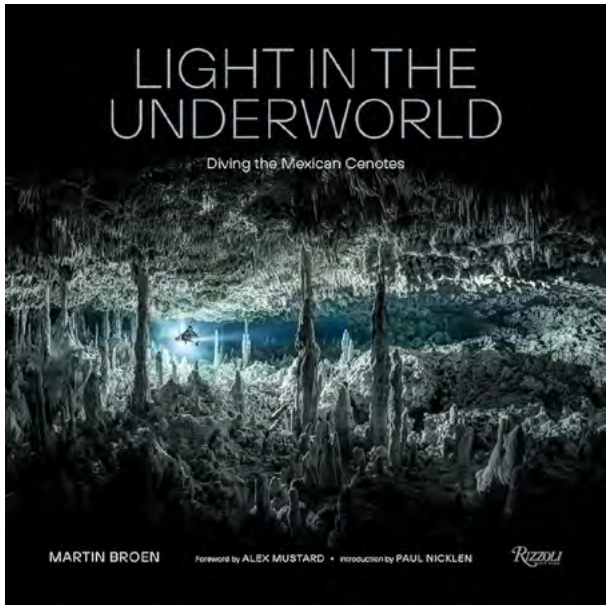
Sony has reconceived what a pro camera should look and feel like with the Sony a1.
Sony maintained the form factor of the A7 series, but loaded it with state-of-the-art technology that provides superior stills and video performance. 4K 120p, 8K Video,50MP @ 30FPS, 9M dot EVF and more breaks new ground in this class. If you can dream it, the a1 can do it.

Married to the Nauticam NA-a1 housing with its superior ergonomics,the underwater possibilities are near limitless.

www.reefphoto.com

Light in the Underworld: Diving the Mexican Cenotes

by Martin Broen



An immersive journey to witness a natural wonder—the underwater caves and cenotes of Mexico's Yucatán Peninsula, a destination very few divers have ever reached.

Shining a light on the Underworld (or Xibalba, as the Mayans called the center of their culture and mythology), these stunning images transport us into a place that few cave divers can reach—a world accessed from cenotes, water-filled gateways to labyrinths of tunnels that create the longest underwater cave systems on the planet.

Over several years and multiple diving expeditions, Martin Broen has captured more than 250 different cenotes and caves, diving through mazes of pitch-dark tunnels. Paired with images of startling otherworldly beauty, his engaging text guides readers through the depths of the mysterious Yucatán cenotes—from their formation and spectacular features to their time capsules of ancient fossils, from how cenotes were a source of life for ancient peoples to their critical environmental role today.

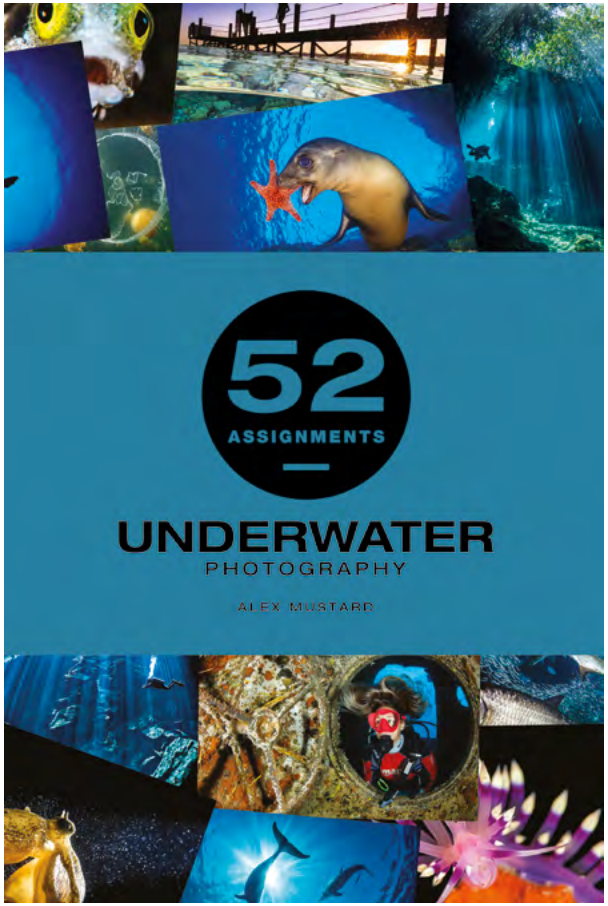
With contributions based on their own experiences in cenotes by Alex Mustard and Paul Nicklen, this volume beckons divers, cavers, and armchair explorers to explore a uniquely dangerous yet beautiful and essential underwater world.

https://www.rizzoliusa.com/book/9780847830909/

https://a.co/d/4K20rnO

52 Assignments: Underwater Photography

by Alex Mustard



Available
September 10th 2024

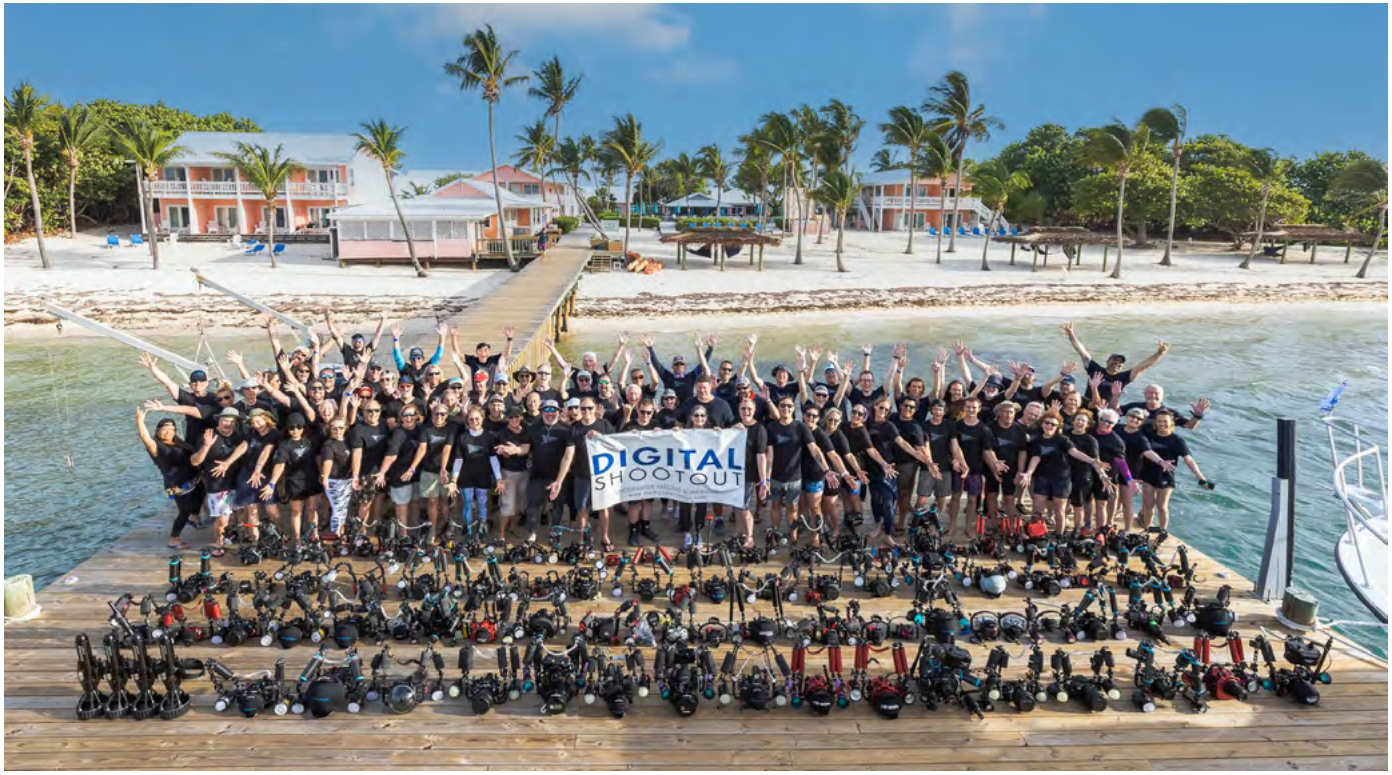
52 Assignments: Underwater Photography by Alex Mustard (RRP £12.99, October 2024) is the next photographic journal and guide book in the popular series from Ammonite Press. The 52 Assignment journals are handy project journals for photographers of all skill levels and are designed in such a way that over the course of a year the reader can try out one assignment a week and hone their skills and embrace new ways of being creative.

This latest book is written by Alex Mustard, a celebrated underwater photographer and the author of the Ammonite Press book, Underwater Photography Masterclass (2016). This isn't a book to simply read, it is a book for those who really want to develop skills and improve. It is intended that you read an assignment and then get in the water and work on it. Each of these assignments will allow you to build a broad base of skills and experience across a diversity of genres. From capturing a sumptuous sunburst to taking a one-strobe macro of a strange sea creature there ideas a plenty… consider the classic black & white ship wreck photo or perhaps be daring and shoot from the hip, Alex has plenty of ideas for novices to, and veterans of, underwater photography.

www.amonitepress.com

Digital Shootout 2024 report

by The Backscatter Team



In its 21st year, the Digital Shootout is the pinnacle of underwater photography workshops. For two weeks, underwater photographers from Baby Boomers to Gen Z unite to scuba dive, improve their in-camera shooting skills and editing skills, try the latest in underwater imaging equipment and have the most fun anyone can have during a working vacation. Dive. Shoot. Learn. Repeat.

With some of the most talented underwater photographers in the industry on the Shootout staff, the sharing of their knowledge is unsurpassed in the 25 unique seminars offered. A guest to staff ratio of 4:1 provides learning not only in the classroom, but also on the boats, during meals, by the pool and in the Creative Cave, the drop-in help center.

With 25 unique, professionally presented seminars, the teaching pros at The Digital Shootout share their wealth of knowledge in shooting techniques, editing techniques and creative endeavors in the classroom.

Additionally, the Creative Cave offers drop-in assistance in a small group or one-on-one setting. Q&A sprout up organically during meals, on the boats, at the pool and around the bar! Always learning, always fun!

It wouldn't be the Digital Shootout without a friendly competition at the end of the two-week bootcamp where the best underwater stills and videos captured during the event are awarded AMAZING prizes.

While the Shootout is a learning event with emphasis on improving underwater shooting and editing techniques, the event organizers, Backscatter Underwater Video & Photo and Under

Exposures, manage to gather some very cool prizes to give away in the friendly competition.

Regardless of whether or not your images won a prize, congratulations to all of this year's participants for your hard work and improvement shown during the Shootout!

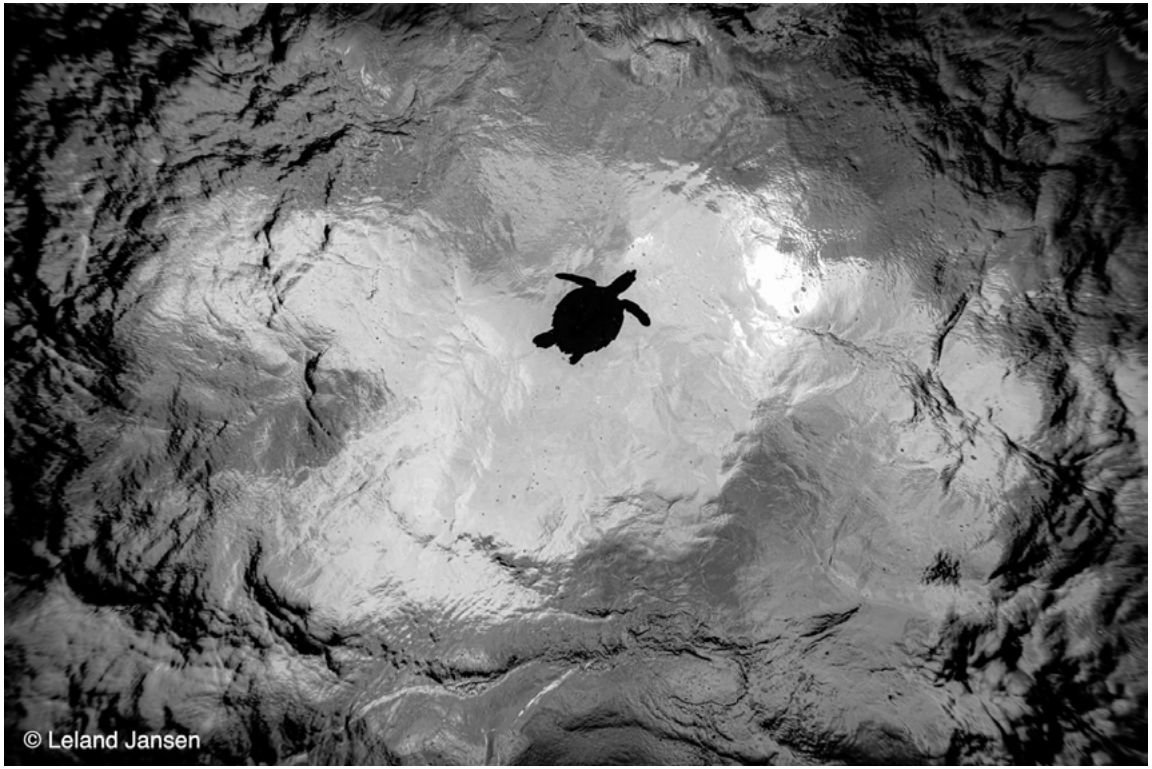
Each of you created captivating, artistic ocean images to be proud of, and you are all winners!

The late Jim Watt was more than a friend to the Shootout. He was a living example of our mission statement. Jim was one of the first professional underwater photographers to adopt digital photography and was thrilled to share all his shooting secrets with first time shooters or fellow professional photographers. His passion and skill in creating new images was infectious and inspired hundreds of Digital Shootout guests over the years.

Our Best of Show image by Leland Jansen is honored with the Jim Watt Award of excellence.

Why not join us in 2025 in Bonaire?!

www.thedigitalshootout.com



Nauticam FCP-1

by Kevin Palmer

Ever since full frame digital cameras started to become popular for underwater, the photographic community has longed for a true full frame fisheye zoom, but to no avail. Many of us remember the joy of the Tokina 10-17 fisheye zoom hitting the market for our APS-C crop sensor cameras. Finally, we had a full 180 degree diagonal view fisheye for the big scenes and decent zoom range when we needed to be a bit tighter. And since it could fit in a small dome and focus down to the glass, it was amazingly versatile.

Nikon and Canon came out with very nice fisheyes with a less zoom range, so it seemed the big camera names were catching on. We here at Reef, started grilling manufacturers years ago about when we would see a true full frame fisheye zoom for all these wonderful full frame cameras being introduced. These lenses would likely have to be around 15-22mm to be the equivalent to the experience the Tokina provided on a crop sensor. It even turned out that that Tokina had indeed designed one, but it was locked up in a license to another manufacturer. Has any manufacturer made any further progress? Not yet. The UW market just hasn't turned enough heads unfortunately. So, people have been stuck on 180 degree fisheye at 15mm or zooming to 8mm for 180 degree circular fisheye. Some folks add a third-party 1.4X Tele-Extender to the 8-15 fisheye zooms to approximate the range, but those give up some image quality.

