Underwater Photography

Sept/Oct 2019
Issue 110

"The reef systems here are some of the most pristine I have seen anywhere in my dive travels around the globe, and Wakatobi resort and liveaboard are second to none. The diversity of species here is brilliant if you love photography." ~ Simon Bowen

An experience without equal

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

wakatobi

www.wakatobi.com

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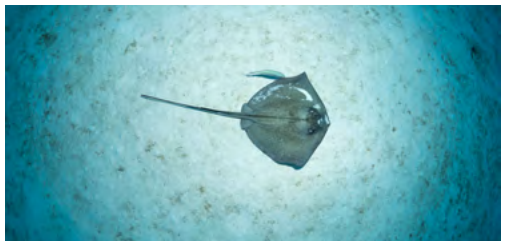
Underwater Photography
A web magazine UwP110 Sept/Oct 2019



Cover shot by
Richard Barnden
Wideangle Winner Dive into the Pink
www.diveintothepink.org

Editorial

Crop factor

If you only shoot stills, move on. There's nothing here for your sort; I'm just talking to the video shooters now and when I mention the "C" word I'm sure you'll know exactly what I'm on about.

The "C" in question is the Crop Factor (CF) which occurs in most cameras capable of shooting still images and video footage. When you shoot video the horizontal angle of view is reduced for various reasons which are not immediately apparent nor properly explained and certainly never highlighted or justified by the manufacturers.

To confuse things further the term CF was used in the early days of digital stills photography to describe the different angle of coverage when using a full frame sensor lens on a smaller chip camera. As a result everything was compared to a "35mm equivalent" which, if you've never shot film wasn't particularly helpful.

I ranted (who, me?) as far back as UwP15 in 2003 that we should use angle of coverage rather than focal length and that would have simplified things but the problem is further complicated by two more factors - the shape of the sensor and image stabilisation.

The result is that the angle of coverage with video can be as much as 30% less. To a surface photographer this can be an advantage as it effectively increases the 'telephoto' effect of the lens but for wide angle underwater we want as much angle as possible so this is a real downside.

As if this wasn't bad enough, there is very rarely any mention of this on the spec sheets of a camera and I have found you have to dig quite deep to find the real truth. In fact in some cases I have had to go into a shop and ask to play with a particular camera to switch between stills and video to ascertain the reality and in nearly all cases there is a significant reduction in angle.

Let the buyer beware.

Spam

E mails are great and are my prefered method of communication but I have recently found that aggressive spam filters can sometimes decide that my message deserves defaulting to the Spam folder so, if you've e mailed me recently and not had a reply, please check your Spam folder or e mail me again.

Spam is annoying but being Spammed for no apparent reason is doubly so.

Dive into the Pink

I am grateful to Dive into the Pink for being able to use the image on the front cover and also to Richard Barnden the photographer for his permission; for two reasons.

Firstly because it is an eyecatching shot worthy of being a UwP front cover but secondly, and more importantly, because it won the Wide Angle category in the Dive into the Pink Competition.

Not another competition?! I hear you say. Well yes. But this is one with a distinct difference; it's aim is to highlight breast cancer and raise important funds for research.

Dive into the Pink, Inc. was started in 2015 by Allison Vitsky Sallmon, herself a breast cancer survivor, veteran scuba diver, and underwater photographer, who wanted to raise money to fight cancer in an unconventional way - by going scuba diving with friends.

Their dive charters and dive trips let divers get together for fantastic dive adventures knowing that 100% of the proceeds would go towards survivor support and breast cancer research. And because demand exceeded the available spaces on charters and trips, they also hold an annual underwater photo competition (the "Think Pink" contest), and an annual online auction of dive-related trips, gear, apparel, and jewelry.

Their funds are split between the Young Survival Coalition (YSC) and the Guise Laboratory at Indiana University.

The YSC is an international organization dedicated to the critical issues of young women with breast cancer - specifically, they support and promote the YSC's incredible patient support network. The Guise Laboratory is part of the Department of Endocrinology at Indiana University; funds are earmarked for a project examining whether characteristics of the bone marrow microenvironment can alter or promote the spread of breast and other cancers to the bones.

The profile of Allison and her charity have become a significant force for good in the scuba community and are a credit to us.

Perhaps someone should follow Allison's example and start Dive into the Light Blue to highlight and raise funds for research into a cure for prostate cancer.

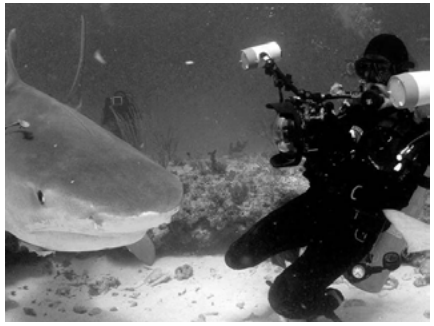
Peter Rowlands
peter@uwpmag.com

News, Travel & Events

Uw Photo Workshop onboard Infiniti

with David Fleetham and Erik Lukas

Jan /Feb 2020



Luxurious and spacious MV Infiniti, the only RINA class liveaboard in the Philippines, will be hosting 5 underwater photography workshops with David Fleetham and Erik Lukas in Jan /Feb 2020.

One of the World's most published underwater Photographer David, his work has been published in many of the top-notch publications including the covers of Life and National Geographic magazines.

Erik Lukas, a passionate underwater photographer with "a special love for macro" in his own words, loves to share his knowledge with others and offers very comprehensive workshops.

The workshops will include photography fundamentals like composition, lighting, equipment maintenance, shooting at night, wide angle underwater, macro and image workflow (lightroom and photoshop) to name a few.

There will be Malapascua & Leyte trips alternating with the Visayas & Bohol trip. Malapascua being one of the few places in the world where you get to see the beautiful and glorious "Thresher sharks "in their natural element. On the same trip, you will get to dive the beautiful corals of Sogod Bay and Leyte.

Visayas and Bohol trip will include diving in Moalboal and Pescador and see giant schools of Jacks, the famous sardine run, the green turtles and the marine sanctuary in Balicasag. The trip is great for macro photography as well.

The trips are great for beginner to experienced divers with a minimum of OW certification and 10 or more dives. The trips are great for photographers as well as non-photographers. Trip price starts from USD 2399 pp and includes accommodation, all meals, alcoholic and nonalcoholic beverages, dive equipment rental, up to 4 dives a day with experienced dive masters and the photography workshop. Divers will have to bring their own photography equipment. Contact

sales@infinitiliveaboard.com
www.infinitiliveaboard.com

WILD OCEANS Exhibition

178 Grand Avenue in Pacific Grove

Nearly a year after our successful grand opening, I'm excited to announce a new photographic exhibit: Wild Oceans.

The new exhibit is a collection of wide-angle natural light imagery of seascapes and wild animals including tiger and hammerhead sharks, manta rays, humpback whales, dolphins, schools of fish, and more.

Wild Oceans takes you around the world from California to British Columbia, Alaska to the Bahamas, and from Mexico to Indonesia.

Wild Oceans is comprised of 24 mostly black and white photographs and it opens on August 10 at 6:30 pm at the Bradley Gallery 178 Grand Avenue in Pacific Grove.

www.bradleyphotographic.com

U/W Photo Workshop With Phil Rudin

Playa del Carmen, Quintana Roo, México

November 5 - 11, 2019

Learn basic and advanced techniques to shoot wide angle scenes in the stunning Mexican cenotes-

These fresh-water flooded caverns provide the perfect playground for underwater photographers craving to produce stunning images-

Get creative shooting portraits with divers and models in crystal clear water and gorgeous backgrounds-

Based in South Florida USA, Phil Rudin has been teaching underwater photography workshops for over thirty years. His images have appeared in a variety of magazines including Underwater Photography Magazine where Phil is Senior Reviewer contributing over 75 articles on new equipment, photo techniques and dive travel.

Phil has taught underwater photography workshops for Reef Photo & Video, Digital Jam, Underwater Digital Fiesta, Asia Divers, Splash Dive Center Belize, and more.

One Drop is a diving company based in Playa del Carmen and run by Francesca Reina. Thanks to her extensive knowledge of the caves and a keen eye for underwater photography, we have selected the most photogenic caverns and schedule the best time to admire and photograph the stunning cenotes.

The price of the trip is $ 2,200 USD, spaces are limited so we recommend to book early to secure your spot.

www.onedropmexico.com

for workshop related questions: tropicalone@bellsouth.net

for bookings: info@onedropmexico.com

BUNAKEN OASIS
DIVE RESORT

www.bunakenoasis.com
info@bunakenoasis.com



Special UW Photo Workshop with Gill McDonald

Mar 28 - Apr 11, 2020



Set in the world-famous Bunaken National Marine Park, Bunaken Oasis offers a truly luxurious diving experience.

Exceptional air-conditioned cottages with sea-view balconies. Chill-out bar, and gourmet panoramic restaurant.
Custom-built spa with qualified therapists.

Panoramic freshwater infinity pool

From water-makers, with UV treatment, to black water treatment, Oasis was designed to minimise any impact on the environment.

5* PADI-affiliated dive centre, designed for photographers, and dive boats that are second to none, with freshwater deck showers, toilets and, above all, space.

Blue Heron Bridge Photo Workshop

October 17 - 20th 2019

Take advantage of one of the finest macro sites in the world, our own Blue Heron Bridge, located in West Palm Beach, FL.

This 3 day clinic focuses on macro photography, and there may not be a better setting anywhere to hold this kind of class. The bridge is actually located on the intracoastal waterway, inshore. This protected area has great tidal exchange, protection from two bridge structures, and an island (Phil Foster Park).

The diversity of macro life at the Blue Heron Bridge dive site is unlike anything else in the tropical Atlantic. Unusual critters like seahorses, frogfish, pipefish, sea robins, batfish, stargazers, nudibranchs, and flatworms, are common sightings. A host of juveniles start their lives in this protected area before moving out on the reef. Tropical angelfish, spadefish, barracuda, and jacks are found amongst the bridge pilings. Eagle rays and stingrays feed in the sand flats, and manatees are even seen on occasion.

In addition to photo instruction, this class includes a dive guide for every 2-3 divers. Our guides work for local dive operators or in the Reef Photo store, and are expert Blue Heron Critter Finders. Our guests can focus on taking pictures, and we'll lead you from subject to subject. No stress about dragging around a dive flag, navigation, or boat traffic; just relax and take pictures!

https://reefphoto.com/blogs/faq/blue-heron-bridge-workshops-2019

Ocean Leisure are now the UK distributor for Ikelite

Ocean Leisure are now the UK distributor for Ikelite underwater photo products and their central London showroom will be a great venue to look at this long established range of products made in the USA.

In the 1950's Ike Brigham invented the first o-ring sealed underwater light to incorporate a sealed beam bulb. Word throughout the diving community spread like spawning coral and everyone wanted one of Ike's lights. That is how Ikelite was born. From that time forward Ikelite has remained an inventive company producing camera housings, video housings, underwater strobes, video lights and of course dive lights.

With the popularity of digital photography Ikelite stepped up to the challenge, they produce housings for many popular Point & Shoot as well as SLR cameras. This is not an easy task since the life span of a digital camera is shorter than that of a sardine in a bait ball, with new models being born monthly. Ikelite housings are injection molded from clear polycarbonate plastic. Ikelite produces one mold for SLR housings, and three for Point & Shoots. By having the molds already in place, when a new camera comes out all they have to do is refit the camera's mounting system, rework the TTL

flash bulkhead if there is one, and drill holes for the control placement. Because of this ingenious design Ikelite can produce new housings faster then most other manufactures.

Ocean Leisure is an independent shop that started in central London in 1985. They started as a diving and sailing shop and thirty years on they have expanded their range of sports including Ocean Leisure Cameras to provide specialist underwater photography equipment.

The acquisiton of the Ikelite UK distributorship is yet another expansion so visit their 8,000 sq ft central London showroom to find out all that's new and happening on the underwater photography front

www.oceanleisurecameras.com

UW Workshop with Gill McDonald

Mar 28 - Apr 11, 2020

Indonesia

What is an underwater photography workshop?

Learning, against a beautiful tropical backdrop, how to take your own personal underwater photography to the next level, while also enjoying world-class diving with a group of friendly, like minded people. It's for everyone who wants to improve their photography, whatever your starting point. You will return home with new friends, a hard drive full of amazing photographs and a strange desire to go straight back again.

The Workshop will run for 2 weeks with the first week at Oasis and the second week at NAD in Lembeh.

In the first week, the photography will be focusing on mostly wide-angle, with Bunaken's national park housing pristine walls and beautiful reefs covered in healthy corals and an abundance of marine life from turtles, clownfish, black, and whitetip sharks, barracuda and much more

There are optional extras available e.g. night dives. Service is first class as the staff are very well trained with excellent attention to detail. Hot towels and fresh fruit greet you after each dive.

The second week will be spent at NAD Lembeh where the focus will be on macro. This is a different kind of diving. Many of the sites have fine black sand and good buoyancy is vital to avoid kicking it up. The small boats head out to the local dive sites, most sites being no more than half an hour from the resort and many are just 10 minutes.

There is an etiquette to diving and photographing in this magical place, so please refer to the NAD website or ask me for more information.

With both Bunaken & Lembeh teamed together this makes North Sulawesi one of the worlds best diving destinations.

The total price for the two weeks, based on full board accommodation in a Luxury Seaview Cottage in Bunaken, and Deluxe Seaview Bungalow in Lembeh, (both fully air-conditioned), is:

Double sharing: US$ 6,400 per person, Single: US$ 7,570

All transfers, meals, snacks on board the dive boats will be included, including Diving, Talks and free Nitrox with Oasis.

For further details, contact Gill

gill@gillmcdonald.com
www.gillmcdonald.com

For resort details

www.bunakenoasis.com
www.nad-lembeh.com

Oyster Diving Photo Courses

Our Underwater Photography courses are run by Barry Neal, a London based professional underwater photographer who has travelled the world putting his skills to good use. He has extensive experience of taking underwater photos and has travelled the world doing so.

Our underwater photography course provides a thorough foundation in underwater photography. He has been a professional photographer for over 10 years and has visited destinations such as Azores, Bali, Java, Komodo, Nusa Lembongan, Bohol Philippines and Thailand.

He'll take a look at your current knowledge and fit the course around you and you taking great underwater images.

www.oysterdiving.com/underwater-photography

Frame And Focus On Saba
September 21-28, 2019

Saba is the Unspoiled Queen of the Caribbean: beloved for its old world charm and barely touched landscape.

Join Ambassador Andrew Raak for a week of photography workshops, presentation, and one-on-one interaction.

28 miles southwest of St. Maarten (St. Marten), Saba is officially part of the Kingdom of the Netherlands. The Saba Marine Park protects 30 dive sites around the perimeter of the island.

This trip includes lodging in the charming Juliana's Hotel and diving with Sea Saba. Also included:

7 nights, 5 days of diving, 11 dives (includes 1 free afternoon dive)

Afternoon Photography Workshops, and Evening Photography Presentations by Andrew Raak

Tanks and Weights included (Nitrox Additional Add-On Fee)

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www.ikelite.com

Swim with Killer Whales/Orcas in Norway

1st - 8th November 2019

Swim with the world's most intelligent predator in the Arctic Circle! Join us in November on a tour to the coastal fjords of Norway to view the spectacular herring migration which attracts large pods of whales. The trips are arranged to allow both boat based viewing and a strictly supervised swimming encounter. This area has also provided our most stunning Aurora Borealis (Northen Lights) experience to date. Along with the orca, there are chances to see majestic humpbacks, sei and fin whales, sea eagles, otters, seals and a variety of seabirds; all set against wonderful mountainous landscape and magical sunrise/sunset light.

Our base has very little light pollution so excellent opportunities for stunning northern lights pictures. If you're not sure of how to take great photos, we'll help you.

Our in-water encounters are all snorkelling/swim encounters; no scuba diving. This means anyone with a basic level of fitness can take part as long as you are comfortable with 100m open water swimming and can get on/ off the boat. The weather can be challenging so the right equipment is a must, along with the right attitude.

We have a maximum of 8 guests per boat. This is a premium wildlife experience in a challenging environment so we tailor the trips as such. Places are extremely limited so booking well in advance is recommended. We are based on a beautiful island in cosy and comfortable lodge style accommodation.

https://baskingsharkscotland.co.uk/our-tours/overseas-tours/swim-with-killer-whales-orcas-in-norway

‘Capturing Critters in Lembeh’ Workshop 2021

Capturing Critters in Lembeh is back!! January 2021 will be our 9th annual workshop – what a great way to start the new year!!

