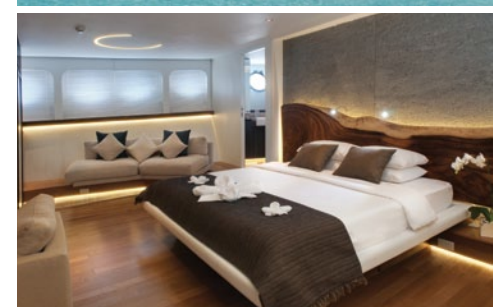
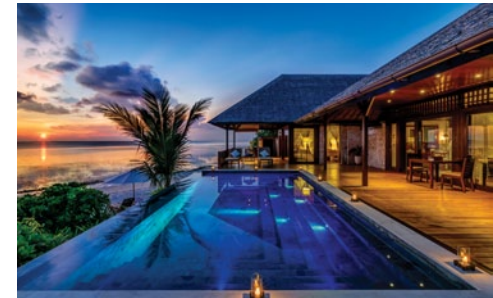






An experience without equal

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.



"A fantastic and unique location with some of the best dive sites we've ever experienced. The sites are great at 25 metres, 15 metres and 5 metres, so perfect for any kind of preference. The service and support was downright luxurious. All in all 5 stars!"

T. Marshall Manson



www.wakatobi.com

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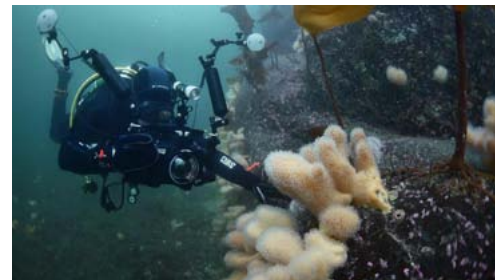
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Underwater Photography

A web magazine UwP90 May/Jun 2016



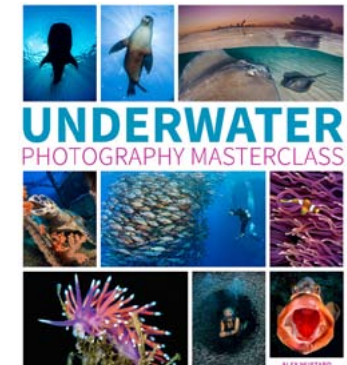
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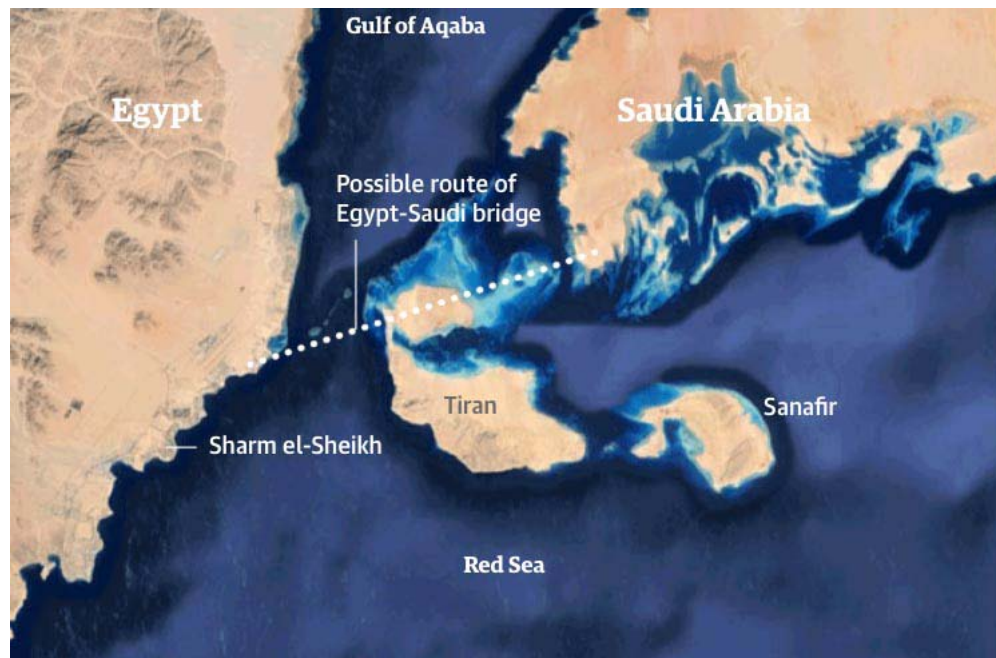


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Underwater Photography 2001 - 2016
© PR Productions
Publisher/Editor Peter Rowlands
www.pr-productions.co.uk
peter@uwpmag.com



I had to check the date of the article on the Daily Mail website in case it was an April Fools Day prank but it was dated April 8th so it can't have been.

The plan is to build a 30 mile bridge across the Red Sea between Saudi Arabia and Egypt. At first glance this seemed like a good idea but when you look at the map it is planned to span across the Straits of Tiran.

The bridge, to be named after King Salman of Saudi Arabia, will facilitate pilgrimages to Mecca and promote local industry, and is likely

to pass through the islands. Saudi newspaper Alriyadh described the project as the realisation of a great vision that would "join the two continents of Asia and Africa by connecting Saudi Arabia to Egypt over the water".

The problem is the effect such a major construction would have on the coral reefs which have for so many years attracted hundreds of thousands of divers.

Wouldn't it be much more sensible to build a tunnel?

Trident ROV

Open ROV is a long established project to develop small ROVs for a wider market and to help them become 'quadcopters of the sea'.

The first incarnation was quite basic but nevertheless very successful. I understand they have shipped in the order of thousands.

Back in September 2015 I was alerted to their second incarnation, Trident, by a colleague of mine who is a video engineer specialising in larger work ROVs such as Woods Hole use. He told me about their Kickstarter campaign to fund Trident but more importantly that he had put his name down for one.

I didn't need any more encouragement and followed suit. I have to say that the promotional video was very impressive and exciting. The only downside was that delivery wasn't promised until November 2016. However the first hundred orders were promised for March 2016 which seemed far less distant.

The deal was that if they get

www.kickstarter.com/projects/openrov/openrov-trident-an-underwater-drone-for-everyone/posts/1548733

their target fund amount they can start charging credit cards to get the project going. And so it was that a couple of weeks later my CC statement showed a charge of about £800 going out.

No problem. I haven't ordered anything so far ahead before but I was happy with that.

When March 2016 came round I looked out for any news of the first 100 units and possibly some online reviews but couldn't find any. Open ROV issue press releases every now and again to update progress but most until recently were slim on detail about Trident.

When I messaged their Facebook page about the first 100 units I was told that the delivery date was always November 2016. OK we all get overenthusiastic when pitching projects so I accepted their youthful exuberance and kept the faith.

Fortunately their latest press release and website is much more forthcoming with information and images and I feel more reassured about Nov 2016.

I think this is a very exciting project and I will keep you up to date on progress

You can find out more at

Peter Rowlands
peter@uwpmag.com

www.uwpmag.com

News, Travel & Events

Saudi Arabia to build a 30-mile bridge across Red Sea to Egypt



King Salman has announced that a bridge connecting Egypt and Saudi Arabia would be built across the Red Sea following a meeting with Egypt's President Abdel Fattah al-Sisi.

There has been long-held suggestions of the construction of a 30 mile bridge, stretching from Ras

Nasrani, close to the Egyptian resort of Sharm el-Sheikh to Ras Hamid in northwestern Saudi Arabia.

Saudi Arabia is also expected to sign a \$20 billion deal to finance Egypt's oil needs for the next five years and a \$1.5 billion deal to develop its Sinai region.

www.uwpmag.com



2016 Basking Shark Season

Spring has now arrived and we're now working hard to be ready for the up and coming wildlife season in the Hebrides!

Right now, the ocean is stirring out in the Atlantic, the nutrients from winter storms are circulating in the water column. The plankton are awaiting the increase in light and temperature to begin the start of the summer food chain! i.e food for BIG FISH!

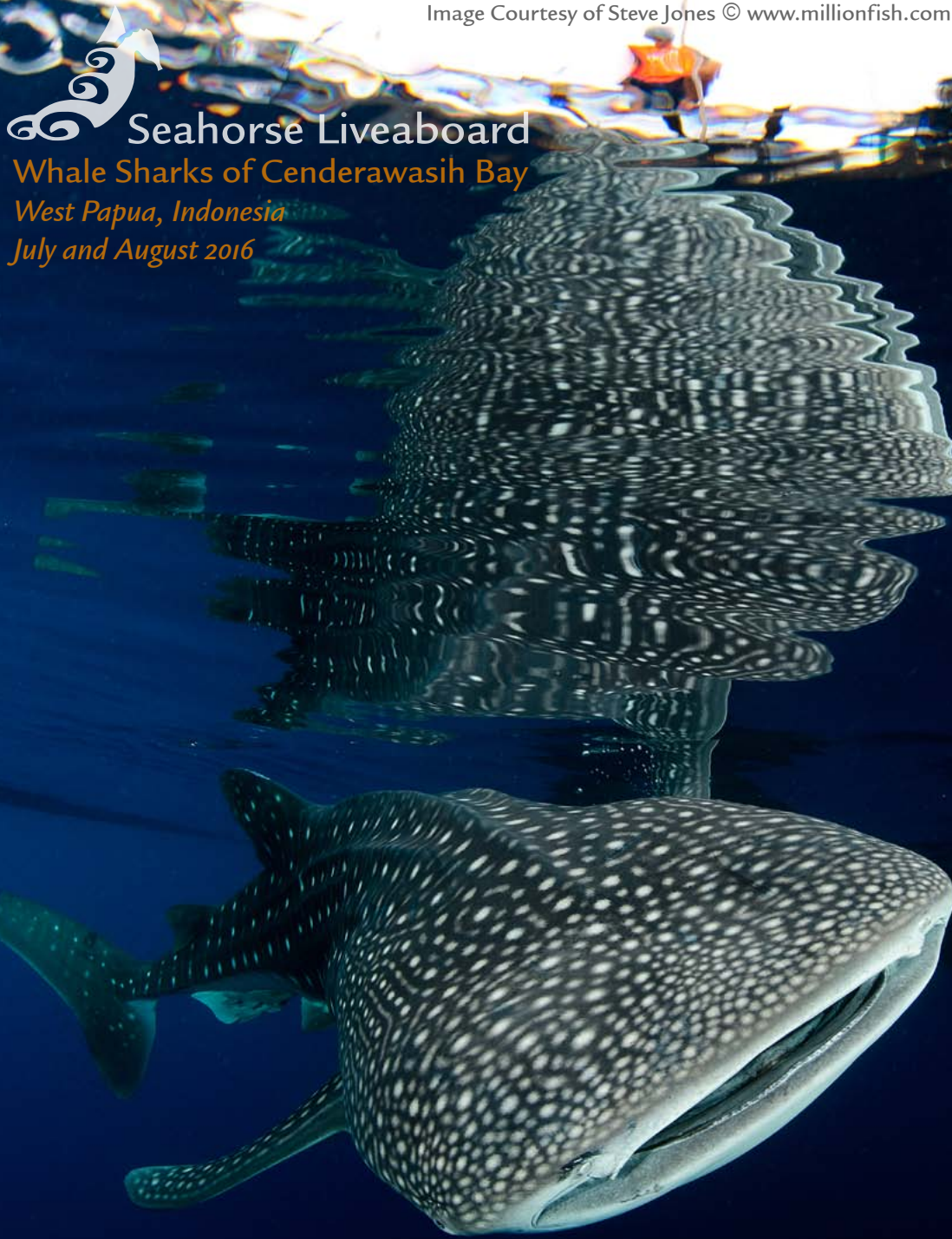
Last year we were blessed with the earliest ever arrival of basking sharks, only a few weeks from now! We'll be watching and waiting to head out if they decide to turn up early again - so be ready if you'd want to join us on a last minute trip out! This all depends on plankton production of course!

www.baskingsharkscotland.co.uk

The advertisement for Siren Fleet is a vertical collage. At the top, a sailboat with blue sails is shown on the water. Below it, the text 'Siren Fleet' is written in a large, stylized blue font, followed by 'in Fiji' in a smaller, simpler font. The middle section shows a close-up of a diver's head and mask underwater, surrounded by colorful fish. At the bottom, there's a close-up of a camera lens and underwater equipment. The text 'Specialists in Underwater Photography' is written in white over the bottom image. At the very bottom, the contact information 'info@sirenfleet.com • www.sirenfleet.com' is displayed in white.

