Underwater Photography

Mar/Apr 2026
Issue 149

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

info@bunakenoasis.com

www.bunakenoasis.com

WORLD TRAVEL AWARDS WINNER 2021 Indonesia's Leading Dive Resort

WORLD TRAVEL AWARDS WINNER 2022 Indonesia's Leading Dive Resort

Contents

Underwater Photography

A web magazine

UwP149 Mar/Apr 2026

Cover shot by
©James Ferrara (United States)/UPY2026

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

Editorial

UPY 2026

Competitions may not be everyone's cup of coffee so if they are not for you, jog on; but for those who use them as a personal benchmark, UPY 2026 has once again shown that, without a shadow of a doubt, it is THE underwater photography competition.

The reasons for this are many and I make no apology for highlighting them shortly but cast your mind back to when UPY was reincarnated from the Brighton Film Festival back in 2015. At the time there were several well established competitions but they all followed the same established path - quite high entry fees per image, heavy prejudging by the organisers and online judging to name just three criticisms.

The situation was very similar to the iPhone when it entered an already saturated mobile phone market. It made no commercial sense to be the same and it was only by coming up with what was needed rather than what was possible that Apple, led by visionary Steve Jobs, literally changed the course of technology.

That is what UPY has done in the underwater photography competition world and, judging by the numbers of images entered from the number of underwater photographers worldwide, it has changed the game for all other competitions. But how?

Taking the three criticisms of existing competitions - quite high entry fees per image, heavy prejudging by the organisers and online, remote judging, UPY kept it's entry fees reasonable, every single entered image is viewed by the judges and they physically meet over three days in January. That is because UPY treats the process as collaborative between entrants, judges and organisers. I hate quotes like "Produced by divers for divers" but UPY does the underwater photography competition version.

Respect the endeavours and treat them with integrity.

Finally there are two UPY features which set it way above the competition (pun intended) and the first is the Feedback system. All entrants can find out how far their images progressed from the first round through to the finals. This is invaluable information which no other competition can provide.

The second feature is the Yearbook; a beautifully presented, downloadable and permanent record of the winning images, the photographer's back story and, another unique feature which I forgot to mention earlier, a judge's personal comment on each and every image. The result is a reference work of immense importance, a showcase of what images succeed and a reference work to help all aspiring entrants.

See you next year hopefully.

Constant light v strobes

Nigel Motyer's excellent and superbly illustrated article "Constant light v strobes" makes very interesting reading and, if the images are anything to go by, constant light looks like the way to go but I'll leave you to read the article, find out Nigel's conclusion and see how you take it from there.

Smartphones

If the UPY 2026 Smartphone category, sponsored by Divevolk, is anything to go by, the images they can produce, in the right hands, are here to stay. The range of the winning images shows that they are not just one trick, available light wide angle, ponies.

What is needed now, IMHO, is the hardware to make these 'cameras' better ergonomically and for underwater photographers to realise that these are very capable tools and you are not wasting photo opportunities by using 'just' a Smartphone.

The clue is in the first part of the name.

Peter Rowlands
peter@uwpmag.com

News, Travel & Events

UPY 2026 Awards Ceremony aka The UW Oscars

Crown Estate, Heddon St, London W1

UPY team at the Awards Ceremony. LtoR - Saeed, Toby, Alex, Dan, Sharon and Peter

SUFOD

SUFOD, or the Underwater Photographers and Filmmakers Association of Turkey (Su Altı Fotoğrafçıları ve Filmcileri Derneği), is a voluntary civil society organization. Founded to promote underwater photography and filmmaking in Turkey, it organizes exhibitions, fosters a diving community, and showcases the beauty of the underwater world.

One of SUFOD's main missions in 2025 was to carry out an awareness project in the Sea of Marmara entitled "Nine Islands: Nine Lives of Istanbul." This project was designed to document the underwater world surrounding the Princes' Islands and to raise public awareness about the increasing environmental threats in the region. During the summer of 2025, a selection of these images was shared with the public through an exhibition. Following a jury selection, the chosen photographs were exhibited at Taş Mektep in Büyükada, opening on September 27 and remaining open to visitors until April 19, 2026.

Our hope is to preserve a moment in time and pass it on to future generations—as both a reminder and an inspiration.

The enthusiastic public response made it clear that this visual record deserved a more permanent form. For this reason, three SUFOD members revisited the material collected between June and September 2025, re-evaluated it according to the exhibition criteria, and selected 104 high-resolution photographs representing 38 species to create an e-book. This week, we published the e-book electronically in both Turkish and English, in PDF and EPUB formats. It is freely available for download at the following link:

www.sufod.org.tr/2026/01/12/dokuz-ada-istanbulun-dokuz-cani-sergi-kitabi/

Muck & Magic Philippines with Saeed Rashid, Sep 2026

Join the latest dive adventure in our popular Muck & Magic series with journalist and underwater photographer Saeed Rashid for great diving and plenty of fun on this holiday to the Philippines.

Travel with like-minded divers to the central region of the Philippines, where you spend time at two iconic dive resorts. The itinerary begins at Magic Oceans Resort in Anda, with unlimited diving and a half day whale shark excursion included. After six memorable nights, continue to the beautiful Atmosphere Resort & Spa, dive the famous house reef, take in the incredible critter diving of Dauin, and enjoy the beautiful Apo Island during your 6-night stay.

Saeed will be by your side throughout the trip providing entertaining evening talks and tips for any budding photographers.

"I first dived this stunning region of the Philippines 12 years ago, and it instantly captured a piece of my heart. From mesmerising muck diving to swirling schools of jacks and majestic whale sharks, the Bohol and Dauin coast offers it all. I can't wait to return for this very special workshop!"

www.diveworldwide.com

Anilao with Alex Tattersall 21–30 April 2027

Anilao is macro heaven—nudis, critters, textures, behaviours—and Alex is, frankly, a force of nature. Since teaming up with Oonasdivers in 2010, Alex has run hit workshops across Egypt, Indonesia, and the Philippines. The formula? Creative techniques, zero ego, and a Mary Poppins-sized bag of underwater toys.

Anilao is an absolutely 'must dive' destination for the underwater photographer, offering a breathtaking myriad of photographic opportunities on every dive.

The beautiful Aiyanar resort is the perfect base for our group, and we will be diving with some of the best dive guides in the area. Dives will be unhurried, productive dive sites will be revisited and I'm confident in saying that you will come away with a deeper understanding of your own photography and a set of beautiful images to add to your portfolio.

It will also be a good laugh!

Expect hands-on coaching and guided dives focused on technique, creativity, and problem-solving and his "toy box" often including Light-shaping gizmos & laser snoots for dramatic, controlled lighting and the infamous "magic ball"

Daily diving: Up to 24 guided dives over the trip—think critter hunts, creative lighting sessions, and plenty of time to practise

Workshops & reviews: On-resort sessions with image reviews, technique deep-dives, and practical demos you'll apply the same day

Full board: You concentrate on photos; Aiyanar keeps you fed, watered, and spoiled with surface-interval views

This workshop is aimed at intermediate to advanced photographers who are ready to take their underwater imagery to the next level.

www.oonasdivers.com

The Masters Class Series of Workshops for 2026

All workshops are fully inclusive of all meals, group ground transport, nitrox, guide, boat, diving fees
2 daily seminars, coaching and more!

Critterfest- January 27-FEB 6 + The Blackwater Edition FEB 6-Feb. 14

Bruce Shafer, Mike Bartick and Walter Marti-Photo, Editing and Video

Insider Divers-Simon Lprenz and Tobias Friedrich Feb 16-24th

Macro + Blackwater, Photo and Editing

Backscatter Macro Intensive + Blackwater March 8-18/18-22

Mike Bartick- Photo, Editing, Coaching

Bluewater Photo and Travel 2 sessions, April 16-26 | April 26-May 3

Photo, Editing, Coaching

Stephen Frink - Limited- May 9-16

Macro and Blackwater, Digital Darkroom

May 18-28 + The Blackwater Edition May 28-June 5th

Bruce Shafer, Mike Bartick, Walter Marti

Contact Mike Bartick for more details or questions- Groups are welcome

mike@DiveCBR.com or saltwaterphoto@live.com

Crystal Blue Resort, Anilao

www.DiveCBR.com

mike@DiveCBR.com saltwaterphoto@live.com

REAL FOCUS Underwater Photography Shootout

The REAL FOCUS Underwater Photography Shootout will run from February 15 through May 31, 2026, offering photographers a ten-week opportunity to participate in a competition that places ethics, authenticity, and mindful image-making at its core.

The shootout is open to guests staying a minimum of three nights at either Solitude Resort Anilao in the Philippines or Solitude Lembeh Resort in Indonesia during the competition period. Both destinations are internationally recognized for their rich marine biodiversity and macro photography opportunities, making them ideal settings for a contest centered on observation rather than intervention.

More than a traditional photography competition, the REAL FOCUS Shootout positions itself as a platform for reflection and change within the underwater imaging community. The initiative encourages photographers to move away from staged or manipulated encounters and instead embrace a respectful, non-invasive approach to documenting marine life. Participants are challenged to create images that are visually compelling while remaining truthful to the natural behavior of their subjects.

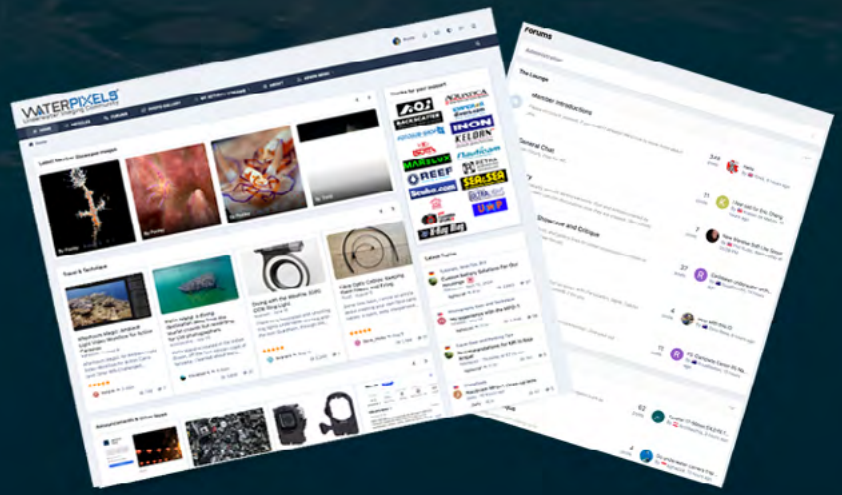
The total prize pool exceeds USD $25,000, featuring a curated selection of awards that include advanced photography equipment, travel experiences, and specialty items designed for underwater photographers. The prizes are intended not only to reward excellence, but to support continued growth and creativity within the field.

Further details, including entry requirements and judging criteria, are on the official competition website:

www.solitude.world/realfocus/

WATERPIXELS™

Underwater Imaging Community



Setup in late 2023, Waterpixels is a thriving online community for underwater image makers.

With over a 1000 members, the forum is run by a small, dedicated team of individuals who share a passion for underwater photography and who want to support the underwater imaging community.

Our objective is to provide members with a free community website and share advice, experience, knowledge and ideas that can enhance skills and creativity.

To support our commitment to keeping Waterpixels accessible to everyone, there is no charge for membership. We aim to cover running costs through sales of Waterpixels merchandise, donations from our community members, and, perhaps in time to come, carefully selected advertising partnerships. We do not sell or pass on data.

By joining Waterpixels, you become part of a vibrant community that is driven by a common love for underwater imaging. Whether you're a seasoned professional or just starting your journey, whether you use a large mirrorless or DLSR system, a GoPro or a compact, we welcome you to explore our platform, engage with fellow members, and take advantage of the wealth of resources available to you.

www.waterpixels.net

Monterey Shootout

July 24-26, 2026

This three day weekend features seminars, a fabulous social mixer, and a friendly photo and video contest that makes us dive a little harder and push our creativity alongside new and old friends just a bit longer. Join us for the greatest dive weekend of the year.

The Monterey Shootout is an underwater photo event focused on fun, education, and the goal is to inspire new underwater image-makers. Are you new to underwater photography or Monterey diving? Come meet a supportive group of die-hard Monterey divers, learn new shooting techniques in our shooting seminars, and maybe even discover a new dive site. Our friendly shooting competition not only rewards advanced shooters with amazing prizes but also bestows fantastic prizes to the newest shooters in the ranks. Join us for a weekend diving and seminars!

Registration Only $35

First time underwater shooters will enjoy our introductory seminars held on Friday. All skill levels will get inspired with our more advanced seminars held on Sunday. Come meet fellow enthusiasts and learn from our professional presenters.

You don't need to be a pro to have fun and win big in our friendly competition. You just need to get in the water this weekend. Our 32 hour photo and video competition has categories for beginner, intermediate, and advanced shooters with great prizes from our sponsors. All competition entrants must register for a full weekend pass to enter.

www.backscatter.com

SEA SHEPHERD
CONSERVATION SOCIETY

SHOP | SUPPORT | VOLUNTEER

Antarctica's Whales Under Threat

Dear Peter,

The Southern Ocean is one of the most remote places on Earth, yet the pressure on it has never been greater.

Every year, fleets of massive industrial trawlers descend on Antarctic waters and haul in staggering amounts of krill, billions of these tiny crustaceans that whales, penguins, seals, and seabirds depend on for survival. In fact, this year's haul was one of the largest ever recorded.

Krill are the foundation of the Antarctic food web. Remove them, and entire ecosystems collapse. For whales in particular, krill mean life itself.

www. seashepherd.org www.seashepherd.org/donate/

Rockpool Photography Workshop
Plymouth, UK

A strong foundation in basic photography is key to achieving good results. If you're new to photography, this session covers the fundamentals: understanding exposure, aperture, shutter speed, and ISO, as well as composition tips like framing and using leading lines to draw attention to your subject. We'll also cover how to adjust your settings for different light conditions and how to work with close-up subjects.

This session focuses on the specific environment of rockpools. You'll learn how to identify interesting subjects like marine life, seaweed, and rocks, and how to use the natural light available to your advantage. We'll also discuss the challenges of photographing small, often moving subjects and how to stay mindful of the delicate ecosystems you're working within. I will share tips on how to approach and photograph wildlife without disturbing it, maintaining respect for the environment.

Under my guidence, you'll practice composing shots, using natural light, and capturing both still subjects and those in motion (such as crabs or fish). We'll help you experiment with different angles and perspectives, so you can discover the most creative and effective ways to photograph the rockpool environment.

After the field session, we'll review the photos you've taken. We'll go through each participant's images, offering constructive feedback on composition, lighting, and subject matter. You'll also get an introduction to basic editing techniques, where we'll show you how to enhance your photos, improve exposure, and bring out the colours and details of your rockpool images. You'll leave with a better understanding of how to edit your photos to reflect the natural beauty of the environment.

1:1 - £200. 2+ people: £100 pp

www.jamesharrisunderwater.co.uk

New Products

Nauticam Insta360 X5 housing

The Insta360 X5 is a significant upgrade for 360° creators, praised for its superior image quality. It features a larger 1/1.28-inch sensors and enhanced AI processing. It delivers vibrant colors, improved dynamic range, and exceptional low-light performance compared to the X4.

Notable features include user-replaceable lenses, a new Wind Guard for clearer audio, extended battery life, water resistance up to 49 feet, and AI-powered editing tools for effortless reframing.

These features, combined with the Nauticam Housing for the Insta360 X5, make it a top choice for consumers seeking immersive, high-quality underwater footage.

The Nauticam housing for the Insta360 X5 is crafted with premium optics housed in a robust metal body. It's constructed from a hard-anodized aluminum alloy, boasting a depth rating of 100 meters.

Like all Nauticam housings, it features user-friendly ergonomic controls, including a rotary housing lock, a red push button for the power button, and a blue push button for the quick button.

Each lens has a 190-degree angle of view and is made up of three elements in two groups. These lenses are coated with anti-reflection material and have a working distance of 0 to infinity.

To use the housing, you'll need to remove the original outer lenses (one from each side) of the Insta360 X5 camera using the included tool.

Once the back door is closed, the camera automatically activates dive mode within the housing. The housing provides 1x 1/4"-20 threaded hole and 2x M5 threaded holes for mounting points.

Dimensions 91.4mm(W) x 156.7mm(H) x 88.5mm(D)

Weight in air 630g

Buoyancy in Water Negative 350g (incl. camera with battery)

Depth Rating 100m

Angle of View 190° (each lens)

www.nauticam.com

Aquatica AZr housing for Nikon ZR

As with all Aquatica housings, the AZr is CNC-machined from 6061 T6 aluminum, then treated with a MIL-A-8625 anodized coating and finished with a baked-on, super-tough powder coat. This housing is built to take a beating and keep going, dive after dive.

Optimized for speed and control: The AZr layout puts AF-ON, joystick, and key focus controls exactly under your fingers, allowing you to select AF points, lock focus, and track subjects without taking your eye off the viewfinder.

A dedicated, glove-friendly control gives direct access to the ZR's Photo/Video mode, so you can switch between stills and video without removing your hand from the grip.

The housing supports the latest Z-mount lenses as well as F-mount lenses via the FTZ adapter. The adapter can be removed from the camera without removing the camera from the housing, and there is a lens release for both F and Z mounts.

As usual with Aquatica, all critical camera controls are brought out to the housing, ensuring you can take full advantage of the Nikon ZR's capabilities underwater.

All housing controls are spring-loaded and self-centering where needed. Simply install the mounting tray on the camera and slide the assembly on the stainless-steel guide rails. It couldn't be simpler or more secure.

The Surveyor Vacuum System (valve and pump) is included as standard equipment with all AZr housings. A quick pre-dive vacuum check gives you peace of mind before every descent.

www.aquatica.ca

Nauticam NA-C50 Housing for Canon C50 Camera

The Canon C50 is a compact, powerful cinema camera that blends cinematic image quality with a portable form factor, making it a versatile tool for underwater creators looking for a smaller system. It delivers impressive 7K RAW footage, professional audio, and over 15+ stops of dynamic range.

The NA-C50 underwater housing upholds Nauticam's dedication to innovation. Essential controls are conveniently accessible via ergonomic handles, facilitating an efficient setup that optimizes time spent in the water and minimizes time spent on rig maintenance.

The N120 port system accommodates Canon RF and EFMount lens. For EF lens the RF to EF adapter with a variable ND filter can be used with an optional control kit. Nauticam's extensive range of ports and in-house corrective optics complement the NA-C50's capabilities.

When equipped with an accessory vacuum valve, the integrated vacuum check and leak detection system provides continuous updates on the housing's watertight integrity. A vacuum system reset switch, located beneath the tray, eliminates the necessity to open the back of the housing during lens or port changes.

Dimensions 366mm(W) x 237mm(H) x 131mm(D)

Weight in air 3.74kg

Buoyancy in Water: Negative 233g (incl. camera and battery)

100m

Port Mount N120

www.nauticam.com

Nauticam NA-ZR housing for Nikon ZR

The Nikon ZR is a compact full-frame cinema camera developed in collaboration with RED Digital Cinema. It's perfect for both video professionals and enthusiasts who want to take their video game to the next level. With features like 32-bit float audio, super-fast autofocus, and the ability to capture up to 6K60 video in REDCODE, N-RAW, or ProRes RAW formats, the Nikon ZR is sure to impress.