Once again we will be hosting THREE world-class Photo Pros: Jade Hoksbergen-Spiers, Henley Spiers, and Alex Tattersall. The 10 day workshop will be packed with incredible diving, presentations and one on one instruction and feedback.

Our 2021 schedule is as follows:
27th– 30th January: Pre-workshop – time to relax and unwind before enjoying some of Lembeh’s famous dive sites.
30th January – 6th February: Capturing Critters in Lembeh Workshop
6th – 8th February: Workshop extension

Our three visiting Pros will be working alongside our full time, in-house Photo Pro, as well as our two Marine Biologists. With a phenomenal team behind you, you’ll be taking home some of your best images to date. No matter what level of photographer or videographer you are, you’ll learn how to take your underwater imaging to the next level.

Whether you are diving with a compact camera, bringing a totally new camera set up with you or an advanced DSLR you’ll learn how to get the best shots possible from your system.

There is no better time to come to Lembeh and improve your imaging than during our renowned Capturing Critters in Lembeh Workshop. You’ll experience North Sulawesi’s best dive sites, stay at one of Indonesia’s best dive resorts and enjoy some spectacular extras in this unique 10 day photography workshop including:
7 nights in a Luxury Cottage
17 guided boat dives
“Workshop Member Time” (one-on-one) with the pros: maximize your learning curve before, between or after your dives. Daily seminars by our professional presenters on a wide range of customized topics followed by practical in-water application.
Unlimited guided house reef dives (subject to guide availability, 8am to 5pm)
3:1 diver to guide ratio
Unsurpassed dive guide attention and superlative resort service to complement the entire event.

We highly recommend spending 3 nights (or more) before and after the event to give you time to relax, and make practice dives beforehand and to put your new skills into action afterward!

www.lembehresort.com

Sperm Whales in Dominica with Amanda Cotton

March 7 - 13 2020 & March 12 - 18 2020

Our snorkeling begins with two guests led by expedition leader Amanda Cotton. A good encounter is one when the whales remain. When this occurs, the other twosome follows into the water.

Our past experience has observed Dominica's west coast hosting approximately five sperm whale families, each with five to nine cetaceans. Females and their calves comprise the majority of these groups. We occasionally encounter a male, 45 to 55 feet long, easily recognizable being thirty percent larger than the females. Families frequently socialize by playing in the water. Other times, they may remain stationary in a vertical position.

Sometimes the pod swims slowly allowing us to fin with them, while other times their speed picks up. We then follow them at a safe distance until they abruptly stop, apparently waiting for us. Each encounter offers a different opportunity, one more exciting than the next.

www.biganimals.com

Plongées

A la découverte des eaux douces et d'ailleurs

Plongées

Le magazine gratuit pour les passionnés de plongée et d'images inédites


Every housing includes
a lifetime of advice
and support from a
team of experts that
wants to help you
get awesome
photos.
ikelite
Start learning today at
ikelite.com/photo-school

New Products

Aquatica AZ6/7 housing for the Nikon Z6 & Z7

In our never ending quest to offer the latest and greatest equipment to the underwater photographer/ videographer, we are now offering our new housing for the Nikon Z6 & Z7 Mirrorless, Interchangeable Lens Camera. Continuing in Aquatica's reputation for offering premium quality and at affordable prices, the AZ6/7 housing will have the finest ergonomics and control accessibility combined with the famed ruggedness of our all aluminum construction and distinctive hard coating.

As with all Aquatica housings, it is CNC machined from 6061 T6 Aluminum with a MIL-A-8625 anodized coating with a baked on, extra tough powder coat paint. All control shafts and push buttons are made from T304 stainless steel. This, as for all our housings, will take a licking and keep going!

The housing will support not only the new Z-mount lenses but also the FTZ Adapter. The adapter can be removed from the camera without first removing the camera from the housing. There is also a lens release for both F and Z mounts. As usual, all camera functions can be accessed by the housing. Two items of note that are specific to this housing:

The Sub Selector center press and AF-ON control's ergonomic placement (easily accessible with the shooter's right thumb) allows the user to lock exposure or focus and take pictures

The "+" and " –" buttons have been moved, for access by the left thumb, next to the playback button. This allows the user to quickly zoom and check if the image is in focus.

In order to protect your expensive electronic gear from the elements, our Surveyor Vacuum

System (valve and pump) is now included as standard equipment with all AZ6/7 housings. The vacuum system will provide that extra layer of security since the user can verify that if air is not seeping into the housing the water definitely will not either.

Depth Rating:

90m ~ 300 ft. Can be upgraded to 130m, ~ 450 ft with our deep spring kit

Weight: 2.88 kg ~ 6.35lb

Dimensions:

364mm x 158mm x 160mm (W x H x D) ~ 14.3" x 6.2" x 6.3"

MSRP: USD $2,995.00.

Available Sept. 2019

www.aquatica.ca

AQUATICA™ Digital

"The Aquatica monitor expands my creativity, giving me clear vision to shoot a variety of low angles and imaginative shots that are otherwise done blind." - **Jill Heinerth**

Deep down you want Aquatica

www.aquatica.ca

AZ6/7 Housing for the Nikon Z6 & Z7
Aquatica A5HD monitor

AZ6/7 Housing

- *Stainless steel self-centering controls, just close and shoot!*
- *Supports new Z-mount lenses and FTZ adapter*
- *Ergonomic controls*
- *Full access to camera controls*
- *Machined 6061 T6 aluminum*

Retail: $2,995 USD

Includes surveyor valve & pump

A5HD Monitor

- *Full HD 1920x1080*
- *1400:1 Contrast Ratio*
- *5.7" IPS LED-Backlit Display*
- *Accepts 4K HDMI Input*
- *Up to 4 hours running time**
- *Peaking focus & false color tools*
- *Available in black or red*

Retail: $2,195 USD

**Battery and charger not included*

Nauticam Housing NA-A6500 for Sony a6500

Sony a6500 is the latest high performance mirrorless interchangeable lens camera placed in the Sony E Mount lineup. Similar in size to many compact cameras, the a6500 body surrounds a large APS-C image sensor with fast and accurate autofocus performance. The a6500 is an incredible camera for underwater imaging (both stills and motion) when paired with the ergonomic, rugged, and down right good looking Nauticam housing. The combo excels at fast action still photo shooting, 4K video, and everything in between.

NA-A6500 features an integrated handle system. This ergonomic style is well proven on the full frame NA-A7 and NA-A7II housings for Sony Full Frame (FE) cameras. Exceptional control access, even with thick gloves, and ideal placement of the shutter release and AE-L / AF-L buttons at the right handle.

Nauticam build quality is well known by underwater photographers around the globe. The housing is machined from a solid block of aluminum, then hard anodized making it impervious to salt water corrosion. Marine grade stainless and plastic parts complete the housing, and it is backed by a two year warranty against manufacturing defects.

A new accessory battery pack has been released along with NA-A6500! This larger capacity battery provides 2.5x the power of a single Sony NP-F50 battery pack, and slides conveniently into the underwater housing below the camera mounting plate.

This accessory benefits all users, greatly extending the time between battery swaps, and allowing the housing to remain sealed between dives.

www.nauticam.com

Ikelite Anti-Reflection Rings

These self-adhesive vinyl labels cover the white lettering and ring details on the front of the lens to reduce reflections when used behind a dome port underwater.

Designed specifically for use with the following lenses:
Canon 16-35mm f/4
Canon 17-40mm f/4 USM
Canon 16-35mm f/2.8 III USM
Canon 16-35mm f/2.8 II USM
Sony 16-35mm f/4 ZA OSS
Canon 10-18mm STM
Canon 24-105mm
Canon 15-45mm STM
Sony FE 16-35mm f/2.8 (Type I) GM
Canon EF-S 10-22mm F3.5-4.5 USM
Nikon 18-55mm AF-P DX f/3.5-5.6G
Panasonic Lumix G X Vario 12-35mm F2.8 I or II ASPH Power OIS
They retail at $10 each

www.ikelite.com

Seatool announces deep housings for GoPro cameras

Recsea and Seatool are offering a range of housings for the GoPro HERO7, HERO 6, HERO5 and HERO action cameras. They are available with depth ratings from 300m (984ft) to 3000m (9842ft) and with or without additional power options.

Specifications

Compatible Camera: GoPro HERO7 Black, HERO (2018), HERO6 Black, and HERO5 Black

Maximum Depth: 30MPa (3000m / 9842ft)

Material: Main Body and Back Cover: Corrosion-resistant Aluminum Alloy, Anodized. Lens: Hard Coat Acrylic

Size (Housing) W162mm x D71mm x H144mm

Weight: Approx. 2.3kg (Land) / 1.3kg (Freshwater w/Camera & Power Bank)

www.recsea.com

Sealux CD-Z7 housing for Nikon Z7

The new SEALUX CD-Z7 housing made for the lightweight Nikon Z7 allows both taking photos as well as shooting videos.

Now the fullframe mirrorless camera Nikon Z7 with its supreme ease of handling can fully show its capabilities underwater, too.

The proven camera slide was made to facilitate the fitting of the camera inside the housing. The handgrip is mounted at the front and can be adjusted. The housing also supports the NIKON FTZ adapter.

We have designed the CD-Z7 housing so that you can make full use of the Nikon Z7 underwater, too.

With a special socket a HDMI monitor can be connected (optional).

As a result, it is very easy to view image sharpness in video mode using the monitor, too.

www.sealux.de

Nauticam NA-GFX50S Housing for Fujifilm GFX 50S Camera

The marriage of medium format and mirrorless has led to the Fujifilm GFX 50S.

With the NA-GFX50S you can now capture 4:3 aspect ratio 51.4MP uncompressed 14bit RAW underwater images in a form factor similar to a pro-level DSLR from a sensor that is 1.7x larger.

Nauticam has produced housings for a variety of both medium format and mirrorless housings. The NA-GFX50S takes all that experience and produces the first housing for a mirrorless digital medium format camera. Nauticam has continued to offer unencumbered access to the essential controls that underwater photographers need.

The GFX50S has 10 customizable buttons. The camera's "Q" menu can also be customized to accommodate most-used menu items. The "Q" menu is easily accessed by the double thumb-lever on the right hand side which also accesses the assignable "Fn 4" button. The left hand double thumb lever accesses the "PLAY" and "DELETE" functions.

The FOCUS piano key on the right hand side engages the joystick to change the focus point. The GFX50S has a total of 117 contrast focus points that can be further subdivided to 425 individually selectable points. The neighboring Piano Key activates the "Fn 5" button of the camera.

The GFX 50S uses a new lineup of dedicated lenses with the moniker GF. The Nauticam N120 Port Systems supports many of those currently available including ultra-wide primes, zooms, and macro lenses.

£8,727.00 GBP (incl. VAT)

www.nauticam.com

Ikelite housing for Nikon COOLPIX A1000 cameras

This compact housing has been designed to maximize the performance and capabilities of Nikon COOLPIX A1000 digital cameras in, around, and under water.

Underwater Housing Features

* 200ft (60m) depth rating
* Extendable shutter release lever
* Extendable AE-L/AF-L thumb lever for back button focus
* Glass lens port supports a zoom range of 24-275mm with options for wide angle and macro accessories
* Lightweight, corrosion-proof ABS-PC construction
* Clear view back with laser engraved control markings
* Ergonomic, field serviceable direct-drive controls with premium soft-touch knobs
* Dual fiber optic ports for strobe triggering
* 1/2-20 accessory port for optional vacuum valve
* Made in the USA

The optional Tray with Quick Release Handle # 9523.63 and Tray with Dual Quick Release Handles # 9523.64 provide a balanced grip and are the perfect platform for adding lighting accessories.

Either tray mounts to the bottom of the housing with two 1/4-20 threaded screws for secure and rotation-free use. Our uniquely curved grips are rubberized for a comfortable grip and provide a quick release mechanism for adding and removing light arms.

This housing is in production now for late August release.

www.ikelite.com

Final update - new Retra Flash

We are excited to say that this is our final update before the new flashguns will start their journey into your hands. We want to share with you our current program.

For the past 3 months we have been glued to our measuring equipment and pushed our prototype flashguns to the limits. By doing so we have found out how to extract the maximum performance from the new Retra Flash while keeping the vital components well within operating range. Besides this we have seen how the new flashguns perform in practical situations and we can say that we are very happy with the outcome.

The new flashguns are, by a considerable margin, better than anything currently on offer for the underwater photographer.

All housings and the majority of housing components are finished and we have already begun with the assembly. This process is expected to continue in the next 3-4 weeks until all pre-ordered housings are ready to be mated with their electronic counter parts.

The first pre-production batch of the electronics is currently undergoing final testing and we expect to complete and confirm the production version in 2-3 weeks. As soon as we have the green light from our development team we can begin the assembly process and final testing before the new Retra Flash is ready for shipping.

Although we have taken more time to confirm our designs for the new Retra Flash we are aiming to start the shippings until the end of September and deliver all pre-ordered flashguns before the end of October.

No further delays are expected.

www.retra-uwt.com

ONE 160x digital strobe

This is a project and a realization made entirely in Italy.

Years of research, development and testing allow us to offer you state-of-the-art electronics.

The heart of this advanced electronics is a powerful CPU that manages the entire strobe with sophisticated digital communication software between the camera and the strobe, perfectly interfaced with the i-TTL protocols by Nikon and E-TTL by Canon.

This operating mode allows us to get very accurate exposure of flash light without the aid or interposition of any converter.

Auxiliary functions such as focus-pointing light and synchronization on the second curtain are also supported.

Selected component with strict quality parameters and an intelligent management of all the operational functions of the strobe ensure a very high level of reliability. The neoprene cover of the body and the dome will ensure the protection of the unit as well as will generate a good buoyancy to the system in water.

A series of accessories for light shaping, diffusers and snoots are currently in production.

Max energy 157 Ws (J)
Beam angle 130° (circular)
Number of full power flashes over 250
Recycle time 0,2-1,8 sec
Color temperature 4.600 °K
Weight in air battery included 1480 g
Weight UW battery included (with neoprene cover) ≈-190 g (≈ -70 g)
Max operating depth 200 m
1,790 € EU price incl. 22% VAT

www.oneuw.com

HPRC #2500 case with cubed foam

Durable, lightweight and beautifully finished ... The ideal travel companion for your precious underwater photo & video equipment. Provides optimum protection against dust, water and shocks.

This case falls just within the maximum dimensions for carry-on luggage! This version is also equipped with wheels and retractable handle for maximum comfort!

External dimensions: 480x385x190 [mm]

Internal dimensions: 450x320x175 [mm]

Weight (without foam): 3.15 kg

Weight (with foam): 3.71 kg

Completely filled with cubed foam.

www.uwcamerastore.com

Hire the Canon WP-DC53 for PowerShot G1 X Mark II Daily rates as low as £1.30 p/day

The WP-DC53 Waterproof Case from Canon enables you to shoot underwater with their PowerShot G1 X Mark II Digital Camera. It features a depth rating of 130'. Mechanical controls afford access to virtually all camera functions, and the built-in, flat polycarbonate port with anti-reflective coating accommodates the lens.

www.lenslab.co.uk/category.php?catname=diving

Ikelite Sony Cyber-shot RX100 VII Housing Compatibility Update

The Sony Cyber-shot RX100 series consistently lands on compact camera "best of" lists for both surface shooing and underwater. It has a large 1"-type sensor, really flexible 24-200mm zoom range with excellent autofocus, and shoots great oversampled 4K video quality.

The newer Sony Cyber-shot RX100 VII is compatible with the existing Ikelite Underwater Housing for Sony Cyber-shot RX100 VI # 6116.18

There is a slight dimensional difference between RX100 VI and VII cameras which may cause some intermittency of control function with housings that were built prior to the release of the Mark VII.

Housings produced before August 26, 2019 (serial number 72159 and below) were manufactured to the specifications of the older Sony Cyber-shot RX100 VI camera. The screw attaching the rear dial control may interfere with the slightly thicker RX100 VII camera causing intermittency of rear dial and aperture ring controls. Tightening this screw slightly should resolve these issues.

Minor differences in camera bodies and housings may affect your results. If you experience any issues with the installation of the newer RX100 VII in older housings built for the RX100 VI, please contact Ikelite .

The RX100 VII camera cannot be used with or adapted to other Ikelite housing models built for prior model RX100 I, II, III, IV, or V cameras.

www.ikelite.com

Gates RPT7 external monitor

The new RPT7 is the latest addition to the family of External Monitors for the RED family of LCD's. Classic Gates features include:

Neutral to slightly positive buoyancy. No 'turtling' of your rig due to top heavy monitors.