Issue 90/5





Seahorse Liveaboard
Whale Sharks of Cenderawasih Bay
West Papua, Indonesia
July and August 2016

Last minute deals now available. Click here for more info!
www.seahorseliveaboard.com/cenderawasih-bay-2016/

Lembeh Strait
Photo Week
with Doug Sloss, Mike Veitch
and Luca Vaime



Next summer join Doug Sloss, Mike Veitch and Luca Vaime from the Underwater Tribe for an awesome week of photo fun at the best photo resort in Lembeh Strait, Nad Lembeh Resort. Seven days of incredible diving, one-on-one underwater instruction to help improve your shooting techniques and informative lectures throughout the day to hone your photo skills and post processing prowess.

July 30 - August 6 2016 at Nad Lembeh Resort - 7 nights/17 day dives - \$1466

www.nad-lembeh.com

Jack and Sue Drafaahl Digital
Photo Class in Bonaire
May 7 - 14, 2016



We have been offering this unique underwater photography course now for 15 years, but the 2016 class will take a new direction. We will address the problems encountered when shooting and editing, by lecturing utilizing images submitted by the students. We also will be covering how to edit your videos.

Sue will be available to help underwater during 3 dives a day, and Jack will be in the classroom for help on shooting or editing problems encountered during the week.

www.jackandsuedrafahl.com
www.uwpmag.com

UPY display at Chavonnes Battery Museum, Capetown, South Africa 1st May to 30th September 2016

Coming to South Africa for the first time, the UPY London Underwater Photographer of the Year 2016 exhibition will be showcased at the Chavonnes Battery Museum, Clock Tower, V&A Waterfront in Cape Town, from 1st May to 30th September 2016 in partnership with the National Sea Rescue Institute (NSRI).

The 41 images cover 8 categories, 3 of which are exclusively in British Waters while the rest are entries received from 54 countries including South Africa, UK, Mexico, Russia, Indonesia, Egypt, Jordan, Malta and Italy.

These spectacular images invite you to explore fascinating

perspectives and interesting insights into our world underwater and on land from underwater.

“We are very excited to partner with the National Sea Rescue Institute (NSRI) and to host this fascinating Underwater Photography exhibition. The various themes will be incorporated into our school group visits along with the NSRI WaterWise Academy project which I know the learners enjoy.”, says Dale Dodgen, Business Executive of Chavonnes Battery Museum. “Thank goodness we have the NSRI now”

Visitors have the option to meander on their own or join a guide from local communities for a tour that lasts up to 2 hours.



www.chavonnesbattery.co.za

Wakatobi Getaway

April 10 - 17, 2017



Join Walt Stearns and the publishers at X-ray magazine for an unforgettable week at Wakatobi Dive Resort!

The trip will include:

Photo contest: Best Macro & Best Wide-angle with Top honors to include a cover shot on X-ray magazine (issue TBA); prizes TBA

Post Trip Photo Gallery on X-ray website featuring top images from participating photographers

Image clinic – Tips for improving composition

Shoot like a pro – Enhancing your skills and techniques for online (and print) publication

Getting the big picture – Capturing memorable wide-angle sciences

Working with models – How to best capture images of divers and snorkelers underwater

\$3,950 covers 7 nights / 6 days

of diving to include the following:

Round trip airfare between Bali and Wakatobi Dive Resort

Accommodations in Palm Bungalow (twin share)

All inclusive meal plan: breakfast, lunch, dinner, snacks (sodas and alcohol excluded)

3 boat dives per day

Unlimited shore diving with taxi service on Wakatobi's famous House Reef

Nitrox on all dives - complements of X-ray magazine

All clinics and seminars plus photo contest participation

For more information or to reserve your spot please contact:

Henrik Rosén:
henrik@wakatobi.com
or Karen Stearns:
karen@wakatobi.com

Internet on Siren Palau



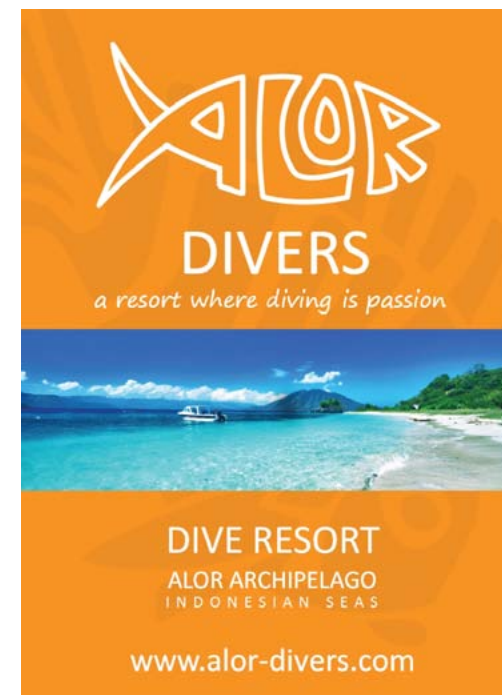
After public requests to have internet on board our yachts, Worldwide Dive and Sail has been working on a plan. We are now there and the first yacht to have satellite internet on board is the Palau Siren

We are all very excited about this and to celebrate we have launched a new contest! #MySirenFleetExperience

Share your experience while you are still on-board the Palau Siren by posting pictures to your facebook, instagram or twitter account with the hashtag #mysirenfleetexperience (make sure your post is public so we can see it :)).

Each month, we will publish them to the Siren Fleet facebook and the shot that gets the most likes will get a special discount on their next trip on board! You can share as many pictures as you want!

www.sirenfleet.com





UnderwaterPhotography.com photo contest

Another competition has ended with an impressive 6,339 entries out of which 972 became hotshots that we consider the first round of judging to the annual competition. We are so proud to be having a constant flow of new talent coming in. Our goal is and always have been to promote young talent and give them a stage to show off their photos and launch a career.

2015 World Champion Terry Steely

Terry has been a rising star in this year's competition with 165 Entries out of which 37 have been shortlisted and 7 are awarded in this annual competition. Terry's images stood out in multiple categories from Wide Angle to Macro and even fashion shots. His portfolio is diverse and impressive and we are proud to be presenting his images.



2015 Grand Master Raoul Caprez

Raoul is a long time member and has uploaded over 1099 images to the competition since. He has won multiple medals in the past and has contributed heaps to the site over the years.

This year Raoul entered 125 images out of which 20 have been shortlisted. Raoul has demonstrated great technique and creativity in multiple categories and we are happy to congratulate him on this well deserved title.



www.underwaterphotography.com

Environmental Photographer of the Year 2016



The Environmental Photographer of the Year competition is once again calling for entries from environmentally conscious photographers and filmmakers of all ages, nationalities and abilities.

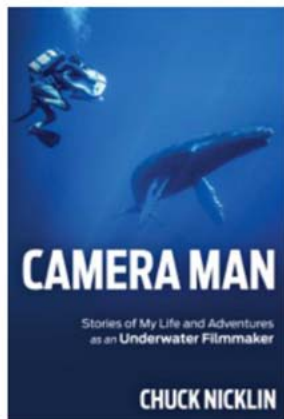
If successful, your work will be featured by major global media and at high profile events around the world.

The competition offers prize money of £6,000 and is FREE to enter.

This year there will be three specific prize themes to focus the entries – the Built Environment; the Changing Climate; and People, Nature and Economy.

<https://epoty.artopps.co.uk>

Now released on Amazon.com/Kindle



My Life and Adventures as an
Underwater Filmmaker
\$9.95 USD



www.chucknicklin.com

Fiji Siren



On the morning of February 20, Fiji encountered the most powerful cyclone in the Pacific nation's history.

Thanks to the bravery of the captain and crew on board, the damage to the boat was minimal and only one week after; the Fiji Siren was already up! The entire crew is currently working to have her up and running on the 14th of April. If you have booked a trip with us after that date, you can be sure that the Fiji Siren crew will ready to welcome you on board and show you the Soft Coral Capital of the World!

From everything that we have seen so far it seems the damage to the reefs is minimal. Our Fiji ops manager and other dive shops all around Fiji have been checking the reefs in their area and everybody is happy to discover that most of the reefs haven't been damaged or if they have then only suffering minor damage.

www.sirenfleet.com

Humpback Whales in Tonga

August 29 - Sept. 8, 2016



Have you ever dreamed of swimming with the whales?

Come join us for trip of a lifetime in Tonga!

Swim with the planet's most mysterious and magical marine giants among remote and pristine coral atolls. NAI'A journeys every year to the exotic Kingdom of Tonga to bring guests the close whale encounters of a lifetime.

From the sight of the first breach at dawn, to the silhouette of whales resting at sundown, these expeditions are a special and rare kind of ocean adventure in a particularly picturesque part of the world.

This is a rare opportunity, so don't miss your chance to join us as space is limited.

www.jackandsuedrafahl.com

www.uwpmag.com

Gerald Rambert in Indonesia

S/Y Indo Siren - Raja Ampat, 15th -25th April 2017

After the success of his previous Underwater Photography Workshops, Gerald Rambert will be joining us again for a 10 night workshop in Raja Ampat.

Underwater photographers will delight in the range of photographic subjects – with both wide-angle and macro lenses used. Whether you are a beginner or more experienced photographer you can benefit from Gerald's instruction- or simply join a like-minded group.



www.geraldrambert.com



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dive
asia**

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Raja Ampat Expedition With Km Ambai

24 Nov to 05 Dec 2017

The biodiversity, the fish life the colorful coral reefs make Raja Ampat one of the best dive destination on the planet

For this expedition, the AMBAI was an obvious choice as it is one of the best quality/price offer on the market and arrangement are already made with the owner.

The dates of the cruise is from 24 November to 05 December 2017 The price is 3990 euro for 11 nights and we offer a 5% discount as we charter the all boat.

The Raja Ampat: the name says it all.... divers that were lucky to dive this part of Indonesia all make the same comment: it is one of the best diving destinations in the world. So let's just see it with our own eyes...