The NA-ZR underwater housing upholds Nauticam's dedication to innovation. Essential controls are conveniently accessible via ergonomic handles, facilitating an efficient setup that optimizes time spent in the water and minimizes time spent on rig maintenance. The N120 port system accommodates Nikon Z Mount lens with a new gear system. Nauticam's extensive range of ports and in-house corrective optics complement the NA-ZR's capabilities. When equipped with an accessory vacuum valve, the integrated vacuum check and leak detection system provides continuous updates on the housing's watertight integrity. A vacuum system reset switch, located beneath the tray, eliminates the necessity to open the back of the housing during lens or port changes.

www.nauticam.com

BACKSCATTER

THE BEST BANG FOR YOUR BUCK

OLYMPUS E-M10 IV

Sea & Sea Nikon Z Universal Housing

The Sea & Sea Nikon Z Universal Housing is a high quality housing which is built from machined aluminum.

It can house the Nikon Z5II, 6II and 7II.

It is durable and can take a beating. It offers great ergonomics and can easily be controlled when wearing gloves.

It is built with the option for their useful YS Converter, offering excellent TTL strobe control. These housings also offer full camera control and a wide selection of quality ports.

The buttons and knobs are all well labeled and glow in the dark for easy-to-use camera controls during a night dive.

This housing offers a unique window at the top, so your camera control panel is visible from the top, ensuring you save camera battery as opposed to using the lcd screen to view your camera settings.

www.seaandsea.jp

AOI HT-03

Building on the momentum of its Modular System (MDS), AOI Ltd. is proud to introduce the HT-03 - a revolutionary new handle that empowers content creators to switch seamlessly between horizontal and vertical shooting.

“We designed the HT-03 for creators who need to move fast - and shoot smarter,” said Victor Tsui, Managing Director of AOI Ltd. “Whether you’re filming a cinematic dive in horizontal format or switching to vertical to capture a trending Reel or Story, the HT-03 makes it effortless.”

It’s ideal for users of action cameras such as GoPro Hero Black, DJ Action 3/4/5 Pro, and Insta360 Ace Pro/Ace Pro 2, especially when used with AOI’s optical correction lenses like the UWL-03, UWL-03PRO or UCL-03.

ww.aoi-uw.com

Marelux Canon EOS R6 Mark II Housing

Marelux housing is built from high grade aluminum alloy which provides durabily and can withstand even the toughest beating.

Ergonomics is also top-notch, all camera controls are readily available at your fingertips and maintain a small footprint which makes it great to travel with.

Buttons are clearly labeled. It is very easy as well to assemble and installing the camera to the housing is a breeze with its quick release plate.

It also has a depth rating of 100m.

www.marelux.co

Ikelite RC232 TTL Strobe with Video Light

When you drop down to the depths your time is limited. Be ready for anything that you find with the RC232 hybrid strobe with built-in video light. Know that it's going to work because it's designed and manufactured by a company that's been revolutionizing underwater strobe lighting for over 50 years.

Whether you're just getting started, upgrading, or down-sizing, the RC232 is a strobe that will support you through a lifetime of underwater imaging.

Trusted by professionals.

Our strobes are proven to perform in the harshest conditions on Earth: from the Arctic circle to Antarctica, and everywhere in-between.

Made in the USA.

www.ikelite.com

SMART 3 TURTLE System

2026: when the SMART 3 system became complete

With the release of the final models,
the SMART 3 TURTLE system became complete in 2026.
The lineup now consists of eight dedicated underwater flash controllers:
four TTL and four MANUAL versions, covering all major camera platforms.

One family, four distinct characters

The essence of the SMART 3 TURTLE series is simple:
you get the same design philosophy,regardless of the camera system
you use.

e-TURTLE SMART 3 –
for Canon mirrorless users who
need reliable TTL and advanced
features such as stroboscopic flash,
HSS, and curtain sync control.
AOI and Backsctter TTL!

i-TURTLE SMART 3 –
for Nikon DSLR and MILC systems,
Shooting parameter switching
from camera menu and
Stroboscope flashing
AOI and Backsctter TTL!

o-TURTLE SMART 3 –
for Olympus and Panasonic systems,
where RC mode, Wireless TTL,
and automatic HSS coexist seamlessly.
AOI and Backsctter RC mode!

s-TURTLE SMART 3 –
for Sony systems users
who need reliable
TTL and advanced features
such as stroboscopic flash,
HSS, and curtain sync control.
AOI and Backsctter TTL!

Different cameras. Different strobes.
One philosophy: the trigger should never be the weak link.

Built on an entirely new hardware platform,
SMART 3 brings significant upgrades compared to previous generations:
a user-replaceable, high-capacity battery with up to three times
the capacity than SMART 1-2, USB-C charging and configuration,
reinforced switches, and robust optical or sync-cord outputs
designed for real underwater use.

The system supports an exceptionally wide range of underwater strobes
from leading brands, and compatibility continues to expand
via software updates. SMART 3 offers advanced
IKELITE, Inon S and Z series, AOI UIS, and, BackScatter HF-.1,
Sea&Sea strobes.Marelux all versions. and Retra Flashes.
Check the softwares or the product website about strobe compatibility.

- features such as TTL,
- HSS (High-Speed Sync),
- front and rear curtain sync,
- and a true stroboscopic (multiflash) mode,
  allowing multiple flashes within a single exposure
  a feature still unique in the underwater trigger market.

All settings are stored directly inside the trigger,
meaning the system is instantly ready
after wake-up, even during demanding dives.

SMART 3 is not a single product
– it is a complete, platform-
spanning solution for
underwater photographers
who expect reliability, flexibility,
and creative freedom
below the surface.

Follow us on Facebook and Instagram
to be the first to hear about new developments, tests, and updates.
Webshop: www.trt-electronics.com

Ewa-marine housings

Ewa-marine photo housings are suitable for nearly all types of compact - and SLR cameras, offering options for battery handgrip, zoom lenses, top mounted strobes and autofocus lens. Flexible housings are very robust, despite their light weight of approximately 500 gr., they offer a long and dependable service life lasting multiple generations of cameras.

The Ewa-marine camera housing will not only enable you to take impressive underwater shots at depth of 10, 20 or even 50 meters (depending on the type of housing) but also allow you to take your camera into the most hostile environment (humidity, seawater, spray, sand, dust).

www.ewa-marine.com

LEO3 Universal Housing

Universal underwater housing in anticorodal aluminium compatible with all DSLR models (Canon, Nikon, Panasonic, Leica, Fuji).

By all, we mean all current and future models and, after so many years we can say it: safer than ever. When you change cameras, the housing always stays the same, you only need a dedicated update.

The only housing in the world which allows you to adjust times, diaphragms and ISO without shutting off vision from display or sights.

www.easydive.it

Seacam Optical Precision Port

Uncompromising image quality has been SEACAM's greatest challenge and motivator in underwater photography. We have constantly strived to further improve quality and find even better solutions.

Our idea behind the new Optical Precision Port is to guarantee the same high image quality underwater as the lens used on land. At the same time, we were also concerned with adhering to increasingly restrictive baggage regulations and keeping both dimensions and weight as low as possible.

With the new Optical Precision Port – OPP – we have achieved this very successfully, and after extensive development work, it has now become a reality.

EUR 4950

www.seacam.com

OrcaTorch Snoot D530V D710V

The OrcaTorch Snoot works perfectly with the D530V and D710V Orcatorch video lights for underwater macro and super-macro videography and digital photography.

It is easy to operate, made of aircraft-grade, high-strength aluminium, and boasts a diamond-grade, hard-anodised, seawater-corrosion-resistant finish.

An underwater video light snoot narrows the light beam to precisely illuminate a small subject, creating a focused spotlight effect that separates it from the background and minimises backscatter.

This is especially useful for macro and super-macro videography and digital photography (where a video light is used instead of a strobe), as it can make subjects pop, create dramatic shadows, and produce a clean, black background to enhance colour and contrast. Sale price£16.95

www.orcatorch.com

WORKSHOPS

ALAM BATU | BALI | JUL 10-19, 2027

CORAL EYE | BANGKA ISLAND | SEP 1-6, 2027

SILADEN | NORTH SULAWESI | SEP 6-12, 2027

Dive, shoot, relax and learn alongside our Photo Pros in three of Indonesia's best destinations. Elevate your imaging with hands-on guidance at these expert-led workshops.

Whether you just got your first system, recently upgraded or are an experienced shooter, our underwater workshops are the best way to improve your imaging in some of the world's best dive destinations.

We're always adding more Workshops to the list so join our newsletter to get notified when new destinations are added.

REEF
PHOTO & VIDEO
www.reefphoto.com

TELESIN phone housing

Never miss a magical moment beneath the waves with the TELESIN Underwater Snorkeling Diving Phone Waterproof Case; its built-in Bluetooth remote lets you snap photos and record videos effortlessly with just your fingertip, even at depths up to 20 meters, so you stay focused on the adventure, not fumbling with your phone.

Save money and hassle with the truly universal TELESIN Underwater Snorkeling Diving Phone Waterproof Case, compatible with a vast range of smartphones from 5.4" to 6.9" including latest iPhone 17/16/15/14/13/12/11 series, Samsung Galaxy S25/S24/S23/S22/ S21/S20/S10,

www.amazon.co.uk

Red Sea Imaging Tools

Red Sea Imaging uses the highest-quality underwater imaging tools available today, including equipment from RED, Canon, Nauticam, and more.

Our current kit list includes:

-Red V-RaptorX Global Shutter 8K camera

-Nauticam Raptor Housing and Accessories

-Canon RF lenses including RF 15-35 2.8, RF 100m 2.8 macro, EF 8-15 FE, RF 28-70 2.0, etc.

-Nauticam WACP-2

-Nauticam EMWL system set

-Canon R5 and R5C bodies + Nauticam housings and accessories

-Keldan and Sea and Sea lights and strobes

www.redseaimaging.com

UPY 2026 winners

by Alex Mustard

An adorable pair of Southern elephant seal pups, photographed in a rockpool on the Falkland Islands, sees Matty Smith from Australia named Underwater Photographer of the Year (UPY) 2026. Smith's photograph 'Rockpool Rookies' triumphed over 7900 pictures entered by underwater photographers from around the world.

"Once their pups are weaned, elephant seal mothers abandon them ashore," explained Smith. "I watched dozens clamber over one another in shallow rockpools, awkwardly learning to swim. On my very first evening, the sky ignited with colour and I captured a handful of frames before the light vanished. It was the defining moment of the long trip."

"The lives of elephant seals traverse land and sea; they are born on wild shores, but thrive in frigid waters," added chair of the judging panel, marine ecologist Dr Alex Mustard. "Smith used a special dome that he built himself to capture the revealing under-over perspective, perfectly balancing his lighting on the pups' fur with the setting sun. Elephant seals were hunted right to the brink of extinction. Their oil rich blubber was used for everything from fuel for lighting to margarine. Fortunately, the hunt was stopped just in time, and their recovery over the last 100 years is a great example of resilience of the ocean. A beautiful and hopeful photograph."

Ocean babies starred in several of the contest's international categories including "Clownfish Hatchout" by Kazushige Horiguchi from Japan, which remarkably shows the moment anemonefish eggs hatch, with the parent watching on. "I have been photographing clownfish for over three years, but this single image is the only one that truly succeeds," said Horiguchi, who won the Behaviour category.

Cecile Gabillon Barats, from France, won the Wide Angle category, sponsored by Scuba Finders, with her characterful portrait of a sperm whale calf. "The exuberance of youth bursts out of this photo. Sperm whales live strange and secret lives, but we now know that youngsters can be full of mischief," commented Mustard.

Behaviour - "Clownfish Hatchout" © Kazushige Horiguchi (Japan)/UPY2026

Underwater Photographer of the Year - 'Rockpool Rookies'. © Matty Smith (Australia)/UPY2026

'PADI' Up & Coming Underwater Photographer of the Year 2026 "Lunging Leopard" © Sam Blount (US)/UPY2026

Sam Blount from the United States was named as 'PADI' Up & Coming Underwater Photographer of the Year 2026 for his photo "Lunging Leopard", for his symmetrical composition of the jaws of a leopard seal, one of Antarctica's top predators. "Leopard seals wield an astonishing array of dominance displays," explained Blount. "This one put them all to use, darting around me with effortless power. Watching that massive mouth lined with sharp teeth charge straight toward me is a thrill I'll never forget."

"Probably the best leopard seal shots I've seen," commented contest judge Tobias Friedrich. "To capture such a perfect composition with delicate lighting, in such an intense moment, is so impressive."

The UPY Contest aims to promote underwater photography and in 2026 includes a Smartphone category to encourage more people to try making images underwater, using the camera most people carry in their pocket – their phone. Jack Ho from China won the category that is sponsored by DIVEVOLK, with "The Roar" a photo of a yawning hairy frogfish taken with a Vivo phone. "I found this well-camouflaged frogfish patiently lying in wait for prey on the sandy seabed in Indonesia," said Ho. "I also waited patiently for at least 15 minutes to capture the moment it opened its huge mouth."

"2025 has been called the Year of the Octopus in British waters," explained judge Mustard. "Octopus are native to Britain, but usually very rare, but last summer there was a population bloom and as expected lots of photographers encountered them too." Tom Ingram won the British Waters Macro category with "Mum" showing a female octopus guarding her eggs in Cornwall. "Octopus are the most dedicated parents, the female guards the eggs for many weeks, stops feeding and dies soon after she's ensured they have safely hatched," said Ingram.

British Waters Macro "Mum" © Tom Ingram(UK)/ UPY2026

DIVEVOLK Smartphone - © Jack Ho (China)/UPY2026

'Save Our Seas Foundation' Marine Conservation Photographer of the Year 2026
'Innocence Meets Tradition' © Khaichuin Sim (Malaysia)/UPY2026

In the same contest, Malaysian photographer, Khaichuin Sim, was named 'Save Our Seas Foundation' Marine Conservation Photographer of the Year 2026, with his photo 'Innocence Meets Tradition', depicting the annual pilot whale hunt in the Faroe Islands. "Seen by locals as a cultural heritage and source of food, it is condemned globally for its brutality and impact on wildlife," commented Sim. "A young boy sits atop a slain whale amid blood-red waters, a haunting reflection of how tradition, identity, and ethics collide."

"A sad but powerful image which asks more questions than it answers," said contest judge Peter Rowlands. "The message must be that traditions such as these have no place in modern society. Photography has the power to bring change."

www.underwaterphotographeroftheyear.com

DPG Masters 2025

By Ian Bongso-Seldrup

DPG is proud to announce the winners of the DPG Masters Underwater Imaging Competition 2025. The contest invited submissions to nine image categories and one video category, and more than 2,000 entries were received from underwater photographers and filmmakers from around the world.

This year's overall winner is Yuka Takahashi, who topped the Wide Angle category with her breathtaking image of two humpback whales swimming side by side in synchronicity. Captured while snorkeling off the island of Mo'orea in French Polynesia, the winning image earns the Japanese photographer the prestigious title "DPG Grand Master 2025."

The winners of the other categories are: Sunbong Jung (Macro), Chris Gug (Traditional), Karyll Gonzalez (Unrestricted), Anton Sorokin (Over-Under), James Ferrara (Conservation), Francesco Visintin (Cold Water), Manuel Wüthrich (Compact), Tom Shlesinger (Portfolio), and Fabien Michenet (Short Film). Congratulations to all the Gold, Silver and Bronze winners, as well as the Honorable Mentions.

This year's Mentor Prize winners are: Grega Verc (Wide Angle finalist), Byron Conroy (Macro finalist), Miesa Grobbelaar (Portfolio finalist), Talia Greis (Over-Under finalist), Allison Vitsky Sallmon (Cold Water finalist), and Verona Chadwick (Traditional finalist).

We would like to thank this year's hard-working judges—Nicolas Remy, Jennifer Hayes, Álvaro Herrero (Mekan), Jill Heinerth, Aaron Wong, and Kate Jonker—who pored over hundreds of short-listed photos in private before getting together to select the winners and runners-up during an hours-long virtual meeting. We would also like to offer a very special thanks to our generous sponsors for contributing an amazing pool of trip and gear prizes.

As with all Underwater Competition Series events, 15% of entry proceeds will be donated to marine conservation efforts.

www.DivePhotoGuide.com

Best of Show by Yuka Takahashi. DPG Grand Master

Macro – Gold – "House Cleaning" by Sunbong Jung (South Korea)

Rokinon 14-24mm F/2.8

by Phil Rudin

Since 1979 Samyang Optical Company LTD, the Korean based company has continued to push the boundaries for innovation and craftsmanship in the camera lens industry.

Rokinon is owned and operated by Elite Brands Inc. which is the sole provider of Rokinon, Xeen by Rokinon and Samyang branded products in North America, Central America and South America. Samyang/Rokinon lenses and accessories are distributed in over fifty countries world wide. Samyang has focused on manual focus fixed focal length camera lenses and the XEEN Cinema lens line for years.

This review will be the fourth in a series of lens reviews using third party "budget" lenses for high resolution cameras. The lenses I will be testing cost anywhere from one-half to one-third the price of the camera manufactures proprietary lenses. In addition to third party lenses, bargain hunters can also find many last generation camera bodies which are discounted as well.

My first experience with a Rokinon lens was for a review of the Sony A7R II and Ikelite housing for

UWPMAG.com May/June 2016 back issue #90 using the manual focus Rokinon 12mm F/2.8 ED AS IF NCS Fisheye. Fast forward to May 2026 to the Samyang/Rokinon announcement of their first ever auto focus lenses exclusively for Sony full frame mirrorless cameras.

The first offerings were the Samyang 50mm F/1.4 AS IF UMC and the 14mm F/2.8 ED AS IF UMC. Rokinon/Samyang have now partnered with the venerable lens manufacture Schneider-Kreuznach to develop the first 14-24mm F/2.8

Sony A1 II, Marelux MX-A1II housing, Rokinon 14-24mm at 14mm, Marelux one Apollo III strobe in TTL, ISO-800, F/722, 1/200th sec. ND filter

wide zoom for Sony EF mount full frame cameras. This is an outstanding rectilinear zoom range for underwater photography but many past 14-24mm zooms and fixed 14mm's have come up short when it comes to U/W IQ especially corner sharpness. I find this to be largely related to minimum focus distance in past offerings.

The Rokinon 14-24mm F/2.8 has a minimum focus distance of only 18cm (7.1 inches) while other current lenses like the Leica 14-24mm F/2.8, Nikon Z 14-24mm F/2.8 and Sigma 14-24mm all focuses to 28cm (11inches). The 10cm MFD difference between the Rokinon and the other lenses makes it much more user friendly in ports from 200 to 250mm with the proper extension placement.

In addition the Rokinon retails for $1199.00 (now on sale in the US for $959.19) while the other three lenses range from $2885.00 to $1539.00 with the Nikon Z lens reduced from a retail of $2696.95 to $2096.95 currently in the US.

The Rokinon 14-24mm F/2.8 AF is a wide angle zoom lens with a 114.2 to 84.1 degree rectilinear angle of view on full frame. The lens is currently only available in the Sony FE mount but Rokinon has made AF lenses for Fuji and Nikon in the past so the 14/24 could be offered for other brands going forward.

The lens is very compact at just 84X98.6mm (3.3 X 3.9 inches) and weights in at only 445g (17.7 oz.). The lens has fifteen elements in eleven groups. Because of the short 18cm minimum focus distance the lens has a 1:3.85 max macro reproduction ratio with 0.17 to 0.26X magnification.

There are nine aperture blades which creates great sun stars at the higher aperture ranges that top out a F/22. Unlike the other three lenses that have no front filter threads and use rear gel filters or no filter at all, the Rokinon accepts standard 77mm front filters. This is useful because you can mount filters like the Sea&Sea Conversion lens which improves corner sharpness for many zoom lenses. As a footnote I have not tested the S&S conversion with lens or as wide as 14mm. I intend to test the S&S lens in the coming months however the only way to get one these days is in the used market.