Enter Nauticam.

As a company pioneered by actual underwater photographers, Nauticam has always looked to solving problems where there did not appear to be an off-the-shelf solution available. This has been particularly evident with their focus on underwater specific optics over that last many years. After their tremendously successful WWL series of wet lenses and WACP series of water contact ports, it is not too surprising

ISO 250 @28mm f/9 1/80

ISO 400 @29mm f/13 1/60

ISO 320 @50mm F/10 1/100

that they pursued a solution to the fisheye conundrum that the camera manufacturers did not seem to be interested in addressing. The FCP-1 is the result of that nearly two-year quest.

What is perhaps most exciting about the FCP-1 is not just the 170 degree angle of coverage, which was expected, but rather the incredible range of coverage options that the conversion port achieves with a relatively limited range of focal lengths available through the zoom lens. Compatible with 28mm lenses to create 170 degrees of coverage, there are now several mirrorless zoom lenses that offer a substantial range of coverage. For instance, the Sony 28-70mm mid-range zoom lens offers 170 degree FOV at 28mm down all the way to a mere 62 degrees FOV at 70mm. The flexibility is a bit mind-boggling as it allows for fisheye reef scenics, distant blue water pelagic subjects, and wide angle macro all on the same dive.

The shots above give a pretty good sense of the range of coverage which is impressive. There are some notes to be aware of when shooting the FCP.

The optic provides the sharpest overall image quality at the wider focal lengths. These photos were shot with the Nikon Z8 and the Z 24-50 zoom lens. Zoomed to 50mm provides a lovely opportunity with the angel fish above, but you can see the corners are a little softer than the images shot at 28mm - even when shot at f/10. Not a problem for most shooters, but good to understand.

This brings up one other point worth noting. The magic involved in turning a 28mm focal length into a 15mm fisheye equivalent does not necessary bring the same depth of field you might get with the fisheye lens at the same aperture. How much difference? I would guestimate it at about two stops difference. So, when shooting the close focus wide angle shot of the anemone and clown fish, I shot it with high ISO, slow shutter and f/13 which provided plenty of depth of field (it was a cloudy day). That being said, the FCP performs quite well at f/8 & f/9 for general wide angle shooting.

Are there any other caveats? Well, like all fisheye lenses, expect barrel distortion at the widest focal lengths. Fortunately, the underwater world tolerates that pretty well unless you are shooting straight pilings or shooting a tiger shark straight from the side.

If you are shooting 24-50mm lens

ISO 250 36mm f/9 1/100

ISO 250 36mm f/9 1/100

This image is zoomed out to about 25mm showing a more significant vignette. ISO 320 f/11 1/200

ISO400 50mm f/11 1/80

ISO 400 29.5mm f/11 1/100

as produced by Canon & Nikon, be aware that the image will vignette until you get to 28mm. You can just crop it if you over-zoom of course, but Nauticam makes special zoom gears for these lenses so it will limit the lens from zooming past 28mm if that is a concern.

What follows are shots taken at various narrower focal lengths. It is valuable to remember that corners will not be as sharp and to try and minimize subjects in the corners, when possible, as well as stopping down a bit more. But having the flexibility to shoot more portraits is a big plus.

The abilities of the FCP-1 are intriguing, so who is it for? First and foremost, this is a fisheye option with added flexibility. If you are a fish portrait shooter who occasionally needs a super wide angle set up, this is likely not your best choice. If you are dedicated fisheye shooter, but need a bit more flexibility or are always cropping your shots, the FCP might make a lot of sense. It also has a lot to offer the traveling dive photographer who wants to minimize their gear to simplify their packing. The FCP is smaller than a WACP-1 and just a little larger than the WACP-C. Using this set up with a compact zoom lens and one extra port for a macro lens gives you the range to cover almost anything you will encounter.

Kevin Palmer
www.reefphoto.com
www.islandexposure.us

M. Zuiko 8-25mm

By Andrew McLachlan

When I began my journey into the world of underwater photography with the micro four thirds format (MFT) using the Olympus / OM System OM1 cameras I immediately purchased the M.Zuiko ED 8mm f/1.8 Fisheye PRO, M.Zuiko ED 7-14mm f/2.8 PRO, and the M.Zuiko ED 60mm f/2.8 Macro lenses as these were the most often discussed options for MFT underwater photography.

These lenses have been my workhorse lenses for quite some time now and have served me well in capturing some very nice imagery beneath the waves. I also own the M.Zuiko ED 8-25mm f/4 PRO lens, which I have mostly reserved for my topside landscape photography.

The M. Zuiko 8-25mm lens has quickly become my go-to lens for many of my excursions into Grand Cayman's underwater world. I do not intend to provide a pixel peeper's review, but rather my real-world experience from diving with this lens to produce salable imagery for my agent and personal licensing requirements.

Before we go to depth, we must decide on what lens to use beneath the waves. Often, we must commit to either wide angle reef scenes, close focus wide angle, or macro subjects and without a doubt we will find a subject that we wish a different decision was made prior to the dive.

There are some very expensive conversion lenses that perform exceedingly well as they allow photographers to take advantage of a range of focal lengths underwater, greatly improving the versatility of some lenses. However, the M. Zuiko ED 8-25mm f/4 PRO provides Micro Four Thirds (MFT) shooters with excellent versatility at a fraction of the cost. In fact, if you are already set-up to use the M. Zuiko ED 7-14mm f/2.8 PRO lens in your housing it may be as easy as purchasing a zoom gear for the M.Zuiko f/4 8-25mm PRO lens.

I have been using the AOI UH-OM1 housing with the M. Zuiko ED 7-14mm f/2.8 PRO lens for almost 2 years now. Being able to use the M.Zuiko 8-25mm f/4 PRO lens in my set-up was as easy as getting the appropriate zoom gear (AOI LG-OM2-825PRO) as I already use the 37mm Zoom Knob Extension ring (AOI ER-PN-OD-37) and the 8" dome port (AOI DLP-12 OD).

Due to the polycarbonate

Great Barracuda photographed with the OM1 and M. Zuiko ED 8-25mm f/4 PRO lens in an AOI UH-OM1 housing with AOI DLP-12 OD Dome Port and dual AOI Q1-RC Strobes. ISO 200, f8 @ 1/200 sec at 25mm (50mm FF)

Wreck of the Geneva Kathleen photographed with the OM1 and M. Zuiko ED 8-25mm f/4 PRO lens in an AOI UH-OM1 housing with AOI DLP-12 OD Dome Port and dual AOI Q1-RC Strobes. ISO 200, f8 @ 1/250 sec at 8mm (16mm FF)

construction of my gear this set-up is quite positively buoyant. I corrected this by using a 2lb ankle weight around the back of the dome port.

The M. Zuiko 8-25mm f/4.0 PRO lens offers a focal range of 16-50mm in full frame terms and is an excellent choice for underwater photographers using the Micro Four Thirds (MFT) system, offering several features that will cater to the unique demands of shooting in aquatic environments. The 8mm focal length (16mm full-frame equivalent) is particularly advantageous underwater, allowing you to capture wide scenes such as coral reefs, large schools of fish, sea turtles, rays, and wrecks. The close focusing capabilities of the lens (9 inches from subject to sensor) make it great for close focus wide angle (CFWA). This minimum focus distance also makes it a powerful tool when the lens is zoomed to 25mm (50mm full frame equivalent) for closer subjects like individual reef fish, quasi macro

Hawksbill Turtle. OM1 and M. Zuiko ED 8-25mm f/4 PRO lens in an AOI UH-OM1 housing with AOI DLP-12 OD Dome Port and 2x AOI Q1-RC Strobes. ISO 400, f8 @ 1/160 sec at 8mm (16mm FF)

USS Kittiwake. OM1 and M. Zuiko ED 8-25mm f/4 PRO lens in an AOI UH-OM1 housing with AOI DLP-12 OD Dome Port with ambient light. ISO 500, f8 @ 1/200 sec at 8mm (16mm FF)

scenarios, and more detailed shots of the underwater environment. For my shooting style this lens offers superb flexibility for the subjects I most typically encounter on a dive in Grand Cayman. I can go wide and close for sponge-scapes and co-operative reef fish and zoom the lens to 25mm to keep a bit of distance for skittish subjects or smaller reef fish of around 6 inches or so and still fill the frame nicely.

But it is an f/4 lens? While f/4 is not particularly fast, it is consistent throughout the zoom range. This means you need not worry about exposure changes when zooming the lens, which can be particularly helpful in unpredictable lighting conditions. I seldom shoot with a lens wide open as I am often getting in quite close and stopping the lens down will yield better depth field for the subject matter in the image. For example, shooting an f/2.8 lens at f/8 is the same as shooting an f/4 lens at f/8 is the same. In fact, I think the only time I have ever shot an f/2.8 lens wide open is when I have been topside photographing the night sky.

The M. Zuiko 8-25mm lens delivers excellent sharpness and

Tiger Grouper photographed with the OM1 and M. Zuiko ED 8-25mm f/4 PRO lens in an AOI UH-OM1 housing with AOI DLP-12 OD Dome Port and dual AOI Q1-RC Strobes. ISO 400, f8 @ 1/250 sec at 25mm (50mm FF)

Small Sand Diver of roughly 6 inches photographed with the OM1 and M. Zuiko ED 8-25mm f/4 PRO lens in an AOI UH-OM1 housing with AOI DLP-12 OD Dome Port and dual AOI Q1-RC Strobes

Tubulate Sponge and Red Rope Sponge photographed with the OM1 and M. Zuiko ED 8-25mm f/4 PRO lens in an AOI UH-OM1 housing with AOI DLP-12 OD Dome Port and dual AOI Q1-RC Strobes. ISO 400, f8 @ 1/50 sec at 8mm (16mm FF)

low distortion, even at the widest angles, which is crucial for capturing clarity and detail. The advanced optical elements in the lens minimize chromatic aberrations which is typically more pronounced underwater due to refraction. As mentioned previously the minimum focusing distance of 9 inches allows you to get close to your subjects, which is beneficial when shooting smaller marine life or coral details. This versatility of close focusing capability is very valuable for improved clarity and sharpness. You may recall the saying “if you think you are close enough, get closer” then the M. Zuiko ED 8-25mm f/4 PRO lens will allow you to do just that.

The lens is compatible with various underwater housings available for Olympus cameras. The compact size of the lens means that it can fit well within many standard dome ports, providing the necessary optical quality required for underwater

This is the textured plastic around the front element of the lens that will cause reflection concerns when the lens is held towards the sun at such an angle that will cause reflections. I would highly advise using an anti-reflection ring with this lens by either making your own with some flat black material or sourcing out options to purchase.

I connect 2 X 1lb ankle weights together and place them just behind the dome port to give better balance.

Over-under scene from Seven Mile Beach photographed with the OM1 and M. Zuiko ED 8-25mm f/4 PRO lens in an AOI UH-OM1 housing with AOI DLP-12 OD Dome Port with ambient light. ISO 200, f16 @ 1/500 sec at 8mm (16mm FF)

shooting. Dome ports are typically preferred when using wide-angle lenses like this one because they help maintain the field of view underwater and minimize distortion. The M. Zuiko ED 8-25mm f/4 PRO lens is also an excellent choice for split images (over-under) when used in large 8" dome ports.

If you choose to shoot this lens with ambient light it is important to note that it accepts 72mm filters, unlike the M. Zuiko ED 7-14mm f/2.8 PRO lens that does not accept filters due to the bulbous front element. Being able to accept the screw on filters means that a Magic Filter can easily be used with this lens for improved colour rendition beneath the waves. Yes, the OM System OM1 features an underwater white balance setting but this is really only useful close to the surface. I highly advise setting a custom white balance when going to depth with ambient light photography. I am often shooting with strobes at depth and currently use a pair of AOI Q1-RC Strobes. I enjoy their compact size and ease of use, and when fitted with the optional dome diffusers I find they spread the light sufficiently for my photographic needs.

No lens is really designed without some sort of drawback, and I have found one such drawback with the M. Zuiko 8-25mm f/4 PRO lens. When using the lens in my 8" dome I became aware of a reflection issue on a shoot at the USS Kittiwake while shooting into the sun. This can be a problem with many brands of lenses inside large domes. I noticed the issue on the dive and was able to remedy the situation by tilting the camera slightly downward to prevent the reflection from being visible in the images. The lens has some textured plastic around the front glass element that will reflect in the images when the lens is positioned at an angle that will cause reflections. I would highly advise using an anti-reflection ring with this lens by either making your own with some flat black material or sourcing out options to purchase.

Hawksbill Turtle photographed with the OM1 and M. Zuiko ED 8-25mm f/4 PRO lens in an AOI UH-OM1 housing with AOI DLP-12 OD Dome Port and dual AOI Q1-RC Strobes

The M. Zuiko 8-25mm f/4.0 PRO lens is highly versatile for underwater photography, particularly if you need a lens that can handle both wide-angle, split scenes, and quasi-macro on a single dive. Having one lens that can accomplish each of those photography scenarios is incredible. The optical quality, close focusing ability, and compatibility with underwater housings make it a strong candidate for capturing stunning underwater images, whether you're shooting wide reef scenes or more intimate marine life portraits.

Andrew McLachlan
www.andrewmclachlan.ca

Panasonic Lumix GH7 with Nauticam NA-GH6

by Massimo Franzese

The GH7 is the first model of the GH line to feature Phase Detection Autofocus. The GH7 is physically identical to its now phased out predecessor GH6 therefore the Nauticam NA-GH^ housing fits both the GH6 and GH7. Many GH5 users did not upgrade to the GH6 now they are wondering if it is time to move forward with the GH7. In this review I will talk about the GH7 as a photo camera.

Image Quality

A few key improvement over the GH5 include:

Increased resolution 25 Megapixels vs 20.2

New RAW files with 16 bits depth

Dual Gain Output Circuit

Back illuminated sensor

The increase in resolution compared to the GH5 and GH5M2 is only 11.4% (5776/5184). This is not exactly life changing but more pixels are always better than less pixels bearing in mind that pixel size and image overall noise are NOT related.

With regards to the dual gain output circuit the increase in peak dynamic range compared to the GH5M2 is minimal and appears entirely due to the fact that base sensitivity is now ISO 100 instead of 200.

Perhaps the most interesting feature of the GH7 are the new 16 bits RAW files.

A typical wide angle image has a size of 38 MB which is rather large considering the 25 Megapixels, for reference Sony A7 IV files are around 42 MB. There are several discussions about the efficiency of Panasonic compression but we are not going to deep dive on this. What matters to use is how much beating the raw files can take.

The camera can easily take +3 adjustment as well as shadows up to 100% which is an excellent result.

The other aspect of image quality is of course the lens and we can here use the excellent canon 8-15mm in the entire zoom range in addition to a huge assortment of lenses and ports for Micro Four Thirds supporting all Nauticam water contact optics including EMWL, WACP, WWL and others.

Compared with my A1 with the same Canon 8-15 in a similar shot I can say that at the edges the GH7 is superior and in the centre the difference in actual resolution is small to non-existent despite half the pixels.

In general terms I feel the RAW files of the GH7 are similar in handling to my A1 and A7C II.

Housing Ergonomics

I want to get out of the way few annoying things of the NA-GH6 housing which is otherwise a great product.