We ask for a minimum of 100 dives as experience to ease the dive organization and take most advantage of all the dives site that Raja Ampat has to offer.

Domestic airfare from Jakarta or Bali is around 300/350 euro/pax. Pack entry fee : 120 euro. Nitrox included. Our agent can arrange all domestics tickets



The boat

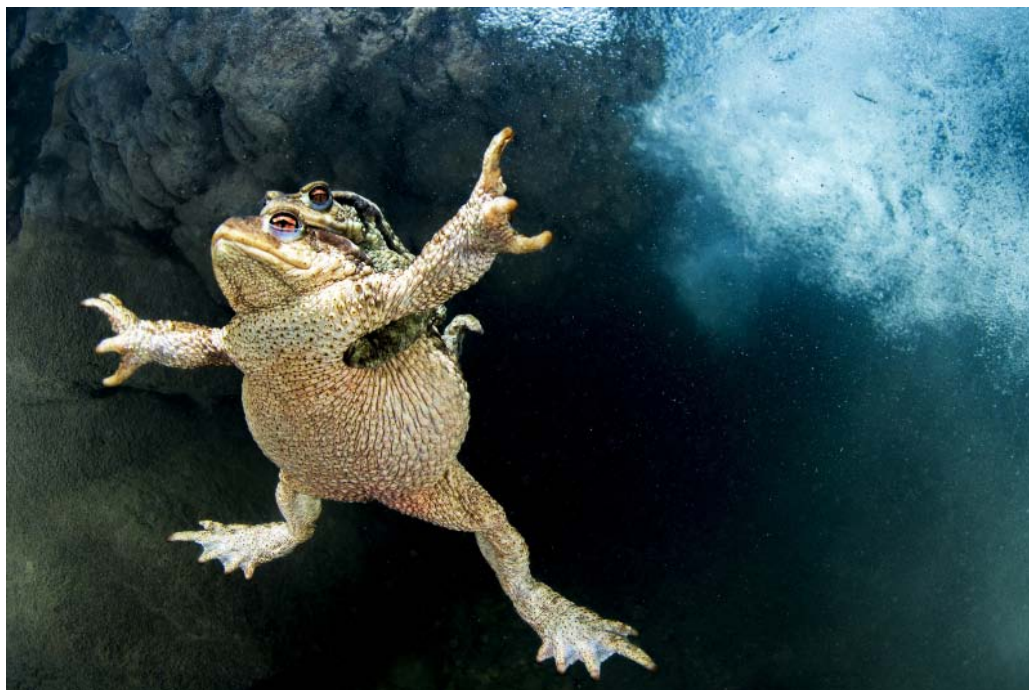
- 32 m long
- 7.5 m width
- 8 double cabin (with ensuite bathroom)
- Spacious lounge deck
- Dedicated camera room

For those that like to stay and dive longer in Indonesia after (or before) the cruise, we propose a extension to some famous muck diving in Ambon / Lembeh. Different wishes can also be organized.

As coming from Europe or another part of the world to Indonesia for a 11 nights cruise can seems short for some, we suggest a “after party” in Maluku or Lembeh for some famous muck . Optimal length would be 3 to 5 diving days and it is very flexible as flights from Ambon/ Manado are every day to Jakarta to Bali.

www.alor-divers.com

DEEP Indonesia 2016 Results Announced



DivePhotoGuide and Wetpixel are proud to announce the winners of the 2016 DEEP Indonesia International Underwater Photo Competition. In conjunction with the Our World Underwater International Photo and Video Competition, the contest makes up what is known as the “superbowl” of underwater imaging competitions, offering more than \$100,000 in prizes.

This year’s DEEP Indonesia contest attracted thousands of entries from all over the world, with photographers vying for awesome travel prizes.

Special congratulations to Mathieu Foulquié, who earned the “Best of Show” award with a wonderful image of mating toads, which was shot in France. This year’s judging panel included Aaron Wong, Daniel Botelho, Abi Smigel Mullens and Joseph Tepper.

The full set of winning images can be viewed below. As with all Underwater Competition contests, 15% of proceeds will be donated directly to marine conservation efforts.

www.underwatercompetition.com

The leading online resource for underwater photographers and videographers



TECHNIQUES

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

TRAVEL

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

ARTICLES

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

NEWS

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

GALLERIES

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

EXPEDITIONS

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

DIVE PHOTO GUIDE

www.divephotoguide.com · contact@divephotoguide.com



Find an Authorized Ikelite Dealer at Ikelite.com.

Underwater Housing for

Sony Alpha a6300

A compact, full-featured waterproof housing for scuba diving, surf, pool, and creative photo opportunities anywhere there's water.

Superb Handling

The a6300 feels great in your hand with a simple and ergonomic control set. We extend this underwater, providing larger controls and push buttons which are easy to access even with thick gloves. Control symbols laser engraved into the back of the housing will never peel off or fade even with years of use. The camera's large, super-bright LCD screen is viewable edge-to-edge through the back of the housing.

True TTL Exposure

An integrated TTL circuit is fine-tuned to the Sony Alpha a6300 flash exposure protocol for the most accurate exposure possible. The circuit is powered by the strobe for zero maintenance and no batteries to change. At this time, only Ikelite DS strobes are capable of powering the circuitry. SEA&SEA, INON, and Nikonos strobes will still enjoy fast recycle times and improved battery life, but must be used in manual exposure modes only.

Lens Support

It couldn't be more simple to change ports than this system—just press the port on and tighten three thumb screws. Feel positive reinforcement that the port is secure with simple parts you can trust in a remote location. This housing accepts a variety of ports to accommodate all of the most popular zoom, macro, and wide angle lenses.

Durability and Corrosion Free Performance

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

New Products

Nauticam NA-D5 housing for Nikon D5

Nikon pro series bodies are the cameras that can go anywhere, withstanding unbelievable punishment in the field, and bring back images bordering on the fringes of what is possible from current imaging technology. Nauticam is pleased to announce the NA-D5 underwater housing, an ergonomic, rugged, and reliable underwater housing ready to take the camera underwater to the ends of the earth in search of these photographic fringes that make rarest and the most memorable images.

Nauticam housings are evolutionary marvels, with advancements from previous systems providing the foundation that new models are built on. The new Nauticam NA-D5 housing incorporates advances from the NA-D4 that came before it, but features enhanced ergonomics, a more sophisticated flash triggering system, and reduced size / weight thanks to cutting edge manufacturing processes.

NA-D4 was a significant elevation of the Nauticam DSLR housing game. Key controls, such as ISO, Video Record, and Playback,



and Info were dramatically routed out to the housing grips. Nauticam recognizes that advanced DSLR cameras, and advanced DSLR users, rely on these functions more than ever to realize the full potential of advanced imaging systems.

Advanced high iso and video functionality in modern DSLR cameras has redefined what “essential controls” are really essential. Buttons that seem like an afterthought in the D5 camera control layout, such as Info (which displays shooting data on the 3.2” color lcd screen), are critical for use in the housing. This button is routed to the left handle for



convenient access. AF-ON, Movie Record, Playback, ISO, Pv, Fn1, Fn2 and Live View are all handled similarly. Considerable design and manufacturing resources go into this ergonomic reshuffling, but the benefit to the user experience makes is worth the effort.

www.nauticamusa.com



ACQUAPAZZA
GripBase



GripM+BaseGM
(General purpose)

M10 Ball Joint



(Short / Medium)

<http://acquapazza.jp/en>

Nauticam
innovation underwater



NA-A6300 Housing
for Sony A6300 Camera

www.nauticam.cn

Nauticam 蓝天海

Ikelite Action Housing for Sony Cyber-shot RX100 III, RX100 IV

Our new line of Action Housings are designed with water sports and travel in mind: built tough yet compact and lightweight. And you don't have to stay near the surface of the water... each housing boasts a professional scuba and free diving depth rating of 200 feet (60m).

Compact Action Housings are also perfect for the outdoor adventurer. A hard cased housing provides both protection and functionality way beyond the plastic bag alternative. And unlike a traditional dive housing, the compact Action Housing won't add excessive bulk to your backpack.

Access to important camera functions including the menu and manual white balance. Functions are clearly engraved with the same symbols that are on the camera. Engraved markings will never fade or fall off.

The scratch-resistant glass lens port provides full use of the camera's zoom range without vignetting. The



front of the port accepts press-on color correcting filters and is 67mm threaded for the attachment of optional accessories.

A custom ABS-PC blend housing with acetyl controls provides strength, UV protection, and fundamentally corrosion-free performance.

A central tripod mount on the bottom of the housing is the perfect attachment point for stabilizing trays and constant-on lighting.

Less than 1/2 the weight and significantly smaller than a traditional underwater housing.

Made in the USA and individually tested for fit, function, and waterproof integrity.

www.ikelite.com



ACQUAPAZZA



APS0-A72

Underwater Housing for the Sony ILCE-7M2/7RM2



<http://acquapazza.jp/en>

AQUALITE

eLED VIDEO LIGHTS



S 90° BEAM
500 LUMENS
100mts DEPTH RATED
3 POWER SETTINGS
BALL-ARM & SWIVEL MOUNTS INCLUDED
BATTERY AND USB CHARGER INCLUDED

PRO 100° BEAM
1200 LUMENS
150mts DEPTH RATED
4 POWER SETTINGS + S.O.S.
BALL-ARM & SWIVEL MOUNTS INCLUDED
BATTERY & MAINS-USB CHARGER INCLUDED



BOTH VIDEO LIGHTS
CAN BE USED WITH
THE OPTIONAL
UV HEAD



WWW.SEA-SEA.COM

UK Underwater Kinetics

Dome Diffuser Pro

Professional dome shaped diffuser for super wide coverage and optimal soft and even lighting with your existing INON, Sea&Sea or Ikelite strobe.

The dome shaped diffuser for strobes such as the INON D-2000, Z-240, Sea&Sea YS-D1 / D2 and Ikelite DS 1xx series greatly improves the coverage and makes the lighting much more soft and even than with a standard diffuser.

The Dome Diffuser minimizes the differences in light-intensity throughout the image creating a more even, soft and beautiful lighting of your underwater images.

Newest edition featuring special diffuser material with an extremely high efficiency!

The Dome Diffuser Pro uses a semi-transparent material especially developed for strobe usages. This material is a perfect balance between diffusion and transparency resulting in a much higher efficiency compared to the first generation Dome Diffusers.



Plus underwater photographers not only report a more beautiful lighting but also reduced backscatter on their images!

The strong body for the dome diffuser makes mounting the diffuser very easy and safe. It only takes a few seconds to mount it on to your strobe. An allen key or thumb screws are already supplied.

The dome diffuser is available for the most common strobes and costs €85,- More information can be found on the website

www.Flipadapters.com



Nauticam NA-RX100IV for Sony RX100 IV



"Amazing 4K Compact"

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

www.reefphoto.com

PROFESSIONAL FILTERS FOR GOPRO

FLIP4

**MACHINED ALUMINUM
FUMBLE-FREE FLIP DESIGN
PERFECT UNDERWATER COLOR
PROFESSIONAL +15 MACRO LENS**



BACKSCATTER
WWW.FLIPFILTERS.COM

Zen underwater ports



Zen Underwater was founded in 2007 with one goal in mind, to design and develop the highest quality optical glass port available in the underwater imaging market. Our products have since been used by professionals in all corners of the world and have been touted by the best underwater photographers as being the finest dome ports available.