What I did find very useful was the ability to use a 77mm graduated neutral density filter for shooting splits. My ND filter threaded nicely onto the front of the 14/24 lens and was rotated for use in landscape (horizontal) orientation. I needed a bit of flat black tape to insure that the filter would stay in place. The disadvantage with these filters is that they can't be moved once closed in the housing so you are stuck in landscape of portrait orientation for the entire dive. Because of the added thickness of the ND filter I had slight vignetting in the corners at 14mm. I still found the ND filter very useful for splits and other situations.

Florida Pan Fish also called Brim or Bluegill, Sony A1 II, Marelux MX-A1II housing, Rokinon 14-24mm at 24mm, two Marelux Apollo y strobes in TTL, ISO-500, F/8, 1/100th sec

For land photography the lens has a smooth manual focus ring which works very well for things like astro photography. I have manual focus set on my Sony bodies so that as soon as I turn the focus ring the area around the focus box is magnified about ten times in the viewfinder. Once I achieve critical focus and half press the shutter the image in the viewfinder returned to the full frame view.

I also have focus peaking set to red which assists with achieving critical focus although not as prescience as I would like it to be.

Currently the Rokinon AF 14-24mm F/2.8 is not included on the Sony A7-series, A9-series or A7c-series port charts for Aquatica, Ikelite, Isotta, Marelux Meikon/Sea Frogs, Nauticam, Sea & Sea or Subal housings. As a result I was on my own to come up with a dome port and extension combination to support the Rokinon 14-24mm lenses. I like to

Left at 24mm, right at 14mm. Tom in Ginnie Springs Ballroom entrance, Sony A1 II, Marelux MX-A1II housing, Rokinon 14-24mm at 24mm, two Marelux Apollo y strobes in TTL, ISO-500, F/11, 1/60th sec

test extension lengths for unsupported lens/dome/extension combinations in a swimming pool before venturing out for field testing. It gives a far better idea of what end result to expect than testing in a tub of water.

Field testing the Rokinon 14-24mm F/2.8

I started this review by having Shen Colllazo at oceaninovations.com make a custom zoom gear using the gear tooth section from a Marelux gear I already owned. Shen's work is always superb and always completed in a timely manor. Since the purpose of this review is to offer less expensive options that offer excellent high resolution image quality I opted to use the Marelux 210mm acrylic dome port (about half the cost of like glass ports). I would also suggest several other acrylic dome ports like the Ikelite eight inch port which should also work well with the proper port extension.

I chose to use two Marelux extensions a 15mm and 40mm (55mm total) with the acrylic dome port. You can also choose the ports and extensions you already own if they support this lens.

Larger acrylic ports have a tendency to turn port up putting an extra strain on the wrist while the optical glass ports are much heaver but still have a large air pocket. Weights can be added to the dome shade for acrylic ports to help offset the added port buoyancy.

I prefer the optical glass ports for split images because they appear to shed water better and I see less ghosting and reflection in the images however they are much heavier than acrylic.

Acrylic ports can work well if you keep the sun at your back and use a coating like mask defog to help shed water.

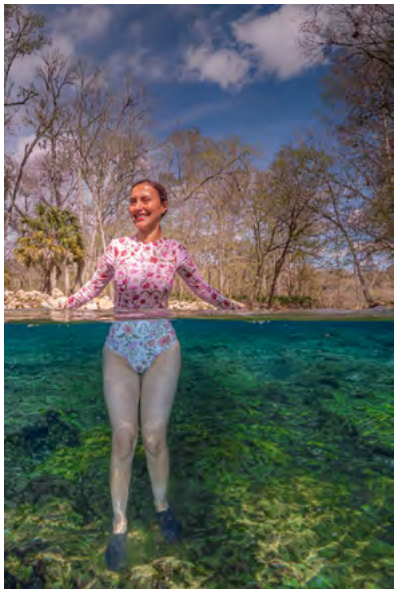
I used the new Marelux MX-A1II housing and 50MP Sony A1 II camera which I had in house for this review. All camera settings were manual and two Marelux Apollo Y strobes in TTL were used for fill flash.

Once in the water I found the auto focus to be quick and accurate using AF-C and auto subject recognition. I opted for ISO settings in the 100 to 400 with wider aperture rather than bumping ISO in favor of higher F/numbers.

I have included two images taken from exactly the same vantage point to give an idea of the difference in AOV between 14mm and 24mm ends of the lens. The split shots were at F/16 and F/22 using the ND filter.

While I did find the acrylic port buoyed up during use it was not overly annoying and can be easily mitigated with a small amount of weight to level out the port. For splits the acrylic has the advantage of being much lighter than glass so it handles better all things considered.

My rule of thumb for full frame wide angle lenses is to stay in the F/13 to F16 range for best corner sharpness. In reality I often shot wide lenses at F/5.6 without major issues if the subject matter is interesting. In open water the corners are much



Karen, Ginnie Springs, Sony A1 II, Marelux MX-A1II housing, Rokinon 14-24mm at 14mm, two Marelux Apollo y strobes in TTL, ISO-500, F/16, 1/200th sec

Florida Springs, Sony A1 II, Marelux MX-A1II housing, Rokinon 14-24mm at 14mm, two Marelux Apollo y strobes under in TTL, ISO-200, F/22, 1/200th sec. ND filter.

less problematic and rarely noticed.

Corner sharpness is an issue that has been debated on many forums too ad nauseam. I have seen hundreds of U/W photo contest winners over the years that have had less than stellar corners which were overlooked by judges, myself included because of the impact of the overall image.

If you are not a fan of the bent lines in wreck photos or the distorted shapes of some animals using fisheye lenses the 14/24 range could be the lens you have been seeking. The impact of close-focus wide angle images is impressive with this lens because of its very close focusing ability the port size not withstanding.

I have used a 45 degree viewfinder for many years and had no issues with this wide lens. My go to wide angle lens testing site is the many springs in north Florida a three hour drive from my home. When the night temperature gets into the low 40's (4.5c) you can consistently expect to see Manatees gathering at some of the head springs which makes the trip worth the drive.

I like the extended ability of the Sony A1's 1/400th second max shutter sync for all of the wide lenses I use. I understand that the A1 II is a very expensive camera but you can get similar results using cameras like the Sony A7C II/R with a HSS enabled flash trigger.

I use the UW technic external trigger for TTL, HSS (above 1/400th) and Marelux MTL for multi frames per second. I chose the external trigger because it can be used with the Marelux FlashFuel 2100 to extend the cameras battery life by about double.

The FF2100 fits above the camera hot shoe with room for the UWT and a mini USB goes from the FF2100 to the camera USB for charging. This allows me to shoot all day including high frame rates without worry about camera battery life.

When the digital files are downloaded into LightRoom all of the EFIX data appears but the lens profiles are not yet accessible. The LightRoom library meta data always lists the lens as a Samyang 14-24mm F/2.8.

The Rokinon/Schneider 14-24mm F/2.8 AF collaboration is its first offering using the outstanding Schneider lens design. The lens performance was superb by any standard across the entire frame with excellent corner sharpness at F/11 and beyond behind a properly placed dome port.

For the under $1200.00 price point I would highly recommend this lens for wide angle rectilinear underwater photography.

Phil Rudin
Instagram

Phil is Senior Advisor at Marelux
www.marelux.co

UWACAM App

By Matthias Lebo

Over the course of more than 15 years diving and filming in oceans, lakes, and rivers around the world, I have captured thousands of underwater images and video sequences — from monstrous pelagics to the tiniest macro critters that often go unseen.

I've shot on dedicated cinema cameras in huge housings, mirrorless stills systems, compact cameras, action cams, and, increasingly over the past few years, on smartphones housed in the Divevolk SeaTouch series cases.

My philosophy has always been simple: the best camera is the one you have with you — and with the evolution of smartphone imaging and Divevolk's rugged underwater housings, that camera has become remarkably powerful.

But having the hardware to take your phone underwater is only part of the story. To truly unlock the potential of smartphone imaging beneath the surface, you need software that understands — and compensates for — the unique challenges of the underwater environment. That's where UWACAM comes in. In this article, I want to share in detail how this specialized underwater camera app has helped Divevolk users capture their underwater adventures with better quality, greater ease, and more creative control than ever before.

Underwater imagery presents unique challenges that standard camera apps, even some professional ones, simply weren't designed to handle. Color casts, loss of reds and yellows with depth, fluctuating contrast, and rapid autofocus changes all conspire to degrade underwater content if the tools aren't built specifically for the medium.

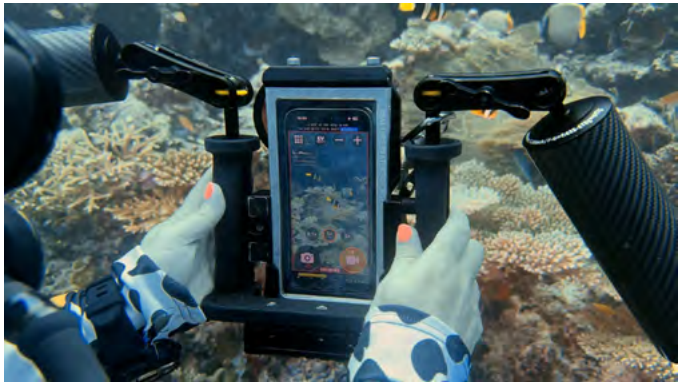
For Divevolk users — whether hobbyists, enthusiast shooters, or seasoned professionals — the need for a dedicated underwater imaging workflow has been clear.

Enter UWACAM, an underwater camera app designed from the ground up by divers for divers for use with Divevolk SeaTouch housings and smartphone imaging. UWACAM was developed in collaboration with photographers and underwater cinematographers, including myself, to address both the ergonomic and technical needs of shooting beneath the surface.

What distinguishes UWACAM from generic camera apps, and even from other advanced camera software like Blackmagic Camera App or Filmic Pro, is its comprehensive focus on underwater image capture coupled with powerful processing, intuitive controls, and modern computational tools.

When you take a smartphone underwater, you are fighting against physics: water absorbs longer wavelengths (reds, oranges) first, leaving your images overwhelmingly blue or green. Standard camera apps — including those with professional features — tend to treat white balance in a generic way that works well in air but often fails to correct underwater color shifts dynamically.

What has made the biggest difference for me in still photography is the UWACOLOR processing. This is an automatic, dynamically adaptive color and contrast enhancement system built into the app that intelligently corrects underwater color



casts either in real time during capture or afterward in postprocessing — directly inside the app. This means photos shot at depth will have far richer, more accurate colors without needing hours of manual grading in external software.

Unlike traditional white balance sliders alone, UWACAM analyzes the image and boosts color fidelity and contrast in a way that is optimized for underwater conditions. It even works with RAW capture on certain smartphones, meaning you can preserve maximum detail and latitude while still benefiting from in-app enhancements. This is a game-changer for underwater photographers who want images that look great straight out of the camera — ideal for social sharing, websites, galleries, or print.

For users transitioning from point-and-shoot to more controlled photography, UWACAM's AUTO Mode offers large, intuitive controls and good default settings that deliver excellent results with minimal fuss. For experienced shooters, the PRO Mode unlocks robust manual controls — exposure, shutter speed, ISO, white balance, bracketing, focus peaking, and zebra highlights — similar to what high-end camera apps and even dedicated camera systems offer.

This dual-mode approach means UWACAM is as accessible to someone taking their first underwater photos as it is powerful for seasoned creatives who want granular control over every parameter.

Video capture underwater is an even greater technical challenge than still photography. Variables like motion, fluctuating light, backscatter, and frame rate selection require real adaptability from your camera app.

UWACAM approaches video capture with the same seriousness as photo capture:

• Full support for all device resolutions, frame rates, and color spaces, including high frame rate capture and HDR/Rec.2020 on most devices

• LOG recording support (available on selected devices) for advanced color grading in post, giving creators cinematic latitude.

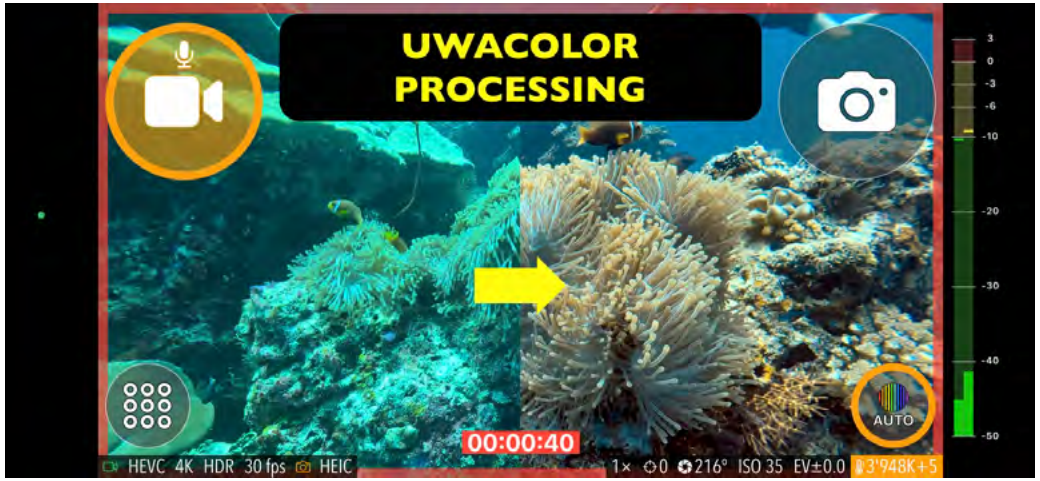
• Built-in LUTs and custom LUT import, so you can preview and apply creative looks natively.

• SMPTE timecode support for professional workflows.

Whether you're shooting slow-motion reef life or fast-moving marine animals, UWACAM keeps video options open — from quick social sharing clips to footage intended for commercial or cinematic use.

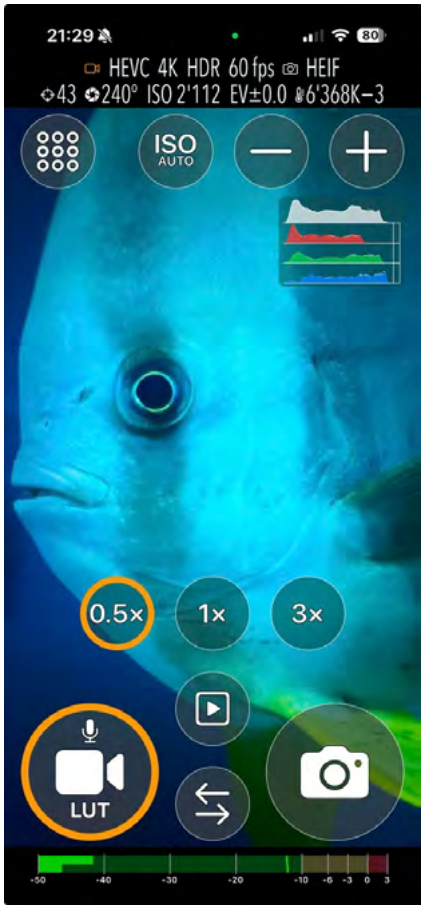
The automatic UWACOLOR color processing isn't just for photos — it's available for video too. UWACAM can apply adaptive color and contrast correction in real time as you record or afterward in postprocessing. This reduces the need for extensive manual color correction later and helps your clips look vibrant and true-to-life straight from the timeline.

One exciting innovation that sets



Before and after applying UWACOLOR Processing to an image

UWACAM in Manual Mode



UWACAM in Pro Mode

UWACAM apart from almost every other camera app is the AI-supported fish and marine life identification feature, powered by Vizalyzer AI.

After a dive, you can analyze your photo and video captures with this AI tool (internet connection required and available to subscribers) to get species names, behaviors, and other contextual information tied to specific marine life seen in your footage. This capability adds a scientific and storytelling dimension to your captures

Divevolk users enjoying the simplicity of capturing beautiful underwater imagery with the help of UWACAM

— turning ordinary dive content into educational and sharable narratives.

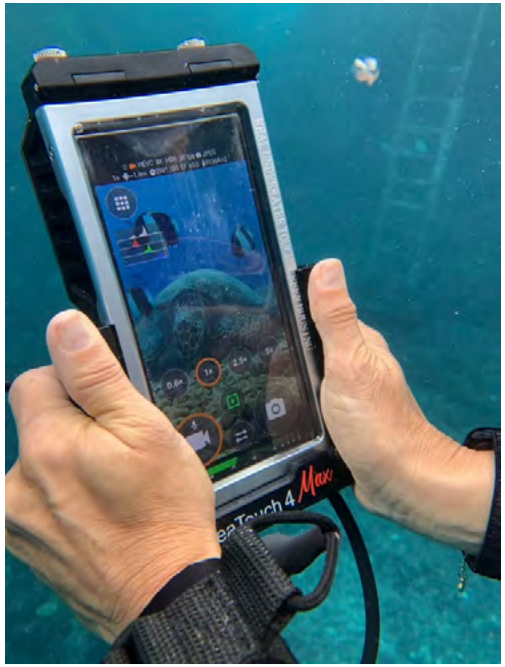
For marine biologists, dive guides, educational content creators, and conservationists, this feature transforms UWACAM into a documentation tool as much as a camera app.

One of the things I appreciate most about UWACAM is that it bridges the gap between beginners and professionals. The AUTO Mode makes it easy for first-time underwater shooters to start capturing compelling imagery without needing an extensive technical background. At the same time, the PRO Mode and advanced features provide seasoned creatives with the depth of control they need for serious projects — whether for social media, client work, or film production.

I have personally seen Divevolk users transition from being intimidated by underwater cameras to confidently navigating manual settings and producing stunning footage — and UWACAM has played a central role in that journey.

Until recently, UWACAM was available only on iOS. As of 17 January 2026, UWACAM has expanded support to Android devices — a major milestone that opens professional-grade underwater imaging features to a much broader part of the Divevolk community worldwide.

To celebrate this launch, Android users can benefit from a 30%



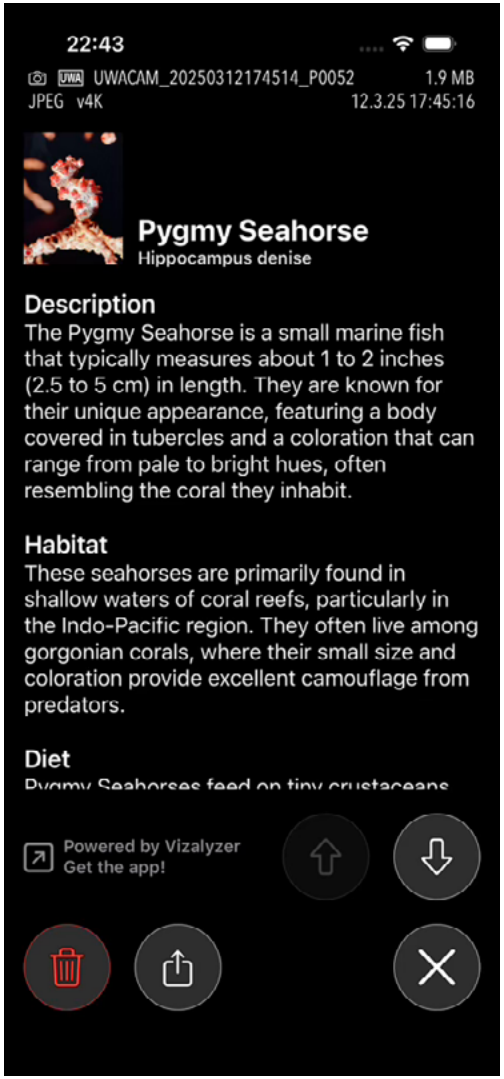
UWACAM being used by a diver on an Android device inside a Divevolk housing

UWACAM's unique Vizalyzer AI

introductory discount on the first 100 yearly subscriptions (use the code DROID30 directly inside the app when subscribing for a yearly plan – limited offer). This is a rare opportunity to access the full suite of UWACAM features at a significantly reduced rate.