Gates original 'pass through' cable design. No additional connectors between LCD and camera for utmost reliability.

Low profile mount keep even this 7 in monitor in a streamlined configuration.

Water blocked cable with a tough polyurethane jacket is bulletproof.

Optional shade extensions for easy viewing in the brightest conditions.

www.gateshousings.com

10Bar HS-DC-Cn-EOS M

Made of 6061 aluminum, the 10Bar Housing is a sturdy choice for the Canon EOS M camera. For those who favor small cameras, it is the ideal housing to suit their needs.

It is equipped with full-function control buttons. The Acrylic back cover allows taking pictures and checking on the camera much easier. Its key hole lock design provides ease of use and added security to prevent from leaking.

Optional Extension ring allows use with 45mm macro lens.

An Optional 67mm wet macro lens holder is available to fit on the semi-dome port.

Standard ¼" tripod socket for tray.

90m depth rating, but recommended working pressure 60m

www.aditech-uw.com

Nauticam NA-RX100VI for Sony DSC-RX100 VI

"Close in on the Action"

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

www.reefphoto.com

Pelican, TrekPak and Pick N Pluck

Pelican Products has announced that two of its durable carry-on cases can now be ordered with TrekPak divider system and Pick N Pluck foam hybrid interiors. Until now, customers were forced to choose between either the protective foam or the divider system, but couldn't order both in the same case.

The new combination Pick N Pluck foam and TrekPad divider system is now offered as a standard option with the Pelican Air 1535 Carry On Case and Pelican 1510 Carry One Case. The Pelican Air 1535 Carry On is a lightweight polymer case that weighs up to 40% less than the Pelican Protector Case, whereas the Pelican 1510 Carry On is a protective carry-on case made from ultra-high impact copolymer.

The company's Pick N Pluck foam is cubed, pre-scored, and can be easily customized to suit the user's needs and specific gear with an emphasis on protection. This foam is the standard offering for the majority of Pelican cases.

www.pelican.com

Seacam ships housing for Nikon Z6 and Z7

Seacam is shipping their Silver housing for the Nikon Z6 and Z7 mirrorless cameras. Designed for use either with or without the Nikon FTZ adaptor, it also utilizes Seacam's existing standard port system, so offers lens support for most Nikon F and Z mount lenses. The housing provides access to all camera controls.

www.seacam.com

Ikelite WD-4 Wide Angle Conversion Dome

The WD-4 Wide Angle Conversion Dome provides all of the benefits of a dome port underwater without the limitations.

The WD-4 simply slides onto the standard port of the Ikelite housing— no modification to or replacement of the housing's original port is necessary. The WD-4 can be removed and replaced underwater so there is no limit to the camera's zoom or macro capabilities. Approximately 3/4 of the camera's zoom range can be used with the dome in place.

The conversion dome corrects for the refractive magnification of the flat port underwater to restore the camera's original angle of coverage. For example, the WD-4 and Canon PowerShot G16 combination provides 28mm angle of coverage with incredibly crisp corners.

The WD-4 Wide Angle Dome is compatible with any Ikelite housing featuring a 3.9-inch diameter lens port. To check compatibility with Ikelite housings, please refer to the housing instruction manual or webpage.

Specifications
Magnification 0.75x
200 ft (60m) depth rating
Optical grade glass and acrylic
Approximately 2.6 oz negative in fresh water
Weight 1 lb (480 g)
Dimensions 5 in diameter x 2.25 in length (12.7 x 5.7 cm)

www.ikelite.com

Sea Frogs SF-iP8 (for iPhone 8/7/7S/6/6S)

Sea Frogs housing SF-iP7 for the iPhone 8/7/7S and 6/6S is a photo and video imaging solution for water sports enthusiasts & athletes who have traded their digital cameras for the simplicity and capability of the iPhone.

The camera is controlled using the original Photo/Video App already installed in you iPhone. This compact digital housing is molded of corrosion free ABS-polycarbonate, it is virtually indestructible with heavy duty walls that allow it to operate safely to 60m (200 feet).

www.aditech-uw.com

INON 45° Viewfinder Unit II for X-2

INON INC. is pleased to announce modification of current 45° Viewfinder Unit for X-2 enabling to attach an optional Diopter Correction Lens [+1.5D].

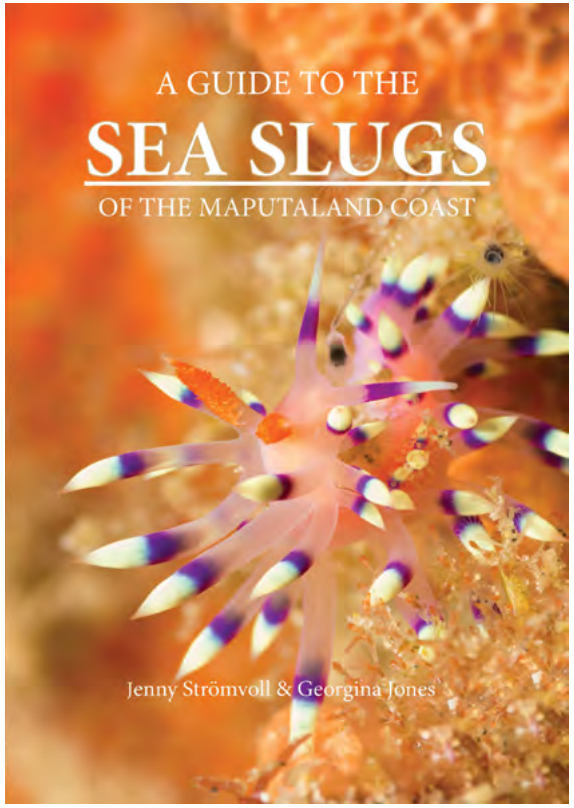
The specification, exterior, dimensions and price of the viewfinder itself remain same as the current model.

www.inon.co.jp

THE SOURCE

WETPIXEL

“A Guide to the Sea Slugs of the Maputaland Coast”
by Jenny Stromvoll & Georgina Jones



“A Guide to the Sea Slugs of the Maputaland Coast” is designed for easy identification of its many and varied species of sea slugs. There are clear identification images, as well as images of colour and pattern variants, and descriptions of each species. The introduction gives details of sea slug biology, evolutionary history and current classifications for those wanting more background on these amazing animals.

Get your hands on our great guide to the sea slugs of the Maputaland Coast at the following places:

Ponta do Ouro: B2B, Gozo, Oceana, The Whaler

Ponta Malongane: Malongane Dive Centre

Rocktail Bay: Mokarran Dive Charters

Sodwana: Sodwana Bay Lodge, SeaXplore, ReefTeach, Coral Beach shop, the Lighthouse

Aliwal: Agulhas Lodge, Blue Ocean

Scottburgh: ScubaXcursions

Cape Town: Into the Blue, Pisces Divers (or direct from Georgina)

Joburg: Reef Divers, 7th Heaven and InfiniteBlu

www.backtobasicsadventures.com/seaslugs-of-maputaland-coast

BLACKWATER Creatures
by Linda Ianniello and Susan Mears

Every night the largest animal migration on earth takes place in the oceans of the world. The zooplankton migrates vertically up from the deep to feed in the shallower water near the surface. With the plankton comes a variety of both pelagic and larval creatures to feed on the plankton and each other. This creates an opportunity for underwater photographers and divers looking for something new and unique. A “blackwater dive” means going out at night in the deep ocean and looking for these subjects, which include: fish and mollusk larvae, that will eventually settle on the bottom; pelagics that live their whole lives in this environment; and creatures like jellyfish and siphonophores, all traveling with the currents.

BLACKWATER Creatures will be a useful reference for blackwater divers and photographers to identify and learn more about the subjects. The authors (Linda Ianniello and Susan Mears) have been doing these dives for four years and together have logged over 200 blackwater dives. This is a compilation of their images.

BLACKWATER Creatures contains 170 pages, with over 220 images, in 8.5 inch x 8.5 inch softcover format. The creatures are divided into groups, with descriptions and identifications (where available).

Order your copy now. BLACKWATER Creatures sells for $39.95 plus $8.50 shipping and handling to U.S. addresses, including Puerto Rico, US Virgin Islands, Guam and other areas considered domestic by the U.S. Post Office. Your book(s) will ship via USPS Priority Mail.

www.blackwatercreatures.com

Dive into the Pink 2019 winners

by Allison Vitsky Sallmon


© Richard Barnden//Dive into the Pink

Nonprofit organization Dive into the Pink is delighted to announce the winners of the Think Pink underwater imaging competition.

The competition, organized by Dive into the Pink, invited photographers to submit their most exciting images featuring the color pink, with proceeds used to support the fight against cancer.

We had a fantastic response once again this year, with almost 600 entries raising nearly $4500 for cancer research and patient support.

The quality of the entries was absolutely outstanding, and the judging panel had an incredibly tough time picking the winners.

Ultimately, first place in the Wide Angle category went to Richard Barnden's charismatic sheephead wrasse, and first place in the Macro category to Pietro Cremone's beautifully executed backlit Rhinopias.

Richard won a seven-day liveaboard trip to Indonesia with Dive Damai, while Pietro scored a seven-day package to Crystal Blue Resort, Anilao, Philippines. In the Second Place positions, Juan Murillo won a Light and Motion Sola 3800 video light for his serene water lilies in the Wide Angle category, while Enrico Somogyi will get a Sea and Sea YS-D2J strobe for his garden eel


© Juan Murillo//Dive into the Pink


© Rosie Leaney//Dive into the Pink

surrounded by pink "disco" lighting. The third place finishers are Rosie Leaney for her lovely pair of giant cuttlefish and Volker Lonz for his delicate skeleton shrimp, in Wide Angle and Macro, respectively. They each took home a €250 gift certificate towards Saga Dive products.

Winning images will be used to help promote the fourth annual Pink Auction, a silent online auction that kicks off on September 29, 2019. Items up for bidding include exotic dive trips, dive gear, underwater photography gear, jewelry, and apparel. Auction items are still being added and can be previewed at 32auctions.com/divepink2019

About Dive into the Pink

Dive into the Pink, Inc was founded in 2016 by Allison Vitsky Sallmon, a breast cancer survivor, veteran scuba diver, and underwater photographer, who wanted to raise money to fight cancer by mobilizing the scuba community through dive charters and dive-related activities. Dive into the Pink is a 501c3 organization, and 100% of our proceeds are redistributed. Our 2019 beneficiaries include the Young Survival Coalition (YSC), an international organization dedicated to the critical issues of young women with breast cancer, and the Guise Laboratory at Indiana University,

who are investigating whether certain characteristics of the bone marrow microenvironment can alter/promote the spread of cancer to the bone.

Personal note from Allison:

4 years ago, I ran my first dive charter to raise funds for the fight against cancer. In the years since then, I've spent lots of time and energy thinking about how to raise money for this cause, and also about how to engage divers.

Divers are some of the most passionate people out there, and I've always thought that if I could give divers a fun way to fight this disease, we'd have something very powerful on our hands!

This contest is a perfect example of what we've always hoped to do as

an organization. I started it in 2017, and I never guessed that we'd have the support of so many, and so many amazingly skilled photographers. I am truly amazed at the stunning images that we've seen each year.

This year, shooters pulled out all the stops; the beautiful execution and creativity of the images submitted was astounding, and I was very thankful that I wasn't part of the judging panel!

Most importantly, these beautiful entries helped us raise nearly $4500, every cent of which will go to fund cancer research and patient support. I'm so grateful to every single entrant, as well as to our generous sponsors.

I'm also very thankful for this year's hardworking judges, Erin Quigley, Kerri Bingham, Hergen Spalink, and Adam Hanlon, and also to DPG editor Ian Bongso-Seldrup.

www. diveintothepink.org

Don't settle for 2nd best

Film - No Filter No White Balance

Digital - No Filter Manual White Balance

Magic Filter Manual White Balance

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

www.magic-filters.com

Canon EOS R

by Team Backscatter

The Canon EOS R is Canon's debut in the full-frame mirrorless arena. It's got outstanding image quality that's so good, you can essentially consider it a mini-5D4. It feels right at home performance-wise among fellow full-frame mirrorless systems like the Nikon Z7, Sony a7R III, and Panasonic S1. What sets the Canon EOS R apart from the competition is the stunning ambient light custom white balance video color produced in-camera. Even at depths up to 70 feet, the Canon EOS R produces video color that requires little to no correction in post - a spectacular feat for any camera. However, these results don't come without some compromise in the control set, operation, and execution.

Still Photos On Par With 5D Mark IV

The image quality of the Canon EOS R confidently stacks up against it's SLR bigger brother, the Canon 5D IV. One would have to get down to an extreme pixel-peeping level of detail to eek out any major difference. The Canon EOS R's 30.3 megapixel image is rich in color and has detail just as sharp as the Canon 5D IV. Colors are vivid and packed with enough natural color saturation and contrast to please the eye straight-out-of-camera. The dynamic range stands out with plenty of detail in the shadows and highlights. Shooting in RAW provides plenty of range for development allowing post-dive creativity to flourish.

Even though the Canon EOS R provides a level of image detail equal to the Canon 5D IV, there are other full-frame mirrorless cameras that pack a higher megapixel count and wider dynamic range. Users looking for the ultimate in still image quality should also look at the Sony a7R III and Nikon Z7 for their 40+ megapixel resolution, better low light performance, and wider dynamic range. The Panasonic S1 with 24-megapixel resolution ranks just after the Canon EOS R at 30.3 megapixels.

Our wide angle images were shot with the Canon EOS Control Ring Mount Adapter and the Canon 8-15mm Fisheye Lens. This combination allowed the use of our favorite EF mount lens for superior underwater wide angle coverage. Whether shooting with only ambient light or with strobes, the colors, contrast, and clarity produced by the

The Canon EOS R packs such great image quality that we call it the "Mini-5D Mark IV"
Canon EOS R | Canon 8-15mm Lens | 1/125 | ISO 200 | f9

The dynamic range of the Canon EOS R is demonstrated well in this sunball shot, with sharp detail in the darkest shadows and brightest highlights.
Canon EOS R | Canon 8-15mm Lens | 1/125 | ISO 200 | f8

Wide angle autofocus performance was second to none on the Canon EOS R, allowing for tack-sharp images of even fast-moving and unpredictable subjects.
Canon EOS R | Canon 8-15mm Lens | 1/200 | ISO 200 | f8

Canon EOS R all scored high marks.

Our macro images were shot using the Canon EOS Control Ring Mount Adapter and the Canon 100mm IS *f*2.8L Macro USM Lens, along with an externally mounted Nauticam SMC-1 67mm Super Macro Converter Lens. This produced a greater than 1:1 ratio of subject-to-sensor allowing us to get some insane detail on even the tiniest subjects.

Snappy Autofocus In Wide Angle, Macro, And Even Super Macro

The autofocus performance of the Canon EOS R is one of its key strengths. Whether shooting wide angle, macro, or the notoriously AF-challenging super macro, the Canon EOS R exceeded our expectations. There was no noticeable performance decline between the Canon EOS R and Canon SLRs, like the Canon 5D IV.

The Canon EOS R is our top pick for ultimate autofocus performance among the current pack of full-frame mirrorless cameras. The Sony a7R III has great wide angle speed and tracking, but is flat-out horrible at macro autofocus and is practically unusable for super macro autofocus, forcing the shooter to rely solely on manual focus. The Nikon Z7 was just okay in both arenas, but not outstanding.

The Panasonic S1 relies on an adapter to use Canon EF-mount lenses, which can only currently be shot in AF-S mode. The Canon EOS R was the only full-frame mirrorless to excel in both wide angle and greater than 1:1 super macro autofocus, earning it the top spot in that department.

Another advantage that the Canon EOS R brings to the table in the focus arena is the Focus Peaking feature. Focus Peaking outlines the sharpest part of your frame in a designated color in the electronic image. This is very helpful if you have a hard time determining critical focus with just your eyes, and is a major advantage for getting that tack-sharp detail in super macro shots. Optical

Backlit wide angle scenes such as this are often difficult to compose on an electronic viewfinder, but the Canon EOS R was able to display sufficient dynamic range for the shooter to properly compose it.
Canon EOS R | Canon 8-15mm Lens | 1/1200 | ISO 100 | f9

SLR viewfinders cannot display focus peaking like a mirrorless camera viewfinder can, so macro enthusiasts especially should take note of this benefit on the Canon EOS R.