Zen ports start with the best optical glass available. The surface is coated with a magnesium fluoride broadband anti-reflective coating to minimize reflections along with a proprietary scratch resistant coating to control lens flare. This results in one of the most optically pure glass ports available, with an amazing 99.7%+ transmissive.

We are located in South Florida and have the amazing opportunity to put our equipment to the test every week on the beautiful Florida reefs



and around the world. We are all divers and underwater photographers who contribute our experience and knowledge to the development of each product. This gives us the unique ability to not only offer superior products, but to share our real world experience and advice with all our customers. We understand how difficult it can be to choose the right port for your needs, so please contact us with any questions you may have.

www.zenunderwater.com



Nauticam NA-EM10 Package Special for Olympus OM-D E-M10



"Ready to Dive"

It's never been easier to start shooting great underwater images than with this ready-to-dive package from Reef Photo & Video. This package includes: Olympus O-MD E-M10 with 14-42mm lens, Nauticam NA-EM10 housing and Macro Port 56, Easitray, Inon S-2000 strobe, fiber optic cable, mounting hardware, 16GB memory card and rechargeable batteries. This is the perfect opportunity to 'dive' into a mirrorless system! Enjoy quality imaging in an easy-to-use, travel-friendly, package.

www.reefphoto.com

 **ACQUAPAZZA**



High definition in the palm of your hand.
APSO-RX100M4
 Underwater Camera Housing for SONY RX100 M4






<http://acquapazza.jp/en>

LG2 flash diffuser for PT-056 Olympus TG4 housing



Specially designed for the PT-056 this diffuser is designed for macro photography with the TG4

It provides even illumination and is simple and quick to install.

www.photo-denfert.com

INON SD Front Mask STD

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We rent out a small selection of Ewa-Marine products, from the U-A and U-B Range for SLR cameras Depending on what we have in stock. We charge £40 + VAT per day and £7 + VAT for Shipping each way.

www.camerasunderwater.co.uk

If you require Deeper diving housings or housings for Video cameras there are a few companies that we recommended.

Esprit Films rent out Canon EOS 5D Mk III with an Aquatica housing and lighting equipment as well as the RED Epic and Sony PMW-200 With Gates housings

www.espritfilm.co.uk

Visual Impact rent a selection of Gates and Ewa-Marine housing for professional Video cameras.

www.visuals.co.uk

Stanford develops underwater robot



Engadget has published an article about OceanOne, a “humanoid diving robot” that has been developed by Stanford for use in research of coral reefs in the Red Sea. It has two “eyes” giving stereoscopic vision and a pair of dextrous manipulator arms.

The latter are equipped with sensors that give the pilot feedback about the amount of force being applied. An on board inertial positioning system allows the robot to maintain its location even in challenging sea conditions.

www.engadget.com

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Nauticam NA-1DXII for Canon EOS-1DX Mark II

Nauticam is proud to announce a new underwater housing crafted specifically for the latest Canon flagship full frame dslr camera, EOS-1DX Mark II.

Canon calls 1DX Mark II "the ideal tool for any professional image creator." 1DX Mark II is a class leading still photo camera and a professional level 4K video system wrapped in a single body. This is an incredible advantage for an underwater shooter!

Nauticam housings are evolutionary marvels, with advancements from previous systems providing the foundation that new models are built on. The new Nauticam NA-1DXII housing incorporates advances from the Nauticam housings that came before it, but features enhanced ergonomics, more and better control access, and reduced size / weight thanks to cutting edge manufacturing processes.

There is clear continuity within the Nauticam DSLR lineup, and this consistency in control layout is something that professional image makers appreciate. Whether using a 1DX Mark II, 5DSR, or 7D Mark



II the control access is remarkably similar, and instantly familiar.

At first glance it seems that Nauticam engineers have literally thought of everything. The truth is, they just listen. The thousands of Nauticam users, constantly in the field, have thought of everything. The engineering team listens to and integrates their feedback, and the product line gets better and better.

www.nauticamusa.com

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NA-1DXII Housing
for Canon EOS 1DX MarkII Camera



NA-D5 Housing
for Nikon D5 Camera

Nauticam TTL Flash Trigger for Canon

Alongside their NA-1DXII housing, M Nauticam are proud to release a new TTL Flash Trigger.

This hotshoe mounted optical flash trigger provides automatic TTL Flash when used with Inon S-TTL and Sea & Sea DS-TTL strobes connected by fiber optic cables.

The TTL trigger also offers manual triggering, including rear curtain sync, with any pre-flash compatible slave strobe.

Accurate automatic TTL flash exposure has been a favorite feature of Nauticam photographers using cameras with pop up flashes, and we are excited to bring this advanced flash control functionality to the NA-1DXII housing!

Powered by a single Canon NB-13L rechargeable battery, the TTL Trigger provides approximately 150 full power flashes.

The Nauticam TTL Flash Trigger



is compatible with the NA-1DXII, NA-1DX, NA-5DSR, NA-7DMKII, NA-6D, NA-5DMKIII, and NA-70D Nauticam Housings

www.nauticamusa.com

Acquapazza update



Japanese housing manufacturer Acquapazza have launched four new products this year.

The APSO-A72 was launched in March and next they will introduce a housing for the Sigma dpQuattro. The image sensor in this camera is different from DPMerrill and the battery life has been extended.

AF is standard and the design of the camera is novel. Although it is 29MP sensor, you will feel the resolution is more like 60MP.

There are four kinds of lenses. 14 mm, 19 mm, 30 mm and 50mmMacro. Since it is an APS-C sensor, they are 35mm equivalent 21 mm, 28.5 mm, 45 mm, and 75 mm.

The housings are unique to the camera. You cannot change lenses underwater so you will take two cameras to shoot wide and macro.

On land, to cover all angles photographers would need to carry all four cameras.

Fortunately, in the sea, it is not



unusual to take two cameras, in order to take a good photograph.

Even though the dpQuattro has a higher-resolution than a high-class DSLR, it is much less expensive and lighter. Two high-class DSLRs would be very expensive but two dpQuattros are not so and the 14-mm lens of dp0Q is a wonderful lens.

In addition, the 50mmMacro of dp3Q is also wonderful. .



The housing is double O ring sealed as are the push buttons and control knobs.

The push buttons are well positioned to avoid other buttons being pushed accidentally.

There is an M14 accessory port which can accommodate a Nikonos5 pin connection.

The large hand grip is easy-to-use and there are three mount bases for strobe arms.

This housing will be on the market at the end of May. .

www.acquapazza.jp/en/product/apsg-dpq/index.html

In addition, Acquapazza is developing an APSO-A6300 housing for the Sony A6300 which will incorporate a large diameter port similar to the previous NEX housing. allowing the E90 Macro can be used.

www.acquapazza.jp/product/apso-a6300/index.html

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Store owner Marco Heesbeen won a Golden medal at the CMAS World Championship of Underwater photography.

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Introducing 360fly - the fully wearable and mountable action camera that misses nothing and changes everything! 360fly gives you the power to capture and share your life in fully immersive, interactive 360° HD video - then edit, enhance and share content instantly from your mobile device across social media, including YouTube's 360° channel.

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3-Axis Sensor and Accelerometer: For motion-sensing and image orientation

IP67 Durability Rating: Shock, dust and water resistant down to 35m (with mic plug inserted)



Built-in 32GB Memory, Lithium Battery and Microphone: Record 2+ hours on a single charge

On The Fly App: Shoot, edit, share and replay footage directly with iOS & Android devices

VR Compatible: Footage formats for use with Google Cardboard and similar VR headsets

61mm Sphere; Weight 142g

www.camerasunderwater.co.uk



Nauticam NA-5DSR for Canon 5D Mark III, 5DS & 5DS R



"Truly Refined"

At 50mp, the Canon EOS 5DS (R) is the highest resolution SLR to date. This extraordinary camera demands an equally impressive housing, and the renowned Nauticam design team has left no detail overlooked in refining the solid design of the NA-5DMKIII to complement the shooting experience of the 5DS (R). In a marriage of form and function, the NA-5DSR features (among many thoughtful improvements) Nauticam's patent pending multi-controller, yielding a user interface that is nothing short of elegant in its ergonomics.

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Issue 90/24

Peak Design Clutch at Reef Photo



A premium day-to-day essential carry workhorse, The Everyday Messenger is for photographers, travelers, commuters and everyone in-between. It's more than just an innovative camera bag, it's a giant leap for bag-kind. Patent-pending MagLatch™ closure. Origami-inspired FlexFold™ dividers. Weather resistant shell expands and contracts to hold a lot or a little. Dedicated Capture clip attachment points and front access panel designed for photography workflow. Hyper-adjusting internally padded seatbelt strap allows use as messenger or shoulder bag.

Peak design everyday messenger Carry-on approved for all airlines. Fits under airline seats easily.

Ultralight waxed Kodra synthetic canvas with DWR coating for weatherproofness, poly-spun mixed twill interior, waterproof galaxy foam



Dedicated, protected 13-15" laptop pocket with tablet/document sleeve is accessible without opening main bag compartment. Max laptop dimensions: 15"x10"x2"



bottom liner, compression-molded high-density EVA foam dividers and protective panels.

30cm (12 in.) x 43cm (17 in.) x 18cm (7 in.) (These are average dimensions. Actual size will expand/contract depending on load.)

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Pelican Air cases



Pelican has introduced the Air series of cases, boasting the same level of protection without all of the weight. The Air series cases are up to 40% lighter than their Protector series counterparts.

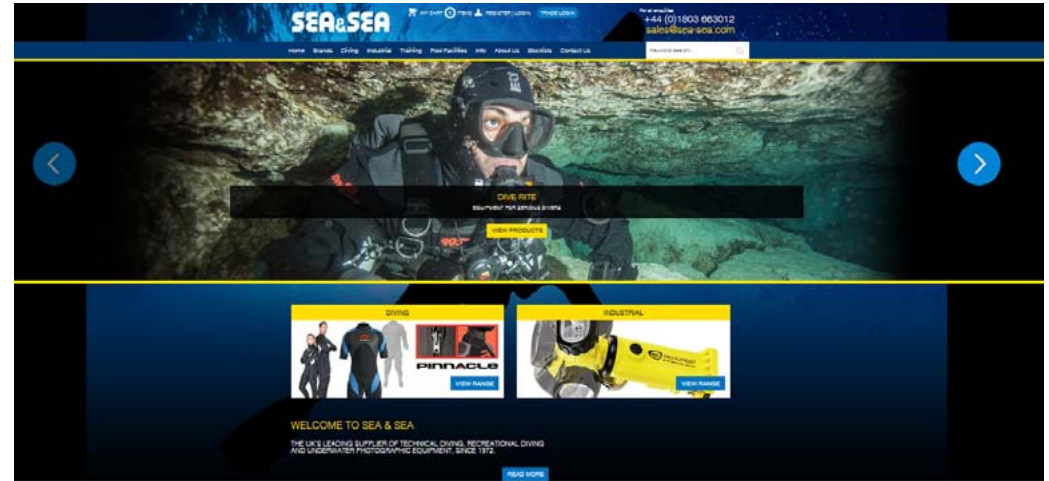
The Air series will include six sizes including an overhead compartment-friendly wheeled version. The new cases are made of an HPX2 resin and will be offered in four configurations: no foam, with customizable cubed foam, with padded dividers or with Pelican's TrekPak rigid dividers.