Whether you're documenting a once-in-a-lifetime dive, producing content for a client, or simply sharing your love for the ocean with friends and family, UWACAM helps you tell that story in the highest possible quality.

Go out there and capture your



awesome underwater adventures. And let the beauty you find beneath the surface shine like it truly deserves.

Matthias Lebo
www.matthiaslebo.com

Constant light v strobes?

by Nigel Motyer

A few years ago I was watching a guy shooting pictures with his TG6 while usung a torch for lighting, no strobe. I asked him afterwards how he managed his exposures and he came back with the obvious but simple reply of, he didn't, he just let the camera do it. That was a light bulb moment for me and as I'd recently set up a housing for Video, it didn't even have a way of triggering strobes, I thought I'd dedicate some time looking at constant lighting instead of strobes to light my images.

I get asked for still images from time to time but I was increasingly being asked for video footage and I liked the idea of a new challenge so I had toyed with the idea of seriously trying to shoot underwater video footage in a more focused way. At the same time I had been asked by a film production company for useable underwater video footage as they were producing a natural history series for an American channel and had a budget for underwater footage but the brief was pretty broad. They suggested I just carry a video camera on every dive and see what showed up!

So I went for it, but I was doing this at very much the budget end of what was "broadcastable" and on advice from the production company, had sidelined my usual Nikon D850 and had set up a dedicated Video system with a Panasonic GH5, a Nauticam housing, an ex demo model that Alex T gave me at a good price, and a set of Keldan 15000 lumen video lights and a WWL-1 wet lens. It's a very capable video system but as I started down that road the difficulty of shooting useable footage that can be cut into watchable sequences came roaring into view. Video is hard, and it takes so much more time to get quality footage, and the editing, the computing power needed and the file storage…..don't get me started!

If I'm honest, I just prefer to shoot stills. I like the challenge and the simplicity of trying to come back with five to ten images I like from a day's diving, so I was finding that increasingly as I was shooting video footage I'd feel that the scene would make a lovely still image and so I'd switch the camera over to stills capture and play around with the Keldan lights to get a still image I liked.

I had no way of triggering a strobe on that GH5 housing so I could only light images with the Keldan lights but I was loving the freedom of being able to dial up or down the power on the lights and immediately see the potential image in the viewfinder before I pressed the shutter, it seemed just like the simplicity of the TG6 and the torch. I could just dial in and see the light coverage I liked right in front of me. With the cameras screen I could see the real-time impact of changing any of the camera settings and I could dynamically move the lighting around to where it looked good. No more

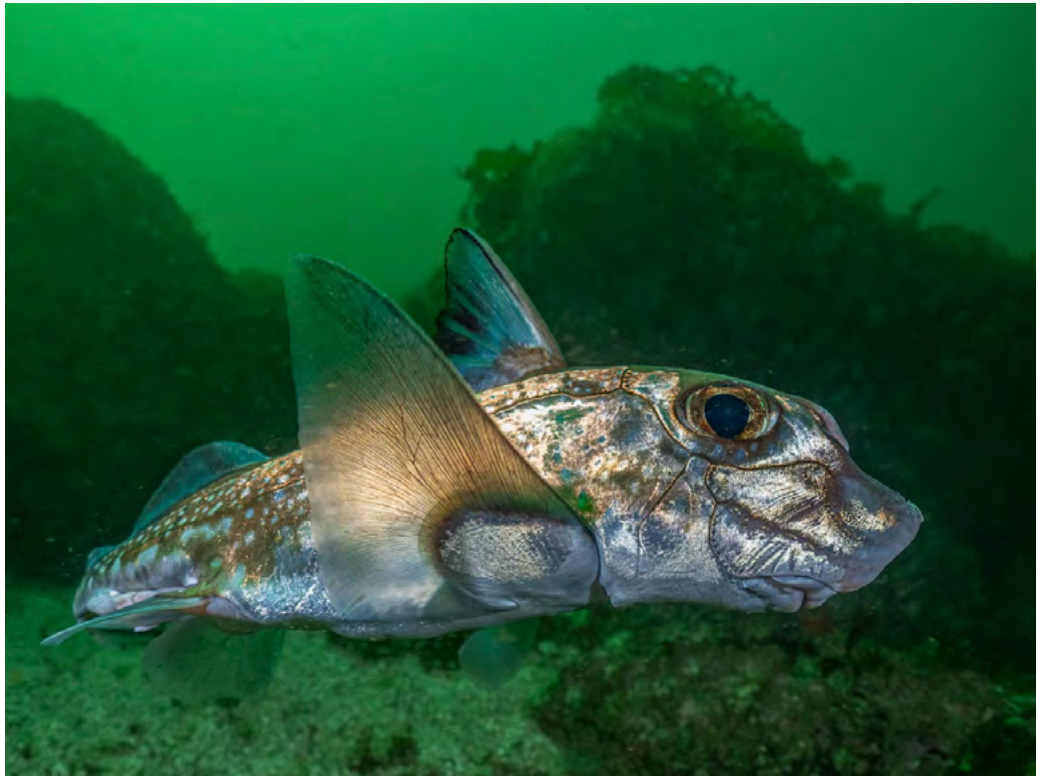
A diver over a sea fan in the Banda Sea. Getting good diver images when trying out new techniques requires a bit of understanding from the model. John is a wonderful photographer who instinctively knows how to model for shots. He knew I was trying to dial up the Keldan lights to add in the right amount of lighting on the fan and gave me the time to do it.
Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2xKeldan Video 8x CR195. 160th at F7.1, ISO 500

surprises in image review, I can't tell you the number of times my strobe fell behind a kelp frond or I had the power setting on the strobe completely wrong for the image and I didn't know about it till afterwards. This was so easy to dial in the lighting and see the impact before pressing the shutter. It was a genuine game changer and I really started to enjoy this different type of image making.

The other big factor boosting my love of this system was the Nauticam WWL wet lens, this is such an adaptable optic and matched with an Olympus kit lens, it has a really useable zoom capability. I could shoot nearly anything I came across from Basking sharks to Shrimps. On paper, in terms of view, it was similar to the 16-35 lens on my D850 but in reality it far out performed that system. The Nikon lens needed a huge, heavy dome and an extension collar to get decent edge sharpness. The WWL was much sharper in the corners at wider F-stops but it was also much neater to use and allowed you focus right up to the front element. Depth of Field can be an issue unless using a smaller aperture but it really is a great optic.

Within a short period of time I found that my favourite camera to dive with was the GH5 rather than the D850. This surprised me because the image quality of the Nikon was way higher than the Panasonic. The image files were just better on the Nikon, they had a higher resolution, much better high ISO performance and far better dynamic range within the files but the fun factor of shooting the Panasonic was just so appealing and I had the option of shooting useable video if I happened to come across anything special. The big hassle of course was travelling with both systems but with the usual tricks of stuffing ports, lenses , batteries

A Red Irish Lord in Browning Pass, Northern Vancouver Island. The ability of the WWL wet lens to focus so close to the dome gives great opportunities for these mid-sized fish but it can be tricky to get even lighting across the frame with the port so close to the subject. Being able to move the Keldans so I could see the lit image in the viewfinder before you press the shutter was a huge benefit.
Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2xKeldan Video 8x CR195. 100th at F8, ISO 500



This Chimaera is a very reflective fish which comes up from deep water to lay eggs in the shallows of northern Vancouver Island. The water was dark and the viz wasn't great, so it was an easy shot to screw up. Being able to judge the lighting on the fish while bringing in some background water colour would have been tricky with strobe. With constant lighting and a moving subject, I needed to pay attention to the shutter speed to avoid movement blur.
Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2xKeldan Video 8x CR195. 100th at F4.5, ISO 500

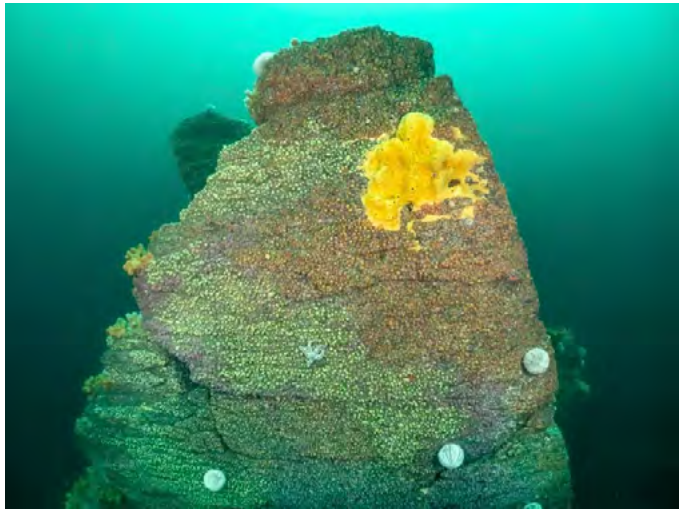
and chargers into every pocket I had, I could just about manage that.

The simplicity of setting the camera's LCD screen to reflect the impact of the settings on the camera meant that I could very easily get the background water to be the brightness I wanted and then it was just a question of adding in the light I wanted by dialling up the power of each Keldan light until the foreground interest was showing the colour I wanted. Most of the time I shot the system on manual settings but if I was

When rooting around under Kelp fronds it's easy for a strobe light to fall behind a Kelp frond, something you won't notice until after you review the image. When using constant lighting you can see any shadows real-time and correct before you take the picture. Here beading anemones are growing on a Kelp stalk. I needed a very slow shutter to bring back the green in the water.
Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2xKeldan Video 8x CR195. 13thth at F8, ISO 500

feeling particularly lazy I could just set the camera to meter for whatever light I put onto the subject for nailed on exposure every time. So it felt like an ideal solution right ? Well while that's largely true, I did find out the gotchas with this solution.

The first thing that I noticed was that strobe brings one very clear advantage that constant lighting doesn't give you. That burst of high intensity lighting from a strobe not only adds light, it also freezes the action. The burst of light has a tiny duration so the light recorded on the sensor helps to freeze any motion on the lit parts of the frame, even if a slower shutter speed is used. My home waters are in Ireland, so its colder, greener and frequently darker water where I regularly use very slow shutter speeds to create background colour in the water. A strobe will freeze the action but I was soon to find out constant lighting will continue to light a moving subject evenly throughout the duration of the shutter being open so you can very easily end up with blurred still images if you drop the shutter much below an 80th of a second. I found that good camera technique became much more important when using constant lighting and I was always looking to use faster shutter speeds than I was used to using with strobes. You will get away with some movement if the

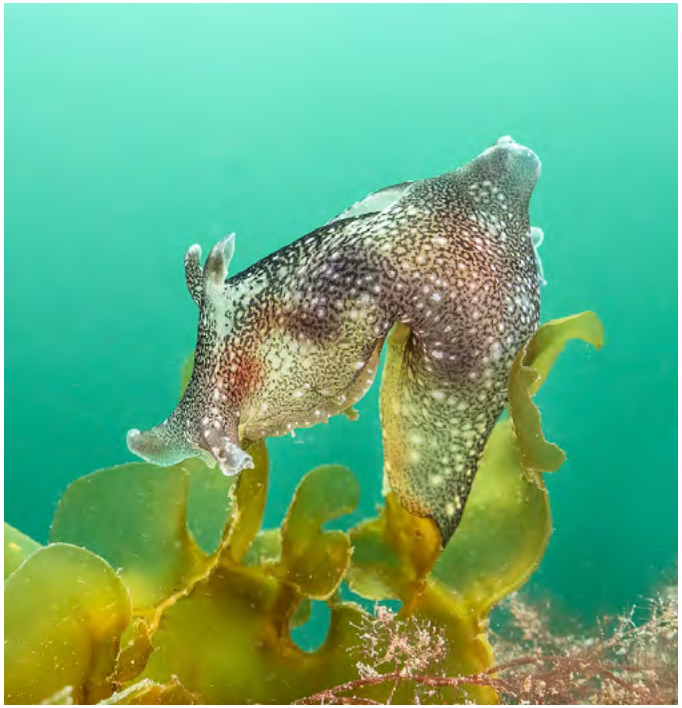


To show the process – Two images, the first, unlit showing how I judge the available light exposure to get the background water the colour I wanted. The second image is the same exposure but this time with the lighting turned up until the colour on the rocks is brought back into the frame. Valentia Island, Co Kerry Southwest Ireland Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2 x Keldan Video 8x CR195. 30thth at F3.5, ISO 640

movement is further away from the camera but,by and large, staying above 125th of a second was a good idea if there was any movement in the scene. I lost a lot of images from camera movement in the early days, particularly if I let the camera control the exposure.

The next issue was having the ability to critically review the still images I was taking. On my Nikon I use an enhanced 45 degree viewfinder, it makes the images much easier to compose but I could critically assess focus on an image review LCD screen on the back of the camera. I could also do this on the GH5 but I found in dark water, a quick preview on the LCD screen on the back of the camera allowed me judge exposure but, unless I punched in magnification, often didn't allow me see if there was a slight movement blur if I'd allowed the shutter speed to drop too much. I quickly found that judging the images properly was an important step and really needed a bigger viewfinder.

I looked at options, I originally wanted to keep the system smaller and easier to travel with but in the end I opted for an external 5 inch HD monitor. Being able to shoot video while holding the camera away from your body was a game changer for improving the stability of the video footage. So despite my desire to keep the system smaller and more budget friendly, I ended up buying a Nauticam housing for a Small HD502 4K monitor, I got the obvious benefits for my video shooting but it also allowed me a proper screen to judge if there was any motion blur in the final images. So more chargers, housings, brackets and arms vacuum systems (with different batteries, honestly, why do



Macro shooting with this technique opens a much easier route to creating balanced lighting macro images. In this case a Sea Hare in Kilkeran Bay, Connemara, West of Ireland.
Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2 x Keldan Video 8x CR195. 160thth at F9, ISO 640

Nauticam do that ?). I now had two systems with multiple battery systems, none of which used the same chargers. When it all worked it was fantastic but I was used to a D850 whose battery lasted for weeks, the GH5 or the monitor needed attention after every dive, it's a high maintenance system. Perhaps it was the way I set it up, but if the monitor batteries died on a dive, the LCD on the camera was disabled and I could only use the eyepiece viewfinder. That was near impossible to use

effectively so I got used to changing the batteries on the monitor after every dive.

The other issue was that although the lights I was using were pretty powerful, in shallow water I needed lower ISO's and smaller apertures to control brighter daylight. In those conditions, even though I had thirty thousand lumens at my disposal, I was often wishing for more power on my lighting. This was a particular issue in shallow coral reef dives where the natural daylight was really strong or if I was filming divers who also themselves had very powerful lights. Of course the usual restrictions on shutter speed needing to stay within the flash synch speed no longer applied, so I could happily run the shutter speed up to whatever I needed to control the light, but as a stills shooter I had to remember that now, for the first time, shutter speed was now a setting that also controlled the intensity of my artificial lighting as well as the available light. That takes a while to get use to but it sometimes means you need to really crank up the power of the artificial lighting if you want to use a faster shutter speed. The exposure triangle that I had learned through years of still photography was now operating with slightly different rules.

The other issue that became a daily task was battery management. I found that if I kept my lights at half power or lower then I could happily get a days diving out of a charge but if I was shooting in brighter conditions or I wanted to use a smaller aperture for greater depth of field then I needed to up the power on the lighting, then the run times on the lights might not last two dives. Battery management became a constant nag in the back of my head, the camera, the monitor and the lights all chewed through power. Not a deal breaker, but you needed to think about it, particularly if you were

I was lucky that I had been shooting a close focus image of a sponge when I saw movement to my left as this small Angler fish swam towards me, so this was really a grab shot. The lighting was OK but at only an 80th of a second the shutter speed was much slower than I would have liked for a moving subject. I was able to take four frames three of which were blurred from the combined movement from me and the fish but panning with the fish gave me one sharp image. The benefit of constant lighting though means you don't have to wait for flashes to recycle so you can set the frame rate as high as you like. Aran Mor Island, County Donegal Ireland.
Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2 x Keldan Video 8x CR195. 80thth at F4.5, ISO 500

One of my first attempts to balance a constant light source light on a close focus wide-angle was this Elegant anemone in one of my local dives Dublin Bay. With the Zoom racked all the way out to its longest end the WWL focuses virtually on the dome. The lights were angled high up and pointed down onto the scene to light up the anemone. Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2 x Keldan Video 8x CR195. 25thth at F9, ISO 400

heading offshore for a day, dry boxes and spare batteries for each of them needed space on the boat and getting systems back on charge between dives became a more urgent task. I can certainly see why professional camera people use such powerful and expensive lights to give themselves the option of balancing their lighting with longer shooting times.

So the constant lighting wasn't the game changer I had hoped. It certainly is a good solution for some images but I ultimately found that using strobes for still images was a better solution. Certainly a large part of the appeal of the GH5 system I had was the WWL optic. At one point

I'd tried to take this type of shot many times, showing the colour in the dark gullies under lush green kelp fronds above. Putting light in the back of the image is a great way to pull the viewer into the frame so I was trying to balance this colourful scene with the distant but low available light in the background. It's an environment subject to a lot of swell and movement so I'd always found it hard to get clean even lighting on the colour on the rocks as my strobes would frequently be blocked by swaying Kelp fronds. Getting constant light onto the scene gives you certainty on the lighting before you take the picture. The GH5 is a capable camera but high ISO is not its strength, so I was shooting this wide open to maximise the exposure and it's a great example of how well the WWL works even at F4.
Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2 x Keldan Video 8x CR195. 40thth at F4, ISO 640

I was loving the WWL optic so much that I looked at getting hot shoe flash trigger for the housing to allow me add back in strobes onto that system. The ability to freeze motion at slow synch speeds was something I missed

A local dive for me, Dublin Bay, Ireland. This was an earlier experiment looking at what was possible. Here I was able to get a sharp well-lit image in pretty poor conditions, 4 meters viz making the background colour at 20 meters hard to achieve. A 15th of a second brough back the colour even at F10 which I wanted to keep it all sharp.
Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2 x Keldan Video 8x CR195. 15thth at F10, ISO 400

in a constant lighting solution. Its not that you can't do it with lights, it's just that its easier with strobes. However, by then the technology had moved on and, capable as it was, it made no sense to further invest in the GH5 solution. The newer sensors were just far more capable and even the GH5 Video capability was becoming more dated. Finally, newer systems were coming on stream that would allow me combine superior video capability to the GH5 whilst maintaining the still image quality of the D850 in one mirrorless system that allowed me keep the WWL wet lens. I sold both the D850 and the GH5 and switched to a Nikon Z8 and the WWL-c, an upgraded WWL lens that was optimised for the Nikon Z range.

A cuttlefish at Playa Chica in Lanzarote in the Canary Islands, I wanted to use a smaller aperture here to keep the whole animal sharp, so even though I was shallow, I slowed the shutter speed to keep the blue in the water. It's interesting that although I used a relatively fast shutter speed at 125th, the movement in the sand under the Cuttlefish's siphon wasn't frozen. It was a lesson to me how good flash is at freezing this type of movement likely making strobe lit images sharper overall.
Panasonic GH5, Olympus 14-42mm F3.5-5.6 II R, Nauticam housing, WWL-B wet lens, 2 x Keldan Video 8x CR195. 125thth at F16, ISO 400

In retrospect the two years I ran those two systems was a great learning curve but I was really ready for the move to the Z8 when it came. The Z8 has great video, if I ever needed it, but in truth I know video isn't my thing. I still regularly dive with Z8 and the WWL-c with the Keldan lights, I love the simplicity of that system but I came to the conclusion that if stills are your passion, then while constant lighting has its place, for me it cannot replace good quality strobes for stills photography.