The joystick is not available through the housing, not many Nauticam housings have a joystick control but Sony full size bodies, Canon and Nikon top of the range

do. I feel this is a drawback of the NA-GH6 which continues from the GH5.

To resolve this and make operations quicker you need to customise your camera for underwater use. Change the joystick to Fn and assign focus area movement to the joystick central button. This will allow you to skip one step compared to focus area select where you need to navigate to access focus area movement.

There are other two issues with the housing, the handles are angled forward, something typical of the Nauticam GH series. I have been told it improves shooting video but I just cannot see how that would differ from shooting photos. I wish Nauticam would give straight angles to the GH series housing too.

Another consideration: not all function buttons are accessible, in particular the two on the left side of the camera are not. The lever under the front ring controls the function buttons 2 and 3 that correspond to the front two buttons of the camera.

The housing is not small at 331x176x136 with a weight of 2.8 kg is indeed similar or equal to a full frame camera housing.

The final consideration is that the price of the GH6 housing, that is compatible with the GH7, is very high, more than a Sony A7 IV, less than Sony A1 and way more than other smaller micro four thirds body as well as other full frame (the S5II housing costs less).

Key Autofocus Settings for the GH7

Please note that the camera focuses differently in video than it does for photos and therefore you should not draw any conclusion for video autofocus from this post except that due to phase detection the infamous DFD pulsing no longer occurs.

Above: I recommend using one for constant preview, hitting will circle through aperture simulation, shutter simulation or nothing and the other can be used to recall the focus limiter which is very important for macro shooting. The function button on the back can be your fn 9 to recall the focus area movement useful if you want to move it to position the focus are in a specific part of the frame.
Above right: In total you have access to 3 function buttons as well as white balance, ISO, exposure compensation, focus mode, operation lock, EVF/LCD, quick button, menu and the four arrows, delete, mode, shutter mode, playback, movie, af.
Right: One very important feature is that the handles distance from the housing can be adjusted, I move out the left handle so that the lens is central to the handles to avoid uneven exposure for close focus shots.
The housing also has an M10 accessory port as well as the ability to host M5 accessories, and two ports for monitor and vacuum valve in addition to a cold shoe mount.
While Nauticam recommends the M5 accessory this is too close to the handles and personally I find the cold shoe and especially the M10 port more suitable for focus light and external monitors.

If you look in the menu nothing has changed from the previous Panasonic cameras in terms of set up options except a few significant improvements that came with the GH6.

Macro lenses tend to focus hunt and take a long time to move from infinity to your focus point, this is a problem in any format unless you use a focus limiter. The challenge when using a limiter on the lens is that in most cases once the camera is inside the housing and you have made a choice you cannot change it during the dive and therefore miss photo opportunities when the subject is outside your range.

The GH7 however has a software focus limiter feature that is extremely useful. You can set the focus between a near and far point and the camera will increase the focus speed significantly afterwards. This is also very useful to make sure that you do get close to fish.

For the purpose of my tests I did not use this feature as I wanted to stress the setup and thought of using it only if I had problems but I did not. I find this feature invaluable to ensure you get really close. I have discovered when using wet diopters that all the wet lens was doing was forcing me to get closer but indeed I could have used the naked lens to get the same shot. In consideration of the limited depth of field I rarely use wet diopters with dedicated macro lenses on micro four thirds as the imaging frame is as small at 17.3x13 mm in size.

Wide Angle with the Canon fisheye 8-15mm

I am not a fan of shooting fisheye lenses with Continuous Autofocus as the depth of field is high and the focus range is so limited that rarely it matters.

Fish was not always recognised, especially in those cases where only one eye was visible and the fish was on busy background, however the MFT camera combined with the 8-15 means there is always depth of field to fix any issues of focus at wide angle. A better option is to use animal detection without eye focus especially for schooling fish.

With the GH7 I use the Canon fisheye 8-15mm using a metabones adapter and this in the past only supported single autofocus. I noticed some vignetting on the bottom side of the frame that I did not experience with the GH5 series that I need to double check, but otherwise the setup is identical to what you see here on my website.

Metabones released firmware V4.10 on 12 July 2024 declaring continuous autofocus compatibility with the Panasonic G9M2 which has indeed the same AF system of the GH7. The update also

Diver with Grouper ISO 100 8mm f/7.1 1/80

improves general performance. I updated my adapter and I can confirm continuous autofocus works correctly with the Canon 8-15mm. Like it does with the Sony camera the focus is a bit wobbly however it works fine. I used zone focus with subject detection, the GH7 does recognise fish and fish eyes so it did not have problem locking onto this grouper. The GH7 shows the focal length on screen as you zoom which is extremely useful.

Sea Stars ISO 100 8mm f/8 1/160

Close up work with the Panasonic 45mm Macro

For close up work I used the Panasonic 45mm lens because it has the best rendering on the MFT landscape. Here I used continuous autofocus using a single area or zone focus with subject detection on animal eyes.

I have been advised by Panasonic not to use tracking functionality however topside tests indicate it may work well underwater. Many people get

The GH7 focus right on the eye of this large grouper. ISO 100 45mm f/10 1/250

confused between tracking and subject detection so it may be worth some explanation. Tracking works with or without subject detection and allows you to choose an area on the frame that may or not correspond to a detected subject and then the focus points follow this area. It is especially useful when the camera does NOT detect a subject. Subject detection works differently: it uses the camera live feed to scan for shapes using a deep learning algorithm when a shape is identified the location of the focus points is passed to the autofocus engine to take the shot.

Strictly speaking the camera is not tracking an area of choice but detecting one or multiple targets across the frame. This has a risk when there are multiple targets as the camera may jump from one to another however in close up work this is not generally an issue. If the camera detection works there is no need to use tracking as the subject detection mechanism is quicker and more effective.

I activated subject detection with Single Area + and the camera identified all fish with eyes, in my case groupers, gobies and blennies. For nudibranchs I got a shape around the body most times. The subject detection for fish is way more successful than my A1 but I do not know how it compares with the latest implementations of current cameras with more detection modes like insects that may be a good proxy for certain critters.

I took 255 shots in a dive with the 45mm of which 5 did not have a subject in focus and of those 2 had no subject as the fish had run off the frame.

The Panasonic PDAF system focuses like a DSLR with the lens wide open this helps in situations of low light.

I had a very high success rate as mentioned and only in a few circumstances the focus was off the eye but more because the fish had moved too quickly and I was at close range.

This focus system is excellent for shots wide open and you can easily obtain nice bokeh with eyes in sharp focus. I had a focus light but I never had to turn it on because the GH7 focuses wide open, my strobes have a modelling light but this is only useful if you aim at the subject which in most cases I actually do, again there was no need to use it. I did not have a single shot with focus on the background which for me is quite impressive.

Subjects like nudibranchs can move fast or be on little algae that is swaying in the current, the MFT system with the huge depth of field available means you can achieve the effect you want easily. Different shots at various f stop

The GH7 like the GH5 and GH6 can sync with the strobes at 1/400 using the Nauticam trigger which also supports rear sync and burst mode. Only the A1 can match this sync speed and is very useful for close up work as it easily gives you dark

Too Close ISO 100 45mm f/10 1/250

Shallow ISO 100 45mm f/2.8 1/250

backgrounds in the right conditions.

The 45mm maintains good sharpness even at f/10 and further but I did not stress the setup in my tests. Take into account that the depth of field even at f/11 on MFT (equivalent to f/22 on full frame) is 1 cm at very close range therefore some really small critters may even need f/16 or more.

Conclusion

The Panasonic GH7 performs very well both for wide angle with a dome port and at close range with a macro lens. Continuous autofocus is reliable and appears to work fine without a focus light even when the shooting conditions are not easy. Subject detection recognises fish and fish eyes and makes shooting easy. It is unlikely that the GH7 will appeal to pure photographers due to the high price of the housing. Perhaps the real strength of the GH7 though is hybrid use, if you want a camera equally capable of top range photos and videos you are looking at Sony A1 or Nikon Z8 or similar or the GH7 and here it becomes interesting for the latest Panasonic. In the near future I will provide some details of how the GH7 performs as a video capture device so that you can get the end to end view.

Massimo Franzese
https://interceptor121.com

Trioplan 100mm & TT Artisan 100mm + FIT Focus Gear

by Alex Tyrell

The classic Meyer Görlitz Trioplan 100mm, created by Hugo Meyer in 1916, is based on the Cooke-Triplet designed by Harold Dennis Taylor in 1893.

The Trioplan was one of the first affordable lens constructions, comprising of three lenses arranged in three groups, that allowed for a relatively high optical correction. The lens has 15 rounded aperture blades, and when shot wide open at f/2.8, especially when exposed to backlighting, it produces the famous characteristic circular bokeh, known as Soap Bubble Bokeh. This is a vintage lens with manual aperture and focus controls. In 2020 Meyer Optik Görlitz released an updated version of the lens using current manufacturing techniques and materials, but this came with a hefty price tag of €999 / £850 / $1100. Original models of the Trioplan can be picked up on eBay starting from around £250 going up to £750+ for ones in pristine condition. The original lens came in Exacta and M42 mounts, therefore requiring an adapter to use on modern cameras, but as electrical contacts are not needed, they are very cheap. The newer version came in a variety of mounts for current cameras.

I first shot a Trioplan 100mm underwater in early 2016, after picking one up on eBay and botched together gears for both the aperture and focus controls for my Subal ND-7000. I soon found out that the aperture control was mainly redundant, as the main goal of using this lens was to get the Bubble Bokeh, with a secondary benefit being the creamy soft backgrounds it also produced when backlighting wasn't present. Both of these however needed the lens to be shot wide open for optimal results, hence the redundancy of the aperture gear. The minimum focusing distance for this lens is around 100cm, so the addition of a close-up lens or macro extensions tubes were needed to bring this in closer underwater. My friend Mark Drayton then machined me a far more professional looking (and working) aluminium collar that perfectly fitted the focus ring of the lens, for precise fit and stability. I now had a gear that didn't slip off during the dive! I used this lens on my D500 up to 2022 when I switched to the D850. Shooting on FX gave a wider field of view than on DX and the depth of field was a bit less, but other than that shooting it was pretty much the same.

This year I finally made the jump to mirrorless, switching to the Sony A1 in a Nauticam housing, so needed to rethink how I would get the Trioplan working, as it would need a new M42-E Mount Adapter and longer Macro Extension Tubes on a mirrorless body. My initial thought was to once again botch a solution with a Nauticam N100 focus gear of a similar diameter to the aluminium collar that fitted the Trioplan, but these were looking quite pricey. I then turned my attention to the newly produced replica Trioplan from Chinese manufacturer TTArtisan. Given the budget friendly

Top: TT Artisan 100mm
Right: Trioplan 100mm

price tag of USD150 for a lens that is more or less identical in design and optical effect to the Trioplan, I hoped that someone may have already have produced a focus gear for it.

After some Googling it soon became apparent that finding a focus gear wasn't happening, so I turned my attention to 3D Printed options. A few places produce 3D Printed gears for more commonly used lenses, but not for the TTArtisan. I then saw a Facebook post that Fun-In Taiwan were now producing 3D Printed Gears for

variety of lenses, so sent Joe at Fun-In a message to ask if they had made one for the TTArtisan. They hadn't, but Joe said if I could send the lens to their shop in Shenzhen, they could scan it and make a custom gear.

I knew the lens would need some Macro Extension Tubes to reduce the minimum focussing distance down from 90cm to a more underwater friendly distance, but didn't know what would be the optimal length. I did some tests using my Trioplan with the A1 to get a rough idea and came to the conclusion that in addition to the M42-NEX Adapter that was 28mm, either 21mm or 28mm should work. Things then got a little lost in translation whereby they produced a gear that fitted the lens with just the 28mm M42-NEX Adapter, not accommodate Macro Extension Tubes, but I knew it wouldn't do the job as I intended, the minimum focusing distance of 90cm was going to be too restrictive underwater. A few messages back and fourth, and things were worked out. My request for a gear that could accommodate various length Extension Tubes up to 28mm, in addition to the M42-NEX Adapter was designed, some clever engineering put into action and a dual-section telescopic gear was produced. The extra time and print materials increased the cost a little, but it made sense to pay the extra. For those interested, the Retail Price of the gear will be USD165.

About 10 days later the gear and lens arrived and I must say I am impressed with both the design and quality of the 3D Print. The two section of the gear slide along silicon rails that grip well creating a secure fit of the two sections. At it's shortest length, with both sections fully telescoped together, the gear works with just the 28mm M42-NEX Adapter. Fully extended the gear can accommodate Macro Extension Tubes of approx. 35mm, though this is at the limit of it's extension and therefore is a little bit wobbly. The set of M42 Extension Tubes I have consists of three pieces that combine in various combinations, usable at 7mm, 14mm, 21mm, 28mm and 35mm. From 7mm through to 28mm is very secure with the gear, it is just at 35mm that it isn't perfectly secure, but still usable.

Next I set about testing the minimum and maximum focusing distances of the lens with the different length extension tubes, plus measured the horizontal distance across the frame for each. I also checked what port/extension ring combination would be needed on my NA-A1. The following chart is my findings with the TTArtisan 100mm + M42-NEX Adapter (28mm) on the Full Frame Sony A1 (completed in air, so refraction has not been taken into account):

Wide-Barred Shrimpgoby - Koh Tao, Thailand - TTArtisan 100mm+28mm Extension Tube on Sony A1: f/2.8 - 1/400th - ISO80 - Retra Pro X

Extension Tube Length	Min. Focussing Distance / Frame Width	Max. Focussing Distance / Frame Width	Port & Extension Ring
0mm	78cm / 25cm	∞ / n/a	Macro Port 105
7mm	56cm / 17cm	158cm / 65cm	Macro Port 105
14mm	44cm / 13cm	87cm / 29cm	Macro Port 105 + EXR 15
21mm	37cm / 11cm	59cm / 19cm	Macro Port 105 + EXR 30
28mm	32cm / 9cm	47cm / 14cm	Macro Port 105 + EXR 30
35mm	29cm / 7cm	38cm / 11cm	Macro Port 105 + EXR 30

Ports & Extension Rings:
- Nauticam N100 Macro Port 105 for Sony 90mm
- Nauticam N100 Extension Ring 30mm
- Saga N100 Extension Ring 15mm

Scalefin Anthias - Similan Islands, Thailand - Trioplan 100mm on Nikon D500: f/2.8 - 1/125th - ISO100 - Retra Pro X

Shooting either the Trioplan or TTArtisan is going to be quite similar. Both require pre-setting the aperture, and having this wide-open at f/2.8 is optimal for the Soap Bubbles, however the images are a fraction softer than when closed down. You can still get the soap bubbles at f/3.2 and f/4 but they look slightly more defined at f/4, and I prefer the effect at f/2.8 and f/3.2. As you close down further the bubbles are even less apparent. I would suggest setting to either of the first two f-stops on the dial. Both lenses also require manual focussing and I would highly recommend the focus gear. I have heard of people using it without the gear, pre-setting the focus and then adjusting their distance from the subject. This works but will be restrictive, limiting you to shooting at a precise distance for the entire dive.