The Pelican Air series are available for pre-order now and will ship starting May 1, 2016.

www.pelican.com/air



New Sea & Sea website



Our web address is still www.sea-sea.com and all other addresses you have bookmarked for us will point to the new homepage.

You may have to refresh any bookmarks to clear the cache and load the new site.

You can now search by brand or category. Along the top bar you can click on the BRAND tab to search for products by brand or on the DIVING tab to search for products by category.

You can also click on the DIVING-VIEW RANGE box further down the page which will give you the same list of product categories but on its own page.

The website also features an INDUSTRIAL tab for Sea & Sea's industrial, commercial, emergency and military customers.

Each product page will give you all the information you need about that item and may include videos, related accessories and downloads.

The site is compatible with mobile phones and tablets making it interactive and convenient for visitors to access information on the go.

The website is set up on an ecommerce basis and in the future we will offer trade customers only the opportunity to set up accounts and place orders online.

The new website is still a "work in progress" so not all our products are visible at launch and some categories will be empty until we complete uploading the products so please bear with us.

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Underwater - Black & White

by Yann Hubert

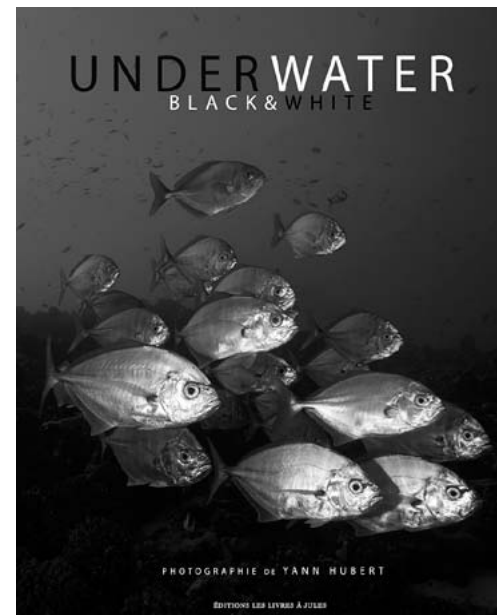
In a physical environment where colors almost totally disappear after around thirty meters, almost all of the submarine photos are in color!! !

The largest part of my production of images is also in color. At first because the color is inseparable from the representation of the reality. But also because if the colors of the submarine universe are rare, they are especially unique!! !

Nevertheless black and white offers possibilities of artistic expressions which allow another vision of the underwater world!! !

Underwater photographs in color and those in black and white are not rivals but reflections of two different visions. To use black and white and disregard the spectrum of colors is to concentrate the eye. Often the colorimetry of an image is a main party of its success. But this can hide the purpose looked for by the author.

The same good image treated in black and white and in color does not create the same response, but it often remains a good image in both cases. The choice of the one or the other one has to be the voluntary representation from the point of view of the author, of its intention!! !



Certain subjects such as remains, whales or underwater landscapes are intrinsically particularly “capable” of the processing in shadows and lights. The natural lighting expresses all its wealth and the composition takes all its strength!! !

Macrophotography of small creatures, there are not of objects which cannot be the heart of a good image in black and white!! !

In color or in black and white the strength of an image will always be the feelings which it creates in her spectator's. Hopefully the images gathered in this small collection get you a little...

www.blurb.fr/ebooks/574647-underwater-black-and-white

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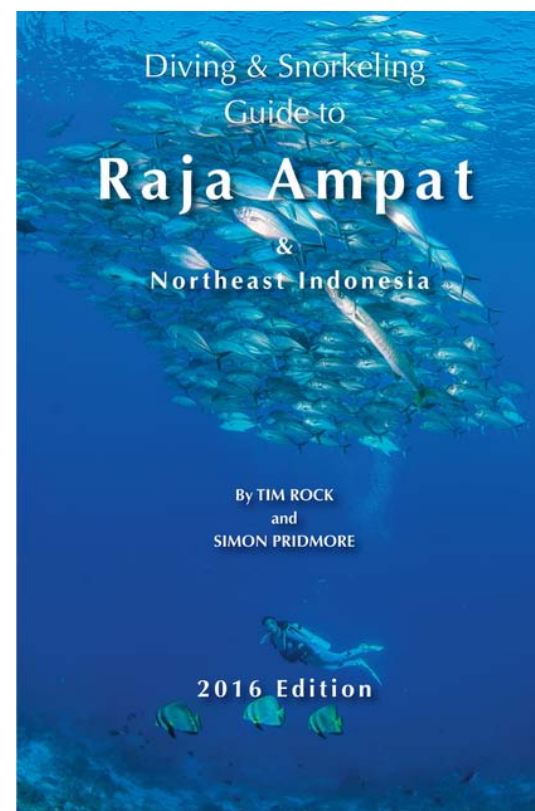
Diving & Snorkeling Guide to Raja Ampat & Northeast Indonesia by Tim Rock and Simon Pridmore

As part of their series of 2016 Diving & Snorkeling Guides, authors Tim Rock and Simon Pridmore have produced a brand new guide to Raja Ampat & Northeast Indonesia.

Diving or snorkeling in this remote region at the edge of the Pacific Ocean is a life affirming, bucket-list-topping experience! Abundantly rich in marine life, these seas are proving to be a gift for divers that keeps on giving. Raja Ampat is the superstar destination, but other areas such as Cenderawasih Bay, Triton Bay and Southwest Halmahera are shining brightly too and acquiring similarly mythical status.

This richly illustrated, detailed and informative guide is the first to cover all of these incredible places! It tells and shows you - the adventurous travelling diver - what to expect from this remote, fascinating and often downright astonishing part of the world. It will help you plan your trip, enhance your experience when you get there and provide you with the best possible souvenir of your visit.

And once you have been there, it

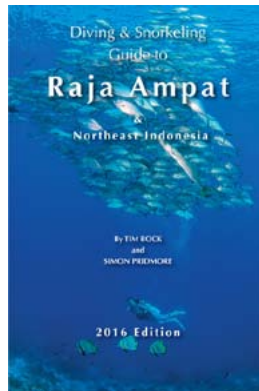
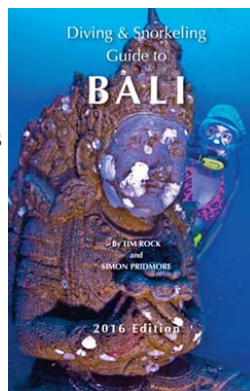
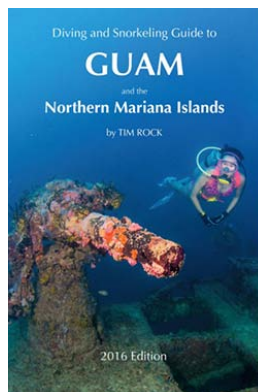
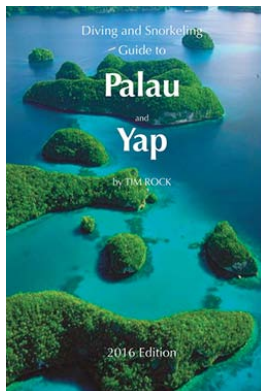


will whet your appetite for adventures ahead – because you WILL be back!

The guide includes over 100 dive & snorkel sites, 240 color images, travel advice, dive safety tips, topside attractions, diving terms in Indonesian and much, much more.

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www.simonpridmore.com

Diving Guide Series Updated and New Edition Added



Tim Rock has just published a new range of diving and snorkeling guides for 2016, updating some of his most popular titles. The series includes guides to Palau & Yap, Truk, Pohnpei & Kosrae, Guam & the CNMI, Bali and a brand new book covering diving and snorkeling in Raja Ampat and Northeast

Indonesia. This region at the edge of the Pacific Ocean is considered to be the epicentre of marine biodiversity and, because of that, has become a Mecca for adventurous divers worldwide.

The Bali and Raja Ampat & Northeast Indonesia guides in this series were written in collaboration with Simon Pridmore, author of a number of books for divers and a long-time Indonesian resident.

The five books are richly detailed and beautifully illustrated, giving prospective visitors useful advice and direction to help them plan their trip and providing them with a wonderful souvenir of their journey when they return.

All are available in paperback and e-book versions via Amazon stores and iTunes stores worldwide, as well as Tim's own Blurb.com

www.blurb.com/user/timrock



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Sony A7r II And Ikelite A7r II Field Review

By Phil Rudin

Ikelite Underwater Systems is a USA based company which has expended its distribution network to cover most areas of the world during its fifty-three years in business. Ikelite has a large and loyal customer base built on a foundation of excellent customer support and product reliability. During DEMA 2013 Ikelite debuted a new housing with a unique port system for the Canon EOS 100D/SL1 DSLR which I reviewed in issue #78 of UWPMAG.com. At DEMA 2014 Ikelite debuted a new line of mirrorless camera housings featuring the same port system which I reviewed in issue #85 of UWPMAG.com using an Olympus E-M5 II housing. At DEMA in November 2015 Ikelite once again introduced a complete line of housings for the Sony Alpha A7 II, A7R II and A7S II Full-Frame mirrorless cameras. This line of mirrorless housings uses the current DSLR ports and extensions and features full TTL support for Ikelite's complete line of DS strobes. New lighter ports are also being added to the product line and a lighter and thinner back plate is being developed

for shallow water applications like surf photography.

Sony Alpha A7R II camera

Sony's new flagship Alpha A7R II is the fifth in the lineup of Sony full frame mirrorless cameras and the second to include sensor based in-body image-stabilization or (IBIS). Sony debuted the first Alpha A7, A7R & A7S cameras during 2013 and they became the first mirrorless interchangeable lens cameras to feature a full-frame (36 X 24 mm) image sensor with a body the size of the current Olympus E-M1 & E-M5 II mirrorless cameras. Sony has made it quite clear that they intend to challenge Canon and Nikon in the pro and "Pro-Sumer" markets by focusing heavily on their full-frame lineup of mirrorless cameras.

The Sony A7R II is the first camera in the Alpha line to offer 5-axis sensor-based image-stabilization on a full-frame 42.4 MP CMOS sensor. The rugged new weather-sealed Sony A7R II magnesium alloy body includes an



enlarged grip making the camera body easier to hold with any lens, it has no AA filter, a five frames per second rate in raw with focus tracking, 399 phase detection AF on-sensor focus points covering 45% of the total image area. 4K (UHD) video in full frame and super 35 mm modes, 4K video recording to the single SD card at 100Mbps in XAVC S, S-log video recording, a very large high-res (2.35 million pix) OLED EVF with fast refresh



rate, a silent electronic shutter setting and much more.

The custom buttons are well laid out and any number of functions can be assigned to better assist with your photo needs. Image capture is brilliantly displayed with a 3-inch tilting LCD with 1.23 million dots. Unlike many of Sony's new cameras including the Sony A6300 Sony's A7R II includes a battery charger and two NP-FW50 lithium-ion batteries.