Electronic Viewfinders A Mirrorless Compromise

One of the biggest things to consider when looking at mirrorless cameras is the Electronic Viewfinder. The lack of an optical prism and mirror within the camera body is the defining difference between Mirrorless and SLR cameras. The problem is that most electronic viewfinders don't come close to the dynamic range that an optical viewfinder can display. This leaves underwater photographers to struggle when composing backlit shots because the underexposed foreground is shadowed or silhouetted, and the background is blown out and overexposed, making it difficult to see detail in either area.

The electronic viewfinder on the Canon EOS R is certainly better than

A smaller camera body means less room for dedicated function buttons, so compromises must be made.

average among mirrorless cameras but isn't quite the best that we've seen. That accolade has to go to the Nikon Z7, which truly surprised us with the dynamic range it was capable of displaying. The Canon EOS R takes second place overall, with the Panasonic S1 and Sony a7R III sitting just behind.

A Smaller Body Means Fewer Buttons & More Workarounds

One of the most appealing benefits of a mirrorless camera is the overall smaller body size compared to optical SLRs. While there are the obvious benefits of reduced weight and a smaller body to pack, it also means that there is less space on the camera body for dedicated-function buttons. On the Canon EOS R, this produces some quirks that the underwater photographer needs to be aware of.

The Canon EOS R does not have a dedicated ISO control button. Instead, there is an innovative 'swipe' bar on the back of the camera. While it may look cool and impress other camera operators topside, it's a difficult control to adapt in an underwater housing. At the time of this review, no housings supported operation of this 'swipe' control. This can lead to a convoluted process of setting the ISO via one of two workarounds: either from the Quick Menu and LCD screen or by assigning a custom function button (we used M-Fn) that must remain depressed while simultaneously scrolling a control wheel. Both of these workarounds were cumbersome and time consuming to use underwater when the action got fast. Fortunately,

there was a third option available: The Canon EOS Control Ring Mount Adapter.

The Canon EOS Control Ring Mount Adapter differs from the Canon EOS Mount Adapter by adding an integrated control ring to the adapter itself. This control ring can be conveniently assigned to ISO control, negating the drawback of losing a dedicated button on the camera body itself. More than just eliminating a workaround, this control ring provides the 'holy trinity' of triple dials dedicated to shutter speed, aperture, and ISO.

Fortunately, the Nauticam NA-R housing provides a control on the housing to interface directly with this gear, providing in-water access to it. We have not yet seen other housings implement this feature yet. With the Canon EOS Control Ring Mount Adapter, your days of wishing for an otherwise nonexistent dedicated instant ISO dial are gone forever.

One detail of the controls and operation that we enjoyed was the separation of settings for both Photo and Video modes. The user is able to retain their exposure settings relative to each mode, so when quickly swapping back and forth there is less time spent dialing in the aperture, shutter speed, ISO, and white balance.

In this screenshot from our underwater test footage we can see the perfect color captured with a manual white balance at a depth of about 45-feet/14-meters.

The Best In-Camera Video Color but Not The Easiest Execution

In the underwater video world the term "Canon Color" is a real thing. Historically, Canon cameras have produced the best in-camera ambient light custom white balance color even at depths past 50 feet, and the Canon EOS R is no exception. Our test footage yielded near-perfect color down to depths of about 70 feet. This is unparalleled performance among not only the current pack of full-frame mirrorless cameras but most current SLRs as well.

As great as the color performance of the camera may be, there is a major caveat to be aware of. The process to actually execute and assign a custom white balance requires some of the most control activations out of any camera that we are currently shooting underwater. This stems from the lack of a Photo-Video Mode Switch on the camera. Typically, Canon cameras require a still photo be captured to assign a white balance. Most Canon cameras and housings offer a physical Video-Photo toggle that is activated from the outside of the housing.

The Canon EOS R requires activation of the Mode Button, then the Info Button to toggle between the various photo or video modes. This minor difference isn't a deal breaker on its own, but it does become somewhat of an inconvenience for frequent white balance changes (which are needed every ~10 feet in depth). The user cannot capture a photo while in video mode and also cannot record video while in photo mode, so for every new white balance, the user must switch back and forth between the two modes every time.

The steps to execute a custom white balance on the Canon EOS R are as follows:

1) Select Photo Mode
2) Adjust your exposure to zero the meter
3) Capture photo of intended white balance target
4) Assign that photo to Custom White Balance (Menu -> Custom White Balance -> Set)
5) Hold Mode and hit Info to bring up Video Modes
6) Select Video Mode
7) Set White Balance to Custom
8) Check exposure settings and record
9) Repeat steps 1-8 every 10 feet or as needed for new white balance

The Canon EOS R only has one custom white balance bank, so the user cannot store multiple white balances for different depths or lighting situations. If the shooter is willing to commit to the somewhat cumbersome process outlined above, the payoff will be the best

The 1.7x crop can be used to your advantage when shooting 4K video by allowing you to get tighter shots without having to get quite as close to skittish subjects.

in-camera underwater ambient light white balance capable from a current mirrorless or SLR system. A bit of good news is that when shooting with video lights, it's practical to just utilize the Auto White Balance setting and your color will look just fine.

1.7X Crop In Video - Use It To Your Advantage

The Canon EOS R utilizes a fairly heavy 1.7x crop when shooting 4K video. While this is using a significantly reduced area of the sensor it is not that much of a detriment, especially if you choose your optics to make the most out of it. The Backscatter go-to lens for wide angle is the Canon 8-15mm fisheye lens, which is typically only shot at 8mm or 15mm (nothing in between) due to the otherwise partial vignetting that occurs on a full frame sensor. On a 1.7x crop sensor area, this lens can be used around 9-10mm for a 180-degree diagonal angle of coverage, and may then be zoomed up to 15mm for even tighter shots. This is actually pretty cool for wide angle video shooters because it allows for more versatility out of an otherwise fairly single-purpose lens.

When shooting macro video, the 1.7x crop increases the reproduction ratio of the subject while also maintaining a manageable depth of field. This is a win-win for macro shooters because you can get a tighter shot without reducing an already paper-thin depth of field even when your aperture value is maxed out, and you have more working distance to avoid spooking skittish critters. The flip side is that larger macro subjects can be more difficult to fit into the frame, so a less powerful lens like the Canon 50mm Macro *f*2.5 lens may be a better choice than the Canon 100mm IS Lens.

Size comparison between the Canon EOS R & Canon 5D IV Cameras.

EOS R Vs. 5D Mark IV - The Mirrorless Vs SLR Debate

Body for body, the Canon EOS R is going to save some weight compared to the Canon 5D IV, but by the time the system is fully assembled in an underwater housing, the overall size difference is basically negligible. The lack of an optical viewfinder and lack of a dedicated photo-video switch are the most notable differences between the two systems once they are in-hand and ready to shoot underwater. Autofocus performance side-by-side between these two cameras is so similar that there is effectively no discernible difference.

Underwater shooters with a primary interest in capturing video will find that the Focus Peaking and Highlight Warning tools on the Canon EOS R give a distinct in-camera usability advantage over the Canon 5D IV which does not have these features.

The process of capturing a white balance on the Canon EOS R is more complicated than on the Canon 5D IV, and some may find that the extra steps required are enough to negate the additional advantages of the Focus Peaking and Highlight Warnings.

The additional control ring that can be added with the Canon EOS

Control Ring Mount Adapter is, frankly, pretty awesome. Having a triple-control-dial system for shutter speed, aperture, and ISO control is super practical and is a distinct advantage towards the Canon EOS R (as long as used in a housing that supports it, such as the Nauticam NA-R).

If your priority is a smaller-bodied camera without compromising image quality, then the Canon EOS R is the way to go. If underwater wide angle is your priority, then the optical viewfinder of the Canon 5D IV makes it a better choice given its ability to more easily see the scene and compose accordingly. For wide angle photo composition, nothing beats an optical viewfinder and the dynamic range of the human eye. Macro enthusiasts will feel the benefit of the Canon EOS R's Focus Peaking, especially if you can't see critical focus very well with just the naked eye.

If video is the main priority, then the pro/con lines are not as clearly drawn. The drawbacks of the electronic viewfinder are no longer as relevant since either system will likely be working from the LCD screen. In fact, the electronic viewfinder of the Canon EOS R creates an advantage when shooting macro video, because you have an in-viewfinder Focus Peaking option. Add on a 45 degree expanded viewfinder and you have a great macro system that allows you to keep your face out of the sand. The Canon 5D IV would require an external monitor to achieve the same Focus Peaking. The Canon EOS R has in body image stabilization, but the Canon 5D IV fewer button activations for custom white balance.

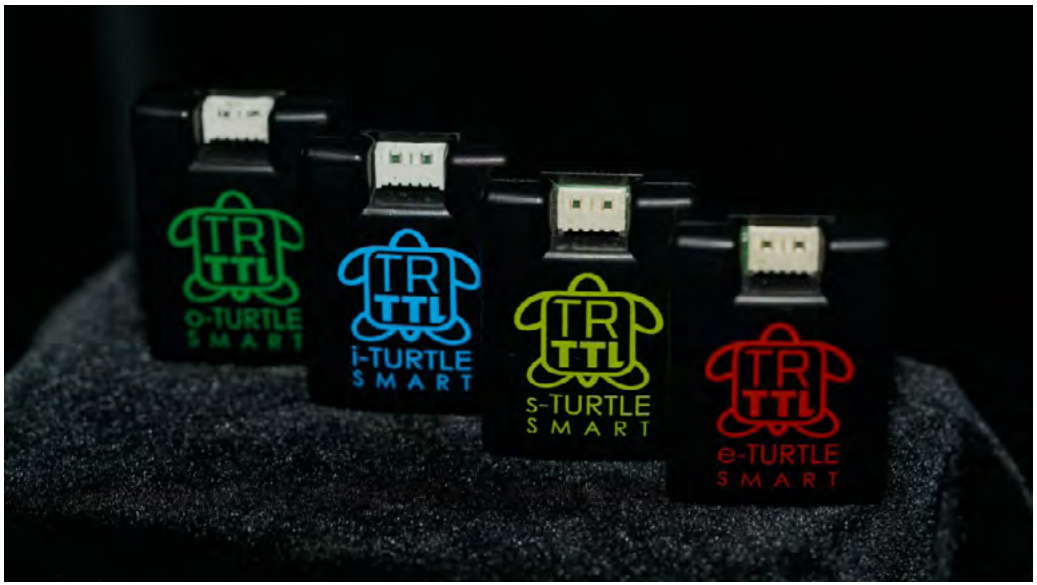
As a video shooter, if one can reconcile themselves with the cumbersome white balance execution, the Canon EOS R does offer more tools and is a superior system for video when compared to the Canon 5D IV.

When ultimate still image quality is on the line, the Nikon Z7 is our camera of choice. The extra dynamic range and super fine image details captured by the Z7 are just enough to tip the scales in its favor. The electronic viewfinder of the Nikon Z7 is the best that we've seen and is the closest to an optical viewfinder is capable of displaying. While the Nikon Z7 autofocus performance may not be as fast and accurate as the Canon EOS R, these can be worked around and overcome.

Team Backscatter
www.backscatter.com

S-Turtle Smart TTL trigger

by Phil Rudin



TRT-Electronics is a Hungarian company that designs what they call a “quartet” of Turtle TTL converters for underwater photographers. The product line includes TTL-flash triggers for Canon, Nikon, Olympus/ Panasonic and Sony cameras. These TTL converters can be triggered via sync cords or fiber optic cables. Each trigger is color coded by brand, Red E-turtle Smart for Canon, Blue I-Turtle Smart for Nikon, Green O-Turtle Smart for Olympus/ Panasonic and Yellow S-turtle Smart for Sony.

Each of the four different TTL-converters come in two styles. One has the hotshoe directly on the bottom of the trigger for larger housings and the other has a separate hotshoe connected by wiring to the trigger for smaller housings that don’t have the room for the trigger above the camera.

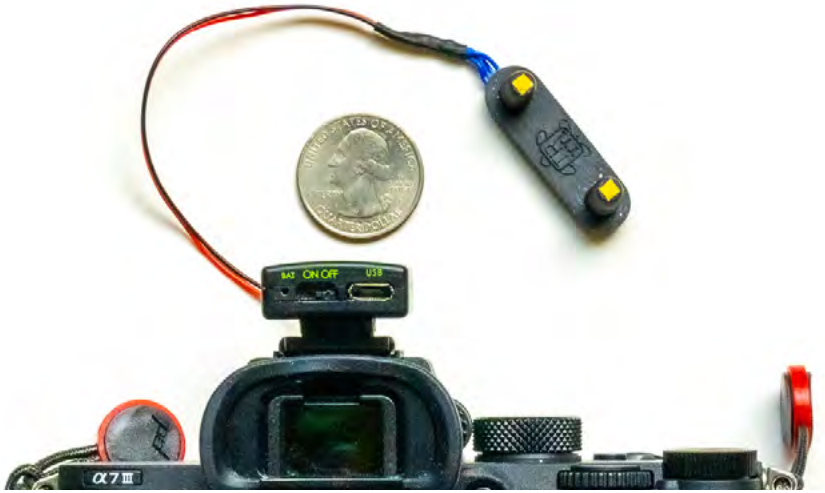
For my review I have been testing the yellow S-Turtle Smart TTL trigger for larger housings using the Nauticam NA-A7R III housing and Sony A7R III camera.

As of February 2019 the strobes that are compatible with the S-Turtle TTL trigger using fiber optic cords include the Inon Z-240 and Z-330, Sea&Sea YS-D1, YS-D2, YS-110a and Subtronic Pro 160 and Pro 270. The strobes will not fire in the high speed shutter mode when using the Turtle triggers. With a propitiatory sync cord the trigger provides full TTL with all of the Ikelite strobes, Inon Z-220, Z-240 and Z-330, Sea & Sea D1 D2 YS250 and S110a.

Not all of the converter models support the same strobes so be sure to check the trt-electronics.com web site to see which strobes are supported for your camera and housing type. Be aware that these are state-of-the-art user friendly TTL flash triggers that can be upgraded via firmware update using the mini UBS connector on the unit. This means that additional strobes could be added to the growing list supported strobes going forward.

When you purchase the Turtle Smart TTL trigger for Sony cameras you select the LED panel for optical cables or the sync cord connection for your type of bulkhead sync cord. The package includes the Turtle Smart device and the LED cable with two LEDs or sync cord cable.

To setup the trigger you can first charge the internal LIPO 120 mAh rechargeable batteries by connecting a USB 2.0 cable to the port on the right rear of the trigger. A full charge

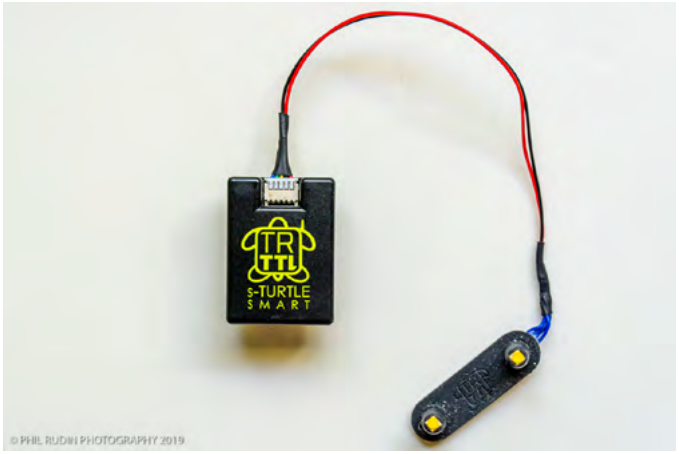


takes about one hour from any USB compatible device. To the left of the USB port is the on/off switch which must be in the OFF (to the right) for charging. On the right side of the trigger is a small red LED which is on during charging. When the red light turned off the trigger is fully charged.

To the far left on the rear of the trigger is another small red LED which will start blinking when the battery level drops under twenty percent. TRT-electronics states that once the device is charged it can produce up to 2000 flashes on a single charge. I was able to exceeded that

(Left) Coral Polyp Detail, Blue Heron Bridge, Florida USA, A7R III, Sony 90mm F/2.8 macro, Nauticam Housing, Nauticam SMC-1, two Inon Z-330 strobes. ISO-64, F/18, 1/250th sec, S-Turtle TTL EV+/- 0.0.

(Far left) Model Rossina, Cenote Cristalino, Yucatan, Mexico, A7R III, Sony FE 12-24mm F/4 zoom at 24mm, Nauticam Housing, two Inon Z-330 strobes. ISO-64, F/4.0, 1/125th sec, S-Turtle Manual.



number by at least 1000 flashes without ever getting a low battery signal in manual flash mode.