Nigel Motyer
Instagram

Low Visibility

by Ross McLaren

Some of the most incredible underwater images are those jaw dropping wide angle shots of some of the world's largest animals like whale sharks, vibrant reefs that disappear off into the distance or epic ship wrecks with divers that look like the size of ants floating across the decks. These images give a sense of scale that blows the mind. Unfortunately, in murky waters these types of shots are damn near impossible to reproduce, but, that's not to say you can get some incredible images!

Before talking about the photography, the number one priority of any dive is safety. It sounds boring and a bit of a buzz kill, but when diving anywhere, not least in low visibility, safety has got to be at the forefront of any dive plan and never be sacrificed to get that perfect shot.

Even in the best conditions a camera can cause issues during a dive. It's so easy to be distracted by what's in front of you and forget to keep an eye on your gas, no decompression limits (NDL's) on your computer and dive buddies. I'm not one for doing a dive course for the sake of it, but if there's one course I always recommend to underwater photographers it's the Solo Diver/Self Reliant Diver one. Although not directly related to underwater photography, the skills and experience the courses give you mean you become more comfortable in the water and, should you get distracted and get separated from your buddy, give you have the skills to deal with the situation.

However, to avoid separation, the easiest solution is to have a clear dive plan before getting in the water. Ensure that everyone diving together has a clear understanding of things like:

Diver stirring up the bottom. Olympus E-PL9 + Olympus 30mm Macro 30mm 1/250 F3.5 ISO 6400

Agreed separation procedures. These are usually; look around for 1mins then if no sign slowly surface. However, it can change depending on who you dive with.

What you are looking to spot and shoot.

Hand signals. Again, these can change from diver to diver.

Torch signals. Chances are if you are diving in a low visibility environment a torch is an easier method of signalling to your buddy. So, in that case everyone should be clear on how to signal one and other… and avoid randomly looking like you're having a disco beneath the waves.

As with any diving irrespective of conditions or type of seabed, one of the biggest factors a diver has got to consider is their buoyancy. There's a phrase in diving; "Take only photos, leave only

Wolffish thrashing around in its crevasse. Sony A7CII + Sony 28-60mm Lens + AOI UH-A7CII Housing + AOI Q1 Strobes. 1/160 F8 ISO200

Diver using video lights to take photo of aneone (Not me) Olympus E-M1 Mark II + Olympus 30mm f3.5 Macro + AOI UH-EM1 Housing + AOI Q1 Strobes. 1/60th F3.5 ISO 200

bubbles". And, although exceptionally cheesy, it's non-the-less still very important.

We can be easily distracted by what's in front of us, to the point we forget about what's behind or beneath. It's not the first time I've turned around from taking a photo and met by a dense cloud of silt and sand billowing out from beneath my fins. Not only have I disturbed the animals, possibly even damaging them, but severely "kicked up the vis" making finding my dive buddy all the more difficult. Learning to control your buoyancy before picking up a camera is so important no matter where you dive. But, in dark murky waters even the slightest waft of a stray fin can lead to reduction in the visibility which could turn into a more serious situation.

When it comes to underwater photography, especially in dark and murky waters the biggest consideration is lighting! You can have the latest full frame camera, with a gazillion mega pixel sensor, but at the end of the day, if there's little to no light then there ain't going to be any pictures. So, whenever anyone asks me for advice on which camera to buy, my first question is have they budgeted in lighting? Equipment for underwater photography is a real rabbit hole that is so easy to fall into. But, in terms of lighting there are two main options; each having their own pros and cons.

Video Lights provide a constant light on the subject and what you see in front of you and on the back screen of the camera is generally what you'll get from the final image. In general, they're simple and easy to use and just a matter of turning them on and leaving them. The main issue with video lights are, although the numbers on the side sound "big", like mine which are 3000 lumens, it looks to your eye like it will

Diver with good buoyancy in low vis. Sony A7CII + Sony 28-60mm Lens + AOI UH-A7CII Housing + AOI Q1 Strobes. 1/160th F6.3 ISO 200

be good and if the camera is on auto it will look good on the screen.

What's actually happening is the camera is compensating by bumping up the ISO, slowing down the shutter speed and opening up the aperture. This means that although the image will be correctly exposed, it may not actually be the image you have in your head. The slow shutter speed selected by the camera might mean that very subtle movement from the creature is just a bit

Sony A7CII + Sony 50mm Macro Lens + AOI UH-A7CII Housing + AOI Q1 Strobes. 1/160 F16 ISO160

blurry.

The high ISO will mean some post processing denoise editing could be required. And, with that wide open aperture, as I've found a lot, not all of the animals features are as sharp and in focus as you'd like.

Strobes are much more powerful than video lights. They're essentially the same as a normal flash you'd use above water. They allow you to really "freeze" the subject; with their additional power it means you can reduce ISO settings and increase shutter speed.

With strobes you can get quite creative with lighting to give a different feel to images, almost like you would if you were working in a studio with a model. This can be done with video lights, but strobes offer more options like snoots and, I find personally, more flexibility with better results.

The major down side to strobes is, with the flash not firing until you press the shutter button, the first image is generally not going to be the

AOI Q1 Strobes, with snoot attachement on one.

"insta" shot. I generally find myself taking 3 or 4 before I get one I am happy with, meaning I am having to fiddle with either the settings on the strobe itself or settings within the camera itself.

Underwater when you may only have a split second to get that perfect shot, this can obviously be problematic. With strobes I find there is a much steeper learning curve, but once you've got the basics, they really do elevate your game.

This is absolutely key to getting a good shot and a great shot… and I'll be totally honest, I've not mastered it yet! One of the biggest issues with using strobes is backscatter! In murky waters like here in Scotland, backscatter is an underwater photographers worst enemy! Basically backscatter is the "snowy" or "starry" blotches that can appear on images, and caused by the light of your strobe firing and reflecting off of particles in the water. There are a few ways to reduce backscatter, even in the murkiest of waters, but often it takes some trial and error.

Fireworks anemone with silt encroaching. Olympus E-M1 Mark II + Olympus 30mm f3.5 Macro + AOI UH-EM1 Housing + AOI Q1 Strobes. 1/160th f9 ISO 100

Bobtail Squid. Olympus E-M1 Mark II + Olympus 30mm f3.5 Macro + AOI UH-EM1 Housing + Video Lights. 1/80th F3.5 ISO 200

The first, and probably easiest, thing to do is get as close to the subject as possible, without disturbing it, or other animals around. This means there is naturally less particles between you and the "model" and also helps to fill the frame.

Strobe Positioning is where the trial and error comes in. My biggest mistake when I first started using strobes was pointing them directly at the subject. This is probably the worst thing you could do. Not only do you completely overexpose the animal, but gives the worst backscatter possible. It sounds counterproductive, but you actually want to angle the strobes away from the animal, so when they do fire, they are only being illuminated by the edges of the flash. This reduces the reflected backscatter on the image and leads to some really nice lighting effects on the subject.

Strobe positioning is so subjective, both in terms of the conditions you find yourself in and the outcome you want to achieve. But, my default positioning is for them to be at the 10 and 2 o'clock positions up and behind the camera lens. Both point ever so slightly out the way so when they fire the cones of "meeting in the middle" in front of the lens.

Sadly, when it comes to shooting low visibility waters, I've personally found wide angle photography has got to be shelved in favour of macro or, "mid angle" shots… is "mid angle" a thing? I've been able to just about get away with shooting "mid" sized animals like barrel and lions mane jellyfish, but anything much bigger tends to be a "no go". But, macro/portrait photography can be just as impressive and, if you get the right perspective, just as exciting.

It's funny, I did a night class on photography and for the first wee while I struggled to see the link between shooting a model in the studio and a crab at 15m down in a cold murky Scottish loch. But after a couple of weeks, and a few dives in between the sessions, I began to notice that the similarities are

Fireworks Anemone in Torch Light. Canon G9 X Mark II. 24mm. 1/125th F4.9 ISO 200

surprisingly many.

Just like in the studio, lighting and perspective played a vital part in "telling the story" of the shot. From the right angle the "look" on something like a crabs face can envoke a reaction. It's not the first time I've looked back a shot and could almost imagine from "facial expressions" the crab giving me a torrent of abuse for shining my bright lights on them.

Macro photography can be so rewarding as well. Being "forced" to focus on the smaller creatures opens up and whole other world within an already magical one. You begin to notice small details which would normally be missed. Don't get me wrong, macro photography can be frustrating on land. So, as you might imagine trying to keep a nudibranch less than 3cm long in focus, whilst it's wafting around on a piece of seaweed and all the while you yourself is moving with the current, can be pretty infuriating. But, it's all worth it when you can that shot. That one shot out of 30 in focus makes all the struggles worthwhile.

Diving in low visibility isn't easy, and taking photos in dark, murky environments is even more frustrating. But, one of the things

Nudibranch on seaweed. Sony A7CII + Sony 28-60mm Lens + AOI UH-A7CII Housing + AOI Q1 Strobes + AOI UCL-05 Diopter. 1/160th F16 ISO 200

that keeps me coming back each and every time is the unknown. When you get in the water and visibility is maybe only 2 or 3m in front of you, initially it can be disheartening. But as you descend deeper and your torch begins to pick out small details emerging from the gloom, the sense of excitement kicks in and it's that buzz that pushes you on.

Ross McLaren
www.rsmclarenphotography.com

Close-Focus Wide Angle

By Eric Lambert

Some photographic ideas never really disappear. They simply wait.

Long before digital sensors, autofocus algorithms, and precision-machined housings, underwater photography was an exercise in anticipation. Film forced restraint. Every frame mattered. Every decision, whether distance, exposure or timing, was final. You learned to see before pressing the shutter.

I started underwater photography more than thirty years ago with a Nikonos III. No LCD. No histogram. Just a camera, a lens, and the quiet certainty that if you missed the moment, it was gone forever. Over the years, through more than 3,000 dives with half of them in cold, green Swiss lakes, I learned that the most compelling underwater images were rarely about magnification alone. They were about relationship: subject to environment, detail to context, foreground to story.

One technique embodied that philosophy better than any other: Close-Focus Wide Angle. And for reasons that still puzzle me, it quietly vanished.

A Forgotten Way of Seeing

In the film era, CFWA was not a buzzword. It was a solution. A creative response to the limitations of wide-angle lenses and the storytelling demands of underwater photography.

Using the Nikonos system, most often a 35mm lens paired with a dedicated close-focus or wet lens attachment, we could focus far closer than the native optics allowed. This dramatically increased subject size while preserving a wide field of view. Small subjects no longer disappeared into the frame. They anchored it.

The effect was transformative.

A blenny was no longer just a portrait, it became a character in its habitat. A nudibranch was not isolated against blue water but grounded on the reef it inhabited. CFWA allowed us to show scale, proximity, and environment in a single image, long before those words became fashionable. It was not macro. It was not wide angle. It was something in between and something more powerful. When digital arrived, I assumed CFWA would evolve

Nauticam NA-A2020, Tamron 20mm f/2.8 Di III 1:2, Backscatter MF-2 + snoot. f/11 1/60 ISO100

Nauticam NA-A2020, Tamron 20mm f/2.8 Di III 1:2, Backscatter MF-2 + snoot / 1 x Retra Pro X. f/11 1/100ISO 100

Nauticam NA-A2020, Tamron 20mm f/2.8 Di III 1:2. Backscatter MF-2 + snoot. f/16 1/80 ISO125

alongside it. Instead, it faded.

The Digital Shift and the Gap It Created

Digital photography brought extraordinary progress: instant feedback, high ISO performance, autofocus precision, and dynamic range that film could never match. But it also narrowed creative pathways. Underwater, lenses became more specialized. Macro lenses delivered exquisite detail however stripped away context. Ultra-wide lenses captured dramatic scenes but rendered small subjects insignificant. The in-between space, the storytelling space, was largely abandoned.

Like many photographers, I adapted. I accepted that certain images belonged to film history. CFWA became something I remembered fondly but no longer pursued. Until I realized I still missed it.

The One Company That Refused to Let CFWA Die

To be fair, CFWA did not vanish entirely. When Nikon stepped away from underwater photography and wet optics, one company picked up the challenge: Nauticam. Their EMWL (Extended Macro Wide Lens) system is a remarkable piece of optical engineering, modular, precise, and uncompromising in image quality.

The EMWL is not just a product; it is a statement. It says that close-focus wide angle still matters. Relay optics, interchangeable objectives, and carefully corrected aberrations allow photographers to achieve true CFWA in the digital era. Nauticam deserves immense credit for preserving and advancing this concept when others walked away.

But there is no avoiding the reality: the EMWL system is complex, heavy, and prohibitively expensive for most underwater photographers. At close to €8,000, it remains out of reach for many, even professionals. I admired it. I respected it. But it was not my solution.

An Unexpected Rediscovery

The breakthrough did not come from the underwater world at all. It came from looking at land lenses differently. Tamron's Di III OSD series, specifically the 20mm/2.8, lenses are marketed as compact, lightweight wide angles for mirrorless systems. On paper, they looked unremarkable. Until I read one specification twice: 1:2 reproduction ratio.

At first, it seemed like a typo. A 20mm lens

Nauticam NA-A1, Tamron 20mm f/2.8 Di III 1:2. Backscatter MF-2 + snoot / 1 x Retra Pro X. f/18 1/1 0 ISO320

capable of focusing down to 14 cm and achieving half life-size magnification is, by definition, a macro lens. But with nearly a 100-degree field of view, it occupies a category that barely exists in underwater photography. This was not wide angle with a diopter. This was native close-focus optics.

Suddenly, CFWA was no longer a memory. It was a possibility.

The Missing Piece: A Dome That Did Not Exist

There was only one problem. No dome port on the market was designed for this lens.

At such extreme close focusing distances, dome geometry is not a housing accessory. It is an optical component. Radius, diameter, glass thickness, and nodal alignment all matter. A standard dome would introduce unacceptable softness, distortion, and focus shift. So I did what photographers have always done when the industry does not provide an answer: I started asking questions.

That is how I met José at SAGA Dive.

From the very first exchange, it was clear that this would not

be a cosmetic modification or a repurposed part. José approached the problem as it should be approached: optically.

Together, and in collaboration with an optician, we worked through the fundamentals:

- Entrance pupil position of the Tamron 20mm
- Minimum focus distance underwater
- Virtual image formation behind a dome
- Optimal dome radius to maintain corner sharpness
- Glass thickness and curvature to minimize aberrations

These calculations are not theoretical. Underwater, light behaves differently. Refraction changes effective focal length. A dome port must create a virtual image at a distance the lens can resolve especially at extreme close focus.

The result was a custom glass dome, purpose-built for this lens. No compromises. No off-the-shelf shortcuts. And the price? Approximately €700. Not inexpensive but accessible. And orders of magnitude below the cost of modular relay systems.

Back to the Beginning With Better Tools

The first dives with this setup felt strangely familiar. I was once again inches from my subject. Sometimes closer. The lens locked focus effortlessly. The background remained wide, immersive, and present. The subject filled the frame not because it was magnified artificially, but because I was truly close. This was CFWA again. But better.

Compared to the old Nikonos 35mm setup, the field of view is wider. The image quality is sharper. Autofocus is reliable. Digital sensors handle dynamic range effortlessly. What once required absolute precision now rewards creative exploration.

It felt like reclaiming something that had been lost, not technically, but philosophically.

And this is why CFWA is

Nauticam NA-A1, Tamron 20mm f/2.8 Di III 1:2, 2 x Retra Pro X. f/16 1/25 ISO200

Nauticam NA-A1, Tamron 20mm f/2.8 Di III 1:2. Backscatter MF-2 / Retra Pro X. f/16 1/50 ISO250

Nauticam NA-A1, Tamron 20mm f/2.8 Di III 1:2, 2 x Retra Pro X + 1 x Backscatter MF-2 + Snoot. f/14 1/13 ISO250

not a trick. Close-Focus Wide Angle is often misunderstood. It is not about novelty. It is not about optical bravado. It is about storytelling. When we isolate a subject completely, we remove it from its world. That may be beautiful but it is incomplete. Especially when our audience is not composed of divers. Simply because context matters. A tiny shrimp framed against the reef tells a different story than the same shrimp against black water. A fish interacting with its surroundings communicates scale, vulnerability, and behavior. CFWA allows us to show where a creature lives, not just what it looks like. For those of us who care about the ocean beyond aesthetics, i mean education, conservation, and emotional connection, this matters deeply.

But let's be honest. This approach is not without challenges. Extreme proximity demands precise lighting. Backscatter control becomes critical. Composition requires discipline. There is nowhere to hide mistakes. But these are not drawbacks. They are creative constraints. The reward is an image that feels immersive, honest, and alive.

It is not macro pretending to be wide angle. It is not wide angle pretending to be macro.

It is something else entirely.

Lighting CFWA is where intention becomes visible. At extreme close focus, light behaves very differently: proximity exaggerates contrast, particles become unforgiving, and any uncontrolled spill immediately flattens the image.

Over time, I have moved away from symmetrical wide-angle lighting and adopted a more layered approach. In its simplest form, this may involve a single snooted strobe to precisely

Extreme CFWA lighting example.
Two snooted strobes were used to independently light the small foreground subjects, while a third, unsnooted strobe provided low-level illumination for the background. This layered lighting approach allows precise subject separation without sacrificing environmental context. This is an essential balance in close-focus wide angle photography.
Sony A7rIV in Nauticam NA-A2020 with Tamron 20mm f/2.8 Di III (1:2), 2 × Backscatter MF-2 with snoots / background strobe, 1 × Retra Pro X. f/8 · 1/40 s · ISO 100

light the main subject, combined with a second, unsnooted strobe at lower power to gently reveal the background. In more complex scenes, such as the image shown here, I sometimes push this further, using two snooted strobes to independently sculpt multiple small subjects, while a third, wide beam strobe is dedicated solely to the environment.

This may sound excessive, but in practice it mirrors the philosophy of CFWA itself: control where precision is needed, and allow openness where context matters. Snoots are not used for drama alone; they are tools for restraint.

By preventing light from spilling where proximity already creates dominance, they help establish visual hierarchy. It shall guide the viewer's eye first to the subject, then outward into its surroundings. When lighting is treated this way, CFWA stops being a technical exercise and becomes a deliberate narrative choice.

Closing the circle, I did not set out to reinvent CFWA. I simply wanted it back. What began as nostalgia became a technical challenge, then a collaboration, and finally a rediscovery. The tools have changed. The philosophy has not. Some ideas are too good to abandon. Sometimes, the most meaningful innovation is not inventing something new. But reclaiming something we once understood, and seeing it again with fresh eyes.

Eric Lambert
www.colorsoftheblue.com
eric@colorsoftheblue.com

Nudibranchs

by Mike Bartick and Dr. Terence Gosliner

Seemingly crafted for photographers, nudibranchs are slow-moving, vibrant, and have adapted to curious shapes and sizes. Opisthobranchs, commonly called Nudis or Slugs, can be found worldwide. However, the most incredible variety and abundance are primarily found throughout the Indo-Pacific region, particularly in an area designated as the Coral Triangle. Aside from their cute demeanor, slugs also play an essential role in science and have been the focus of study for many decades. They are helping researchers discover more about the functions of evolution and medical research, and they could even help relate to the health of many ecosystems in our oceans. Yes, slugs might be adorable, but their significance cannot be understated.