Having shot the Trioplan quite a bit on DSLR you soon learn that the hit rate is low, especially with moving subjects. Combine a moving subject with a moving background for the bubbles (think a school of silversides) and it's extremely low, as you are not only attempting sharp focus on the subject, you also need precise

Banggai Cardinalfish - Lembeh - Trioplan 100mm w/ Nikon 5T on Nikon D7000: f/2.8 - 1/320th - ISO100 - Inon Z240

distance on the background for the bubble effect. Eyeballing precise focus in the viewfinder is tricky, it's very easy to just miss critical focus with such an extremely shallow depth of field. If you have static subjects then it is not too bad, you just need to bracket focus so you have a few options to select from post dive. On a mirrorless system everything gets that much easier when you utilise Focus Peaking. This nifty little feature dramatically increases the number of sharp shots. Peaking basically superimposes a coloured outline in the EVF/LCD on areas that it deems are in focus. You can change the sensitivity of the Peaking, the options are Low, Standard & High, as well as the Colour from White, Red, Yellow & Blue. You can then adjust the colour depending on the subject you are shooting, so you are not using red Focus Peaking on a red subject. High sensitivity may be too strong, showing you more in focus than actually is. Low may be too weak making it hard to see. Experiment with your camera to see what works best. I have found Standard to be most effective, though depending on the subject it may be hard to see, and then I increase to High, though you may get some shots that you slightly miss precise focus. The best method I have found for attaining sharp focus is to use the focus gear to adjust the focusing distance to the size of the subject, then make minor adjustments of the cameras distance to the subject for precise focus. This is especially valid for moving subjects whereby it is much easier to adjust your distance to the subject than using the gear.

In water tests are at the early stages having completed just 8-dives using the TTArtisan. Also for testing purposes, I introduced an artificial background (wire wool) to give reflected highlights to create the bubble effect, as where I am based

Pygmygoby - Koh Tao, Thailand - TTArtisan 100mm+21mm Extension Tube on Sony A1: f/2.8 - 1/200th - ISO80 - Backscatter HF-1

Banded Shrimpgoby Koh Tao, Thailand - TTArtisan 100mm+14mm Extension Tube on Sony A1: f/3.2 - 1/400th - ISO50 - Backscatter HF-1

in Koh Tao, we don't have schools of small reflective fishes on the dive sites that I could use to create the bubble bokeh. I also shot benthic subjects so I could use the artificial background on the sand without causing any damage to the environment. We have an abundance of Shrimpgoby, so these are easy to locate and won't swim away, so were an good test subject, as were the Anemonefish that won't swim away from the Anemone for too long. But the lens isn't just about bubble bokeh, so I didn't use the background on every shot, though finding suitable colourful backgrounds for nice bokeh wasn't so easy on the dive sites I visited. Other destination with colourful soft corals, sponges, etc would potentially be more productive.

The first dive I used the 14mm Extension, but this to made the minimum focusing distance too long for smaller subjects. It worked, but every shot was at the closest range the lens would focus and they needed a slight crop in most circumstances. The second dive I increased to 21mm and this worked better, bringing the minimum focusing distance in closer, allowing use of the focus gear to adjust the shooting distance for different sized subjects. Next I used the 28mm Extension Tube and found this further improved the usability, as while it gave me a closer minimum focusing distance, it also provided a more varied working range as I adjusted focus. I continued to use this set up for the remaining dives, as it seemed to be the sweet spot for the type of shot I was attempting. I didn't want to completely fill the frame with a subject, as the bokeh is what this lens is all about, so you need a good proportion of background. Also, with the gear being fractionally wobbly at 35mm, there is the chance of it moving out of position, rendering focussing impossible, so with the negligible gain in magnification, I doubt I will try this. But I did find this less than ideal for larger subjects. I attempted shooting some Sweetlips, hoping for a sharp face with their spots blurring out into bubbles, but even with the lens at its maximum focusing distance, it brought me too close to them whereby they turned away before I could get the eye into focus. A shorter extension tube would have worked better, allowing me to shoot from a further distance. This is a big advantage of a variable length

focus gear over a fixed one, allowing for flexibility in set up for subject size and shooting distance.

I also tested the lens apertures of f/3.2 and f/4 to check if it improved the sharpness. I still used the same 28mm Macro Extension Tube and found that at at f/3.2 it was sharper with less haze, whilst still retaining nice bubbles and this may well be the f-stop I use from now on. At f/4 it was little sharper still, but I didn't like the overall effect quite as much, the ethereal feeling diminished as the bubbles were rendered with more definition.

I really enjoyed experimenting with this lens, especially shooting it with Focus Peaking on the A1. Though the TTArtisan 100mm is essentially identical to the Trioplan 100mm that I have been using for years, this feature transformed the challenging, though mildly frustrating Trioplan/Nikon DSLR experience into a much more enjoyable one. Being able to clearly see if focus is on the eye of your subject via Focus Peaking drastically reduces out of focus shots. You could get the same experience with the Trioplan on mirrorless, but its going to cost you a bit more. And Fun-In have already scanned the TTArtisan 100mm, so in addition to Nauticam N100 Focus Gear, they can make them for Nauticam N120, Marelux, Sea & Sea and Seacam.

If you are considering getting this lens yourself, here are some points to note:

•My Sony A1 requires me to turn on a feature that allows it to shoot without a lens being recognised, as there are no electronics in the lens to communicate with the camera body. Other brands may well need a similar feature enabled.

•Be careful if using M42 threaded Extension Tubes that screw together, as if you don't tighten them enough, the gear can potentially unscrew them inside the housing, rendering the focus control inoperable.

•Adjust the length of the Macro Extension Tubes based on expected subject size and required working distance, though I found 28mm to be optimal for most subjects.

•If you are shooting on an APS-C or Micro Four-Thirds sensor, then you will have to account for the crop factor (x1.5 / x2) giving you a smaller area across the frame than on an FX sensor.

•In most conditions you need to minimise the ambient light when shooting at wide apertures (f2.8) to avoid over exposure of the background. You will be using a fast shutter speed and a low ISO most of the time, plus low strobe powers so as not to overexpose the subject.

•If your strobe/flash trigger works in HSS it can be very helpful in bright conditions to quell ambient light using faster shutter speeds. Or consider fitting a weak ND Filter to the lens (i.e. ND4) in bright conditions.

•The distance of reflected highlights behind the subject controls the look of the Bubble Bokeh. Closer creates smaller, more defined bubbles, whereas further creates larger less defined bubbles.

A final point I'd like to stress; do not expect this lens to replace your standard macro lens. It isn't as sharp as a modern Autofocus lens comprised of multiple, optically coated elements. Sharpness drops off towards the edges, the centre and middle being OK at the wider apertures, so consider your subject placement. Yes, you can close the lens down for a sharper overall image, but then you'll loose the bubbles and creamy bokeh, and may as well just shoot your standard autofocus macro lens. Also, contrast is low when shot wide open, making the images a bit hazy at times. This can be partially fixed in post processing using the Dehaze slider and applying some Clarity to the subject via a Mask. In extreme cases you may want to look at using a program like Topaz Labs Sharpen AI, or the newer Photo AI to help out. Due to the softness, I have heard of people using this lens for the backgrounds of double exposures; capturing the bubbles with

Ornate Ghost Pipefish - Anilao, Philippines - Trioplan 100mm on Nikon D850: f/2.8 - 1/250th - ISO250 - Retra Pro X

White-Spotted Hermit Crab - Koh Tao, Thailand - TTArtisan 100mm+28mm Extension Tube on Sony A1: f/2.8 - 1/200th - ISO80 - Retra Pro X

the Trioplan/TTArtisan and then using a modern much sharper lens for the subject. But to me that takes away some of the challenges, though the end result may well be superior.

So to sum up, treat this lens as a bit of fun that produces images with a different look to a standard macro optic. You won't be shooting it on every dive, but if, like me, you repeatedly dive the same sites with the same subjects, it can produce images a little different. And assuming it fits into one of your current ports, with it coming in at under $300 for lens and focus gear, it's a fraction of the cost of most underwater photography related gadgets.

Alex Tyrell

Alex operates Dive4Photos, Thailand's only dedicated underwater photography training facility, located on Koh Tao in the Gulf of Thailand. He also runs regular Photo Workshops & Photo Tours to various destinations around Asia.

www.dive4photos.com
www.atyrrell.com

Brian Skerry

with Peter Rowlands

Brian, thank you for taking the time to answer our questions which I am sure will of great interest to our readers. You are credited as the Creator and Producer of Sea Change: The Gulf of Maine which premiered on PBS on July 24th; written and directed by filmmakers Chun-Wei Yi and Stella Cha it presumably involved years rather than months from idea to completion?

From the television series perspective, the length of time between my initial meetings with network executives until release was about five years. It began with a discussion about producing a documentary series focused on the Gulf of Maine whose underlying theme would be the effects of climate change but would include many related narratives as well. This is a story that I have been wanting to tell for decades. The Gulf of Maine is a 36,000 square mile body of water in the northeast region of North America, stretching from Cape Cod, Massachusetts in the south to Nova Scotia, Canada in the north. It was formed with a unique set of geology and oceanography that resulted in a proliferation of life and, in no small way, fostered the colonization of America. I began diving these waters more than four decades ago. And, while I've always wanted to do a story here, the urgency became greater once this region was identified as an epicenter of global ocean climate change, warming faster than 97% of the global ocean.

Had you worked with Chun-Wei Yi and Stella Cha before?

No.

The delivery of Sea Change: The Gulf of Maine is quite matter of fact rather than hyping and as such it commands more attention and respect for the message. Backed up by excellent underwater photography it must have been hard work both physically and photographically. In general terms what were the sea conditions, temperatures and underwater visibility like?

Diving and shooting in these waters present many challenges that have increased with climate change. These are temperate waters, with temperatures ranging from 4 degrees Celsius to 11 degrees Celsius, and diving here typically requires wearing dry suits. Visibility is generally less than 3 meters and rough seas are common. In more recent times, there are frequent rain events that diminish visibility even further, due to the runoff of the many rivers that flow into the sea. Additionally, climate change has negatively impacted many ecosystems and so many of the animals I used to see routinely, are no longer there.

Having watched the series it is hard not to come away with trepidation at the scale of the job in hand trying to reverse what seems like a sudden collapse of a large marine habitat that had been comparatively stable and productive for centuries. Do you remain hopeful and was your primary motivation to raise awareness to speed up reversal efforts?

The scientific data supports what divers are seeing and have been seeing for a while. We are losing so much in a short amount of time. My motivation was to bring visual context to what climate change means. I feel there has been a somewhat murky understanding of the direct impacts of climate change and how these are connected to people's lives. My hope is that armed with scientific data, personal observations from

a variety of people, and powerful visuals, more informed decisions will be made to implement solutions. I feel that the impacts of anthropogenic climate change for our ocean planet are serious and that we are nearing a tipping point. But there are solutions, and I remain hopeful that these will be implemented.

As a Founding Fellow of the International League of Conservation Photographers you obviously see underwater photography as a key component to changing people's attitudes, was this always in your mind when you started out taking images underwater?

I began diving and making pictures underwater as a teenager. In those days, I just wanted to explore the sea and experience marine wildlife up close and personal. But, over the years, I began to see many problems occurring in the ocean, things that I believed were not evident to most people. I realized, as a photojournalist, I had a platform to reach millions of people and show them both the problems and the solutions. So, while I did not set out with the intention of photographing these subjects or stories, I found purpose along the way, and this guided much of the trajectory of my career. I learned early on that human beings are especially visual creatures and that we respond emotionally to compelling images. We might remember a single frame for the rest of our lives. Photography is a very powerful tool in getting people to care.

The diving conditions on the North East coast of the US must be quite challenging. Was it a hard learning curve but one which has stood you in good stead for the future? Were you learning by yourself or did you belong to a group?

I grew up in Massachusetts and started diving at age 15. A few years later I joined a dive club that had their own air compressor and small dive boat. I was able to dive with more experienced divers from whom I learned. I also started working on a dive charter boat that specialized in wreck diving in New England waters and ran that boat with the captain for about 10 years, gaining a wealth of experience under challenging diving conditions. I believe that this experience prepared me well for diving in pretty much all conditions worldwide.

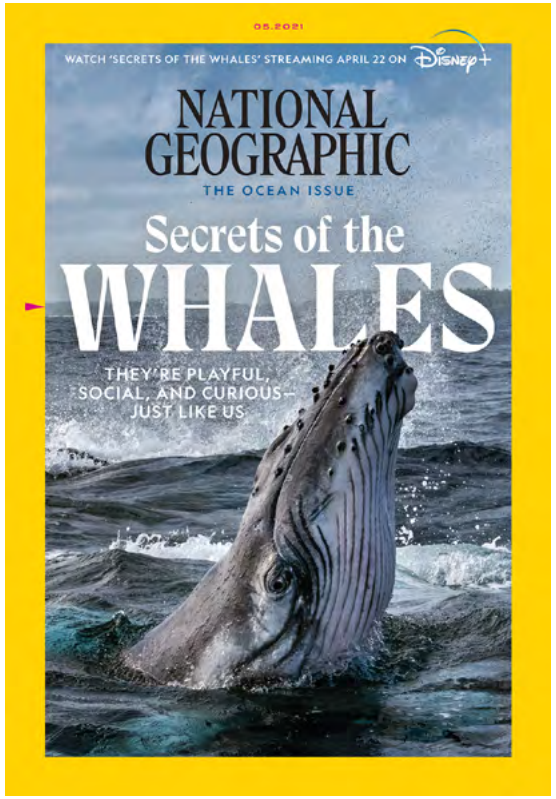
Presumably you grew up and developed (no pun intended) in the film era, what cameras, housings and lighting were you using back then and what was your film of choice?

My very first camera was a used

Nikonos II. I taught myself how to use it and shot mostly with ambient light in the beginning. A number of years later, I bought my first underwater housing which was an Aquatica for the Nikon F3. I tried various films but settled largely on Kodachrome 64. I loved the look in blue water and especially the rich blacks that this film delivered. Toward the end of my film shooting days (around 2004/2005) I was mostly using Kodachrome 64 and Fuji Velvia.

The story goes that Bill Curtsinger was double booked when National Geographic magazine wanted him to shoot of the 1717 pirate shipwreck Whydah Gally, buried in the sand off Cape Cod and he recommended you. Had you worked with him previously and was National Geographic always the direction you wanted your career to develop?

Yes, that is the story. Bill's work was a huge inspiration and influence on me. I had purchased his book, Wake of the Whale, shortly after I began diving. I was enthralled with his photography and the tales of his experiences as a National Geographic photographer. I had read National Geographic from a young age but reading Wake of the Whale really ignited my desire and dream to follow his path. We met somewhat late in his career and dived and photographed together in places like The Bahamas, Australia and New England, where we both lived.



You have done over 30 stories for National Geographic and presumably they have all varied in terms of logistics and difficulty. Do you worry about the responsibility of producing images for such an acclaimed magazine or does it inspire you to go that extra mile for that last elusive shot?