The entire device is only 35.5 mm long X 26 mm wide X 16 mm deep so the on/off switch is quite small and a bit difficult for old eyes to navigate. Perhaps making the switch a lighter color would help to see if the switch is in the on or off position. Be aware that you will not be able to see the flashing red low power warning when the trigger is sealed inside the housing. I did multiple dives over several days and the red low power LED never turned on. I also shot models at five and ten frames per second with my Inon Z-330 strobes on quarter power and the trigger kept up without a problem with the strobes set in manual mode.

The S-Turtle can also be programed for 1st curtain shutter release or 2nd curtain mode for rendering motion blur. With the Inon Z-330 strobes in TTL flash mode exposure (+/-flash power compensation) can be adjusted in camera. With optical flash synchronization over heating problems slow recycle times and camera battery drain have been associated with using an on-board (built-in) flash. With the S-Turtle these issues are completely eliminated even shooting multiple frames per second over an extended period of time.

The S-Turtle Smart electronic components are made from special SMD technologies parts encased in an ABS moulded housing which is very light and extremely robust. The twin LED panel for Nauticam is connected to the trigger by two wires (red & black) which are around 16 cm long. The LED lights are designed to be pushed up into the two fiber optic ports on the inside of the Nauticam

housing. The LEDs can be secured in place with two donut shaped pieces of two sided tape or they will stay in place by just pushing them firmly into place.

The camera can then be mounted in the housing and the TTL trigger can then be mounted to the camera hotshoe. Once in place the wiring is long enough that the camera can be removed from the housing for a flash card or battery replacement without the disconnecting LEDs or removing the TTL trigger. The trigger can be removed from the hotshoe to take the camera out of the housing without removing the LED lights. Be aware that the wire between the trigger and LEDs is long enough to stick out of the housing when the camera is mounted or when it is removed.

Always check to make sure that the wires are fully pushed inside the housing before sealing the rear cover. A connecting cable between the Turtle controller and the Nauticam bulkhead (sold separately) can also be interchanged with the LED light adapter for Nauticam.

What is TTL?

When your camera directly controls the flash output of your strobe by metering the light output through-the-Lens it is referred to as TTL. TTL +/-flash exposure condensation is controlled in the camera menu and works using TTL enabled strobes like the Inon S-TTL Z-240 and Z-330 strobes. TTL works by firing one or more pre-flashes when the shutter is half pressed.

The camera's metering system then measures the pre-flash(s) along with the ambient light level to calculate the power needed from the flash to make a correct exposure. The pre-flash is metered in a few micro-seconds before the shutter is released triggering the main flash. The duration of the main flash exposure is determined by metering based on ISO, aperture, TTL exposure compensation value and the selected metering mode, I.E spot, center weighted and so on.

Shutter speed will have little noticeable effect on the strobes TTL output because the flash occurs within 1/1000's of a second while the shutter moves much more slowly in most cases. Each camera manufacturer has a different propriety TTL protocol hence the need for different Turtle Smart triggers for each camera brand. The Turtle Smart triggers have the same hotshoe design as the proprietary camera brand and they mimic each brands dedicated flash protocol.

For the trigger to support each camera brands TTL protocol you must first download the appropriate loader and driver for your Turtle Smart unit. Then upload the driver to the to the trigger using the USB 2.0 connection from your computer. Each Turtle has a driver specific to the camera make and some specific camera models. The S-Turtle Smart for all Sony mirrorless cameras uses the S-Turtle Smart loader and driver which is downloaded in a Zip format for PC's.

For other camera brands the Turtle

Model Fede, Cenote Car Wash, Yucatan, Mexico, A7R III, Sony FE 12-24mm F/4 zoom at 12mm, Nauticam Housing, two Inon Z-330 strobes. ISO-500, F/5.6, 1/80th sec, S-Turtle Manual.

instruction manuals and driver packages can be found in the Web Shop and FAQ sections on the TRT-electronics.com web page. If you are a Mac owner a loader and driver package will be uploaded to the TRT-electronics.com web page in September of this year.

I have used TTL strobes underwater since the film days and have found TTL to be most effective for macro and close focus wide angle photography since it relies on accurate metering by the camera for proper exposure. The larger the primary subject is in the frame the better the TTL will work because the metering will be more accurate.

With wide-angle if the foreground in an image being lighted by the strobe only takes up say the lower third of the frame while the area lighted by ambient light takes up two-thirds of the frame the TTL exposure may be much less accurate. In this situation flash exposure compensation will need to be applied for TTL to work correctly. While +/-flash exposure compensation can resolve some TTL exposure issues, shooting in manual and changing the strobes power level, aperture, ISO or shutter speed can be just as accurate.

Thorny Seahorse (Hippocampus histrix), Puerto Galera, Philippines. Sony A7R III, Sony 90mm F/2.8 macro, Nauticam Housing, two Inon Z-330 strobes. ISO-100, F/16, 1/250th sec, S-Turtle TTL EV+/- 1.0.

Field testing the S-Turtle Smart

My equipment for this review was the Sony A7R III camera, Nauticam NA-A7R III housing, Sony FE 90mm F/2.8 macro lens and the Sony FE 12-24mm F/4 zoom lens with ZEN Underwater 230 mm optical glass dome port. I also used two Inon Z-330 strobes with fiber optic cables for both manual and S-TTL exposures.

The strobes were used in manual power set to manual EV+/- the last setting on the power switch. I then controlled flash output using the EV control on the left rear of the strobes. For all TTL I used the S-TTL setting which is the first setting on the power switch with the Z-330 EV control centered on +/- 0.0.

To control the S-TTL I used the +/-flash compensation in the super menu accessed through the Fn button on the camera. For both manual and S-TTL I used the cameras color histogram when

reviewing images to judge exposure NOT the LCD image. I shot in manual mode with the 12-24mm zoom for models in the Mexican Cenotes using rapid frame rates and low manual strobe power. The macro images for this review were all shot using S-TTL.

When attempting to control +/-flash compensation with the Z-330 EV controller the output was much less accurate than using the cameras EV settings.

When the images are moved into the Lightroom program the metadata shows that the strobes fired in manual mode, TTL will not appear. This I would assume is because the Inon Z-330 strobes are not proprietary so Lightroom is unable to recognize the difference between TTL and manual when the strobe fires.

When flash exposure compensation is applied in camera it appears in the camera's metadata but when moved to LR the flash compensation EV+/- corrections will not appear. Keep in mind that Flash compensation is changed in the (Sony) super menu while the exposure compensation dial on the camera is for (+/-) ambient light changes. Accessing flash compensation and reassigning it within the camera will very between brands and models.

If you intend to learn how changing flash EV values is working for you I suggest you save the images on the flash card to compare in camera beside the same images you are seeing when the files are uploaded to Lightroom. Other post processing software may very depending on its configuration.

The combination of the S-Turtle Smart trigger and the Inon Z-330 S-TTL produced very accurate and pleasing exposures with little need for added +/-flash compensation. Very dark subjects had a tendency to overexpose expose a bit while bright white subjects would under expose a bit. This is a result of the camera's 18% gray metering system trying to make very dark subjects lighter and very light subjects darker.

Juvenile Highhat (Equetus acuminatus), Blue Heron Bridge, Florida USA, A7R III, Sony 90mm F/2.8 macro, Nauticam Housing, two Inon Z-330 strobes. ISO-50, F/4, 1/250th sec, S-Turtle TTL EV+/- 0.0.

Adding from +/-0.3 to +/-1.0 of flash compensation usually resolves the over/under exposure issue. If you find yourself needing to add more than +/-one stop of light chances are the strobes are not aimed correctly, the strobes are too far away from the subject or in the case of shooting wide open (F/2.8) may be too close to the subject.

I shot a juvenile Highhat without moving the strobes or changing strobe to subject distance from F/18 to F/3.5 without any flash exposure compensation needing to be added. At F/2.8 I was overexposing and I needed EV-0.7 to EV-1.0 flash compensation for proper exposure at ISO-50 and

Florida Stone Crab (Menippe mercenary) (adult) feeding on a Jack, Blue Heron Bridge, Florida USA, A7R III, Sony 90mm F/2.8 macro, Nauticam Housing, two Inon Z-330 strobes. ISO-64, F/18, 1/250th sec, S-Turtle TTL EV+/- 0.0.

1/250th of a second shutter speed.

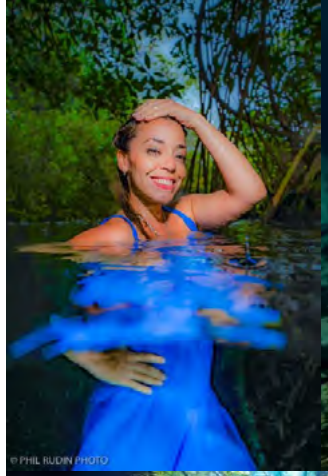
It you are looking for accurate TTL across a broad range of subjects the Turtle Smart quartet of flash trigger should be on your short list for consideration.

The S-Turtle Smart TTL flash trigger for Nauticam retails for $430.00, €329.00 including Vat and €272.00 no Vat. Other brands and configurations range up to $499.00 and €399.00 inc. Vat.

The Turtle quartet of Smart triggers can be purchased through the TRT-electronics.com web page or at several retailers world wide.

Phil Rudin
www.instagram.com/philrudinphotography

www.TRT-electronics.com



Panasonic S1 and S1R

by Team Backscatter

Panasonic released its first full frame mirrorless cameras this year with the S1 and the S1R. The S1 is a 24MP version with great low light capability, while the S1R is a much higher resolution 47MP. The really big news is that both of these cameras shoot 4K 60p. 4K 60p is the holy grail for video, and few cameras have this spec. The Canon 1DX Mark II is the only other full frame camera to shoot 4K 60p, albeit at about 2 times the price. I was shooting the S1 version on this trip, and I stuck to shooting wide angle stills for the day.

Being that Panasonic is new to full frame, there's not a lot of native lenses for this camera, and certainly not any that are popular for us underwater photographers. Sigma makes a mount converter to adapt Canon EF mount lenses to the Panasonic body. I shot the S1 with the Canon 8-15mm fisheye lens.

The image quality from the S1 was excellent. Very sharp detail, excellent dynamic range, and great low light performance are all top notch and compare well to other full frame cameras. This camera easily rises to the top in image quality.

However, with using the Sigma mount converter and Canon lenses, the camera is only able to operate in AF-S mode. Also, the focus is a bit slower with this lens combination. As a note, the Sony A7 III series with the Sigma mount converter focuses really fast and can do all focus modes, including AF-C.

I think the intended user for this camera is a hybrid video/stills shooter. For video shooters, the AF issue is not much of a problem as for video focus is locked down. The AF performance is certainly adequate and a good compromise for the video performance and excellent stills image quality you get for the price.

Jim Decker
CEO: Backscatter

The new full-frame Lumix S1 from Panasonic was my preferred system to shoot for most of the Shootout. I've been a long-time fan of the Lumix series, whether it's a compact like the LX10 and LX100, the mirrorless GH5, and now the full frame mirrorless S1. These cameras are often the best

compromise between image quality, white balance color, and pro video potential. The S1 maintains this trend by producing almost-perfect color at depth, and where it doesn't get it just right, often a single-click white balance correction in post will get it there. Because the S1 uses a new lens mount and the new lenses currently on offer don't align well with the needs of underwater imaging, we opted to use a lens adapter and shoot Canon lenses, primarily the 8mm-15mm fisheye and 100mm macro lenses. These worked well, but likely due to the adapter, autofocus could have been just a touch more snappy. Both the still image and 4K 60p video footage results looked gorgeous, and this camera really does

nicely fill the hybrid photo-video system role. For fans of Panasonic systems or new shooters looking for another competitor into the ever-growing full frame mirrorless market, definitely consider the S1 as a top-choice for the versatility, color, and image quality that it provides.

Robin Dodd
Producer

The long-awaited full-frame mirrorless camera from Panasonic didn't disappoint. The impressive specs on the lower-end S1 are a little more geared towards video shooters, but the 24.2 megapixel sensor shoots great stills too. It's a big camera body, so don't expect any size or weight savings over DSLR.

Learning the controls of any new camera is always a challenge, and there are a lot of them on the S1. The controls on the camera are laid out in an ergonomic way. Coming from Canon, I found the camera intuitive to operate. The menu organization was easy to understand and the custom function buttons added to the ease of use.

The S1 produced excellent underwater color with deep, pleasing blues and good contrast. Though not the fastest autofocus in the game, the S1 managed to keep up shooting turtles and groupers. Though there aren't many L-mount lenses available, the handy Sigma MC-21 adapter allows you to use Canon's many lenses.

Dylan Silver
Backscatter Team Member

I have been looking forward to trying out the Panasonic Lumix S1 with the Nauticam NA-S1R housing for a while now. It did not disappoint!

Regarding the camera, the bright and crisp OLED LVF and LCD monitor really stood out to me. It was generally easy to use and understand the menus both on video and photo mode, and I was surprised with the amount of customization was possible - this is definitely a plus on my book.

One of the features I enjoyed the most was the ability to change from photo mode to a spectacular 4K 60fps video mode. This video mode is cropped which, when using an 8-15mm lens, works quite well. The only feature that needs tweaking, in my experience, is the Autofocus - it feels on the slow side and as if it relies heavily on a strong contrast. Not sure if it may have been due to the use of a Lens Adapter with Canon lenses - I will be looking forward to seeing what native lens will come out! The NA-S1R housing has the smooth ergonomics that Nauticam as used us to. Every control is quickly accessible and you can feel them within your natural reach underwater. All-in-all, this is still a camera system I would love to try again and work with.

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Blackwater for Beginners

by Phil Rudin

With over 6000 dives to date I would be considered a very advanced diver but when it comes to blackwater diving I am still a novice. For those not yet baptized into the world of blackwater diving these are a few things you need to know both as a diver and photographer.

First let me warn you that blackwater diving can become very addictive, sometimes to the point of abandoning all other areas of diving. I have several friends that are making blackwater dives several times a week in my area of south-east Florida and plan their international dive trips around blackwater diving.

During the past three or four years blackwater diving has become an international pursuit for many divers and underwater photographers. Fuelled by an explosion of quality images that are circulating the internet on sites like Facebook, Instagram and in underwater specific photo competitions. Dive resorts around the world are adding blackwater to the list of dives and classes they offer clients. At my recent workshop in the Philippines Asia Divers at El Galleon Resort had trained all of its staff members to assist clients with their blackwater diving needs. We took advantage of the added service and many of my images for this article are from those dives.

So what is blackwater diving and why has it become so popular?