Battery life is an issue with all mirrorless cameras compared to DSLR's not using an EVF. To help mitigate this issue with the A7R II I have assigned control of the EVF to the C1 button on the camera. This allows me to use the LCD screen to preserve battery power and switch to EVF only when it is needed. The only time I have had an issue with battery power shooting stills is when I have been using the 90 mm macro lens which requires more power when focusing with constant EVF operation. I am able to do two tank dives with the Sony 16-35mm zoom shooting upwards of 400 images without concern for battery life.

For video and still shooters using Ikelite housings, optional battery packs from after market vendors can be fitted into the Ikelite Alpha 7 & 7 II housings lines. These battery packs can provide from three to four additional hours of run time while shooting video and increase captures significantly when shooting stills.

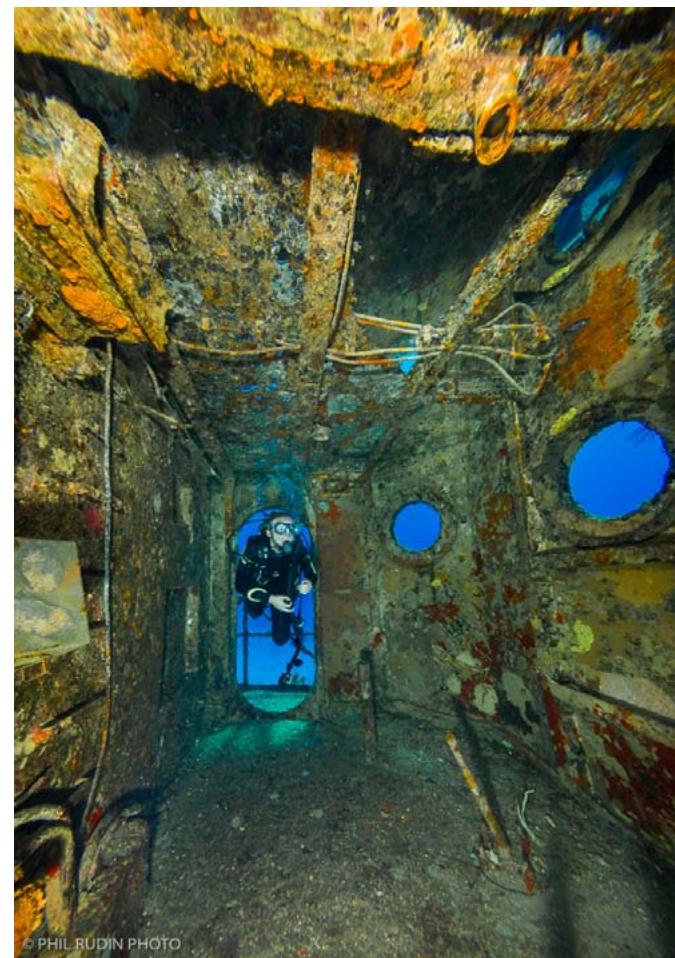
Sony's currently offers fifteen FE (full frame) lenses and five Zeiss FE mount lens with at least four more coming during 2016. Many of these lenses are weather sealed and of the highest build quality. Current indications are that the new Sony G-Master line of lenses will be setting a new benchmark for image quality. In addition to the



Hawksbill Turtle, Sony A7R II, Rokinon 12mm, ISO-160, F/9, 1/250th, Ikelite A7R II housing, Ikelite eight inch dome port, Ikelite DS-161 strobes in TTL with dome diffusers.

Sony FE lens line the Sony APS-C E mount lenses can also be used in conjunction with the cropped setting on the A7R II for both stills and video.

In addition, several other lens manufactures are making direct mount auto focus and manual lenses for the Sony FE mirrorless cameras. Lens adapters like the metabones, Sigma and others have also



Diver entering the bridge of Felipe Xicotencati (C-53), Sony A7R II, Rokinon 12mm, ISO-320, F/9, 1/250th, Ikelite A7R II housing, Ikelite eight inch dome port, Ikelite DS-161 strobes in TTL with dome diffusers.

opened up the ability to use Canon, Nikon, Sigma and many other lenses with full AF and/or manual control as well. Many photographers have made the move from Canon or added the Sony Alpha A7R II body to their bag and still use their complete line of

Canon lenses with an adapter.

Most photographers when they hear the word mirrorless camera naturally assume that this equates to a much smaller and lighter overall underwater camera system compare to like quality DSLR camera systems. This is not entirely the case with the Sony A7r II system and should not be the only consideration when moving to a this full frame camera.

While the 42.4MP A7R II body at 625G (22.05oz) and 126.9x95.7x60.3mm(5.0x3.8x2.4 inches) is smaller than the Canon 50.6MP 5Ds R body at 845G (29.81oz) and 152x117x76mm(6x4.6x3 inches) or the slightly heavier Nikon D810 the differences in systems for the most part ends there. While mirrorless systems like M43 are able to incorporate much smaller lenses this is not the case with quality 35mm full frame camera lenses.

Larger sensors mean bigger lenses with heavier glass to cover the larger full frame sensors. This is a simple issue of physics and while some mirrorless lenses for full frame can be designed a bit smaller than DSLR lenses those used for U/W photography remain about the same size and price as their full frame DSLR counterparts. As an example with the Sony A7R II I shoot with the Sony 16-35mm F/4 zoom and Sony 90mm F/2.8 macro about 90% of my time underwater. The 16-35mm on release in 2015 retailed at \$1348.00USD, weights 518G (18.27oz) and is 78x98.5mm (3.07x3.88 inches) while the Canon 16-35mm F/4L lens on release in 2014 retailed at \$1199.00USD, weight 615G (1.35lb) and is 82.6x112.8mm (3.25x4.44 inches) not a great deal of difference. The Sony 90mm F/2.8 on release in 2015 retailed for \$1098.00USD weight 602G (1.32lb) and 79x130.5mm (3.11x5.14 inches)



Dive Guide Marco Steiner, Ponderosa Cenote, Sony A7R II, Sony 16-35mm zoom at 16mm, ISO-800, F/5.6, 1/200th, Ikelite A7R II housing, Ikelite eight inch dome port, Ikelite DS-161 strobes in TTL with dome diffusers.

while the Canon 100mm F/2.8L on release in 2009 retailed for \$1050.00USD weight 625G (1.38lb) and 77.7x122.9mm (3.06x4.84 inches). Again not much difference between these lenses which both focus at



Aquatic plants at Nichte Ha Cenote, Sony A7R II, Sony 16-35mm zoom at 16mm, ISO-250, F/14, 1/250th, Ikelite A7R II housing, Ikelite eight inch dome port, Ikelite DS-161 strobes in TTL with dome diffusers.

1:1.

Underwater housings are not hugely different either and I can best describe the Ikelite Alpha A7R II housing as a “tweener” sitting between



Anemone, Sony A7R II, Sony 16-35mm zoom at 16mm, ISO-125, F/14, 1/250th, Ikelite A7R II housing, Ikelite eight inch dome port, Ikelite DS-161 strobes in TTL with dome diffusers.



Nurse Shark, Sony A7R II, Sony 16-35mm zoom at 16mm, ISO-125, F/14, 1/250th, Ikelite A7R II housing, Ikelite eight inch dome port, Ikelite DS-161 strobes in TTL with dome diffusers.

most mirrorless housings and like quality DSLR housings. An example would be these Ikelite housings the Sony A6300 housing (APS-C mirrorless) weight 1430G(3.1lb) at 160x191x132mm(6.3x7.5x5.2 inches) Sony Alpha A7RII weight 2269G(5.0lb) at 230x180x150mm(9.1x7.1x6.1 inches) and the Canon 5Ds/5Ds R housing at 2400G(5.4lb) at 250x175x165mm(10x6.9x6.5 inches), all without tray and handles. So the

difference between the DSLR housing and the Sony housing is noticeable a greater difference is evident with the A6300 housing which accommodates smaller lenses and ports. All things being equal I had no more difficulty packing the Ikelite A7R II housing into my ThinkTank roller-bag and carrying it onto an airplane than I did when I tested the Ikelite Olympus E-M5 II housing and carried it on a flight to the same location.

Ikelite Alpha A7R II Housing and Port System

One of the nice advantages of the Ikelite A7 II, A7R II and A7S II lineup is that all of the camera bodies use the same magnesium alloy frame with almost identical button placement so one housing can be used with all three cameras with only slight modification. Ikelite recently announced a line of housings for the older Sony Alpha A7, A7R and A7S cameras which are

NOT compatible with the Alpha A7 II series housings. One of the major advantages of the Alpha A7R II over the original A7R is that the excellent specs for both video and stills allow you to use only one camera body and housing for two completely different tasks. The addition of 1/250 of a second flash sync and full electronic shutter are also welcome improvements along with the much improved auto focus system.

The Ikelite Alpha A7R II

housing is a completely new design featuring an opaque gray ABS-PC polycarbonate material for the front section of the housing with a transparent DSLR style polycarbonate housing back. This attractive gray housing color matches the Ikelite DS strobe line and drew lots of attention from other divers and photographers during my two weeks of testing.

The new color also shades the camera and provides extra protection from the sun during long boat rides. This is the first Sony Alpha A7 II housing I am aware of that supports TTL for the complete Sony A7 II series line of cameras when paired with Ikelite DS series TTL strobes. A direct electronic connection with Ikelite's single or dual sync cables is required for the TTL connectivity. Each housing has an integrated TTL encoding specific to the camera model which is tuned to Sony's exposure protocol.

The circuitry is sealed in a unit below the camera tray and includes a switch for TTL or manual use. The TTL unit is powered by Ikelite DS strobes and requires no maintenance or additional battery. Exposure compensation in TTL mode is also supported using the cameras built-in controls which can be accessed in several ways and assigned to different function buttons to suit the users needs. Other TTL strobes from

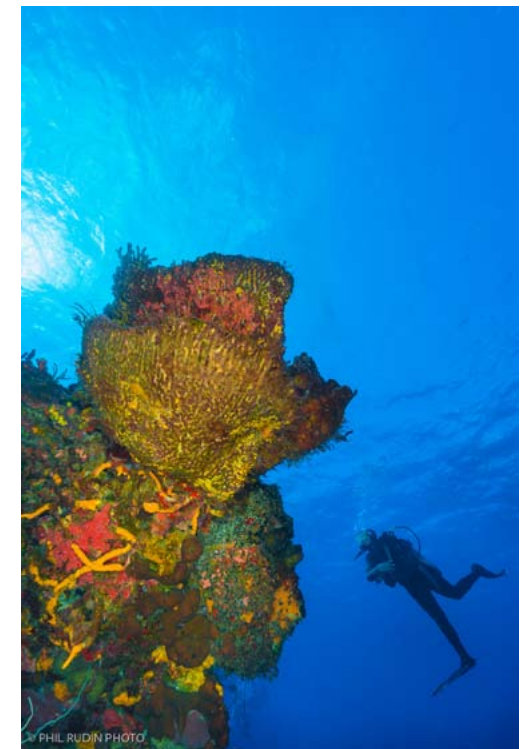


Nicta Ha Cenote, Sony A7R II, Sony FE 90mm Macro, ISO-125, F/8, 1/250th, Ikelite A7R II housing, Ikelite Macro port, Ikelite DS-161 strobes in TTL with dome diffusers.