I have done more than 30 stories for National Geographic and nearly every one was my idea. I research

subjects in which I am interested, sometimes over years, and then write a proposal that is presented to the story committee. A key component of my research is determining the types of photos I envision, and the likelihood of success in making them. I do my best to narrow the margin of error for delivering results while on assignment, however, as all underwater photographers know, there are many variables which we simply cannot control. I saw an interview with Steven Spielberg during which he noted that while driving to the set on the first day of any new film project, he inevitably pulls over to the side of the road, gets out of the car and vomits. I completely identify with this. I feel a great responsibility to deliver exceptional results and always know that the bar is extremely high. There's an old saying at National Geographic that goes "We cannot publish excuses," so it doesn't matter if the visibility was bad or a hurricane came through or the animals weren't there, or the boat sank. Either you got the pictures or you did not. With all these things in mind, and my own desire for perfection, I have always worked until the very last moment on every trip for every assignment.

Were you excited by the advent of digital imaging and were you an early adopter? What advantages did you see for underwater photography?

I was a little dubious of digital when it first emerged on the scene and must admit that I dragged my feet in making the transition from film. I used my first digital camera underwater in 2004 and then made the full transition in 2005. Once I made the switch, there was no going back, especially for assignment work. When I was shooting film, I would go off on assignment and shoot hundreds of rolls of film and never know what I had until I returned, sent them to National Geographic for processing, and received a call from my photo editor. With film, I was also limited to 36 frames per dive. Digital was a game-changer. I could shoot more, see exactly how I was doing, and be more experimental. I could also be more efficient in that if I was satisfied with the results of an image I needed for a story, I could move on to something else.

As a Nikon Ambassador we can guess what cameras you use but which housing, lenses and lighting?

For the last several years I have primarily been using Nikon D5 and D850 bodies. With these cameras I have used a variety of lenses but my bread and butter have been the Nikon 14-24mm, 60 mm and 105mm. I have a suite of prime lenses that I occasionally employ as well. I'm using Nauticam housings and especially love their WACP and the EMWL. For many years I have used Hartenberger strobes and in recent years have also brought Retra strobes into the mix. In the last few years, I have been using mirrorless cameras for surface work, especially the Nikon Z8, and really love it. I'm also excited to begin using Nikon Z 6III and really want to bring these cameras underwater.

Do you try and keep your equipment as simple as possible or do you develop any special equipment to get shots that weren't possible with conventional setups?

It really depends on the subject and the types of images I want to produce. In general, I approach most every project with standard equipment that I am currently using. But, there have been many situations in which I will add specialized lighting from generator-powered cable lights to slave strobes or LEDs. I've also worked with engineers to design and build special equipment including pole cams, tow-cams, seal-cams, specialized underwater tripods and remote camera systems.

Do you use scuba and rebreathers? and if so what effects does it have on how you operate photographically?

I use a combination of scuba and free diving for my work. I have also done saturation diving and used submersibles for special projects. I experimented with closed-circuit years ago and recognize their substantial advantages. That said, to some degree, everything has pros and cons but I am comfortable with the methods I use.

The world of learning is totally different than when you started with so much information and imaging out there, do you have any advice or hints that you think would help new underwater photographers aspiring to a career in your world?

I would advise emerging photographers to learn as much as they possibly can (or as much as they desire) about equipment and the fundamentals of photography. Having a firm understanding of the foundational elements of art and photography is essential. Staying current on the tools available to help you realize your vision can give you a broader pallet from which to work and, perhaps, a competitive edge. But I firmly believe that we must pursue our work with passion. Being successful and consistent with underwater photography requires dogged dedication. Without passion, it could become a chore. So, pursue the things you love. If your interest is doing what I do, visual storytelling, then give serious thought to what it is you wish to say. I begin every project with a simple question – "What do I want the audience to take away from this?" Once I have my answer, I create a story plan, then break down the logistics of how I can best achieve the visuals I need to tell this story.

Underwater photographers hold in their hands the tools that truly help people see and can change the world. Find subjects and stories that you wish to document and share. Research, learn, be creative and then make the images and share the stories that help us understand, care, change and fall in love. Build your brand as a trusted source of authenticity to which people can turn for truth. You can make a difference. And you can have fun and find purpose along the way.

Thank you for talking the time to answer these questions and for being such an influential and inspiring ambassador for the underwater photography community.

Peter Rowlands
www.uwpmag.com
Brian Skerry
www.BrianSkerry.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

Dr. Alex del Olmo

with Colin Marshall

You started diving at 18, living in Spain. I've dived in Spain, and the waters there are not exactly teeming with life…! What inspired you to start diving at such a young age?

Indeed, the waters of the Mediterranean cannot be compared to those of the Indo-Pacific, but in the Costa Brava, the area where I learned to dive, there are still some particularly beautiful places, which cannot be found, for example, in Indonesia. Where you can enjoy profuse forests of red and bicolor big gorgonian sea fans, or dive with large groupers, even find some hidden places with red coral branches. The reason I started diving was because of my father and my experiences through my childhood.

Every year we would go to our summer house in Palamós on the Costa Brava in Catalunya (Spain), where every day I was in the sea with my mask and fins. That's where I learned to swim and then later to dive. I also went fishing in my father's boat. Many afternoons, I would review fishing books, with exquisitely drawn animals, and I would imagine what it would be like to see them. That's how it all started...

Your focus is obviously on video for film-making, but do you still take many still images?

No, I don't. I always say I'm not a good photographer. I have tried it on several occasions, but it has never caught my attention. Firstly, I have never had the patience or the desire to understand how flashes work, and secondly I find underwater video much more complete and complex than photography.

I understand that this statement may sound a bit vehement in the eyes of still photographers, but for me filming underwater is much more complicated than still photography, for many reasons. The need for exquisite buoyancy for long periods while you are shooting a long sequence instead of needing to be immobile for a fraction of a second, having the subject always in focus throughout the action and not just for a few seconds, working the focus in manual and not in automatic, or having a much more lower output power in video lights than in underwater flashes, which sometimes makes it almost impossible to get certain types of shots against the light, or at least make them much more complicated. That's just talking about the underwater filming technique, then comes all the editing, music, color retouching, effects, etc...

As outlined in your website https://naucratesuw.com, your team seems to provide a wide range of services, including providing an underwater cameraman, Director of Photography, filmmaker, or an industry-level color grading expert to enhance film colours, or selling stock footage for others to use and you even teach people underwater film making. Which aspects of your work is most enjoyable and which is most commercially lucrative?

I am really lucky to do the work that I am passionate about in life, which means that I love whatever work I do. Whether it's an animal life documentary, working on a commercial, or teaching underwater video. Now, if I had to pick just one, it would be shooting marine life documentaries. Being able to spend time underwater filming the animals, coral or fish, is a passion of mine. With the added bonus that I don't have to direct people, which means it's entirely up to me to do the underwater work and I'm completely focused on it.

The most lucrative projects are usually either TV commercials or documentaries, especially for big brands or streaming services. The downside is that there is always pressure and little time. Quite the opposite of when I'm on my own filming underwater when I always try to stay as long as possible and as long as it takes - as long as I have air - to get the shot I'm looking for.

What is your "mindset" prior to diving? Recognizing you take story-telling very seriously, I assume you have a story planned before getting wet? Do you have a pre-planned vision, or do you adjust your filming "on the hoof"?

It really depends on the job, if I'm hired as an underwater camera operator, I only have to worry about the technical aspects and getting the image that the director has in his or her head. On the other hand, when I'm making marine life documentaries or my own projects, I always, always have an idea in my head, I know what I want and how to get it. Therefore, beforehand I research the area, the species, the best equipment to get the best results. Once I have the images, I take care either to look for suitable music or to hire a composer who is in charge of carrying out musically the idea I have in my head. Therefore, in my case, I leave few things to chance, because when we jump into the water there are already multiple possibilities that things often do not go as we expect. After all, we work with wild animals and in an environment subject to the weather and with limited diving time.

What techniques do you use for film-making underwater, eg what default camera setup do you use at the start of the dive, and how to you maintain stability, both when keeping the camera still (eg when videoing an animal on coral) or panning the camera smoothly?

That's a tricky question, In my case, I change the camera setup according to the type of dive and to my shooting objective. I always say that you should use the right tool for the specific job you are doing. As a general rule, shutter speed at 180 degrees, 4K DCI, Log or RAW, variable frame rate at 30/60 or if the scene or subject requires it at 120 fps. Color temperature I leave at the same temperature as my Keldan (without filters). The rest is in post-production.

Regarding stability it depends on whether it is macro or wide angle. In the case of macro it's easy, the shots are stable because I work with a tripod; it's the only way to make professional shots when shooting small creatures. No one wants to see shaky footage. Regarding wide angle, the camera moves (or shakes) very little for three main reasons: firstly because the bigger the housing the more stability it has, secondly because when shooting in slow motion you can always improve the stability in the editing and thirdly because I have had more than 8,000 dives controlling perfectly my stability and buoyancy. Finally, the bonus is that I repeat the shot (if possible), until it comes out "perfect".

What is your biggest "lesson learnt" about diving or photography that you would pass on to others?

Never leave anything to chance. Always check your equipment as many times as necessary before jumping into the water, never take anything for granted. Experiment whenever you can. But if I had to make a list, it would be the following:

Film underwater as much as you can. The only way to improve your underwater filming techniques is to dive and make mistakes.

Learn from your mistakes. Every mistake you make is a lesson that will help you solve the same mistake in the future.

The camera is not important. Stop self deception telling yourself that you will start when you have the equipment you want to do big projects. You can start with a GoPro or an Olympus or your phone and upgrade it from there.

Study the audiovisual language, camera techniques, lighting, narrative and film editing. Without these basics, everything will be much more complicated.

Be inspired by the work of those underwater content creators you like. Analyze their work, learn from their techniques, understand their resources and why they use them and try to implement them. There is nothing wrong with "copying" and in the process you will surely learn new uses of camera and editing that will lead you to create new techniques or improve them.

Have an interest in painting and filmmaking that is not just underwater. It will help you better understand lighting, composition and narrative.

Be consistent. Work hard, and keep your goal in mind. This is a complicated job in many ways, but tremendously rewarding.

Network with other creators, contact them, don't be shy, but be polite, you get further with a please and a thank you than with your pretty face. You will realize that there are people willing to share their knowledge altruistically, others will do it for a fee and a third group will not even answer you. When it's your turn, remember the first ones and help those who are starting out as they helped you.

Work on your buoyancy, it has to be excellent. There is nothing worse than a shot that shakes too much.

Don't disturb the underwater fauna and flora in search of an image. Be polite and lead by example. You are the guest underwater. Learn the life and habits of the fish you want to film. It will be easier for you to understand them and create a good composition.

Be brave but humble. If you get an opportunity, take it even if it is 10,000 km away. Even if you are afraid

and think you might not be ready, you probably know more than you think. You always have to start somewhere and any opportunity is a good one. You might not be good at first, but if you have passion for your work, you will learn and improve.

What are your "top three" favorite dive sites or general locations, and why?

So many places and so little time… it is impossible to me to do a list… so take it with a grain of salt, because it can change by the day…

For landscape I love "Batu Bolong" alongside "Tatawa Kecil" in Komodo, especially when you have no other divers around. I was lucky enough to dive those places - and many others - again during lockdown. It was an incredible and yet odd experience to dive alone there… Why these two places? The colors of the table corals, the plethora of orange anthias swirling around in shallow water, the chances to see turtles feeding and giant trevallies hunting - especially in brisk current-. If you have clear water and sunlight the place is just from another world.

For macro "Twilight Zone" in Ambon. I dove two weeks 4 dives a day in the same dive spot, never got old. High chances to see two kinds of rhinopias scorpionfish: paddle flap and frondose (when in season) and if you are extremely lucky you might see psychedelic frogfish, and of course stargazers, frogfishes, ghostpipefishes, octopus, hobbit worms, etc. Sadly, there is plenty of trash everywhere.

And for soft corals I am in awe of Triton Bay, especially with the Pinto Arus and Dramai dive sites. Those are the kind of places that you wish it never ends. The profusion of different soft corals, the color explosion and the marine life; I can do those dives for the rest of my life and I will be happy forever. Actually there is a hidden dive site, that I was really lucky to dive thanks to Triton Bay Divers who took me there, that probably was in the TOP 3 best dives of my life, especially as we hit it just at the right time and current. I dove with Dr. Jos Pet who has decades of marine biodiversity conservation experience and both of us had our minds blown with what we witnessed on that dive.

You were a PhD Professor at the Barcelona cinema faculty, teaching how to set up cameras, camera techniques, story-telling, how to shoot. Presumably this was primarily for students of land film-making – or did you find your underwater film-making experience provided insights applicable to land?

Yes, indeed. I always explained to my students at the university about underwater filmmaking, as it is also a potential job in the audiovisual industry. Breathing is really important not only below water but also above. For example, how to breathe with a camera on land while you are doing a certain shot, especially if you are moving yourself with a big rig. When I was a university student we had a master class with a well known South American documentary director, who asked if any of us were divers, and he told us that divers became good land filmmakers thanks to his breathing technique. That was an eye-opening moment for me, as a young diver and not yet an UW filmmaker, I understood that filming above and under water has similarities.

What image of yours are you most proud of and why?

Believe or not, I do not have any preferences. I see my images as a whole. But I guess if I had to mention one that gave me a lot of satisfaction it would be the one of a small and elusive leopard anemone shrimp. I can't say for sure that this is the only time someone filmed one these in the wild, since you never know, but I can say that my film is the only one I have found on the internet, so there is a chance that might be the only one. It gives me special satisfaction because it took me four years to film one, and besides I was the one who found it (I am not great at finding weird critters). Also, of the shot was technically very difficult, since it was in an area of difficult access and the tiny subject was filmed in macro and super macro with manual focus, with only two points of support less than 0.5 cm each to minimize contact with the rock.

When liveaboards started producing videos for guests, we all experienced some "enthusiastic but not so professional" videos from the boat videographer – shaky, panning too much, zooming erratically etc. Your videos are next level, and reminds me of an underwater Emmanuel Lubezki, the Cinematographer for the space film "Gravity". Your slow shots, where the environment languidly unveils to reveal astonishing sights is mesmerising, matched to perfect music. Do you consider this method as your "signature"?

Many thanks for your kind words. Actually it is a very interesting question, and I love it because it allows me to talk a bit about cinema and it is something I put a lot of thought into it as well.

What makes an author, an author?

Auteur cinema is known as that which is fully faithful to the director's will rather than to external interests. Numerous works by Jean-Luc Godard, Pier Paolo Pasolini or Lars von Trier

are significant examples of this concept.

When you watch a Pedro Almodovar film, even if you do not know is one of his films, but you saw some of them before, you will recognise his style, the “common places” he uses, the camera shots, the stories, the colors, etc.

But to understand more easily what auteur cinema is, we should refer back to 1948. In that year, the magazine L’Écran Français published a manifesto by French director Alexandre Astruc. There, Astruc introduced the term caméra-stylo to expose an avant-garde way of making cinema. In doing so, Astruc twinned cinema with literature. If the writer uses words to externalize his message, why can’t the filmmaker use cinematographic resources for his purposes?If a pen (stylo) is enough to write, a camera (camera) is enough to make films. If the writer expresses his convictions in an essay, the filmmaker can do the same in his films.