Certain “hotspots” for slugs also exist in the area loosely mapped by science that forms the Coral Triangle. This region roughly includes Papua New Guinea, Indonesia, and parts of the Philippines, with Anilao standing out as the premier location on the main island of Luzon in the Philippines, now synonymous with macro diving.

Situated on the southwest tip of Luzon, Anilao is directly adjacent to the Verde Island Passage, the main water corridor that flows through the region separating Luzon from its neighboring island, Mindoro. Since 1992, scientists have partnered with local researchers and dive guides to conduct numerous biodiversity studies in the Anilao area, and their findings are simply staggering.

The leading scientist conducting most of the studies in Anilao is

Dr. Terence Gosliner is the head curator in the Department of Invertebrate Zoology at the California Academy of Sciences. He specializes in adaptive evolution and has devoted much of his life to researching, documenting, and scientifically describing his findings. He spends a significant amount of time in the field, diving and scouring the seabed for new animal life. He is a true modern-day explorer and the author of several ID and natural history books.

For context, around 3,000 nudibranchs have been discovered globally, with just over 1,000 of those found in Anilao alone! Most can be attributed to Dr. Gosliner’s and his teams of experts.

Caloria militaris- A larger slug with lovely orange tipped cerata, orange tipped and smooth rhinophores. This lovely creature has gone undetected for the last 15 years or so, until it recently turned up during our study. Nikon Z8, 105mm F2.8 Nikkor, Nauticam housing, + EMWL 160º - Backscatter HF-1 with domed diffuser . 1/125th @ F13. ISO 200

The magnitude of this kind of research cannot be conducted alone, so he and other scientists have enlisted groups of divers as citizen scientists to assist in the challenge. This eclectic community of devoted sluggers comprises naturalists, self-taught experts, and, believe it or not, newbies. Groups can include divers of all ages, too, which helps them learn about our planet’s diversity firsthand while working shoulder to shoulder with leading experts.

At a recent Citizen Science Nudibranch Workshop(April 2026, Bi-annual), I sat down with Doc Terry to discuss the importance of the Verde Island Passage and the significance of such projects.

“Having citizen scientists identifying species adds critically important biodiversity data that is used in establishing priority areas for conservation. The collaboration of scientists and knowledgeable public members has proven to be a valuable

Doc Terry

partnership to provide the basis for making science-based decisions that protect biodiversity for future generations. This partnership has demonstrated that Verde Island Passage is one of our planet's most remarkable and iconic marine ecosystems that mandates its protection."

Q- How long have you been studying Nudibranchs

Doc Terry- "I have been studying nudibranchs since I was a high school student growing up on the California coast."

Q- Why Nudibranchs

Doc Terry- "Nudibranchs are not only some of the most beautiful creatures on the planet, but their amazing adaptations tell us much about the process of evolution, and they are also important model organisms for biomedical research."

Q- Why Anilao and the Verde Island Passage

Doc Terry- "For the same reason, scientists who study terrestrial biodiversity go to the Amazon; it is simply the richest marine habitat on the planet. Where else in the ocean

Siphopteron sp. A known genus but an unknown species. Siphopteron are very small and are often called "batwings". When feeling threatened, the batwings flap their mantle like a bat and quickly escape.Nikon Z8, 105mm F2.8 Nikkor, Nauticam housing, + SMC2. Backscatter Miniflash and snoot. 1/200th @ F29. ISO 125

can you discover new species daily, even after more than 30 years of continuous study?"

Q-Is it important to work with local colleagues to substantiate the findings

Doc Terry- "It is essential to work with local partners such as dive guides, resort owners, members of the fishing community, and local governments to build a consensus on how to sustain the livelihoods of local people that are going to meet short-term needs and secure the long-term protection of biodiversity hotspots. A bottom-up partnership is always more effective than one that is top-down. Communities must have a stake in their future!

Miamira tenue- Symbiotic relationships are somewhat common underwater. This type of slug is often found with a partner shrimp riding along its back and sides. This combination always makes for a great series of images. Nikon Z8, 105mm F2.8 Nikkor, Nauticam housing, + EMWL 100º, Backscatter miniflash and snoot. 1/40th @ F32. ISO 160

Costasiella kuroshimae AKA-Shaun the sheep, feeds on the algae that live on the Avrainvillea seaweed and is not actually a Nudibranch. Shaun the Sheep is a sacaglossan that steals and stores chloroplasts, which are then used to create biological energy. This one is aprox. 3mm in size. Nikon Z8, 105mm F2.8 Nikkor, Nauticam housing, + SMC 2 shot in DX mode-Backscatter Miniflash and snoot. 1/160th @ F29. ISO 160

For anything to survive, specific factors must align perfectly. One-off subjects cannot endure in isolation or evolve independently.

A food source, a mate, and a survival strategy are essential for existence. If one of these puzzle pieces doesn't fit properly, that species may cease to exist. However, Mother Nature doesn't easily give up on her creations and will do everything she can to alter designs on the fly through adaptive evolution. The process is slow from a human perspective, but over generations of environmental pressures, all creatures must develop new survival methods or perish. It is difficult to observe the changes broadly, but they occur right before our eyes; the proof lies in the details.

Examining a specific group of animals over an extended period can reveal a great deal about the subject of your study, as well as provide insights into the health and environment of their habitat. Such study subjects, known as indicator species, like nudibranchs, are ideal for these kinds of studies.

The science behind describing any new species is as dynamic as the subjects being described; science is not static. Following each clue to determine the exact genus and species based on systematics has evolved dramatically over the last 50 years. In the past, it was necessary to collect multiple samples of the same "new species." Descriptions were often based on scientific comparisons and personal opinions while analyzing similarities or differences to species within a similar genus. Comparative analysis has been and continues to be used frequently before an actual description and is usually denoted by "sp." behind the name of the genus. For instance, "Siphopteron sp.", or species.

Today, scientists use DNA

Gymnodorididae are carnivorous predators that stalk their prey by using their scent trail to track them. This Gynmodorid is in the act of consuming another slug. Nikon Z8, 105mm F2.8 Nikkor, Nauticam housing, + MFO-, Backscatter Miniflash and snoot. 1/200th @ F20. ISO 125

Favorinus sp.2- Preying on the eggs of other slugs, primarily the eggs of Hexabranchs aka Spanish dancers. The Dancers eggs appear as a deep red rose coiled on coral heads. More often than not, Favorinus can be found within the delicate ribbon, consuming the eggs. Nikon Z8, 105mm F2.8 Nikkor, Nauticam housing, + SMC 2, Backscatter miniflash. 1/160th @ F20. ISO 200

sampling to uncover the truth behind clues, but it doesn't necessarily make their jobs easier. In fact, it can complicate them even more, as the ripple effect can extend to the subjects' closest relatives and descendants. This situation arose with the largest known class of slugs, the Chromodoris. In 2012, Doc Terry and a colleague discovered through new sampling methods that the largest group of slugs (Chromodoris) consisted of three separate and unrelated groups.

In response to this latest finding, they classified them into three new groups: Chromodoris, Goniobranchus, and Felimida. If this seems confusing, consider this instance merely the tip of the iceberg. DNA sampling techniques have advanced rapidly over the last decade, enabling scientists to trace and accurately position the new species within the tree of life and assign their binomial names. Humorously, it is said that the only things that haven't changed are the common names often used by guides and divers: Cinderella, Pika-Chu, and the Sea Bunny, to name a few.

The discovery of new animal life on our planet evokes a sense of wonder and a litany of questions. How did it get there? Why now? What is it feeding on? How will it survive? Imagine discovering a new type of Homo sapiens. At the rate of new discoveries and the lack of scientists to conduct proper research, a backlog of many types of creatures has yet to be named. Our oceans are teeming with unknown life forms still waiting to be found and described.

Science and slugs go hand in hand; the more you get to know them, the deeper down the rabbit hole you slide. Nudibranchs are a true gateway drug for marine life.

Slugs, slugs, and more slugs begin to appear as you slowly fin and search the substrate. Some are smaller than a grain of rice, and while their tiny size makes them harder to spot, larger slugs can be just as

Thecacera sp.2-The "Pajama pika chu" is a special slug that shows up once a year when the water temperature drops, and the hydroids in which they feed on are abundant. Nikon Z8, 105mm F2.8 Nikkor, Nauticam housing, + Kraken +6 diopter, Backscatter Miniflash and snoot. 1/200th @ F18. ISO 100

Melibe Colemani appear as a bundle of dental floss on the substrate and are considered a "Holy Grail" find for nudibranch enthusiasts. Sometimes called the Ghost Nudi, due to their difficulty to see, even when looking directly at them. The white lines are actually their muscles on an otherwise transpaernt body structure. Nikon Z8, 105mm F2.8 Nikkor, Nauticam housing, Backscatter miniflash and snoot x 2, one with color gels. 1/200th @ F20. ISO 160

elusive. For instance, many slugs hide under ledges or burrow into sponges while they feed. Some are nocturnal, while others are subterranean or mimic the corals they inhabit. In some cases, slugs even harness photosynthesis to help produce simple sugars for their diet.

Most slugs are specialized feeders that consume specific types of food. One technique for finding these specialized creatures is to locate their

Food source: locate the food and observe the slug. It seems straightforward, but the rule always comes with a caveat. Certain food types may only appear once every few years, making sightings of the slugs that depend on them rare but thrilling discoveries.

What do plants, solar panels, and a special class of nudis have in common? All use sunlight to create energy.

Phylodesmium is a unique class of slug that demonstrates nature is truly better than art, or, in this case, science fiction. These specialized creatures feed on zooxanthellae algae and retain the living algae within their tissues. Their digestive tracts connect to the algae, utilizing photosynthesis to gain energy from sunlight. This amazing phenomenon also includes Baeolidia and Melibe, but only in the Indo-Pacific regions.

Nudibranch—translated, means naked gill. Most slugs in the Dorid class have an exposed gill structure, which enables respiration. The gill plume is located at the rear of the slug and typically features a color scheme similar to that of the rhinophores, its main sensory organ.

Aeolidia do not have the standard gill process. Instead, they possess cerata, which appear as a thick, colorful mane along their back, matching the color scheme with the rhinophores. In addition, they have oral tentacles that can be short or long, resembling a handlebar

Miamira alleni uses mimicry as camouflage and appear as coral. Gerry Allen accidentally discovered this special slug when he saw some coral next to his elbow creeping along the substrate, only to discover it had rhinophores and gills! They can get up to 6 inches in length, have a pink coloration, and have well-protected gills. Nikon Z8, 105mm F2.8 Nikkor, Nauticam housing, + EMWL-160º, Backscatter Atom Flash and Snoot. 1/600th @ F22. ISO 100

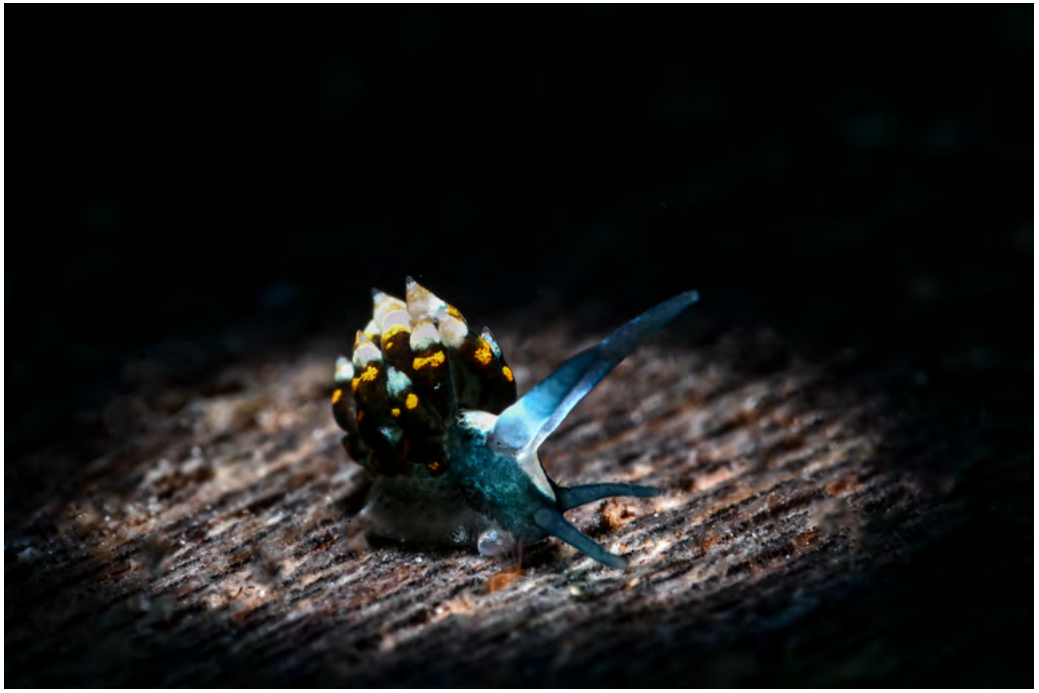
Placida sp. The discovery of a slug that lives within a bubble found on the substrate opened a Pandora's box of questions for slug hunters and scientists alike. How did it get there, how does it mate, how do the feed, can it get out, do they create the bubble and many more. Nikon Z8, 105mm F2.8 Nikkor, Nauticam housing, + SMC2- This image is cropped, Backscatter miniflash. 1/200th @ F32. ISO 80

mustache.

Rhinophores come in various shapes and designs, helping to identify one species from another. Their primary function as chemoreceptors is to detect the chemical scents or mucus trails of their prey. Many slugs also have visible eye spots that can detect light, but they are not truly capable of vision beyond that.

Like any study, you should explore as many scenarios as possible during a workshop to gather the most information and compare it with previous studies. Since 2016, our core group has compiled a list of over 400 slugs. During the workshops, "the list" is distributed to each team involved in the study. Each team consists of four divers and one or two guides. Together, the teams explore various dive sites around the Anilao area, taking photos and searching diverse habitats. Each site yields different slugs, with minor overlaps usually comprising those less finicky about their diet. All information is recorded and submitted to the group's data master, who then transfers the data onto a graph. This allows the teams to measure our real-time progress during our sometimes heated morning discussions.

One of the notable characteristics of slugs is their color and shape. Due to evolutionary processes, opisthobranchs lost their gastropod shells, which forced them to adopt new strategies for protection. Over generations, shell-less slugs developed several new methods for camouflage and self-defense. Color variations within a species can often confuse enthusiasts into thinking they are seeing a new nudibranch, as described in Dave Behrens' book, "Nudibranch Behavior." He goes on



Stiliger SP-F - This is a new and undescribed slug. Nikon Z8, 105mm F2.8 Nikkor + SMC2 shot in DX mode, Nauticam housing, Backscattert miniflash. 1/160th @ F32. ISO 250

to detail the form and function of the flamboyant color schemes that occur across many other species of slugs.

For self-defense, slow-moving, vulnerable slugs need a solid plan to fend off predators. Part of this involves a behavior scientists refer to as aposematic coloration. These bright colors serve as a warning because once bitten, the slug will unleash its secret weapon, injuring and possibly killing its potential predator. Many slugs presumably acquire an unpalatable flavor from their diet, while others have stinging cells. Like other marine organisms, nematocysts are the preferred weapon for inflicting damage during an attack. The nematocysts are ingested as a byproduct of consuming hydroids. The immature cells are then transported to the cerata or glands, where they eventually mature within the slug. Each nematocyst cell, when magnified, appears as a tightly coiled spring with a sharp barb on one end, ready to discharge with the slightest disturbance. When bitten by a fish, this self-defense mechanism involuntarily discharges, delivering fatal wounds in the fish's mouth.

Photographing slugs can be accomplished in various ways. For a scientific study, capturing an identification photo from above or laterally is essential, ensuring that as much of the slug is in focus as possible. It is also important to photograph the slug undisturbed and in its natural habitat. Using a ring flash or front lighting is ideal for this type of photography. Additionally, when discovering a new slug, it is crucial to take that identification photo first so it can be adequately identified before getting creative.

A completely different composition style is necessary for a more expressive rendition. The true challenge lies in merging the two styles to artistically depict the slug while ensuring it can be properly identified. To achieve this, ensure the rhinophores or eye spots are sharp. Additionally, leverage the available colors and patterns. Macro lenses, diopters, and even wide-angle lenses can be utilized effectively, provided the slug occupies a significant portion of the frame. Employing negative space is also crucial for creating a portrait. Taking a slightly upward angle enhances perspective, and getting close ensures clarity, contrast, and minimal backscatter. Lighting, of course, is everything when shooting this way. Using a snoot, a single strobe, strobes at varying power settings, backlighting, or combinations of these techniques helps create striking photos. Slugs can be photogenic even when sitting still.

From ID to art, and nestled between sci-fi and true science, opisthobranchs, nudibranchs, or slugs—whichever name you prefer—are among the most dynamic subjects you could encounter on any dive. Like hunting for colorful needles in a haystack on steroids, continue searching for self and science, and who knows, you might accidentally stumble across a new and undiscovered life form right here on planet earth.

Our next Citizen Science Workshop is April 1-10, 2027. All are welcomed to attend as long as you bring a sense of adventure, your sense of humor and your sense of curiousity.

Mike Bartick
www.divecbr.com

Crystal Blue resort

Dive and Photo Center
Anilao, Philippines

Crystal Blue Resort

Your Home In The Philippines

Chef Prepared Meals

Camera Room

2:1 Expert Guide Service

Photo Coaching

Workshops | Individual Travel

Backscatter Photo and Video Retail Center

Home of Blackwater Diving in the Philippines

www.DiveCBR.com

Mike@DiveCBR.com

Dedicated To Underwater Photography For More Than 15 Years

The only way is ethics

by Gal Kahn

Underwater wildlife photography is a specific niche within wildlife photography therefore, most guidelines for wildlife photography apply for, and get amplified underwater.

As a marine biologist, one of my leading principles when I pick up my camera is the “fly on the wall” concept- causing as little disturbance as possible. Following this guideline allows the animals around me to feel safe, and provide me with opportunities to capture natural behavior shots and get to know WHO they are rather than only WHAT they are.

As a wildlife photographer both on land and underwater, I’ve learned that in the watery world we are presented with bigger challenges in terms of gear, skills and opportunities. In this environment, we are completely foreign, and subtle changes in our behavior can dramatically affect animals, and the photos we capture of them.

However, the reward we get from an exciting underwater encounter is something that cannot be explained to those who haven’t experienced it by themselves.

What Makes Underwater Wildlife Photography Different

Wildlife photography on land and underwater have many differences. On land, for example, we can sometimes camouflage ourselves or hide from our subjects and wait for hours in the same spot. Underwater, however, this is virtually impossible; the animal will almost always notice us, so it’s much more crucial that we convey calmness and pure intentions, otherwise we might scare it away.

Swimming not directly towards the subject and avoiding sharp movements usually help, but every species behaves and reacts differently and has its own body language, so I’d recommend learning the details about our subjects beforehand.