Blackwater dives are night dives in the open ocean or other deep water areas where the bottom may range from 50 to over 300 meters and more. Upon entering the water divers drift in the current following a large float with a weighted line that drops to around 14 meters (45ft). The weighted line is adorned with an assortment of bright lights that are used as a reference for the divers and the dive boat following the divers. The lights are spaced about every three meters so that divers can judge depth. Keep in mind that without a depth gauge you have no frame of reference for how deep you are because you will not be able to see the bottom or the horizon. The tree of

Moorish Idol advanced larval stage, Puerto Galera, Verde Island Passage, Philippines, Sony A7R III, Sony 90mm F/2.8 macro lens, Nauticam NA-A7R III Housing, Two Inon Z-330 strobes, RGBlue video light, S-Turtle Smart in manual, ISO 200, F/13, 1/250th sec

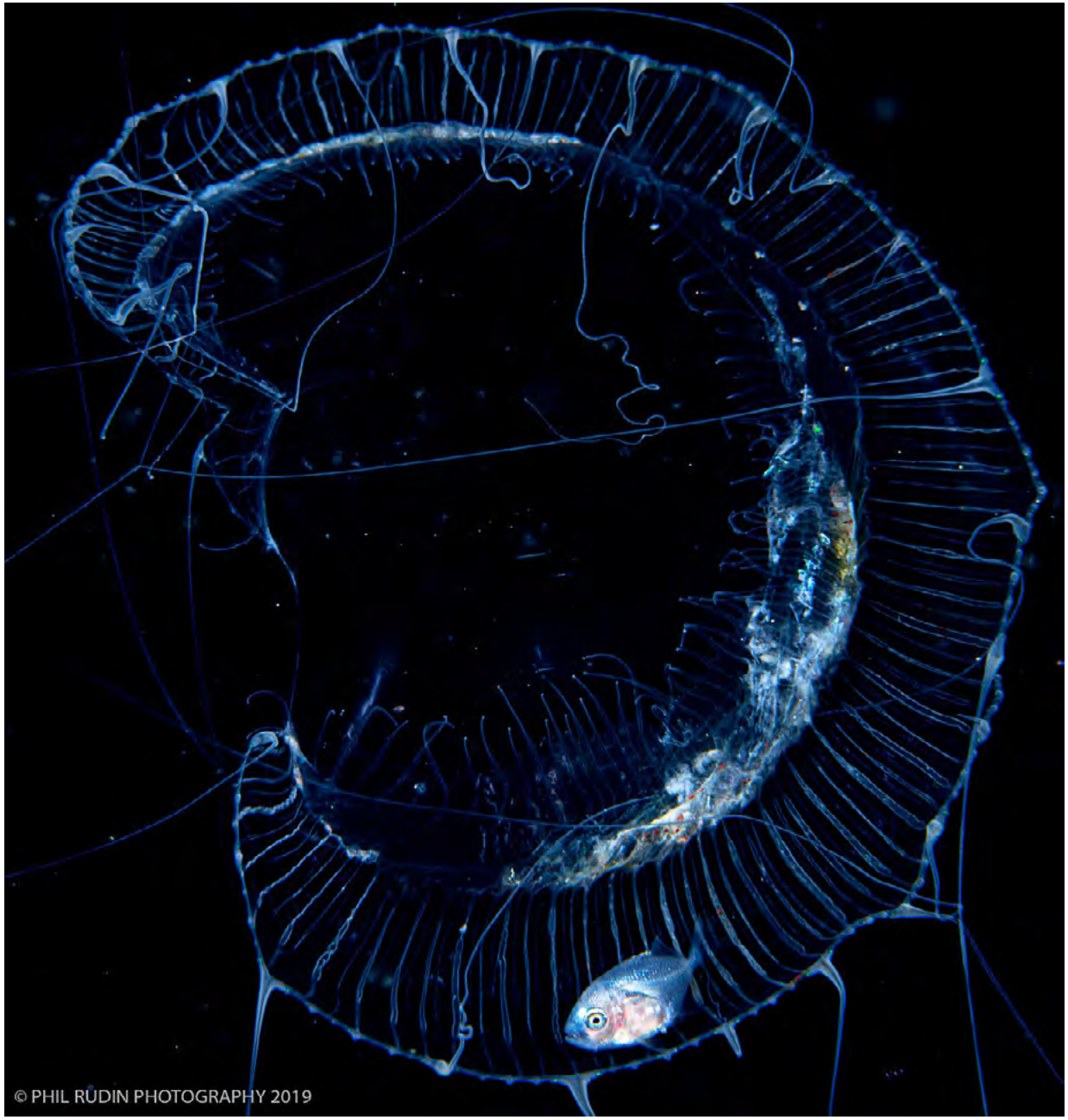
lights is the only reference for depth and proximity to the dive boat which you will want to be near when the dive is over.

In the case of blackwater diving in Palm Beach County Florida where I live the dives are conducted from around five to six miles offshore, so a long swim home if you get separated from the boat. In the same waters we will drift from about one to seven miles during a normal ninety minute dive.

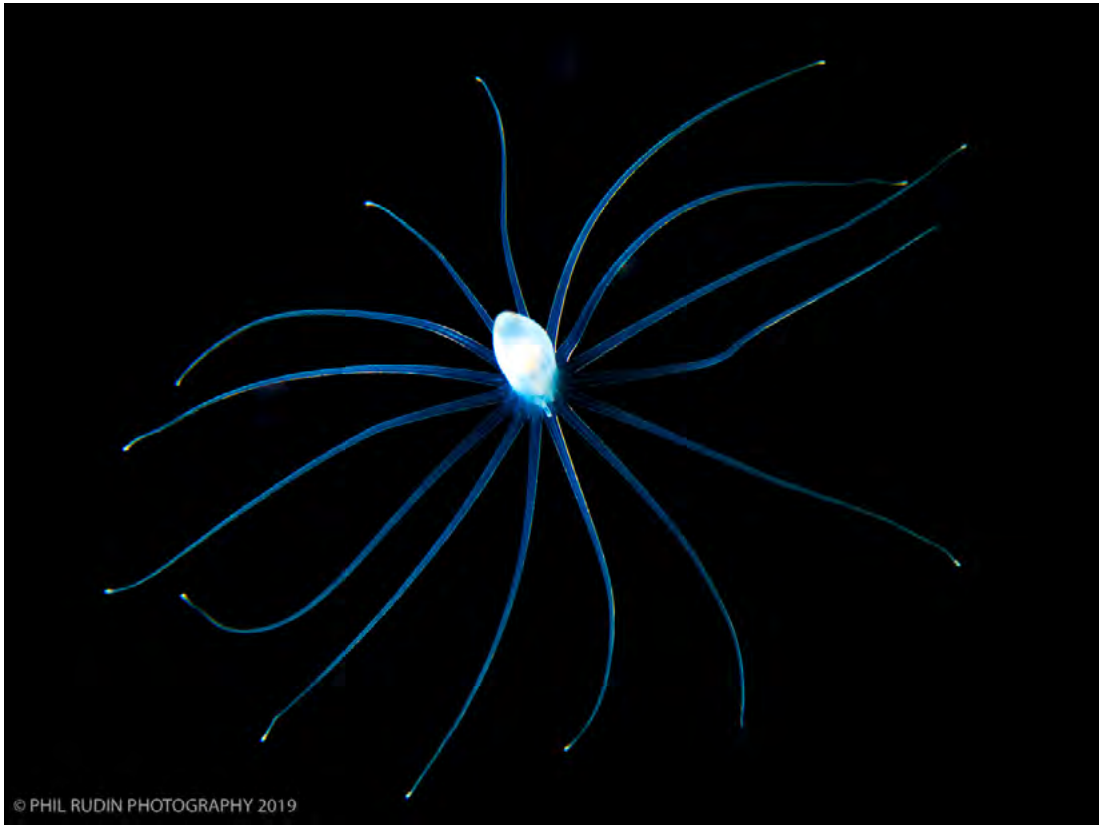
Most blackwater divers will limit themselves to the 3 to 20 meter range only occasionally going deeper following a subject they have been photographing. Animals like Flyingfish, jellyfish and Seahores can also be found at or near the surface sometimes hiding in the sargassum weed along with other small fish. Avoiding boat traffic is a major concern near the surface so be aware.

Blackwater diving is not for amateurs; you need to have excellent bounce control, a familiarity and high comfort level with diving at night, well maintained dive gear and a redundancy of well charged dive lights. Also realize that your best dive buddy is the light tree you are following and not the rest of the divers with you. Also be aware that you are in an area where large animals also roam. If you don't feel comfortable doing a solo dive at night then you probably should not be blackwater diving. Keep in mind that this article and other articles like it are not a substitute for getting proper blackwater dive training. In Palm Beach County Pura Vida Divers offers blackwater dive training and they run three blackwater trips per week, weather permitting.

I believe the reason blackwater diving has become so popular is that it opens up a new world of fascinating and unusual creatures that can only be observed and photographed by recreational divers at night and in deep water. A second type of night dive called Bonfire Diving uses surface lights or lights planted in the sand on shallow reefs and sandy bottoms to attract some of the same types of unusual critters. These



Small fish hiding in Banded Hydromedusae, Palm Beach County, Florida coast, Sony A7R III, Sony 90mm F/2.8 macro lens, Nauticam NA-A7R III Housing, Two Inon Z-330 strobes, RGBlue video light, S-Turtle Smart in TTL at EV +2.3, ISO 100, F/18, 1/250th sec



Larval Stage Sea Anemone, Palm Beach County, Florida coast, Olympus EM1 MkII, Olympus 30mm f/3.5 macro lens, Nauticam NA-EN1 II Housing, two Inon Z-240 strobes, WeeFine ring light, ISO 200, F/7.1, 1/250th sec

Scale Worm, Palm Beach County, Florida coast, Sony A7R III, Sony 90mm F/2.8 macro lens, Nauticam NA-A7R III Housing, Two Inon Z-330 strobes, RGBlue video light, S-Turtle Smart in TTL at EV +2.3, ISO-100, F/22, 1/250th sec

dives take place near the surface and in shallow water so they should not be confused with blackwater diving.

Why all of these unusual blackwater creatures are found near the surface at night and not during the day is simple. At night our vast oceans host the largest vertical migration of animal life on the planet when zooplankton rise from the depths to feed in the shallower waters near the surface. The plankton then attracts both pelagic and

larval stage critters which feed on the plankton, mate, spawn and continue the circle of life in the sea.

Many of the pelagic and larval stage critters that are found blackwater diving are no bigger that a centimeter or two and may be as small as only a few millimeters. Most of these small critters shy away from divers' lights and strobes. They become agitated and move rapidly or move so randomly that trying to photograph them is a distinct challenge. This challenge is what draws many underwater photographers to blackwater diving. Capturing images of many of these very shy animals requires photographers to up their game or come home empty handed.

For photographers, your first goal should be to learn how to move through the water and approach your subject. Excessive hand movement, fin kicks and body movement disturb the water around you much like a ship moving through the water. This disturbance will send the small subjects you would like to photograph flying in every direction. A much better approach is to restrict movement and drift with the current allowing the subject to come near you without spinning away, folding up into a ball or just disappearing in the night. Excessive camera motion creates the same problems, so move the camera slowly and go with the flow.

Finding a subject to photograph requires one or more dive lights. How the lights are used varies greatly among photographers. Some photographers use a ring light attached to the macro port on the housing while others hand-hold a light for locating critters. Others attach video lights to the housing or strobe arms while others have head mounted lights and some use all of the above. I suggest you experiment with several lighting configurations, find what works best for you and then stick to it. Using narrow beam lights verses wide beam lights is another personal preference.

All blackwater photography is done with macro lenses and I would recommend the following equipment for best results. If you are using a full frame sensor camera a macro lenses in the 60mm to 105mm range will work best, for APS-C sensor cameras 40-60mm macro lenses and for M43 cameras 30-45mm macro lenses will be best. Most photographers will be using auto focus for best results so I suggest a camera with the very best AF and tracking that

Pelagic Zoea larval stage of crab, Puerto Galera, Verde Island Passage, Philippines, Sony A7R III, Sony 90mm F/2.8 macro lens, Nauticam NA-A7R III Housing, Two Inon Z-330 strobes, RGBlue light, S-Turtle Smart in manual, ISO 200, F/13, 1/250th sec

you can afford. Since most subjects will be moving within the frame adding closeup lenses is not suggested because they have such limited depth of field and require that you be very close to the subject. Many subjects will only take up a portion of the frame so be aware many images will need to be cropped dramatically so this is where a camera with a high megapixel count will come in handy. Regarding strobes many of the critters you will be attempting to photograph are very translucent and require a great deal of light to expose properly. Many photographers are using two strobes and some use a third slaved strobe over the top of the macro port pointing downward to help make translucent subjects pop. The background for all blackwater photos is blackwater and you will encounter a ton of particles in front of your lens that will create backscatter.

To reduce backscatter and keep the water color as black as possible I use low ISO values and high F/stop values. For my Sony full frame and 90mm macro combo I shoot from ISO-64 to 200 and F/13 to F/22 at 1/250th sec. and try to keep the background black rather than milky purple.

Higher ISO settings in the 200-640 range may be required for F/stop settings in the F/22 to F/32 range. Some photographers also like using manual strobe power settings with lower power levels for faster recycle times which requires the high ISO settings. I have used both manual strobe power settings and TTL settings for blackwater. With S-TTL I add about +1.0 to +3.0 EV of strobe compensation to properly expose translucent subjects and +/-0.0 for reflective subjects using my two Inon Z-330 strobes.

In manual power mode I set the strobes to around 3/4 power and use F/stop or ISO changes based on the camera's histogram. Using Auto-ISO does not work well; it will push the ISO to the highest limit because of the blackwater bias.

For small very close subjects I move the strobes close to the macro port and for larger subjects like squid I move the strobes out several inches and turn them outward to avoid backscatter. Side lighting, top lighting and backlighting are also possibilities

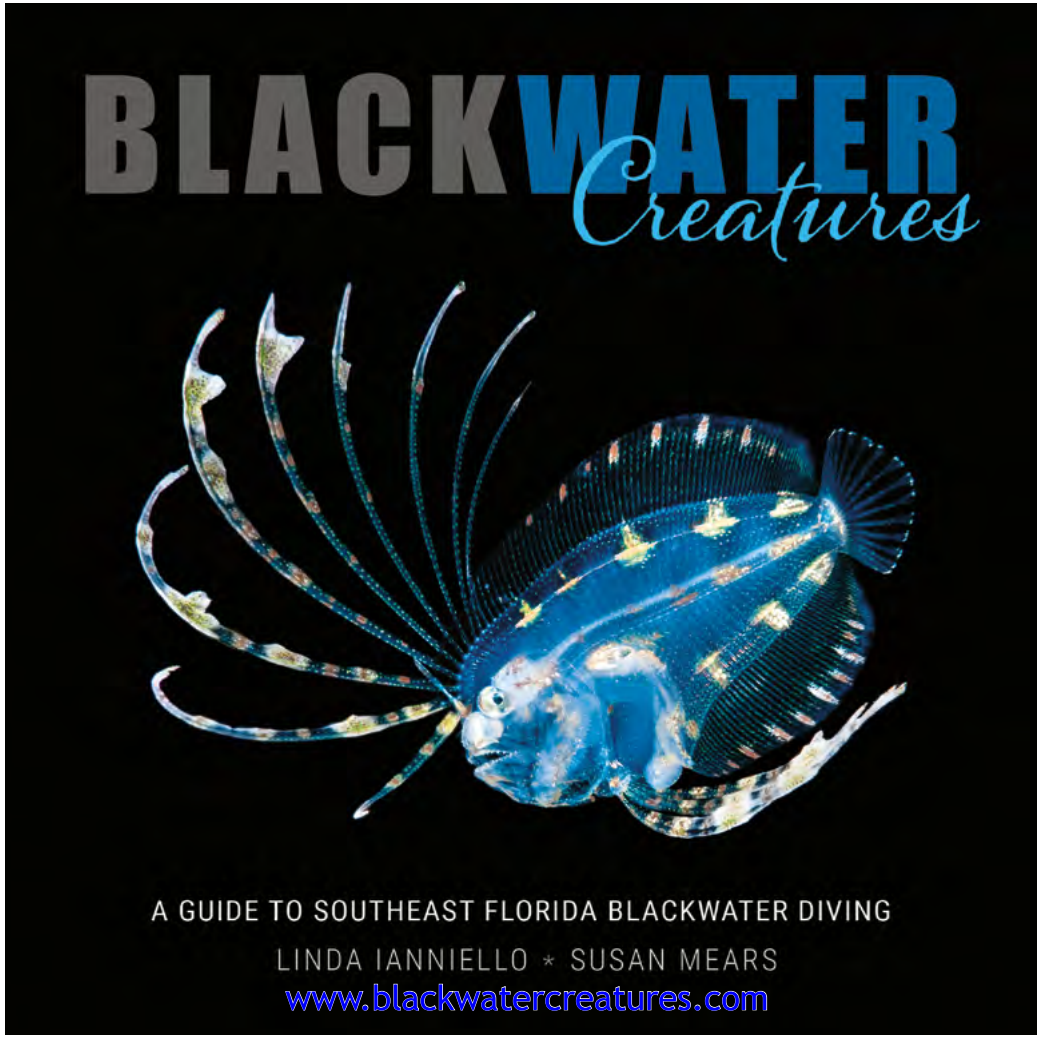
Pyrosome (free-floating colonial tunicae) with Driftfish, Puerto Galera, Verde Island Passage, Philippines, Sony A7R III, Sony 90mm F/2.8 macro lens, Nauticam NA-A7R III Housing, Two Inon Z-330 strobes, RGBlue video light, S-Turtle Smart in manual, ISO 200, F/13, 1/250th sec

Pelagic Zoea larval stage of crab, Puerto Galera, Verde Island Passage, Philippines, Sony A7R III, Sony 90mm F/2.8 macro lens, Nauticam NA-A7R III Housing, Two Inon Z-330 strobes, RGBlue video light, S-Turtle Smart in manual, ISO 200, F/13, 1/250th sec

depending on subject matter.

Once you have captured some respectable images you may want to identify what you have photographed. This may be easer said than done as resources are in limited supply and many of the things you may see have not yet been identified.