So, I always used the camera as my personal pen, to create my stories in my very own personal point of view.To me, what makes an author an author, is that his or her work, his or her mannerisms, are recognizable - even if you do not know who is the director of that particular film. A recognizable style regardless of where you see it but when you see it you know who it is. But not only that, an author should also be someone who creates a particular style, who has enough visual strength so that others decide to follow his style. That’s what we call in Spanish, “crear escuela”.

I am certainly not crazy enough to designate myself as an author. That is not for me to say, and the time to do so it would probably be at the end of my career.

I believe you choose the music before you start editing. Is that to help specifically to work out when to break scenes, or to choose the order for showing various animals appropriate to the music or some other factors?

Let’s say I decided the mood of the music before even filming. I already have an idea about what I want to do regarding music and the editing before even start. But once I am done filming, then it comes a long way listening a lot of music until I decide what it works the best with the images and the mood I want to create in my films. Lastly it was so energy and time draining I decided to hire a compositor to create the music for my short movies. Indeed, I use the music changes to break scenes (a very common technique in editing as it helps to “hide” the cuts), and as I said depending on the subjects or the main idea I want to share with the audience the music goes along with the images.

Many divers start focusing more on behaviour as they become more familiar with the underwater world. What is the most memorable behaviour that you have witnessed?

Towards new moon, there is a specific place in Palau where the bumphead parrotfish gather together in large numbers for spawning. During the new moon phases, thousands of bumphead parrotfish gather to spawn, which is considered the largest bumphead parrotfish aggregation in the world. It is like fireworks under water to witness how the males swim towards the surface surrounding the females to release their sperm.

In September 2018, you became the Cruise Director (CD) for the excellent Seven Seas liveaboard. How many years did you manage to keep the dream job of being able to continuously film in the world’s best dive sites whilst pretending to work as a CD (just joking)?! I believe Seven Seas owner Mark Heighes allowed you, and even pushed you, to go take images underwater every time you were not required to lead any dive group. What were the most memorable moments or sightings from your Seven Seas experience?

To be honest when I signed my contract with the company, I was convinced that I would retire in it. That was my idea, and that’s what I told Mark when we met to talk about me being the new CD of the Seven Seas.

I was leaving behind my life in Barcelona, my family, my work at the university, absolutely everything. And I wanted stability and security in my new job. And so I let Mark know, I told him I hoped to retire myself working for The Seven Seas, to which he replied “Mate, I am about to cry!”. I finally worked five seasons on the Seven Seas, a ship like no other, with an excellent crew and an incredible history behind it. Just the fact that I was able to dive and get to know Lawrence Blair or Valerie Taylor, learn from Mark, who is a diving institution in Indonesia, along with Dr. Jos Pet, or have some of the most famous coral experts in the world, make exploratory trips, filming for documentaries... etc. makes my whole experience on board just awesome. I felt so so lucky and I learned a LOT.

We were one of the few boats out there during the pandemic were sailing and also creating new Marine Protected Areas in Indonesia during the lock down.

I have plenty, plenty of memorable times on board… I could write a book about them… but just to say one that stills “haunts” me is being able to dive in Komodo, or Raja Ampat or Banda Sea absolutely ALONE, with no other boat in sight or divers. I

imagined for a moment what it must be like to dive in these places as the first explorers did, with no other boats around.

The reason I left the job was for family. Without a doubt I can say that the best years of my life have been aboard Seven Seas, the crew is my second family and Mark was never my boss, he was always a very good friend whom I respect and admire. He is a great person. If I had not had to return to Spain I would undoubtedly still be working on the Seven Seas.

I find most videographers irritating, hogging sightings until the animal disappears away from their "interrogation" lights. Am sure videographers also don't like flashes in their films from still photographers who take too many images (like me). When I dived with you in March 2018, both of us as guests on a liveaboard, I noticed you would often dive and video on your own. As a Cruise Director did you separate videographers and still photographers or did you have a better way to keep the two species from irritating each other?! Or perhaps your guests were more tolerant than me…

Haha! Actually what it happens with the flash of the photographers is you can see them on video, and it is quite annoying, and also depending how you set up your White Balance, and if you are using filters, those flashes can appear as well red-ish lights on you frame. Not good. To avoid that I just go by myself if I already know the area, or if I do not, I go with a private guide. Local knowledge is invaluable, especially when you need to get the most out of every dive. I cannot spend time looking myself for critters.

I was very flexible with photographers and videographers -actually I am a very flexible person- during my time working as a CD on the Seven Seas. I always play it by ear, depending on a lot of factors, i.e. if it is a charter or not, or if they come with a dive buddy or not, etc. Charters are easy, as everyone knows each other and we had mostly charters. When it was not, I used to group together UW photographers, then divers without cameras, and finally videographers, but I have to say we generally had very few videographers. I was fine as well letting photographers and videographers doing their own thing as long as they follow the guide.

You have won many awards at many prestigious international underwater film festivals, and your films have been broadcast on a variety of national & international television networks. What are your proudest achievements at festivals?

To be honest… I do not care much about awards. Of course it is nice to be rewarded and recognized for your work, and I am honored and extremely grateful for all the prizes I won, but truth to be told was never my main goal. You know, doesn't matter how many awards you won or might win, at the end of the day, you return home, the world is still spinning around and you make yourself a hot chocolate alone in the kitchen before to go to bed. Nothing really changes. You have to stay focus and remember that you are doing this because is your passion in life and not for any award. I've seen it in other (not many, thank God) UW filmmakers, obsessed in only winning film festivals. There are incredible UW filmmakers out there that they are not even sending their work to international film festivals.

BUT, because you asked me, I have to name 2 awards that made me extremely proud. The first one is when I won the first prize at the CIMASUB, as is the best UW film festival in Spain -and I am from there-. So, it is very special when your work is recognized in your own country. The CIMASUB is not only the oldest International Underwater Film Festival in the world, is as well the best UW Film Festival in Spain and one of the best in Europe.

The second one was the Wetpixel Masters Underwater Imaging Competition, I won the first prize twice in a row. And it was a special moment because some of the UW filmmakers that inspired me won the award before me, like Lee Burghard or Evan Sherman. Thanks to them I found myself doing what I loved the most, filming underwater.

You have made a series (how many - 20?) of videos titled "Out of the Black & Into the Blue" for many different dive areas, eg Lembeh, Alor. I believe your Banda Sea episode won Gold, and Triton Bay won Bronze in the Wetpixel Masters Underwater Imaging Competition 2022. What do you do with these, ie are they commercial films, or are they simply for film festivals, vehicles for advertising Naucrates?

Hahaha! Between you and I, I don't even remember how many chapters I've done, but there is a lot!

Indeed, they served as advertisements for my work. It is an excellent platform to be recognized and to get to more people to know your work, especially those who work already in the field, which means they are the right target to maybe get hired. Thanks to those prizes, besides being able to travel even more to film to other locations, I got some jobs as well, like the two documentary series about the Coral Triangle I was able to shoot, sold internationally to several

main TV channels and also online platforms.

I love the fact that you downplay the importance of having the fanciest and latest equipment and instead focus on story-telling, narrative and accompanying music. Do you see evidence of this in festivals and competitions, eg someone winning a prize from taking a film with a simple iPhone in a housing?

I always told to my students when I was teaching at the university that they had already the tools to create a short movie inside the pocket of their pants. Cameras are just tools. Of course depending on the camera, the lights, lenses, etc… the result can be more or less "cinematic", but the most important part is the person behind the lens. I didn't see yet someone wining price with a phone, although I've seen some works filmed with GoPros for example, winning awards, and briefly from time to time I saw a few clips filmed with iPhones to name a brand), that seems quite promising.

I do believe that sooner than later we will see more short movies filmed with UW housings for phones, but professionally speaking, we still have a long way before that happens in a gig for an underwater professional work.

Do you see any future where your videos are taken with underwater drones, going to deeper-than-normal depths and minimizing disturbing the wildlife with bubbles? Or are we already in that future?

I think we are missing here a bigger picture here, probably the next step will be videos generated with AI, gradually being more and more difficult for the normal viewer to determine if the images are real or just fake. It worries me a bit, to be honest, but let's see what the future brings regarding UW imaging, especially in my area of expertise.

You have worked with Dr Lawrence Blair, who wrote & co-produced "The Ring of Fire: An Indonesian Odyssey", which won two Emmy awards. I believe they then asked you to be the Underwater Director of Photography and underwater cameraman to shoot the documentary "Behind the Seen", which won the best short documentary in the Bali International film Festival 2023, the most prestigious international film festival in Indonesia. Any (repeatable) anecdotes from working with Lawrence?

Yes! I was so happy for him and his team when we won the award, and of course I was over the moon when Lawrence wanted me as the main UW camera and UW DoP.

I met Lawrence the first time a few years ago on The Seven Seas, and immediately we got along very well, not only due to his charming personality and the GREAT stories he has. I felt honored to meet him and had the chance to know him better, he really is a living legend. but also because he speaks Spanish (among other languages), and it was very nice to speak for a few days in my own language with him.

For the documentary one of the goals was be able to film salt water crocodiles. There were stories about a place in Indonesia with a pristine lake with clear water where you can find big crocodiles and giant sea snakes as well. We went to Wetar with the Seven Seas to find it and film it.

The lake was not close to the shore where we anchored. After a two hour 4x4 drive I had to carry my rig (camera, monitor, housing, etc) through the jungle with all the crew with 30 extra kilos to arrive to a huge lake where it was murky water and no signs of giant sea snakes.

I decided to NOT enter into the murky waters because I wasn't comfortable at all, but Lawrence was teasing me (in a funny way) to get into the water while he was well secured on land not too far from the shore of the lake while he was doing his stand up to the camera. We finally were able to find one crocodile using our drone. It was massive but as soon as the drone came close, he jumped into the murky waters and disappeared.

So I dragged my ass out and carried all my camera gear – again - by foot through the jungle once more without having shot a single image of the "pristine lake with giant sea snakes and crocodiles".

I believe you were doing something with Netflix – what is that?

Can't say much yet, but my next project will be filming for a long documentary exploring an underwater lost city that was submerged and forgotten for centuries and it seems it is still in good shape. It is a place not very well known and there is not a lot of info about it. As we speak there is still a lot of ground to explore as they have not yet mapped the whole city.

It will be a quite challenging project, as it is in cold water and limited visibility and the dives will not be shallow. My goal is really to capture the mood of an underwater ghost city lost in time.

Thanks you for such enlightening answers.

Colin Marshall
colintrmarshall@yahoo.com
Alex del Olmo
www.naucratesuw.com

NAUCRATES

underwater filmmaker

www.naucratesuw.com

Light In The Underworld

By Martin Broen

Although I've been diving for 30 years, it only recently became a true passion, leading me to take up underwater photography, and both started with a visit to a Cenote in the Tulum 8 years ago

After several dives in the open sea around Cozumel, I decided to try a cenote called Angelita. I remember feeling disappointed when the guide explained that we wouldn't see any colorful fish, coral, or much life at all, but just go around a vertical sinkhole with sediment at its.

With very low expectations, we began our descent, staying close to see our dive lights in that tinted water. But a few meters down, the visibility became crystal clear, with no sign of being underwater except for our bubbles. As we continued down, a cloud with branches emerged beneath us, and I had the mind-bending experience of floating in mid-air above an enchanted forest.

I began diving in the recreational cenote caverns (accessible to all diving levels) with my first APSC mirrorless camera, progressing in both my diving and photography skills as I ventured over time deeper into the caves. The further I went, the more challenging the photography became, but also the more rewarding. Each cave in Yucatan is entirely different, offering unique experiences and photographic opportunities.

Today, as a full cave, technical, and CCR diver using a Sony a1, I've become proficient in capturing the essence and uniqueness of each cave. From tannic acid pockets that naturally modify the water's color (no Photoshop needed), to hydrogen sulfide clouds or haloclines, all in combination with unique speleothems that decorate the caves.

The more I dove, the more I discovered the beauty and secrets of these caves, uncovering unique fossils of extinct Megafauna, indications of the first Paleo Americans and Maya artifacts preserved in their

Cenote Angelita, x4 shot Vertical Panorama, capturing the cenote entrance above and the hydrogen sulfide cloud below, ISO 6400, f:4.5 and shoot at 1/30sec w/low natural light
This image captures that magical feeling I was experiencing. At the time, however, I wasn't an underwater photographer, and when I tried to capture the shot my GoPro 3 all I got were dark frames. Frustrated, I surfaced decided to learn photography.

One of the many failed attempts of a landowner to increase the open water of a cenote by digging the land; disrupting the normal underwater flow and causing the water to fill with bacteria, leading the owner to abandon the project after destroying it.

A perfectly preserved 200.000 year old turtle shell.

A Maya skeleton in the deep sinkholes of the ring of cenotes

Pristine Speleothems and a massive column highlighted by the perfect visibility of the filtered water

flooded tunnels. Collaborating with scientists to create photogrammetry models and 3D prints for them to study.

These caves hold the data of the first human-made mass extinction, where the local fauna faced a new predator that hunted at the distance with stone tools and sophisticated social organization, ending with 75% of all genera of an already stress megafauna population pushed to extinction. North American species like Lions, Camels, Horses, Gomphotheres (Mastodonts), Giant Sloths or sabretooth tigers got extinct and their fossils remain protected and hidden in the flooded caves.

Diving and photographing these caves feel like exploring another planet—an experience unlike anything else. However, it also pushes the limits of your skills and gear. You'll find yourself constantly pushing your camera to its highest ISO with acceptable noise, shooting your lens wide open rather than at the optimal aperture for a dome, and mastering the art of staying still while shooting at 1/15 second or even slower. All this takes place in a pitch-black, overhead environment, surrounded by fragile

The "God Rays" of the sun passing from the small Cenote entrance illuminating the Hydrogen Sulfide cloud below give a theatrical look that can only be achieved in this environment

While cave tunnels open in different directions in the same plane, it can also open up and down

formations, sometimes hours away from the nearest exit to the surface and safety. But the images you capture are truly unique, and they've helped me win over 50 different photography awards.

Over time, I've witnessed how we're destroying this environment before it's fully explored, the rapid urban expansion driven by tourism that lacks proper waste management, with toilets draining directly into the soil or inside the cave, with pig farms and agriculture fertilizer polluting the very water they rely on, the deforestation and wildlife habitat reduction, and developments like the Maya Train, along with failed attempts to enlarge the cenotes open water to attract snorkeling disrupting their natural flow, are all destroying this incredible natural wonder. Which has instilled in me a deep sense of responsibility. The phrase 'You will only protect what you love, and love what you know' resonates with me, especially when I realize that the landowners above the largest flooded cave systems in the world, and which sustain life in this ecosystem, are completely unaware of what lies beneath their feet.

That's why I created the book, Light in the Underworld. It's my attempt to make you fall in love with the Maya Aquifer, regardless of how claustrophobic you might be, or how much strong your pre-conception that in cave diving you will only see "wet rocks". And hopefully recruit you to help protect this environment as well. The book tells the fascinating story of the aquifer's formation, showcasing the immense variety of experiences you can find within through photos I took in over 250 cenotes, and revealing its secrets. I've employed a wide range of photography and lighting techniques, Using mostly off-camera lighting, to diffusers, High Dynamic Range, Panoramas, long exposures, light painting, infrared, or drones.