Inon, Nikonos and Sea & Sea can also be used with Ikelite electronic sync connections but only in manual exposure modes.

The housing includes an aluminum tray, left-hand quick release rubberized grip with mounting threads for an optional right grip, port opening cover which locks in place using the four point port locking system, a waterproof bulkhead cap to protect the strobe cord socket when not in use, a micro fiber cleaning cloth, silicone O-ring lube, a one year warranty and

two universal zoom/focus gears. The first gear expands up to 2.8 inches in diameter and the second expanded to 3.3 inches. These gears come with neoprene pads of differences thicknesses which have a sticky side. The sticky pads are mounted to the inside of the gear depending on the diameter of the lens in use and then just slide over the lens focus/zoom ring being secured in place by four small springs. The sticky pads help prevent any damage to the lens and bridge the gap between different



Diver over sponge, Sony A7R II, Sony 16-35mm zoom at 16mm, ISO-125, F/11, 1/60th, Ikelite A7R II housing, Ikelite eight inch dome port, Ikelite DS-161 strobes in TTL with dome diffusers.

diameter lenses. These two gears can be used to cover a wide range of both Sony FE and third party lenses, the ikelite.com web site has a complete lens chart which is continually being updated as new lenses are released.

For the purpose of full disclosure I have reviewed dozens and dozens of cameras, housings, ports, strobes and U/W photo accessories which

I do not own for Underwater Photography magazine and several other publications. For this review I used a Sony Alpha A7R II and three lenses which I do personally own, in fact the Sony A7R II is my go to camera for both underwater and top side photography.

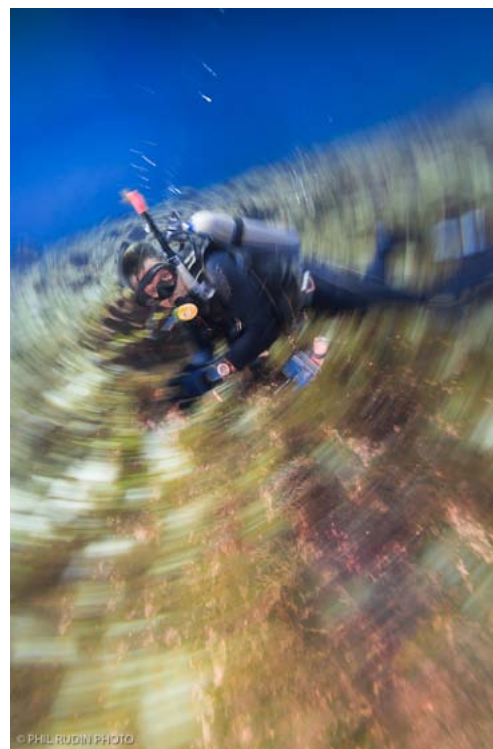
For my review I used three lenses the Sony FE 90mm F/2.8 macro G OSS, the Sony Vario-Tessar T* FE 16-35mm F/4 ZA OSS and the all manual Rokinon 12mm F/2.8 ED AS IF NCS Fisheye for Sony E-mount full frame. All three lenses are quite good and were able to handle the higher resolution Alpha A7R II (42.4 MP) sensor with outstanding results. The 90 mm macro is without question the sharpest macro lens I have ever used with any camera. Other lenses including the Sony FE 28mm with fisheye converter, Canon 8-15mm fisheye zoom and 100mm macros with adapter, Sigma 15mm fisheye with adapter and many more are all supported by Ikelite.

The Sony FE 16-35mm zoom produced sharp images using the Ikelite modular eight inch acrylic port and lens extension. I found best results with the 16-35 zoom fell in the F/5.6 to F/16 range. I have found that large acrylic ports tend to reflect the front of the lens back onto the sensor in direct sun light near the surface a bit more consistently

than optical glass ports. This was the case using the Ikelite port at or near the surface in bright overhead sunlight with both the 16-35 zoom and the Rokinon 12mm fisheye. For best results with the Rokinon 12mm I used Ikelite's shortest extension rather than the recommended Sony 16-35mm port extension. To use the all manual Rokinon 12mm I installed the smaller of the two included Ikelite gears for focusing the lens and set the aperture at between F/8 and F/11 prior to closing the housing. This lens has excellent depth of field at F/8 on the full frame sensor and I controlled exposure using shutter speed and ISO to balance lighting.

The Ikelite eight inch dome with both the 16-35 zoom and 12mm fisheye has a tendency to turn dome port up once in the water while it remained slightly negative overall with the configuration I was using. Over time this can become fatiguing to the wrist while holding the entire system with one hand. This has been a common problem with many systems I have tested using ports in the 170 mm and up range.

To install both wide angle lenses the camera first needs to be mounted inside the housing. This requires that you mount the assembled camera onto the camera tray using the provided tripod screw and slide the camera into the mounting plate. Be aware



Dive Master, Sony A7R II, Rokinon 12mm, ISO-50, F/9, 1/15th, Ikelite A7R II housing, Ikelite eight inch dome port, Ikelite DS-161 strobes in TTL with dome diffusers, Rear curtain shutter, spinning housing during exposure for swirl effect .

that the mounting plate has no lock so the best way to prevent the camera from moving is to point the front of the housing with the port side down until the housing is fully closed. The hotshoe then needs to be pushed ALL the way forward into the camera mount and secured using the rotary



-Felipe Xicotencati (C-53) bow section, Sony A7R II, Rokinon 12mm, ISO-200, F/9, 1/250th, Ikelite A7R II housing, Ikelite eight inch dome port, Ikelite DS-161 strobes in TTL with dome diffusers.

lock.

Once this is done the three lid-snaps can be secured using even pressure on all three at the same time for an even seal of the rear O-ring. Once the housing is closed the camera will not move and the lens and port can be mounted from the front. I keep

the front cap on the camera until I am ready to mount the lens to prevent the rather large sensor from collecting any dust bunnies. Make sure that the gear is properly mounted to the lens before it is installed on the camera again to prevent dust or worse from entering the camera body. Once the lens is mounted and the gear sleeve is aligned rotate the zoom control on the left hand side of the housing to be sure the sleeve is rotating properly. When the port is installed over the lens and pushed into place it will hold the zoom sleeve in place after the four port locks are depressed and locked in place.

Be aware that some lenses (including the 90mm macro) have a push/pull focus ring near the front of the lens which is pushed forward for auto focus. If you bump the focus ring into the manual focus possession while mounting the port the AF will not work so be sure to test AF before going into the water along with test firing the strobes. The 90mm macro modular port system I used has three sections, the flat port, an extension ring and the base mount which seals to the housing. All are thread together before being mounted to the housing. The system includes a strap wrench to disassemble these components which I found more than a bit frustrating for one person to hold and use. I would highly recommend Ikelite's one piece

5505.5 flat port for use with the 90mm macro to avoid aggravation. Ikelite flat ports do not come with a 67mm thread for accessory closeup lenses but a verity of after market mounts are available.

During my review I used two Ikelite DS-161 strobes with four Ikelite seven inch double ball arms, an Ikelite TTL dual sync cord and two Ikelite dome diffusers. The dome diffusers widen and soften lighting much like a small soft box for land photography. The dome diffusers worked well for both wide angle and macro shots. With the dome diffusers their was about a half of a stop of light loss which was not noticeable when using TTL for exposures. I left the strobes set on TTL during my entire two weeks of diving first in the Cenotes of the Yucatan and then the wonderful reefs of Cozumel Mexico. I find Ikelite's DS-161 TTL strobes to be among the best in the industry and they did not disappoint when used with Sony's Alpha A7R II camera and lenses.

I found the controls on the Ikelite housing quite ergonomic and intuitive. I shot using the LCD screen for focus and playback during my review period and found focus to be accurate in most cases using the LCD. I prefer using the Sony A7R II's excellent electronic viewfinder but I did not have an accessory enlarging viewfinder for



Ikelite system with eight inch dome port and dome diffusers.

my review and the pickup finder that ships with the housing does not do justice to the large EVF. I would recommend adding an optional Ikelite 45 or 180 degree optical viewfinder to the housing if you intend to use the EVF frequently. My biggest gripe with the housing is the lack of a back focus button control lever like the one used for the front shutter. Over the years I have programmed back focus as my main shooting configuration for high end cameras both above and below water. A back focus control

level is include on the new Ikelite Sony A6300 housing and it should also be included on the A7 II series housings. The back focus button can be controlled using a push button but the level style control is much more effective for me.

In the water I found the housing to be quite easy to maneuver and I felt in full control using one hand to hold the housing. The zoom/focus control is smooth and easy to reach with one finger. I controlled most setting changes like +/-EV strobe



Nicte Ha Cenote, Sony A7R II, Sony FE 90mm Macro, ISO-125, F/8, 1/250th, Ikelite A7R II housing, Ikelite Macro port, Ikelite DS-161 strobes in TTL with dome diffusers.

control and ISO from the large control display on the LCD accessed through the Fn button. This system makes the control changes very easy to see and it is easy to navigate through a number of control functions using the arrow buttons. For shutter speed and aperture control I used the front and rear control wheels. The housing back plate has a very nice screen shade that sticks out about an inch from the LCD and prevents ambient light from affecting the view of the LCD. A complete housing manual describing all of the controls can be found on the

Ikelite.com web site in the housing information area.

Image quality with this system is impressive at any ISO setting you would normally use underwater and resolution from the 42.4MP sensor allows a wide margin for cropping. What high res full frame cameras do not allow is any margin for error with focus and depth of field. Any mistakes in focus will be obvious in the high res image and no amount of post processing will correct the problem. I am not a video shooter so you will need to look elsewhere for reviews of



Downtown Playa Del Carmen Mexico.

video performance using this camera.

If you are seeking the very best in image quality and a full frame sensor camera with quality lenses is within your budget the Sony Alpha A7R II camera should be at or near the top of your wish list. All of the Ikelite Alpha A7 II and Alpha A7 series housings retail in the US for \$1500.00USD, the eight inch port is \$400.00USD and the macro port 5505.5 is \$200.00USD, port extensions are in the \$150.00 to \$200.00 range depending on the lens being used. The Ikelite system is attractively priced and a great value considering the \$3200.00USD price of

the camera body alone. Thanks to the Ikelite team for their assistance with the underwater equipment used for this review.



Phil Rudin

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Vivid-Pix

by Phil Rudin

Every day more than 1.8 Billion, yes that is Billion with a “B” photos are posted to FaceBook, Instagram, Snapchat, Flickr and WhatsApp. That is approximately one photo for every man, woman and child on the planet. One thing all of these photos have in common is that they are posted in the universal JPEG format.

Many of our loyal Underwater Photography Magazine readers have spent countless hours in front of their computers, in classrooms, in on-line training sessions or simply flying by the seat of their pants in an effort to become skilled at programs like LightRoom, PhotoShop, Capture One Pro and more. These programs have a relatively steep learning curve and have caused most of use more than a little bit of frustration.

While I fully understand the underwater photographers passion for wanting to make their photos near flawless I would like to direct this review to the over eighty percent of photographers who are taking snapshots both around and below water everyday. Most underwater photos are taken with cell phones, water restraint consumer compacts and housed compact camera systems costing under \$400.00USD. These are the photographers Vivid-Pix is targeting with the Vivid-Pix Scuba Picture-Fix software.