I highly recommend investing in the newly released book Blackwater Creatures by Linda Ianniello and Susan Mears. It contains 170 pages of excellent images indexing fishes, crustaceans, mollusks, gelatinous zooplankton and miscellaneous critters. It also contains interesting titbits of information about the behavior of these creatures and four pages of reference sources. This is the source I used to caption all of my images for this article. The book retails for $39.95 and can be shipped world wide for an additional shipping fee. If you are interested in purchasing the book go to www.blackwatercreatures.com



Phil Rudin

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Mar d'Amunt

by Ferran Sánchez

Mar d'Amunt is a spot in an occidental area of Mediterranean Sea located in Catalonia.

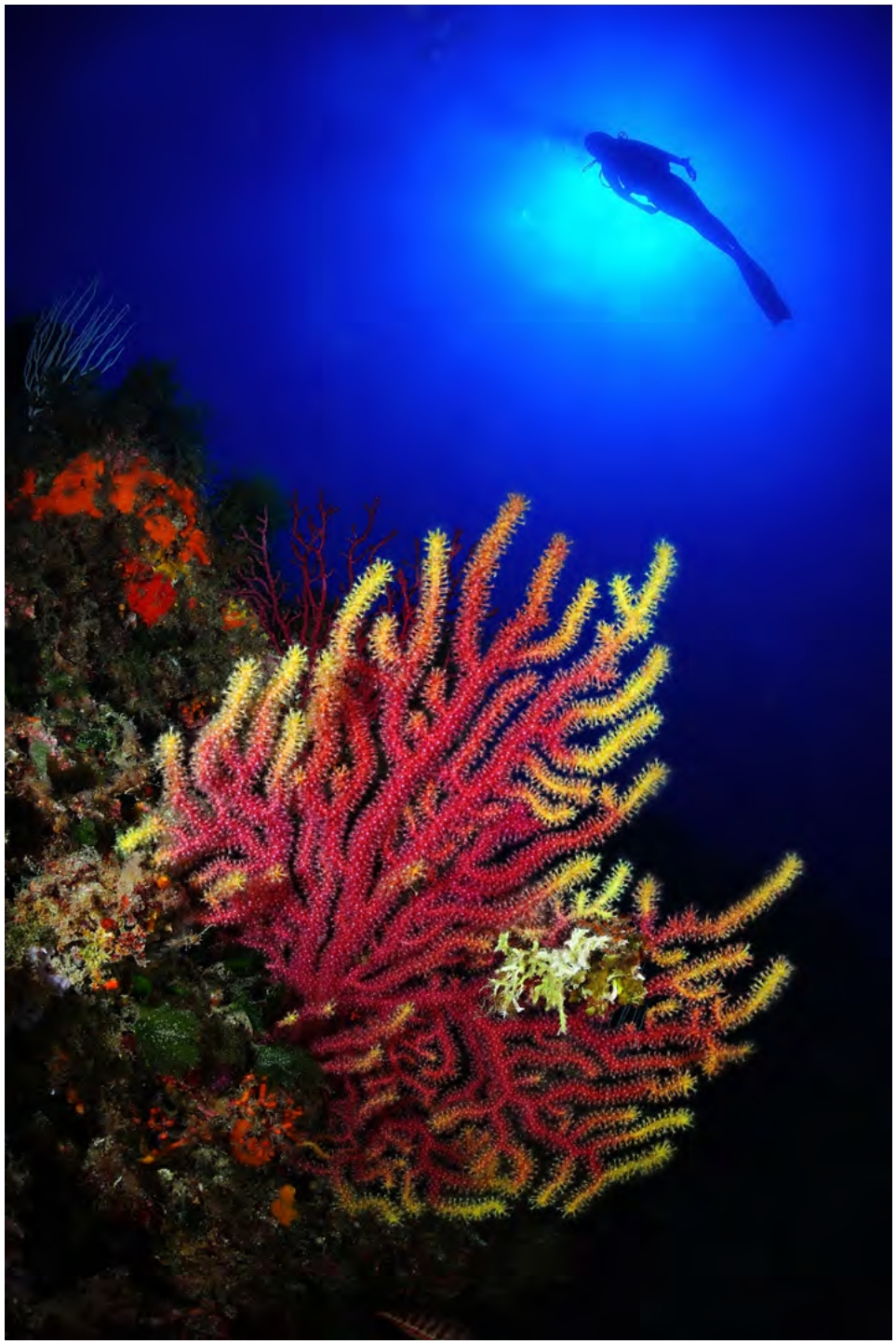
Catalonia is an European country located in the western Mediterranean region as a autonomous community of Spain. The Mar d'Amunt is part of the Cap de Creus Natural Park in the North of Costa Brava. The Mar d'Amunt is a place of great beauty. The effect of the predominant North wind called "Tramuntana" has created an unique and special landscape. In this special location, the water is clean and pure, and the underwater life is of exceptional richness with beautiful stones near of surface and amazing large coral gardens deep in side.

You can travel to this wonderful place using the two main airports: Barcelona (BCN) or the nearest Girona (GRO). The Mar d'Amunt has a steep coast that contains a few charming villages. The main village for diving is Port de la Selva. It is a quiet fishing village with white houses, and with the best beaches of the Costa Brava.

The seabed hosts special and unique wildlife in this spot. I speak of the large red gorgonians forest and the red coral.

The red gorgonians (Paramuricea clavata) are characteristic of this area of the Costa Brava. This habitat-forming species contribute with its three-dimensional structure to the landscape and the marine ecosystem. Ecologically it is very important, as the gorgonian biomass brings an associated rich biodiversity. This is a long-lived species, thus it is very sensible to natural perturbations or to the human activity. Because Cap de Creus is a Marine Reserve, the gorgonians have not excessively suffered the human activity and you can enjoy the great gardens of red gorgonians. In the Mar d'Amunt, there are gorgonians forests from 15 metres deep, and are located in favor of the current to capture the plankton with their polyps. The main color is the red but you can discover all the colours of the mediterranean gorgonian in the dive sites of the Mar d'Amunt.

The other most important species is the red coral (Corallium rubrum). It is in fact animals of Anthozoa class (animals with the shape of small



Nikon D90 in housing Aquatica with Tokina in 12mm, F16, 1/100th sec, ISO200. Two strobes Sea&Sea YS D1

Bay of Port de la Selva: waters of Mar d'Amunt in the Cap de Creus Natural Park. Camera LG-840, F2.4, 1/250, ISO 50

Wide view of the Nautical Club of Port de la Selva, with the typical menorquin boats and white houses. Camera LG-840, F2.4, 1/2000, ISO 50

leafless bushes). The red coral is part of the family of precious coral species that are distributed throughout the oceans.

This red coral of the Mediterranean has suffered a strong fishing pressure for the use of its skeletons in the ornamental industry. Only grows 1mm a year, and only small branches of this hard coral remain, as it has been practically destroyed by the large number of years of abusive exploitation. At present, this coral is protected by law, and its fishing is prohibited throughout the Mar d'Amunt. In 2015, red coral was included in the red list prepared by the IUCN in the category of "endangered species"

The best way to view and discover these characteristic species of the Mar d'Amunt is diving in its underwater spots. The Mar d'Amunt contains more than thirty dive spots, suitable for all levels. All dives are made by boat leaving the harbour of Port de la Selva. The Scuba Diving Section of the Nautical Club of Port de la Selva will take you to the best dive sites in the Mar d'Amunt. The Nautical Club has excelents diving center facilities. The boats are specifically customized to accommodate divers and the engines are powerful to move around the dive spots.

The three best dives recommended for diving and discover the special fauna in this place are: El Molar, the WoodSide Wreck and Els Furallons de la Prona.

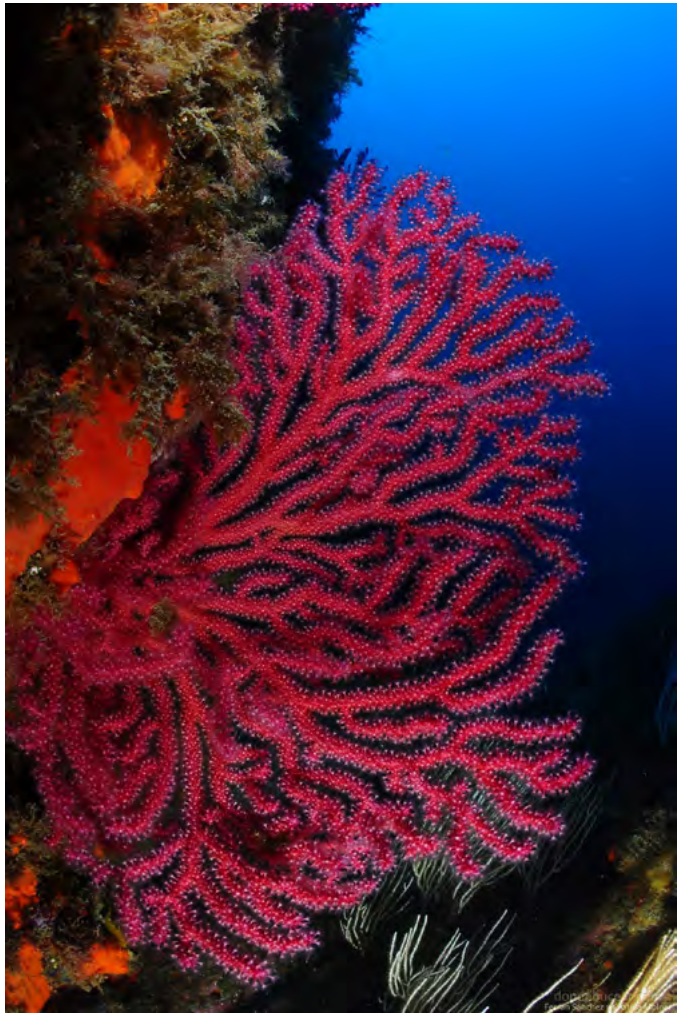
El Molar is a very relaxing dive site that starts descending through a wall to 12 metres deep with a seabed of coarse sand, where you can do a comfort check of your scuba gear. The first interesting zone to observe is a wall with a great number of the sponges Aplysina aerophoba, where it is highly recommended to inspect them because the opisthobranch Tylodina perversa feeds on these sponges. At 15 metres deep, two huge and beautiful rocks indicate the path to the next wall, which is at 25 metres deep and with a U shape. This is the most interesting zone because is completely covered by gorgonians of different colours and shapes. The way back is ascending slowly through the wall, and at 5 metres deep the safety stop could be done observing the wall covered by the yellow cluster anemone (Parazoanthus axinellae).

The Woodside Wrek is an english steamboat sunken between the Xiulet Coast and the Portaló Island, where this old boat collide due to fog in 1884. The diving in this place starts at 10 metres deep with seabed gravel and Posidonia oceanica, and descend to 25 metres deep. At the beginning

(Above) Corallium rubrum, Nikon D90, housing Aquatica. F9, 1/125, ISO 320. Continuos light by Orcatorch D950V

(Left) Mixed lights. The face and hair of the model with continuous light by OrcaTorch D950V and gorgonian by two strobes Sea&Sea YS D1. Nikon D90, housing Aquatica, lens Tokina in 10mm, F9, 1/100th sec, ISO200

(Right) Nikon D90, housing Aquatica, lens Tokina in 12mm, F16, 1/100th sec, ISO200. Two strobes Sea&Sea YS D1



of the dive, at 16 metres deep we can observe some nacras (Pinna nobilis), a large mollusk that is endemic to the Mediterranean Sea and currently at risk of extinction. We continue and once reached 25 metres deep, we will begin to see the remains of this wreck, part of the stern and keel, which are covered by large red gorgonians. In addition, in this dive we can entertain ourselves with the large number of nudibranchs and ascidian colonies that live in the remains of this wreck. Moreover, among the variety of marine life hosted, it is often common to find a three-tailed fish bank (Anthias anthias) on the inner side of the wreck hull.

Furallons de la Prona is a dive site with the most complete biodiversity of the Mar d'Amunt. In addition, it is also one of the most demanding for the diver. The dive computer and the air in the tank should be very well controlled, because of the square profile of this dive, under 20 meters deep. The dive consists of diving through a set of successive channels that begin at a 20m anchor and reach 36m deep. The shallowest part of the channels contain white and yellow gorgonians. As you gain depth, the great purple gorgonians begin to appear. In the deepest part of the canal between the sand and the wall is where the large sponges of the species Axinella polypoides are found. For the return route, it is advisable to visit the high and vertical rocks that protrude from the sea, while making the safety or decompression stop. In them,

Surface stones with mixed lights: ambient light and continuos light with Orcatorch D950V. Camera Nikon D90 in Aquatica housing with Tokina in 10mm, F5, 1/200th sec, ISO200

you will see large fish balls and backlights.

To take underwater pictures I use a DSLR cameras, Nikon D500 and Nikon D90, with Tokina 10-17mm fisheye lens. My preferred configuration for illuminating the landscapes is the use of continuous light to see the result directly through

Corallium rubrum, Nikon D90, housing Aquatica. F29,1/125, ISO 200. Two strobes Sea&Sea YS D1. Subsee +10

the viewfinder. The divelight that I use is the Orcatorch D950V. This powerful divelight allows me to visualize completely the image, thanks to the 120º coverage and to be able to use closed aperture since it has 10500 lumens of power.

Ferran Sánchez

www.instagram.com/dondebucear

Ferran is an underwater photographer based in Barcelona. He shows diving sites around the world and mainly in the Catalonia Coast through his photographs, together with his underwater model Cristina Molnar.

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The last paradise

by Anita Verde

When we mention the words ‘West Papua’ to our non-diving friends, we get a look of ‘Huh? Where? Why go there?’ But to our diving friends, well their faces light up with dreams of uninhabited islands, pristine reefs and verdant green pinnacles rising from the blue.

Known as the birds head peninsula because of its shape, West Papua encompasses the islands of Misool, Salawati, Batanta and Waigeo. These islands, collectively known as Raja Ampat and affectionately referred to as the ‘Four Kings’, harness the highest concentration of marine diversity anywhere on planet earth.

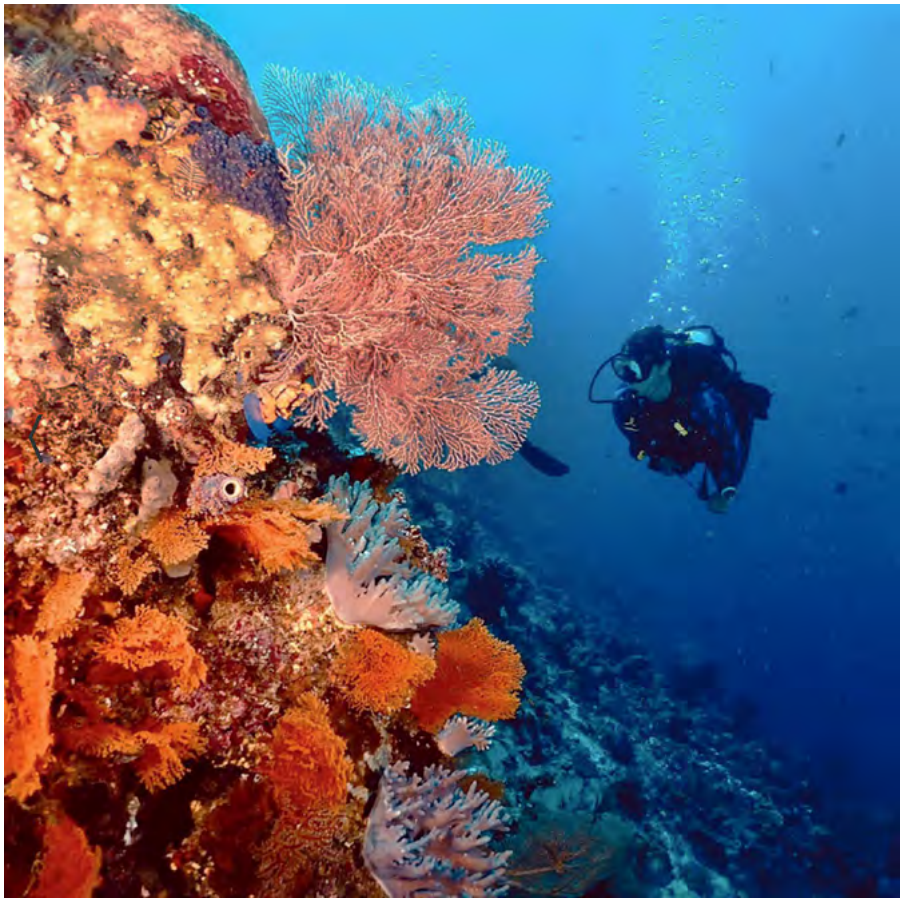
Previously known as Irian Jaya, West Papua was actually under control of the Dutch, forming part of what was the Dutch East Indies. It was not until 1969 that the Dutch withdrew from the region and handed it over to Indonesia. Papua was actually never part of Indonesia prior to Dutch colonization, because Indonesia didn’t actually exist then.