My background in design thinking, which encourages a 'make-to-learn' approach, drove me to explore, test, learn, adapt, and cross-pollinate techniques used on the

What's on my cave diving gear box for a typical shallow cave dive system in Open Circuit. Camera: Sony a1. Lens: Canon 8-15mm w/Nauticam mini glass dome. X3 BigBlue 33.000 lumen video lights. X3 BigBlue 1.2000 lumen lights for navigation. SeaCraft DPV. x4 tanks with Ean 32. Razor wing

A blue crab fishing in the flow of the waters close to the exit of the cave into the sea

The Blue Abyss, and in cave sinkhole, with it white walls reflecting the water column. Shooting upwards from 65m

surface. Instead of getting frustrated by the challenges and failures, I found joy in the process of achieving the perfect shot, treating it as underwater landscape photography, perceiving the directional natural light passing by the Cenote opening as it was a stage light and using the unique lighting conditions of the environment to my advantage.

This is the core of the photos in the book: approaching photography with no preconceptions and a willingness to experiment, which allowed me to capture the caves in the best light possible.

I was fortunate to get into underwater photography at a time when technology had reached the perfect stage for these types of photos. I started with a mirrorless Sony camera, in time when BigBlue lights of 15,000 lumens or more were available, and slim-profile Razor sidemount wings allowed me to squeeze into tight spaces. This setup enabled me to use off-camera lighting, eliminate the need for canister lights, and experiment with settings that experienced underwater

Pristine Speleothems and a massive column highlighted by the perfect visibility of the filtered water

photographers might have avoided—all while enjoying the process.

Another key to achieving these photos is my dive buddy, Nicolas Casella from CenoteXperience in Playa del Carmen. He's the model in most of these images, and after over 400 dives together, we can create these shots effortlessly. Nearly all the images were captured on our first visit to a particular cenote or cave with no previous photo planning. Following the rule of thirds: using one-third of our gas supply to penetrate and observe the cave, another third to exit while shooting the photos, and reserving the final third for emergencies in the unforgiving overhead environment. Our mutual understanding and quick communication in pitch-black conditions, using lights and single-hand signals for technical diving, are crucial for that fast approach, good composition and a safety.

Of course, proper training is essential to protect the fragile environment and ensure a safe dive. Managing the photography gear while handling multiple gas sources and technical equipment can easily lead to task overload, so it's vital to progress gradually and push your limits carefully.

You'll often hear that you should be able to operate your camera controls with your eyes closed— well, these are exactly the conditions you face in any cave dive.

As underwater photographers, we're privileged to witness the marvels of the natural world that few can access. With this privilege comes the responsibility to share our images with the public, raise awareness, and support conservation efforts. We are the visual storytellers that scientists and conservationists need as partners in protecting natural ecosystems. The stronger our images, the greater the chance that someone will stop and take notice. It's crucial that we shift from a competitive mindset to a collaborative one, as time is not on our side.

Martin Broen
www.martinbroen.com

The book Light in the Underworld, published by Rizzoli with a foreword by Dr. Alex Mustard and Paul Nicklen, will be released on September 3rd in the U.S., followed by a worldwide release. It will be available on Amazon, Rizzoli, and other major retailers

https://www.rizzoliusa.com/book/9780847830909/
https://a.co/d/4K20rnO

My compact way

by Tony Reed

When I was asked by Peter Rowlands of Underwater Photography Magazine to select some of my favourite photos taken with a compact camera to showcase their capabilities, I jumped at the chance to show off and talk about compacts as I feel they get a little bit of bad press in the underwater photography world. With technology ever evolving and electronics becoming smaller isn't the future compact?

With that said they are still very limited in what they can do at the moment so for a lot of the time while taking photos you will need quite a bit of patience to capture sharp images!.

I do really enjoy using compacts for many reasons! The main reason being you can still get great acceptable photos with very limited technology. The fun part of that is the challenge in creating images you like the look of yourself. Another reason is the size of the cameras and housings as I do enjoy getting the camera into small crevices where the big housings just can't go! The results are often capturing some of the hard to find critters which don't like having their photos taken.

With the reduced size comes the reduced cost of transporting equipment abroad which is how it all started for me! With a big trip planned with lots of travel, I could not take the extra baggage for both cost reasons nor could I carry it all. On my return I was actually quite happy with my own photos for a change and whilst thinking about which way I was going to go in the near future I kept using the compact camera and trying to push its limits! The longer I used it the happier i became not only with photography but diving itself! I could just clip the camera on and enjoy an hours dive without worrying about photos! It made it not only enjoyable but cheap and easy too and that was that! The decision was made to stick with the compact camera. By being happy underwater I could think more of what kind of images id like to try and take, compositions and lighting just to challenge myself to see what I could achieve!

Thurlestone Rockpool star trail double exposure using the live composite mode - Olympus TG4 with Weefine WFL-02 Lens and Light and Motion video light

A more recent compact camera I have purchased mentioned in camera double exposures in the read out but I have not had a look at that yet! For double exposures I use the technology in editing software rather than in camera for the simple reason it hasn't been available in the older compact

Jelly and dive screams Olympus TG4 -Weefine WFL-02 Light and Motion Gobe wide light - Exposure Time: 1/640, FNumber: 2.8, Focal Length: 4.5

Disco Dorris on star ascidians from porthkerris- Olympus TG4 -Weefine WFL-02 Light and Motion Gobe wide light -Exposure Time: 1/200, FNumber: 3.5, Focal Length: 10.29

cameras and its also relatively easy to do using the software in app rather than the software in camera! I know it's a skill to do in camera double exposures but it's still the same process of mixing two photos with technology so maybe that's just me wanting the easy route rather than the harder one. It is something il be trying with the newer compact tho to see how much more difficult it is and to challenge myself once more.

99 Percent of the time my set up is really simple and does often surprise so many people! When they ask what I use and I tell them just camera and housing usually clipped on until I need it and a small light and motion gobe 850 wide video light I won 10 years ago in a videography competition I get the "oh wow really is that all" response. It genuinely surprises people. The video light I won is actually brilliant for really close up critters as the light setting on minimum drops down to 80 lumens which really helps bring out internal colours of anemones and sea slugs. It's also tiny so it fits in my pocket and when needed i use the bar mount option and clip it to my finger on my left hand while using the camera in my right. I also carry in my other pocket my wide lens (Weefine WFL-02) which I have found to be brilliant also for showcasing so many bigger subjects and getting wide structures in for the

My rig. OM TG4, Weefine WFL-02 lens and hand held video light. Simples.

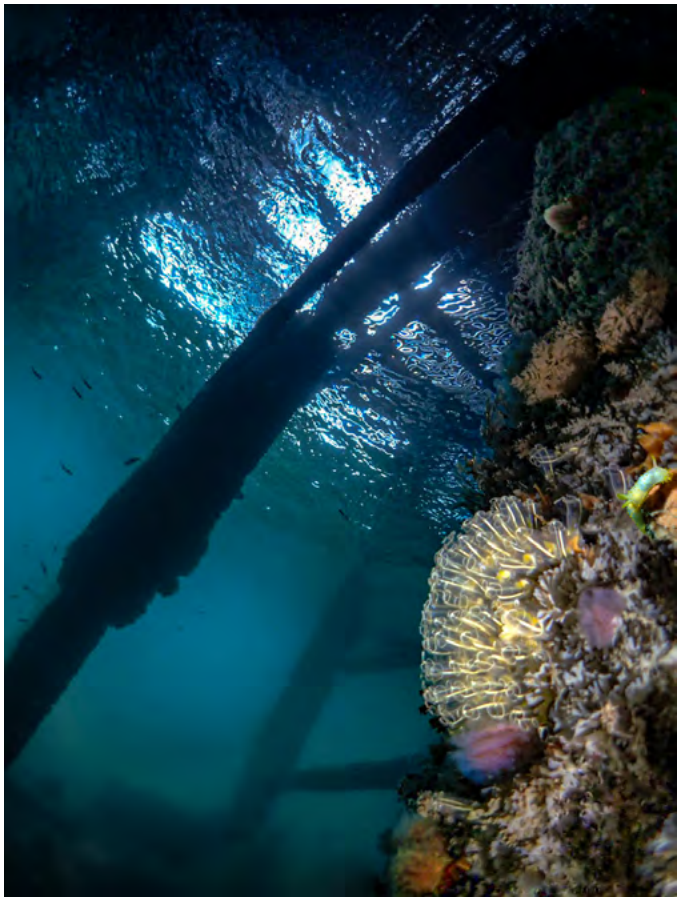
Sunset split - taken during this year's annual Torbay BSAC Splash In competition at Fishcombe, using Olympus TG4 -Weefine WFL-02 Light and Motion Gobe wide light. Exposure Time: 1/10, FNumber: 2, Focal Length: 4.5

Reflections taken at Hop Cove South Devon, Olympus TG4 - Light and Motion video light, Exposure Time: 1/160, FNumber: 3.2,Focal Length: 5.5

double exposures. That's my usual go to set up.

It wasn't until I started entering competitions that I found a new love for photography, a cause, setting challenges and pre thinking of images id like to try and capture! With entering came a lot of fun but also the feedback from the judges which made me up my game and take everything onboard from all the experienced judges and competitors alike! I learnt so much from everyone involved and started to see improvements and some success with each year I entered up until the point of winning on a few occasions. That then lead me to different outlets with companies etc and im currently influencing for a relatively new brand to underwater photography, Marelux who I am happily taking photos for at the

Tompot - Olympus TG4 - microscope mode with Light and Motion Gobe wide light Exposure Time: 1/100, FNumber: 4.7, Focal Length: 16.48



Life in those legs- from Swanage Pier looking up at the structure while capturing the life on the leg. Olympus TG4 -Weefine WFL-02 Light and Motion Gobe wide light- FNumber: 2.8, Focal Length: 4.5

Anemone shrimp from Babbacombe - Olympus TG4 in microscope mode with Light and Motion video light- Exposure Time: 1/200, FNumber: 3.5, Focal Length: 10.00

present.

With some time, effort and patience you can achieve goals and go places with using compacts!

I always look forward to entering the next competition and if you have not entered before it's worth giving it a go! Even if it's just for the fun day it usually is! Not only do you get great constructive advice from the judges you also get a sense of achievement even if you don't quite succeed on occasions. I always thought when I started with my little compact camera that it was just not good enough to enter competitions and I think a lot of people feel the same way. Every one wants to improve don't they? Take the leap and give it a try! You just might surprise yourself and it could take you on a different dive journey completely!

I would like to think that I personally represent compact cameras here in the UK in a positive way and I hope I have shown that with a bit of work and effort any one can achieve acceptable images using compact cameras and the limited technology they offer. For many more images taken with my set up please feel free to take a look at my instagram account.

Tony Reed

www.instagram.com/tony_reed_underwater/

Modelling

by Tim Gurney

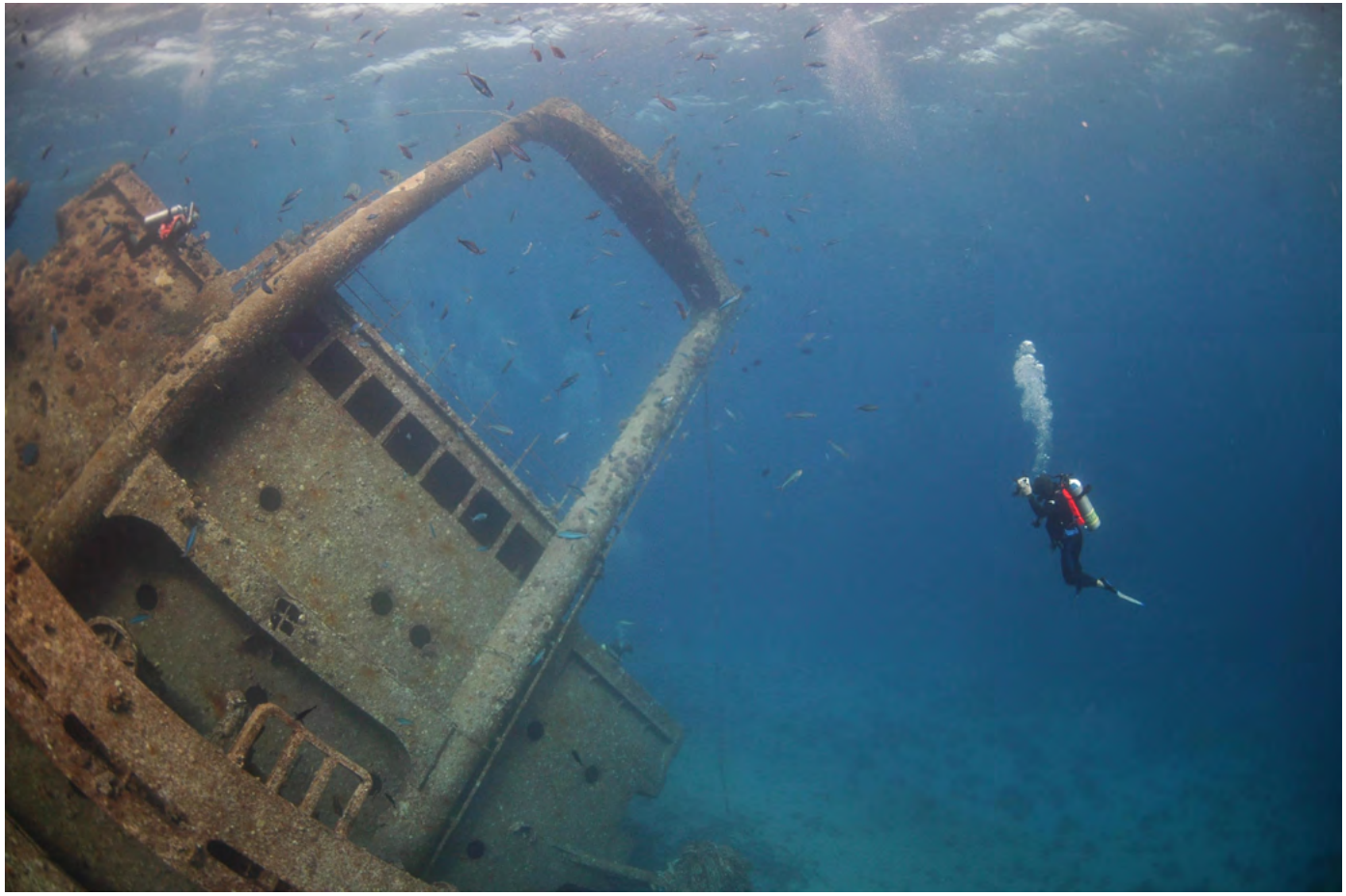
Photos by Peter Rowlands

A wide-angle image of a reef, a wreck, a school of fish or pelagic can look pretty spectacular. Adding a diver is even better for that Telling-A-Story type shot The diver often gives an idea of scale, usually confirms the scene is underwater, and makes the picture one to which non-divers can generally relate.

The problem can often be, however, “the diver”. Viewed dispassionately, the diver may sometimes actually detract from the image. Legs and fins splayed all over the place, dangling gear, eyes closed, bubbles over the diver’s face, weird positions….

How to get over this? The more underwater photographers develop their skills, the more they realise that time, planning and effort are rewarded with better results. Of course you can go out, shoot away and get lucky. We’ve all been there. But to create a high quality image regularly takes patience and effort.