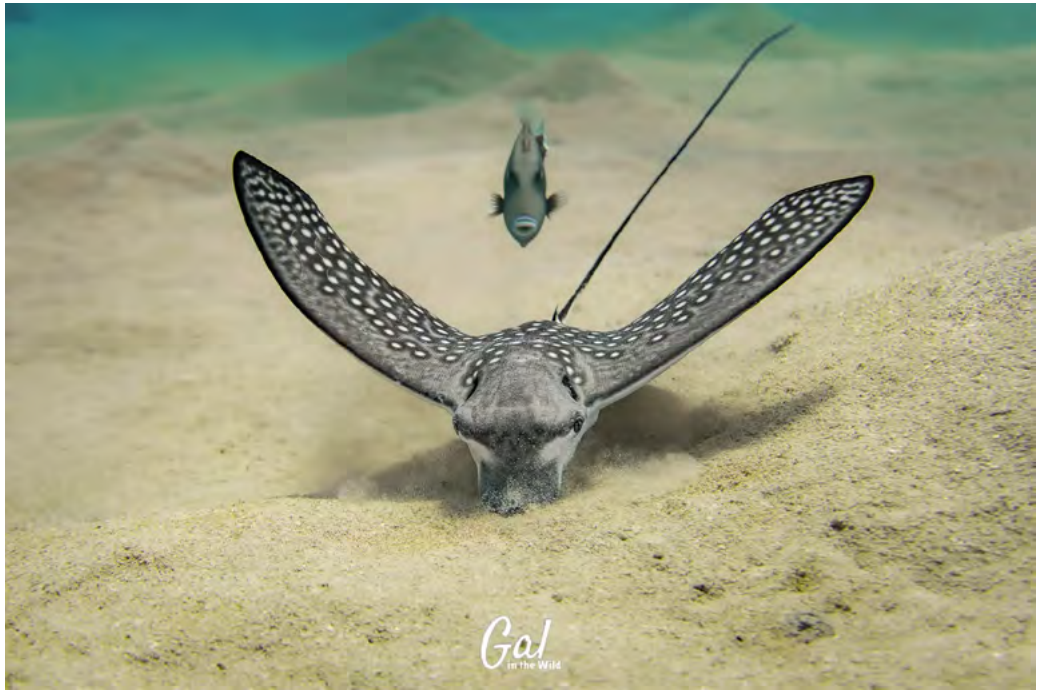
Secondly, underwater we can usually get much closer to wildlife than on land. This is exciting but also presents us with a big responsibility to know the limits and not get too close. In almost all cases, if possible, it’s best to spot the animal from a distance, try to anticipate its direction of movement, position ourselves accordingly and let it come to us.

In addition, there are a few more

factors that apply underwater that we must consider: marine animals perceive us differently; we bring with us foreign microbiome and skin oils from land; our bubbles may deter some animals; this world is much more three-dimensional than what we’re used to; stress signals and body language are often subtle and could be missed.

How Competitions and Social Media Affect Our Ethics

Today, we live in a world with increased social pressure to get “the perfect shot”. Driven either by likes and exposure on social media or by



awards and recognition from photo competitions, photographers might be tempted to push ethical limits and chase winning shots at the expense of stress to wildlife.

Competitions and social media are not the problem by themselves, but if they reward shots that include invasive angles, animal handling, or other misguided behaviors, they normalize them and put pressure on other photographers to recreate them.

Over time, as knowledge and awareness grew, many competitions and professional platforms incorporated ethical behavior rules that participants must disclose. This is good and a step in the right direction, but in many cases it's still largely dependent on the photographers' honesty.

Many experts and judges could recognize stress signals in some animals. However, even for them, it might prove difficult or even impossible to recognize them in macro shots or rare subjects. Not to mention social media, which doesn't even have such ethics rules. Therefore, the responsibility still lies with us, the photographers, to keep our ethical code and be honest about it. Even if no one is around, and we're the only ones who can ever know what really happens, our moral code still applies. So, in addition to asking ourselves "can I get closer?" we should also ask "should I?".

Invisible Pressure on Dive Guides: Expectations vs Responsibility

The internet is a great tool for getting information and preparing for dives. We can learn about dive sites, which animals can be found in them, and even get pro-tips like on which specific algae to look for a special nudibranch, or how to read the body language of sharks.

That said, I still think there is no replacement for local dive guides who can share from their experience and take us personally for a tour in their own home-turf. However, this may create problematic situations for them.

Many times, the social pressure (as discussed in the previous section) is transferred onto guides, as photographers arrive with a target species list, limited time and high expectations.

Usually, dive guides are locals who depend on dive tourism for livelihood, and therefore, understandably, strive to get good reviews, recommendations and tips. Because of this, putting guides under pressure to "deliver" might cause them to resort to flushing animals

from hiding, touching or repositioning subjects, and engaging in other unethical behavior.

All divers, including dive guides, are responsible for their own actions. But this dynamic gives us, photographers, extra responsibility as well as the power to shape this culture. We should make it clear to our guides that we value respect to wildlife, and reward knowledge, skills and patience, not forced encounters. Moreover, we must remember that in nature, encounters are ultimately a matter of luck, and our dive guides can't control nature. Therefore, we should always give reviews, tips and recommendations based on our experience with the guide, not based on natural encounters.

By doing these things, we can reinforce positive dive culture and allow our guides to behave ethically without fearing for their livelihood.

Scuba vs Freediving: Advantages and Disadvantages

Disclaimer: as a person who has experience in photographing both while using scuba and freediving, I'll share some of my opinions and insights. However, it's important to remember that this is based on my experience and personal preferences; different things may work for different people in different situations.

The biggest advantage of diving using scuba is longer bottom time. It allows us to move more slowly, spend more time continuously underwater, and notice more small details. This is especially useful for macro photography, while looking for beautiful tiny critters in the reef. However, it also involves bulky (and expensive) gear, noisy breathing and bubbles which may be intimidating for some larger animals.

Freediving, on the other hand, requires no bulky gear. Furthermore, it allows us to have a much more silent approach, being perceived as just another animal underwater instead of an intruder in a spacesuit.

In my experience, the bigger inhabitants of the sea are usually calmer when I'm gliding on a single breath, allowing me to get closer and have better interactions with them (resulting in better photos as well). In addition, the face-down surface time between dives allows us to cover more distance, have more mobility and a larger field of view, increasing our chances to spot larger animals. However, naturally, the one-breath approach shortens our dive time, which can result in shorter interaction windows and a temptation to rush the shot.

Diving Skills Before the Camera

Being a good underwater photographer means first being a good diver, no matter the type of diving we choose. If we use scuba- we should have excellent (if not perfect) buoyancy, awareness and other scuba skills. If we freedive- we should have great technique and control, and know our limits very well.

As a former instructor, I've seen many beginners go diving with cameras, and completely forget all the basics the moment a turtle or an octopus appears. Holding a camera is a mental distraction, which amplifies mistakes. Therefore, before we even consider bringing it underwater, diving must become a second nature to us.

Mastering diving skills first is important not only for our own safety, but also for the safety of the reef and the marine wildlife. Not doing so may also result in behavior that may frighten our subjects and cause us to lose the photo opportunities, like sharp movements, kicking up sand, etc.

Common Mistakes and Ethical Tips Underwater

Over the years as an underwater photographer, I've made mistakes and watched other people make mistakes that resulted in stress to wildlife and questionable situations. The biggest one is chasing the animal. Especially as beginners, sometimes adrenaline gets the best of us, and we're tempted to chase our subject to get more shots.

When the animal has had enough, it's important that we DON'T chase it. This would only cause additional stress to the animal, would not result in a good photo, and let's be honest- we don't have a real chance of keeping up with most animals underwater anyways.

The second common mistake I've seen is getting too close to subjects or hovering over them, thinking that closer is always better. We must remember that they are the locals, and we are the visitors in their natural environment. Therefore, their needs should be valued more than our desire for a good shot.

Ethics Specific to Scuba Diving and Macro Photography

In addition to the ones mentioned before, scuba diving and macro photography have some extra ethical points worth discussing.

Unlike larger animals, macro critters usually can't escape us by simply swimming away. Some are forced to hide within corals or crevices, while others (like nudibranchs) aren't quick enough to do even that. If our subject went into hiding, as scuba divers, we could hover around, sticking our head in weird places for a chance to spot it again. Goes without saying that this kind of behavior causes additional stress to the animal that is hiding from us, and to other organisms we might not even know are there (on top of maybe being unsafe for us as well). If we scare away our subject, the best strategy would usually be swimming a few meters away, putting some distance between us and it, and waiting patiently.

This way, if we behave like a “fly on the wall”, the subject might feel comfortable enough to come back out of hiding and provide us with a great encounter.

Another consideration in scuba is due to its longer bottom time. Because of it, we may be tempted by behaviors like touching the bottom or corals for stability, manipulating animals to get the perfect angle and composition, moving subjects onto “better” backgrounds, etc.

However, we must remember that underwater environments, especially coral reefs, are very fragile to outside effects. As mentioned before, touching marine organisms means exposing them to our microbiome and skin oils, the consequences of which we don’t yet entirely understand. Furthermore, we don’t know the full extent of how manipulating them might impact their future survival chances.

Small organisms have small energy reserves, and if we move them too far away, they might not be able to make it back. Also, handling them might cause a stress response which could attract predators or harm them in another way. In the macro world, manipulation is usually easy, invisible to the audience, and subjects are often too small to protest. For these reasons, macro photography is where our ethics are tested the most, and our responsibility is the greatest.

Ethics Specific to Freediving and Approaching Larger Animals

All the ethics points mentioned above apply also for freediving. However, by its very nature, it involves much more movement than scuba diving, especially in the vertical axis. For this reason, it has some of its own specific behavioral considerations.

The biggest and most common mistake I see beginners do is descending directly over their subject. When approached from above, most animals would feel threatened and escape, resulting in stress to them and a missed opportunity for us. So, the best approach in most cases would be from the front or side of the subject, descending a few meters away from it, allowing it to see us continuously, making horizontal movements only when we reach its eye level. This way, if we move in a slow and calm manner, we maximize our chances not to be perceived as a threat, giving the animal the option to stick around and allow us to peak into its world.

What Ethical Underwater Photography Gives Back

Considering everything that has been discussed, we can probably agree that ethical behavior underwater has positive effects on us as well as on the animals and their environment.

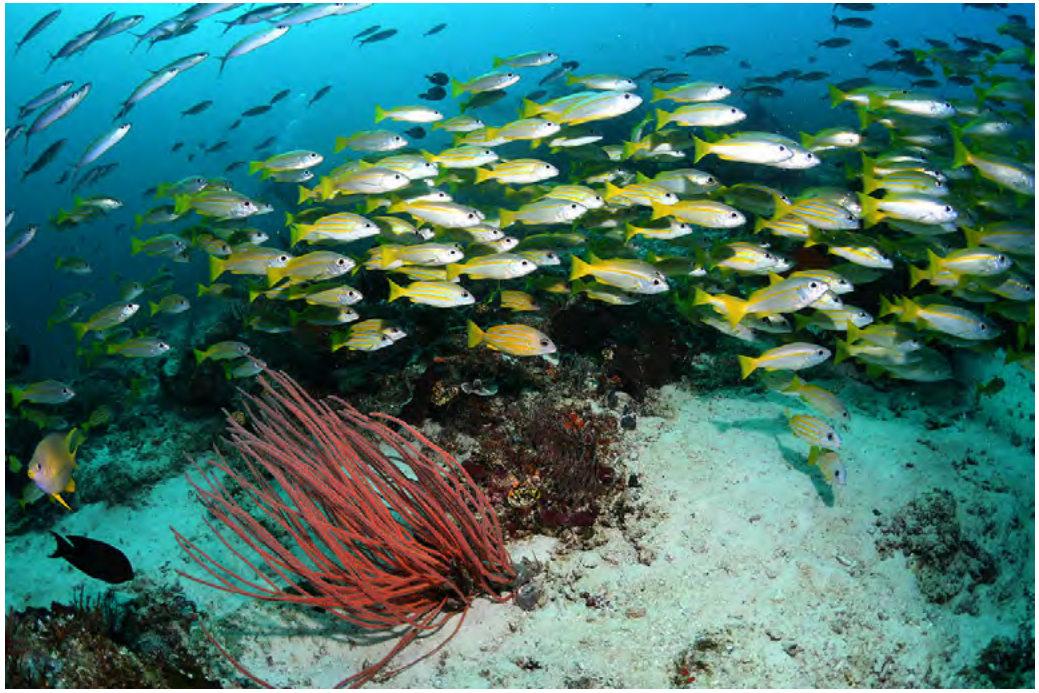
Underwater, calmness is key- if we don’t chase, minimize disturbance and convey tranquility, we increase our chances to get repeated encounters. This, in turn, increases our chances to capture more authentic shots, get to know the animals and their stories better, and increase long-term conservation efforts.

Ultimately, animals that feel safe allow us to get closer, stay longer, and witness their true selves.

Gal Kahn
Instagram

Wide In Raja Ampat

with Nigel Marsh



Before every dive trip I always have a list of dream subjects. Most of these subjects are new, species I have never photographed before. However, when returning to destinations I have dived before I also have subjects that I want to improve on. Recently I returned to Raja Ampat, Indonesia, and I had a chance to tick off some dream wide-angle subjects at this very special dive destination.

I first visited Raja Ampat in 2017 and followed this up with a return trip in 2018. On both trips I explored the area's rich waters on a liveaboard vessel operated by Sea Safari Cruises. Raja Ampat amazed me from the very first dive, with stunning reefs, beautiful corals, masses of reef and pelagic fishes, plus the occasional turtle, shark and reef manta ray. On these trips I was constantly swapping between the wide-angle and the macro lens, shooting schools of fish, fish portraits, stunning corals, fascinating invertebrates, camouflaged wobbegongs and even muck critters.

I thought I had the area covered and wasn't planning on a return trip until an email from the Indonesian Ministry of Tourism arrived inviting me to join a familiarization trip with a group of Australian dive travel agents. The week-long trip would see us staying at a resort at Katembe Private Island and diving some of the best dive sites in Raja Ampat.

I naturally said yes and then reviewed my previous images to see what I had missed and what I could improve on and quickly came up with a list of dream wide-angle subjects. These included a tasselled wobbegong resting on a plate coral and a large school of ribbon sweetlips were key subjects. While I had photographed these subjects on previous trips, the wobbies were always hidden under a ledge and I only found small groups of ribbon sweetlips. I also hoped to get a few reef shark images; however, top of my list was an oceanic manta ray. This is a species that has eluded me for many years. On my previous trips to Raja Ampat, I had seen several reef manta rays, but the oceanic manta rays where nowhere to be seen. With these subjects in mind, I packed my gear and headed off to Indonesia.

Getting to Raja Ampat is a lengthy adventure, even from Australia. We flew Sydney to Jakarta, then flew overnight to Sorong, followed by a two-hour local ferry to the town of Waisa and finally a 30-minute boat ride to the resort. Over twenty-four hours of travel. However, it was well worth the effort when we saw the resort with its white sandy beaches, swaying palm trees and thatched bungalows built over the water. The resort was fabulous, with great staff, amazing food and a wonderful dive operation. However, a little limited for an underwater photographer, as they had little fresh water for showering and washing gear, and limited power, with the generator only working for 12 hours each day. Fortunately, I managed to wash my camera gear and keep my batteries charged daily. I was later informed that the other part of the resort, which will reopen in 2026, has freshwater and 24-hour power.

Katembe Private Island

I started looking for my dream wide-angle subjects from the first dive

Moluccan bluespotted maskray - 1/125, f13, ISO 200, Nikon D500 with Tokina 10-17mm lens, Isotta Housing and Inon Z330 strobe

Banking oceanic manta ray - 1/50, f8, ISO 200, Nikon D500 with Tokina 10-17mm lens, Isotta Housing and Inon Z330 strobe.

at Mioskon. This lovely sloping reef site is typical of many sites in Raja Ampat, with lovely gorgonians, soft corals, whip corals, sponges and a healthy population of reef and pelagic fishes. I snapped images of schools of coral snappers and batfish, plus crocodilefish, angelfish, pufferfish and a few lone sweetlips.

A big surprise at the start of this dive was a group of three Moluccan Bluespotted Maskrays. On my previous trips to Raja Ampat, I had hoped to see stingrays, but hadn't seen one, so these had slipped off my dream list. This species is only found in this area of Indonesia, identified after DNA testing confirmed that what was once thought to be one widespread bluespotted maskray species is actually a dozen local varieties. I got some lovely photos of these co-operative rays as they rested on the sand.

Towards the end of the dive our guide Cliff found a tasselled wobbegong shark, unfortunately, once more resting under a ledge. While I have hundreds of images of these camouflaged sharks, which are also found in Papua New Guinea and northern Australia, the ones in Raja Ampat are unique as some are bold enough to rest in the open on plate corals. This unusual behaviour is what I hoped to capture on this trip.

The next dive at Friwen Wall was also wonderful with pelagic fishes, lovely corals and a great collection of reef fishes. The only subject from my dream list was a blacktip reef shark, that was very shy and impossible to photograph. On this trip I was surprised by the number of blacktip and whitetip reef sharks I saw, a big increase from previous trips. I was also delighted to see over a dozen juvenile blacktip reef sharks cruising around in the shallows in front of the resort.

For the afternoon dive at Batu Lima, I switched to macro to look for smaller subjects. Being a fish nerd, I always have a dream list of fishes I wish to photograph on each trip. I didn't find anything that was new to me, but still had a lovely dive photographing angelfish, blennies, tuskfish, dottybacks, butterflyfish, anemonefish, tobies and a shortpouched pygmy pipehorse.

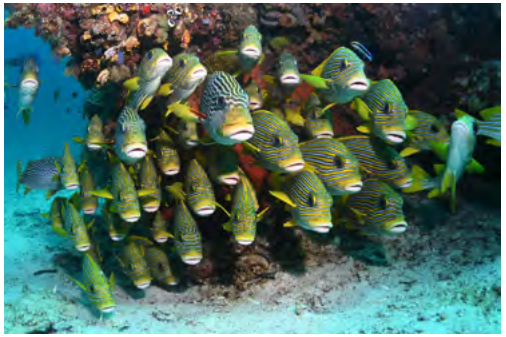
It was an early start the next morning for our dive at Blue Magic. This is one of the most famous dive sites at Raja Ampat, a large coral

mound rising from 35m to 10m that swarms with fish. I was looking forward to returning to this site as it is often visited by oceanic manta rays. A popular dive site, we had to book a time for our visit, with 7am our allotted slot.

Washed by strong currents, we enjoyed an actioned packed dive seeing schools of barracuda, trevally, fusiliers, coral snappers and batfish. We also spotted blacktip and whitetip reef sharks, Spanish mackerel and numerous reef fishes. I found another tasselled wobbegong, naturally resting under a ledge. Unfortunately, no oceanic manta ray today.

We then headed to my favourite dive site at Raja Ampat, the amazing Sawandarek. This site had changed a lot in seven years; there was a second jetty and the village had grown. Fortunately, it is still a spectacular dive site.

This site has a sloping reef and a massive patch of cabbage coral at 25m that is overloaded with coral snappers and squirrelfish. The last time I dived it there was also a small school of ribbon sweetlips hovering here, but they had moved on. Drifting along the reef I photographed green turtles, barracuda, gropers, maskrays, batfish and a massive school of bigeye trevally. We found another tasselled wobbegong under a ledge, still not that dream shot.



Ribbon sweetlips all lined up - 1/125, f8, ISO 200, Nikon D500 with Tokina 10-17mm lens, Isotta Housing and Inon Z330 strobe

Under the jetty was a lovely mixed school of sweetlips and coral snappers, plus lots of sergeant majors and drummers. While still an incredible dive, I was saddened to see the giant clams that once sat under the jetty had disappeared, and the hard corals around the jetty were showing a lot of wear and tear, not like the healthy coral gardens I had seen on my last visit.

The afternoon muck dive at Sapokren was very enjoyable. Switching back to macro I photographed common seahorses, nudibranchs, waspfish, stingfish, commensal shrimps, porcelain crabs, pipefish, pufferfish and marble snake eels.