The 1940’s saw the formation of Indonesia as an independent republic, following which the United Nations forced the Dutch to give up West Papua. To cut a long story short, Indonesia then annexed West Papua as a province.

West Papua lies in the Asia Australian transition zone and actually shares the same tectonic plate as Australia, which can somewhat explain why the plants and animals here have similarities. Tree kangaroos, wallabies and other marsupials are common, but it is the region’s phenomenal biomass and endemic marine species that puts Raja Ampat on top of every divers ‘must dive’ destination.

Indisputably remote, wild and mysterious, the reefs and islands here are mind-blowingly beautiful and have so far escaped the over-tourism evident in other parts of Indonesia. Although part of Indonesia, the Papuan culture here is dominant. The shy, warm smiles and generous hearts of the local Papuan people, combined with the region’s wild landscape make this a very special place to visit. Whether your out diving or on a quest to see the bird of paradise, Raja Ampat will have you spellbound in a heartbeat.

While many divers choose to dive Raja Ampat by liveaboard, we chose a more personal land based approach and stayed at Sorido Bay Resort on Kri Island. Just south of



Waiego and run by the very reputable Papua Diving, the diving here at Kri has some of the highest marine diversity anywhere on planet earth. The resort's local dive site Cape Kri has set the world record for the highest number of fish species, with scientist Dr Gerald Allen counting over 374 species on a single tank dive. The reefs around Kri boast an array of life from various shark species, manta ray, pygmy seahorse (almost in plague proportions), and incredible macro life.

The resort is owned by Papua's own 'Indiana Jones' Max Ammer who came to the region over 21 years ago in search of WWII plane wrecks. Having personally discovered hundreds of wrecks and the majority of dive sites in the region, Max is deservingly the pioneer of Papuan diving.

Not only has he personally discovered and named the majority of dive sites in this untamed region, but has also made it his mission to conserve its precious environment through the establishment of the Raja Ampat Research and Conservation Centre (RARCC). The RARCC is led by Max himself and consists of a small team who dedicate their time to sustainable initiatives that both protect the environment and provide opportunities and training to the local Papuan people.

Some of the staff at Sorido Bay Resort were previously involved in shark finning, blast fishing, illegal logging and turtle poaching, but through Max's efforts the local people now generate an income by using their knowledge of the environment to guide guests and undertake conservation work. Currently, 90 percent of resort staff are Papuan.

While the RARCC's current focus is on building a school and training the local Papuans in fibreglass boat building, carpentry and guiding

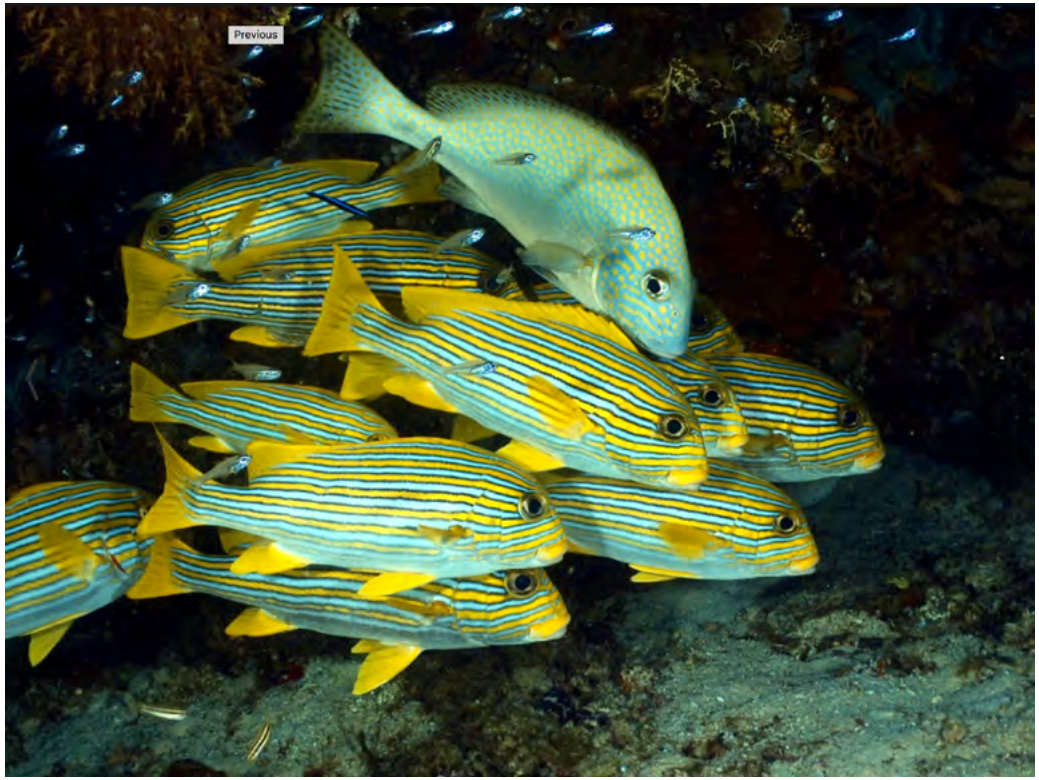
guests for diving and kayak tours, Max is also building electric dive boats and has future plans to train local Papuans to pilot helicopters - part of his ambitious Bell 47 project where he is rebuilding three Bell 47 helicopters. Once rebuilt, the helicopters will be used to undertake air patrols to determine and deter illegal fishing activities, support search and rescue, and to assist scientists and other researchers to more easily access remote parts of the region.

Catering to a maximum of 18 divers, the resort offers sophisticated dive and stay packages in luxury villas nestled delicately amidst the jungle clad shoreline overlooking the lagoon, whose daily residents include hunting black tip sharks, rays and trevally. The resort also has an amazing array of wildlife on land including; numerous resident Cuscus, Shel Ducks, Coconut Crabs, Monitor Lizards, Papuan Hornbills and Beach Kingfishers.

As for the diving, well all we can say is wow! The reefs here are diverse; from slopes, canyons, seamounts, drifts and calm lagoons; the sheer abundance of fish in these waters is difficult

to match. This, combined with the quality and diversity of its coral species and macro critter life makes for a thrilling diving adventure.

From the comprehensive dive briefing from Resort Manager Chris Harvey, to the all Papuan dive team who have a keen eye for everything from sharks to pygmy seahorse, this is a flawless dive operation. Diving here is unique, not only because



of the resort's outstanding location but because of the expert local knowledge of the dive sites, marine life and currents which comes from more than 21 years experience in the region.

Whilst it's difficult to choose, here are a few of our favourite dive sites

Cape Kri

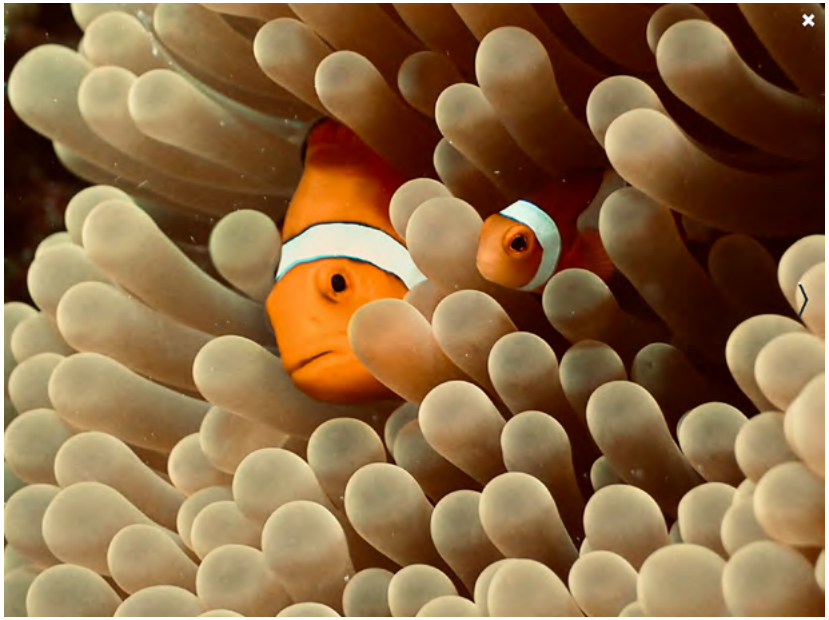
This is of course the dive site where Dr Gerald Allen set the world record by counting over 374 fish species on a single tank dive. After entering from the south-east side of Kri Island, you make your way to the drop off where a steep sloping reef decends to around 40 meters. Soft and hard corals abound, where schools of small fish bring in hunting giant trevallies, spanish mackerel and tuna. White tip, black tip and grey reef sharks are also seen, along with passing hawksbill turtles and schools of ribbon sweetlips. The site also harbours an impressive range of macro critters, so be sure to keep an eye out for scorpion fish, nudibranch and delicate sea fans harbouring pygmy seahorse as you gradually ascend to your safety stop.

Sardines

Best suited to experienced divers, particularly around the full or new moon when currents tend to run faster, this site can harness so many fish that they block out the sunlight! Best dived when the current is running from east to west, be ready to hook in and wait for the show. Numerous species of schooling fusiliers, trevally and barracuda are common, alongside black tip, white tip and grey reef sharks, bump head parrot fish, bat fish and napoleon wrasse.

Blue Magic

This submerged seamount offers healthy and diverse coral gardens alive with the smallest of critters, along with patrolling grey reef sharks, hunting tuna, barracuda and the enigmatic Manta Ray (in season). The reef has a mix of hard and soft coral species including brain and table corals, gorgonian fans and large coral bommies carpeted with a myriad of soft coral species. This is a beautiful dive with something for everyone.



Mikes Point

Named after Max Ammer's son Mike, this site is set around a small rock island. From the surface it's hard to imagine what lies beneath, but as you descend, it's unique topographical features reveal themself. The reefscape can be owed to the US Airforce who during WWII bombed the island repeatedly after mistaking it for a 'disguised' Japanese ship (good one!). The result is huge bommies now carpeted in stunning soft corals, overhangs, ledges, crevices and swim through caverns. A very interesting dive site with excellent fish biomass, particularly when the current is running. A dive site not to be missed.

Manta slope

A sandy slope who's name says it all. On the sandy bottom you'll find a few large bommies that form the cleaning stations for the reef and oceanic manta ray. While you're more likely to see the mantas here during December to April when the waters are plankton rich, the manta are actually believed to be in the area all year round. Diving here in July didn't disappoint.

Melissa's Garden

About one hours boat ride from Kri (weather depending), in the area known as the Fam Islands you find this spectacular underwater garden. Named after Max Ammer's daughter Melissa, this dive site is definitely worthy of the journey. Made up of three pinnacles, this site boasts an array of hard and soft corals along with gigantic fans. Macro lovers will find soft coral crabs, nudibranch, flatworms and a plethora of other tiny critters. In the blue there are huge schools of fusiliers alongside schools of grumpy looking barracuda. The shadows cast by the pinnacles also make for some interesting underwater photography.

The Passage

The passage is iconic when it comes to Raja Ampat dive sites. This narrow stretch of water between the islands of Gam and Waigeo with brisk currents and mangroves resembles more of a river than your traditional ocean dive site. We had heard that the photography opportunities here were fabulous, so we were disappointed when we were told the passage was no longer diveable. Needless to say that we were happy to choose another site once we heard the reason why. Anyone up to duelling with a large salt water crocodile?

When to go

Unlike in the South of Raja Ampat where operators close from July to September, diving at Sorido Bay Resort is available all year round due to Kri Island's protected location.

While the best time to dive Raja Ampat is generally considered to be from November to May (because it's Manta Season), a visit to Kri in June - October not only gives you some of the best visibility, but means you have the dive sites to yourself as the liveaboard boats have left the region. The resort is small and exclusive and often caters to documentary makers and film crews, so advanced bookings are essential. We visited in early July and experienced warm sunny days and light to mild winds, oh and we still saw the mantas ..... someone forgot to tell them it was no longer their season!!

How to get to Kri

There is no doubt that Raja Ampat is wild and remote, and getting there can be long and arduous particularly from European destinations. But it's this distance and effort that keeps it beautifully secluded and untouched.

Sorido Bay Resort can be reached in 2 hours by boat from Sorong harbour. Sorong's Domine Eduard Osok airport is serviced domestically by Sriwijaya Air and Lion Air from Manado and Makassar, with connections to the major Indonesian cities of Jakarta and Bali.

After an amazing week of the most magnificent diving, we would have to say that we are in love with this mysterious and wild part of the world. So would we return? Absolutely. Not just for the stunning diving, but for more of Max's fascinating and side splitting stories!

Want to know more? Book your stay at Sorido Bay Resort or their sister resort Kri Eco Resort by visiting www.papua-diving.com

Ten percent of all resort profits go towards the excellent work of the Raja Ampat Research and Conservation Centre.

Anita Verde
www.summitstoseas.com

www.papua-diving.com

Guidelines for contributors

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

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

Uw photo techniques - Balanced light, composition, etc
Locations - Photo friendly dive sites, countries or liveaboards,
Subjects -, Anything from whale sharks to nudibranchs in full detail
Equipment reviews - Detailed appraisals of the latest equipment
Personalities - Interviews/features about leading underwater photographers

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

How to submit articles

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

1. The text should be saved as a TEXT file and attached to the e mail
2. Images must be attached to the e mail and they need to be 150dpi

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

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

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

Parting Shot 1

The story goes that on the 25 October 1854, the British steamer Forerunner, on the route from Africa to Great Britain, foundered at the very tip of the Madeira Island East tip. It was a small ship, with 381 tons, with 34 people on board, plus cargo. After spending the day anchored in Funchal, resupplying with water and coal, the ship departed to its final destination at the end of the day.

For some unknown reason, she tried to go around the São Lourenço tip too close to shore, hitting a submerged rock. Only 14 people died because fortunately, a fisherman boat was passing at the same time in the area and rescue all the remaining 25 crewmen and passengers. This disaster led to the construction of the first lighthouse in the Madeira's archipelago, as the accident occurred due to lack of any lights on that remote part of the island. By 1870 a new lighthouse was already in place. But, in 1881 a new accident took place, precisely in the same place. This time there were no mortal victims. It was again a British steamer, the SS Newton, of 1 324 tons, built-in 1864.

The spot where both ships sunk is not an easy place to dive, and shipwrecks seldom happen in accessible locations. Most of the time, there is a strong surface current, so the divers need to take cover on the rocky reef that starts around 10 meters deep. On the Westside where most of the wreck is it goes down to 30 meters. As there is no human presence in the area, or creeks nearby, the spot has some of the most transparent waters in Madeira.

And, this summer, I was able to go there twice with a local dive club (FocusNatura). But, on the last time, there was no current when we dived, and we had more than 30 meters of visibility. From the surface, we could see the wreck. Also, the water temperature was a wonderful 25 degrees Celsius. We don't know to which of the ships the remains belong, as no archaeology studies have been conducted in the area yet, but any wreck diver will enjoy this dive in Madeira.

Olympus M1 Mk2, Nauticam housing, Panasonic 7-14 mm, at 7 mm, f/10, 1/60, ISO 400, 2 Inon Z240 strobes.

Augusto Salgado

Parting Shot 2

Nikonos 5, Sea and Sea 15mm, Ikelite AI strobe. Camera setting 1/90, f16 ISO 64

Every underwater photographer has at least one image that got away. You could have the perfect subject but it could be bad visibility or the subject not in the correct position. It could be equipment conditions. Wrong lens, wrong settings, strobe malfunction or dead batteries in strobe. The problems in underwater photography are endless.

Here is my story. In the days of Nikonos film photography you had 36 shots total. On a dive site called Row and be Dammed on the west coast of Canada I discovered a sponge the shape of a heart. I had three shots left on the roll of film. I tried a fourth shot but the roll had ended. I tried the dive site later the afternoon.

The dive site has nine foot or three metre tides. In a rubble field of strawberry anemones and no distinguishing features I could not find the sponge again. I did numerous trips to the same location and still I could not find the sponge. I just have my memories and three shots. My three shots after waiting a week for the film to be developed looked very good. Perfect for now but if I found the sponge again I would choose different settings on the camera and different strobe positions.

So the drive for that perfect spot is why we do underwater photography. And the satisfaction we get when the shot matches the image in our brain drives us to travel to distant lands.

Dave Weeks
https://reefscenics.smugmug.com

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

peter@uwpmag.com