So, the diver in the shot? Same approach: patience and effort. For starters, getting the right diver as a model: comfortable in the water, excellent buoyancy skills, patient, calm…. unflappable, willing to persevere. Sad to say, but generally good-looking and reasonable physique might be considerations too. Then, unless you are shooting radical chic or the 1960s look (love those oval masks!), wetsuits that don’t have holes, gear that looks like it was probably bought in the 21st century.



Divers in an image, especially on wrecks, help give a great sense of scale.
Nikon D70, Subal housing, 10.5mm fisheye 1/45th sec @ F2.8. Available light. Original Magic Filter.

Brief the diver: how you plan to shoot, the type of image you are hoping to achieve and against what background. It helps, of course, if you have dived the site before. Even better if the model has too. Do you want the model as background: just helping put the scene into a context? Perhaps in the background exploring the wreck/reef, pointing a torch to highlight a feature? Or a more close-up portrait-type shot?

Agree some basic signals: up, down, left, right, blow bubbles with long, slow exhales, smile (honestly!), repeat, repeat again, stop, slow, go backwards, get close, get further away. I’m sure you can think of others. My partner is excellent at various other signals with which she likes to respond. These normally involve fingers - often a raised middle finger.

And so to the water. Buddy check of course.

Ungainly fins/legs are distracting. Keep an eye on their positioning and fire when they are tidy.

Nikon D70, Subal housing, 10.5mm fisheye 1/125th sec @ F5.6. Available light. Original Magic Filter.

Models exhaling bubbles or not is personal preference but I prefer them.

Ripping currents and serious drop-off walls are reasons for extra caution. The safety of you and the model are paramount. So if either of you are struggling or uncomfortable, there's always another time, another place and another dive.

But assuming all is well, find the type of location that you have agreed and let the fun begin. Indicate to your model how you'd like them positioned against the backdrop; the direction of travel; carrying a torch which is switched on; and what point do you want them to stop or is it a swim-by? Which way do you want them to look - at the camera (hmmm, maybe not), at the reef. Maybe though you want to be able to see their eyes which might require some vague contortionist movement. Slow exhaled bubbles add drama and context.

No doubt it will take several attempts. Fins in horrible positions, eyes closed, bubbles in front of the mask, pesky fish in front of the eyes, wrong angle…. (see why patience and perseverance come in?). So back off the reef or wreck a little, review what you have with your model, give them a welcome breather - and, probably, do over again. And again. And, probably again. When you get the images home and on screen, you will see

Underwater photographers can make good models because they are usually concentrating on the subjects they are shooting and are good at controlling their buoyancy.
Nikon D70, Subal housing, 10.5mm fisheye 1/125th sec @ F5.6. Available light. Original Magic Filter.

Nice composition but ungainly fins/legs.

Nice pose and breathing but the fish are distracting.

Bingo.

Wrecks are great subjects to photograph and to use to frame models.

All photos - Nikon D70, Subal housing, 10.5mm fisheye 1/125th sec @ F4. Available light. Original Magic Filter.

just how many are not quuuuuite right.

But with luck and effort, you should come home with some images that work. And, fingers crossed, that your model likes too - especially if you want to use their services again. Do give them copies. If it's been an especially successful or challenging day why not print and frame a copy of a significant image as a thank you? If you'd like to try and sell the images, ask the model if they'd sign a model release which then makes commercial sales feasible.

Adding a model to an underwater image helps tell the story of what you are seeing. But it needs careful planning, execution, patience and lots of signals. Even if they are a single middle finger.

Top Tips for models:

- breathe with a slightly tilted head so bubbles move away from the mask
- straightish legs with one leg slightly bend at the knee. This creates length and elegance.
- tuck away gear so nothing is dangling
- big logos/brand names home create intellectual property issues in trying to sell the images
- de-fog mask
- exhale slowly - a long bubble stream looks good
- tuck away long hair to avoid weird ocean-created hair arrangements or hair in front of of the mask

Tim Gurney
www.waterpixels.net

Peter Rowlands
peter@uwpmag.com

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Marshall's Mysteries 17

Answers on page 75

Purists say we should use scientific names when referring to animals. Common names are disparaged as they are not unique and can cause confusion. But common names are often perfect to describe the attributes of an animal, allowing many people to know instantly which animal is being referred to. Here are my favourites – can you identify their common names?

Small Ads

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

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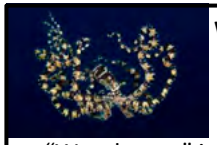
Marshall's Mysteries 17 - Answers



Wunderpus Octopus *(Wunderpus photogenicus)*

"Wonderpus" is a combination of the German "wünder",meaning "marvel or wonder", and Octopus. (The scientific name is pretty cool as well). This beauty was amazingly not discovered until the 1980's, and described only in 2006.

Picasso Triggerfish *(Rhinecanthus aculeatus)*

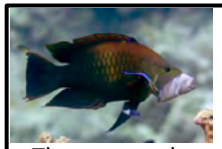
A very appropriate nod to Pablo Picasso in his cubism phase. Similar to the Hawaiian State Fish, Rhinecathus rectangulus, which has the phenomenal name of Humuhumunukunukuāpua'a ("triggerfish with a snout of a pig").

Tiger Shrimp *(Phyllognathia ceratophthalmus)*

The name epitomizes the behavior of this small shrimp. On a number of occasions, when trying to photograph this spectacularly patterned shrimp, it has relentlessly marched towards me, fearlessly trying to intimidate me!

Sea Goblin *(Inimicus didactylus)*

This scary fish has other well-deserved names, including Ghoul, Goblinfish and Spiny Devilfish. It buries itself in sand, with spines ready to pierce a misplaced foot or hand, injecting venom which can be deadly. It has no known predators.



Slingjaw Wrasse *(Epibulus insidiator)*

The name acknowledges that the fish has the most extreme jaw protrusion amongst fish. It can quickly protrude its mouth more than half the head length to capture prey. (Image shows fish extending jaw whilst being cleaned.)

Hairy Norse God Nudibranch *(Aegires villosus)*

The genus Aegires is not Latin or Greek, but named after Aegir, the Norse personification of the sea, often pictured as a stereotypically hairy Norseman with a wild white beard. Hence the common name for the slug with the wild papillae.

Wobbegong Shark *(Eucrossorhinus dasypogon)*

Wobbegong is an Australian Aboriginal word, meaning "shaggy beard", referring to the appendages around the mouth of this Carpet Shark. The shark is an ambush predator, the growths providing camouflage to surprise and catch fish.

Pom-pom Crab *(Lybia tesselata)*

Like a cheerholder's pom-poms, the crab holds venomous anemones (often Triactis producta) using modified claws, waving them around in self-defence or to stun prey. The anemones benefit from greater access to oxygen & leftover food.

Pegasus Seamoth *(Eurypegasus draconis)*

The name was taken from the winged horse Pegasus, from Greek mythology, as the fish looks like a horse (and moth). It has wing-like pectoral fins, a long horse-like snout, and a body cased in bony, protective plates.

Bobbit Worm *(Eunice aphroditois)*

Inspired by Lorena Bobbitt cutting off the penis of husband John after he raped her. The appendage was found (she threw it out of her getaway car) and reattached. The worm has frightening scissor-like jaws and can cut prey in half...

Flamboyant Cuttlefish *(Metasepia pfefferi)*

This cuttlefish is usually pretty drab as it is camouflaged to be invisible. The switch to a flamboyant display takes less than a second, to scare away a threat – like a diver (also for courtship rituals or when males are fighting over a female).

Koran Angelfish *(Pomacanthus semicirculatus)*

In the juvenile phase, the fish's caudal fin develops a pattern of blue lines resembling Arabic script from the Koran, the Holy book of Islam. These lines fade out as the fish grows into adulthood, but the name remains.

Donald Duck Shrimp *(Leander plumosus)*

The Donald Duck reference is due to the large "nose" (rostrum) resembling a duck bill. The rostrum can be used for attack or defense and to improve stability when swimming backwards, (from the Elmer Fudd fish (bad joke))...

Halloween Hermit Crab *(Ciliopagurus strigatus)*

This crab celebrates Halloween on a daily basis, with the dark red & orange striped legs and even orange eye stalks. It lives up to the scary aspect of Halloween as it prefers (albeit empty) deadly Cone Shells as a home.

Ghost Nudibranch *(Melibe colemani)*

Delightfully described as a "string of snot in the water". Discovered by the great Australian naturalist, photographer and author Neville Coleman very recently, in 2008, described in 2012 (a month after Neville sadly died).

Pajama Cardinalfish *(Sphaeramia nematoptera)*

The Pajama reference in the common name is from the fish having a pattern of polka dots and stripes, resembling old-fashioned children's pajamas. The relatively large eyes are because the fish is nocturnal.

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

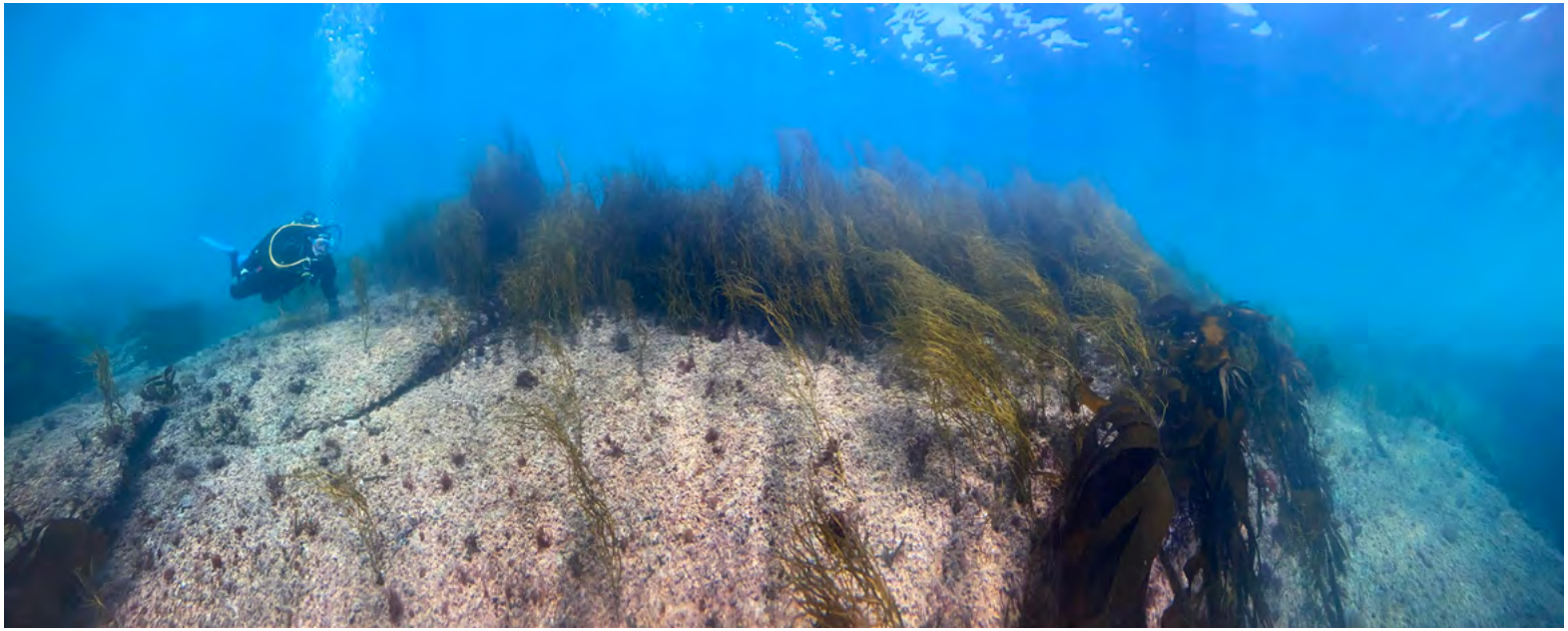
Size - Maximum length 20cm i.e. horizontal pictures would be 20 cm wide and verticals would be 20cm high.

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.

My Shot

by Peter Rowlands



iPhone 'Pano' in Divevolk housing with dome port. Plymouth, UK.

Hi again. It's me because no 'My Shot' shots have been sent in for this issue :-(

I've always been a fan of the Smartphone and the iPhone in particular not just for shooting quality stills and video but also to produce panoramas; achieved by panning the camera from left to right and then the camera software stitches the images together to create a seemless image.

It doesn't always get it right, especially underwater where there are very few straight lines but it's a simple job to reshoot from a slightly different angle and see how it gets on. The real beauty is that you can see the image 'developing' as you pan.

Clear and blue are not two adjectives which usually appear in the same sentence as UK diving but if you get the right conditions, sun direction and a good model (thanks Peter Rustage) then you are in with a chance. It also helps to use a GreenWater Magic Filter, but then I would say that, wouldn't I!

From an underwater point of view, the Pano feature allows you to create an almost unique feeling of space, left to right, which is even wider than your own eyes can see and this works especially well in limited visibility and, because you are working with available light, the camera rig can be simple and light without any arms and strobes.

The files sizes can end up quite big (for an iPone) and they retain plenty of detail. This image came out of the iPhone at 9234 x 3764 pixels which is 325.76cm x 132.79m so should print up to an impressive size.

The Pano feature is not available in most underwater housings because they are controlled by an app which does not allow access but the Divevolk housing, with its unique membrane screen allows you to use the iPhone just as you would on land.

Peter Rowlands
peter@uwpmag.com

Do you have a favourite shot or an image/s which made a dive special?
E mail yours with some text to
peter@uwpmag.com
and yours could be the next My Shot/s
(It's very easy. Images can be any size bigger than 20cm (horizontal or vertical) @ 150dpi saved as jpeg format and about 500 - 750 words would be fine.)

Parting Shots

by David Fleetham

I have seen many similar masses to the one that drifted through the beam of my light on this blackwater dive three miles off the coast of Guam. In the past I ignored them thinking they were some sort of snot from Poseidon brought up with the nightly upwelling of guests that were the target of this activity. As often occurs on blackwater dives, the last twenty minutes had been slow as far as critters went and I decided to exercise my Canon 100mm macro lens on this seemingly unattractive bundle. After several online inquiries it turns out that this bundle of sticks are actually a blue-green pelagic cyanobacteria, Trichodesmium sp., also known as cyanophyta and “sea sawdust”.

Large gas vesicles allow Trichodesmium to regulate buoyancy in the water column. These gas vesicles can withstand high pressure allowing them to move vertically through the water column harvesting nutrients. Trichodesmium is able to fix atmospheric nitrogen into ammonium, a nutrient used by other organisms. Trichodesmium is thought to fix nitrogen on such a scale that it accounts for almost half of the nitrogen fixation in marine systems globally.

The moral of this blackwater story is to shoot whatever comes by your lens and figure out what it is after you get back to your MacBook Pro.

David Fleetham
www.davidfleetham.com

Shot with a Canon EOS R5 mirrorless in an Ikelite dry-lock housing with a Canon RF 100mm macro lens, 1/160 sec, F20, ISO 320, with two Ikelite 230 strobes on TTL.

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

(It’s very easy. Images can be any size bigger than 20cm (horizontal or vertical) @ 150dpi saved as jpeg format and about 500 - 750 words would be fine.)