In the morning, I had the wide-angle lens back on for a dive at Arborek. I had dived this sloping reef and jetty several times on previous

Yawning western clown anemonefish - 1/125, f16, ISO 200, Nikon D500 with 60mm lens, Isotta Housing and Inon Z330 strobe

trips, so didn't have high expectations for a return visit. However, the site really surprised me with its lovely corals and abundant fish life. I found another tasselled wobbegong, once more resting under a ledge. However, this one had a cloud of glassfish swarming around that made for some special images. We also saw batfish, angelfish, fusiliers, coral snappers and a Maori wrasse.

The big surprised came just as our guide indicated to turn around, an impressive school of ribbon sweetlips. Schools of these fish are one of the signature features of this area, and I was very pleased to finally get a chance to photograph a tight ball of at least forty of these colourful fish. They lined up perfectly for my camera and I snapped off almost one hundred images as they milled in front of me. I had finally ticked off one of my dream wide-angle images for this trip.

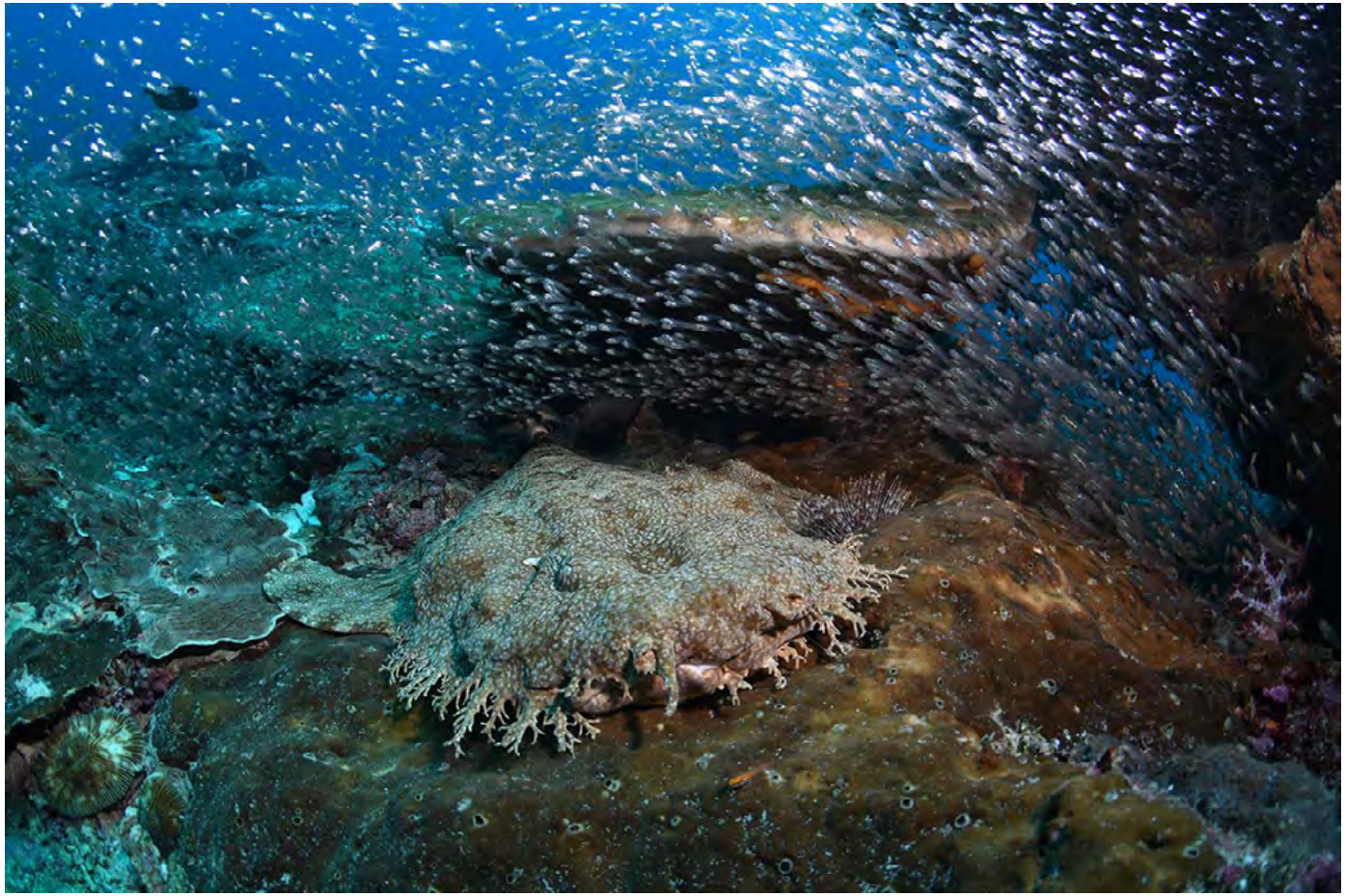
Manta Sandy was a letdown after this lovely dive. I have dived this site before and find it very limiting for manta encounters. The site is setup with a stone strip, where divers kneel to watch the mantas, but with it 8m away from the bommies where the mantas get cleaned it is hardly a

Crocodilefish resting where I was hoping to find a wobby - 1/125, f14, ISO 200, Nikon D500 with Tokina 10-17mm lens, Isotta Housing and Inon Z330 strobe

photographers dream. On this dive we only had 10m visibility and no mantas, and with nothing else to see it was a dull dive.

For the next three dives at East Friwen, Batu Rufus and Melissa's Garden I went with the macro lens for fish portraits. This ended up being a good choice for these sites, with a great range of boxfish, angelfish, tobies, blennies and wrasses. The highlights being a comet, a winged pipefish, a Morrison's dragonet and a Denise's pygmy seahorse.

Our final morning gave us one last chance to visit Blue Magic. We were once again booked into the 7am time slot and woke to find an overcast grey day. It was dark and gloomy underwater, and for the first forty minutes I photographed barracuda, trevally and schools of soldierfish. I found the tasselled wobbegong once more, still resting under the same ledge and was busy photographing it when our guide Cliff started waving and pointing into the blue. I charged over and was delighted to see a large shape swimming towards us, finally an



Tasselled wobbegong resting under a curtain of glassfish - 1/125, f9, ISO 200, Nikon D500 with Tokina 10-17mm lens, Isotta Housing and Inon Z330 strobe

oceanic manta ray.

For the next twenty-five minutes this majestic 4.5m wide ray swam around us getting cleaned. It appeared to be very curious of our small group, heading straight at us and banking away at the last minute. Several times it swam straight over my head, allowing for some great photos.

At one point I was hovering above a small coral outcrop when the manta turned directly towards me. I couldn't believe my luck when the ray kept coming closer and closer. I expected it to turn off at any second, but then something completely unexpected happened, the ray went under me. I was hovering in a horizontal position, so must have appeared to be a lot smaller to the manta for it to make this manoeuvre. I couldn't believe it, there must have only been a two-metre gap between me and the coral head, but the ray squeezed through, only centimetres below me. I got some amazing photos, a dream wide-angle subject finally ticked

The distinctive T-shape of an oceanic manta ray - 1/60, f8, ISO 200, Nikon D500 with Tokina 10-17mm lens, Isotta Housing and Inon Z330 strobe

off.

On the long journey back home to Australia I reflected on a great trip to Raja Ampat. I had ticked off two of the dream wide-angle subjects and had a close encounter with an oceanic manta ray that I will never forget!

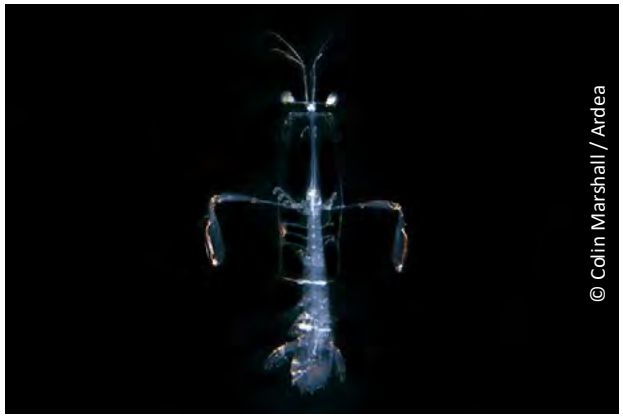
Nigel Marsh
www.nigelmarshphotography.com

Nigel has authored over a dozen books on marine life and dive sites, and each year leads special photography group trips to dive destinations across the globe. On these trips Nigel is on hand to help improve your underwater photography and does regular talks on photography and marine life. Visit his website for details.

Marshall's Mysteries 26

Answers on page 72

Blackwater Diving - "We are not in Kansas anymore" – Part 2 : Following Part 1 in UWP 148, here is Part 2. See if you can name the animals from this selection of Blackwater critters, even if just the general common name. All images taken in Tulamben in Bali, unless otherwise stated.



Small Ads

Underwater Photography UwP

Your FREE underwater photography magazine

Home | UwP back issues | Kit for sale | Sell your kit | Advertise | Contact UwP

Kit for sale

If you're looking for a specific piece of kit, enter a keyword (e.g. flash, housing, Ikelite, etc.) to show only the adverts you want.

Search UwP adverts All Search

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

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

FOR SALE – Aquatica Macro Port & 2 x Sea & Sea YS -120 Duo Strobes
Aquatica Macro Port (Manual & Autofocus) for any DSLR Aquatica housing with the 4 lugs bayonet fitting. £180. Sea & Sea YS -120 Duo Strobes with instructions & one Diffuser they are in good used condition and in full working **... More >**

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

FOR SALE – Nauticam flat ports and lenses Sony 28mm and 90mm
Nauticam flat port for Sony 28mm + sony lens 28mm +Nauticam flat port for Sony 90mm + sony lens 90mm+Nauticam trigger flash for sony. SOLD Can be sold separately. Total price 1260£ (does not include insurance and shipping) **... More >**

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

FOR SALE – Nikon D500 + 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 >**

Please support our advertisers and help keep UwP free.

Magic Filters
BACKSCATTER UNDERWATER VIDEO & PHOTO
KELDAN Advanced Lighting Technology
OCEAN LEISURE CAMERAS
Nauticam
ULTRALIGHT CONTROL SYSTEMS
ikelite
AQUA DIVERS
REEF PHOTO & VIDEO
WETPIXEL.COM digital imaging for divers
SEA&SEA THE UNDERWATER IMAGING COMPANY
DivePhotoGuide.com
wakatobi
ACQUAPAZZA
UW CAMERA STORE
Nauticam Innovation underwater
Magic Filters

Sell your stuff You'll be amazed at just how quickly your unwanted underwater photography kit could be converted into hard cash with a UwP small ad. You can have your own UwP small ad from just £7.50 and it can have one photo as well as up to 100 words.

Check out small ads here

Buy your small ad here

Marshall's Mysteries 26 – Answers

Narcomedusa
(Solmundella bitentaculata)

Narcomedusa (Solmundella bitentaculata), a predator jellyfish with stinging cells (nematocysts); can be mildly painful to humans.

Image on right is the Jewel Jellyfish, Liriope tetraphylla, also seen on a blackwater dive, with a more severe sting.

Tonguesole
(Cynoglossus sp)

Tonguesole larva, with dorsal fin rays. Note eyes have not yet metamorphized to both on left side.

An adult Kopp's Tonguesole, (Cynoglossus kopsii) is shown on the right.

Lembeh Straits, Sulawesi, Indonesia

Crab Megalopa
(Brachyura Infraorder)

Crab Megalopa final larval stage.

Image on right is the previous Zoea stage, before moulting to the Megalopa stage. Zoea stage has more spines, the later Megalopa has more defined claws.

Cardinalfish
(Gymnapogon urospilotus)

Larval Spot-tail Cardinalfish, with extended fin rays. Perhaps mimicking toxic lionfish.

Image on right is an adult of the larval Cardinalfish, with egg case visible in the transparent fish.

Dili, East Timor

Mantis Shrimp
(Stomatopoda Order)

Mantis Shrimp larva, with aggressive pose even at an early age.

This may transform into the commonly-seen highly-violent Peacock Smashing Mantis Shrimp (Odontodactylus scyllarus).

Lembeh Straits, Sulawesi, Indonesia

Pelagic Nudibranch
(Cephalopyge trematoides)

Pelagic Nudibranch, one of only 5 pelagic nudibranchs.

Image on right is a more conventional benthic nudibranch, Anne's Chromodoris (Chromodoris annae).

Lembeh Straits, Sulawesi, Indonesia

Isopod
(Isopoda Family)

Isopod on Sea Butterfly (see Part 1), Cavolinia sp.

Image on right is an Isopod hitching a ride ("phoresy") on a Jellyfish, also enjoying the protection that a Jellyfish brings – like having a taxi driver with a gun!

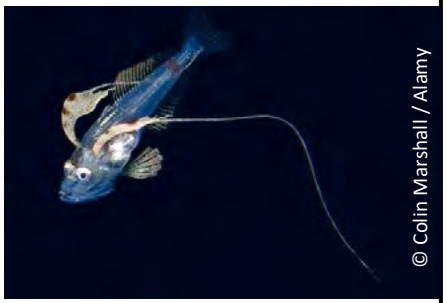
Tube Anemone
(Ceriantharia Subclass)

Tube Anemone larva.

Adults are commonly seen, like this Cerianthus sp on the right. Very difficult to intuitively realise the two animals could be the same.

Crocodile Toothfish
(Champsodon sp)

Crocodile Toothfish larva, Champsodon sp, sometimes called Gapers. Note long appendages as highlighted on right, possibly to mimic dangerous Jellyfish or to detect nearby possible predators in the dark depths.



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 David Fleetham

Canon EOS R5 mirrorless in an Ikelite dry-lock housing with a Canon RF 100mm macro lens, 1/125 sec, F20, ISO 200, with two very powerful Ikelite 230 strobes on TTL.

The green bubble algae, Valonia ventricosa—also called sailor's eyeball or sea pearl—is a common sight on South Pacific reefs. The smooth green spheres sit on reef flats and rubble zones like lost marbles, out of place among coral and broken stone. They look strange. Almost too perfect. Most divers touch one the first time they see it, just to be sure it's alive and not something dropped there by mistake.

What seems like a curiosity turns out to be something more. Valonia ventricosa is one of the largest single-celled organisms known. Each bubble is one cell, held firm by pressure and fixed lightly to the reef. It is simple and complete. For underwater photographers, it is a reminder that the ocean often hides its best stories in plain sight, waiting for those who slow down enough to see them.

Look closer and the story deepens. The algae is home to a small nudibranch, Ercolania endophytophaga. The slug uses the bubble as shelter and as a place to lay its eggs. The eggs sit inside the algae, safe and unseen. The bright green orb becomes a nursery. It is a quiet arrangement, easy to miss unless you know it exists—or unless your camera shows it to you later.

I have photographed these algae many times. I liked the shape. I liked the color. I did not know about the nudibranchs. I did not see them when I took the picture. It was only later, after reading about the relationship and seeing another photograph, that I looked again at my own image. That is when I saw what had been there all along.

For underwater photographers, this kind of discovery comes with time. It humbles you. It also keeps you going. Photography is not only about what you see in the water. It is about what you find later, on a screen, with patience and attention. This was not the first time an image revealed more than I knew when I made it, and it will not be the last. The ocean gives its lessons quietly. You just have to be willing to look again.

David Fleetham
www.davidfleetham.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.)

My Shot

by George Day

Having dived Indonesia on several occasions my wife and I have both seen a lot except for the famous muck diving at Lembeh. So 2 weeks were duly booked at the White Sands Resort so we could really get into it and see as much as possible. We weren't disappointed.

Forsaking my 9" dome of many years, which had developed a small leak anyway, I had purposely armed myself for this trip with a couple of additions to my arsenal in the shape of the Nauticam SMC- 3 and MFO- 3 plus the double flip holder for attaching them to my trusty Nauticam NA D800 housing and port for the Nikkor 105mm f2.8G. This proved to be a great decision as at no time did I feel the need to use the dome since the MFO-3 did exactly what I needed, plus I saved on excess baggage! which my wife appreciated as she has all the bragging rights on light weight camera housings since she only uses her iPhone 15 in a DiveVolk housing!

My keeper rate of shots has never been higher than it is with the MFO-3 since the flexibility it gives with the flip holder between it and the normal lens is fantastic. I particularly loved how close you can get to the subject with it which also increases clarity and reduces backscatter and yet still have a wide angle shot. It does mean however you have to be careful with the strobes positions, I don't think I have ever adjusted the two Inon Z-330's as much before.

My favourite shot is of these two Mandarin fish mating as they darted out of the coral and I managed to get her eggs just appearing from under them both before he fertilised them. It was looking like they and their co-habitants were not going to perform but after about 40mins they did so and our shallow 5 metre dive was all worth while, 10 minutes later it was fully dark as dusk gave way to nightfall and with an unlucky group of divers arriving too late we left for a short night dive a little deeper to finish off the dive.

We largely had good weather for our stay only rain for a few days but not for long and only really windy for one day but not sufficient to prevent diving.

We may well be back!

George Day

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 Shot

by Albert Kok

Nikon D7100 in an Ikelite housing, a 5-inch mini dome, dual DS 125 strobes at half power, and a Tokina 10-17mm lens at 10mm, Settings: ASA 400, @11, shutter at 1/125 at 60 cm distance.

Some 20 years ago, encounters with a Great Hammerhead (Sphyrna mokarran; GH) in temperate tropical waters were very rare, in contrast to its smaller relative, the scalloped hammerhead (Sphyrna lewini).

The best place and opportunity to meet the GH was at Tiger Beach in the Bahamas, where they occasionally mingled with regular lemon sharks, Caribbean reef sharks, and tiger sharks. When a GH showed up, a crew member on the boat started yelling 'hammer, hammer,' a signal to rush into the water to meet the fabulous creature. Some were lucky, others not.

Some years later, the scene changed radically. At Bimini, not far from Tiger Beach, GHs became regular customers, increasing the chance that visitors could take home fantastic shots of this apex predator, which sometimes reached 6 meters. It is said that the GH's strange wing-shaped head with widely separated eyes enables a large, almost circular visual field, with electroreceptors underneath the head functioning as effective sensors for detecting the electrical fields of its favourite prey, sting rays hidden under sand.

One reason for their presence at Bimini was that GH's researchers at the Bimini Biological Field Station (in short, Shark Lab) began baiting sharks to attach tags to their dorsal fins to study their migratory behaviour. Results obtained with satellite tags revealed large-scale annual returns of the GHs to their habitats, seasonal residence lasting 5-6 months, and numerous long-distance interstate movements. The locations at Bimini then became popular among shark photographers who joined Neal Watson's Hammerhead Safaris.

It's hard to describe the thrill of the first encounter with these sharks. Even the mighty tiger shark had to make way for the GH with its spectacular dorsal fin, the swinging wing-shaped head, and large tail.

Moving slowly in the clear blue water above a shallow, flat, and sunlit sandy bottom, sometimes willing to approach and 'pose' for the UW photographer. On such occasions, the fish-eye lens, like the Tokina 10-17, proved to be the ideal tool for shooting this large shark from close range, while pulling the strobes -set at half power- close and slightly backward to the housing. My interest was particularly drawn to the GH's big black eyes, partially covered by the nictitating membrane, which seemed to fixate the photographer when it passed at close range.

Albert Kok
albertkok69@mail.com

Do you have a shot which has a story within a story? If so e mail it with up to 750 words of text and yours could be the next Parting Shot.

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

peter@uwpmag.com

UwP150
May/Jun 2026
will be available on 1st May 2026

www.uwpmag.com