I first had a chance to play with the Vivid-Pix software during a demonstration at DEMA 2015 and was immediately able to grasp the potential for the eighty percent of underwater photographers not wishing to learn a complicated editing software.





Vivid-Pix software can be downloaded directly from the Vivid-Pix.com web site to Windows and Mac operating systems allowing you to be up and running in less than fifteen minutes. The web site also has video tutorials for the software and for how it should be used.

Software updates are FREE at this time and since Vivid-Pix supports JPEG rather than RAW file format any new camera will be compatible without need for propriety file updates. This software works equally well with ambient light or strobe lighted images.

Once the Vivid-Pix Picture-Fix for Scuba software has been downloaded to your computer it boots-up in just a few seconds and you are ready to begin fixing your images. Simply click on the select image icon at the top left of your screen and chose a JPEG from your photo collection, click to open and the image appears in nine different processed versions on your screen.

Pick the version that you think looks the best and click on that image. This opens the original image in a side by side screen with the selected

processed image on the right. Directly below these two images you will see seven sliders which control the correction parameters and are used to make additional manual corrections to your image. First is the depth removal slider which appears on the left side of the screen and deals with color and light loss at depth.

Next is the lightness slider which adjusts exposure followed by the contrast slider. On the right are three sliders for the red, green and blue color channels followed by a vertical vividness slider. If you want to crop an image during processing just put your cursor at the top corner where you would like to begin, hold down the mouse button as you drag the cursor until you get the desired crop you are looking for.

Check the before and after crop example of the Nauticam I-phone housing included with this article. To the right of the select image icon in the toolbar at the top of the window you also find icons for rotating images, skip one image, skip all images and the preference pulldown menu.

In the preference pulldown menu you can set



your own sharpening intensity, sharpening radius, lightness spread and contrast spread. Once you have corrected your image just click the save Vivid-pic icon on the lower right of the window and the corrected image is placed in the image file along with the uncorrupted original image file. The same file number will be attached to the processed image with, _Vivid at the end of the original file number so you can distinguish between the two files.

Each of the images corrected for this article took me less than thirty seconds to complete and the



results are noticeable in every image. I would of course like to see additional features like spot removal added in future software updates.

My biggest concern with the current software is that when you open an image in the correction parameters window you can't stretch the corrected image to a larger size. This means that currently you will only be able to see your image at about 14cm (5.5 inches) on the long side. Vivid-Pix are working to address and hopefully the issue will be resolved in future software updates.

A fully licensed version of Vivid-Pix Picture-Fix for Scuba retails on-line in the vivid-pix store for \$49.99USD for both Mac and Windows. Vivid-Pix also offer Land & Sea software for Windows (Mac version coming) at \$24.99USD which corrects land and snorkeling images using different proprietary image science for each. Be aware

that this version does not work well with images taken below about three meters (10 feet). Vivid-Pix Restore for Windows corrects scanned color slides and prints including sepia. Vivid-Pix print store allows you to upload your images for printing, photo books, calendars, posters, mugs and much more. Print media includes quality papers, acrylic, metals, canvas, tiles and more.

Vivid-Pix is offering UWPMAG readers a 10% discount during UWPMAG.com's May/June issue run. Simply select the software version you wish to purchase, click on the purchase now button and enter code, 3PRPhotoSave10 in the coupon box at the lower left on your screen, click apply and receive your discount.

Phil Rudin

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Mike Korostelev

by Duncan Whittaker

Mike Korostelev won International Wide Angle at the 2016 Underwater Photographer of the Year Awards with his astonishing images of the Kamchatka brown bears. Here he speaks to UWP about how such incredible images were produced.

Where exactly were the bear photos taken and do you live here?

I live in Moscow but last year for 3 months I went to Kamchatka. This is the far east of Russia; an 8 hour flight by plane from Moscow to the city of Petropavlovsk-Kamchatsky which is located on the coast of the Pacific Ocean. From here you have to travel 2 hours by helicopter to the Kuril Lake; the place with the highest density of bears in the world! I lived at the cordon of the Kronotsky Nature Reserve on the shores of the Kuril Lake for over a month and this is where I took the photos.

How did you build the cage? Were you on your own during the photo shoot?

My friends in Petropavlovsk-Kamchatsky helped me to build the cage. I decided to make it before my arrival in Kamchatka so that it was ready in advance. During shooting, my wife helped me. For more than a week, the cage was on the ground and we literally lived in this cage, watching the bears around us. When the cage was in the water, I photographed the bears whilst in the water and my wife waited outside.



Were there any dangers during the shoot? Could the bears have attacked you?

There were no dangerous situations. When the cage was on the ground, the bears often came close and examined us, sniffing and looking but did not show any aggression. When the cage was in the water, the bears did not pay any attention to it; in fact they were fascinated with their fishing.



How did you know that the bears would be there?

There are a lot of bears in the area; they were just everywhere. There is a bridge near the river where I put the cage; often a lot of fish accumulated there. And almost every day, the largest male in the area came to this place for fishing.

How long did the photo shoot take in total?

Under the water I shot the bear for about 6



days. Not all days were successful. On the 7th day, there were almost no fish remaining and the bear could not catch any. Suddenly, in front of our eyes, the large male went after a young bear, killed it and then ate it. The next day he killed another. In the end, he gave up fishing in this place and it was not possible to continue shooting.

What were the main complications of the shoot?

The main difficulty was to take a photograph of a bear from a distance of no more than one meter between the bear and my lens. I needed such a

small distance because in the water I use a wide angle lens. I attached my camera to a long pole which made it possible to take a picture from this required distance.

Another difficulty was that nobody had done anything like this before and therefore we did not know how the bear would react to our actions. After all, I put a huge camera with flashes in front of a very large and dangerous animal. He could have behaved aggressively towards me or become scared and moved away from us. But to our delight, the bear did not pay any attention to me and continued to fish as he usually did.



How did you attach the camera to the pole and how did you operate the shutter button?

The camera was attached using metal wire and the shutter was always pressed; the camera was set to non-stop shooting.

Where did you sleep during the shoot?

We spent the night in tents on the territory of the cordon Reserve surrounded by an electric fence.

Out of everywhere you have ever been, where were your favourite 5 locations for underwater photography? What

was it that impressed you about these locations?

My favorite places where I have been are:

- 1) South Africa (Cape Town)
A lot of different species of sharks. Seals. Penguins.
- 2) Galapagos Islands
Many endemic animals. Marine iguanas, huge whale sharks, thousands of hammerhead sharks, sea lions.
- 3) South Africa (wild coast).
A lot of different species of sharks. And of course the Sardine Run; the best nature action in the world!



4) Maldives Islands

I have found a very interesting place here with many whale sharks and mantas. I visit this place twice per year with anybody who wants to join me.

4) Kamchatka.

Absolutely wild place with great potential for underwater photography. Whales, Orcas, Sea Lions, Sea otters, salmon and many-many other animals in the water.

Which destination was the most disappointing for underwater photography?

I believe that in any situation

you can make an interesting picture. It all depends on the imagination of the photographer. Failure is only stimulated to success in this journey.

I'm usually lucky in events during underwater shooting. Probably most of my unsuccessful underwater trips were on the Sardine Run in South Africa but this is just a reason to go back there again.

If you were to explore one more location for underwater photography, where would you explore?

It is North of Russia. Chukotka, for example. Many white bears and walrus wait for me there in cold

waters I think.

Throughout the years, what have been your favourite pieces of equipment for underwater photography?

I have one camera; a Canon 5D Mark II which I started to shoot underwater in 2013 and I have one Ikelite housing for it. Under the water I used to have only one lens; the Canon 17-40. However, I recently added a Canon 8-15 to my arsenal.

I'm not one of those photographers who pray to their cameras and lenses, cleaning every speck of dust and hair off them. I do not keep track of any new cameras and lenses. The camera, for me, is just a technical means of shooting; it is not a divine artifact. So I always have everything in the sand, scratches on the lens, and often dust on the sensor. I always lose lens caps in the first week after purchase.

Which other underwater photographers do you admire?

Paul Nicklen is the best. I have never met him but his works showed me that impossible projects do not exist. If you want to shoot something then you will do it.

What 3 pieces of advice would you give

to new underwater photographers?

Always include your imagination. Always go your own way and not the way of hundreds of other photographers. Do not shoot everything under water but seek your own style and direction.

What projects do you have planned for the future?

I plan to return to Kamchatka this summer and continue underwater photography of bears. Also I want to dive with orcas in Kamchatka this year. There are a lot of orcas in this region.

Which species would you love to photograph underwater but never have done?

Steller's sea cow. But I need a time machine for this project; unfortunately they were completely destroyed in the 18th century.

Thank you for your time and fascinating information.

Duncan Whittaker

Small ads



SOLD! – Ikelite housing for a Canon 5D MKII

Ikelite housing for a Canon 5D MKII, Ikelite 8" dome port (no scratches) for a Canon fish eye lens, Ikelite ports Canon 17-40mm and a macro 100mm IS lens. I am based in Scarborough, U.K. £1100 ovrnoaminrobin@hotmail.com

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Lorenz Mäder

Founder of Wakatobi Dive Resort

Lorenz Mäder, the founder of Wakatobi Dive Resort, worked in consort with local leaders and village elders to establish the Collaborative Reef Conservation Program. The program was designed to motivate the people living in the Wakatobi region to take an active role in protecting the marine ecosystem. Gaining regular payments and alternative employment in the resort the villages realized that it is a smarter economical use of their natural resource to let sections of the reefs be untouched for the tourist to enjoy looking at the fish. With proper management jointly with the dive resort, there is more for everyone from tourism than from just fishing, especially in a special location like Wakatobi.

When was the protected area established?

The Collaborative Reef Conservation Program began as a pilot project launched in 1997, which turned 6 km of reef into an effective no-fishing sanctuary. As the success of this project was shown, the protected zone was extended, and today covers more than 20 km of reef.

Where is the protected area located (within Indo and specifically in relation to the community) and how big is it?

These privately sponsored reef sanctuaries lie within the later confirmed Wakatobi Marine Reserve in Southeast Sulawesi, Indonesia. The National Marine Park area was recently designated as a UNESCO World Biosphere Reserve, and is recognized as one of the most bio-diverse marine ecosystems on earth. Currently, the program includes 17 communities around Wakatobi Dive Resort and covers 20 km (12.5 miles) of the best-protected reef structures within the National Marine Park.

Why did your team decide to establish the protected area?

We believe in a solid integration of conservation into our business model and accept that keeping intact the marine environment as the

Lorenz Mäder, founder of Wakatobi Dive Resort - Photo by Marco Fierli

Wakatobi dive resort and house reef – Photo by Didi Lotze





Reef Scenic at Wakatobi – Photo by Walt Stearns

foundation of our business and the enjoyment of our guests is an integral part of a sustainable dive operation.

Because year after year Wakatobi Dive Resort is sticking to this commitment, it has earned the trust and the endorsement of a large majority of the population, of the village elders and island leaders. We don't know a more effective and cost efficient model for reef conservation in this environment.

Why did the community agree to establishment of the protected area (what benefits do they receive)?

Over the years substantial investment has gone into keeping the reefs shielded from destructive fishing methods. Every month each of the 20 villages obtains a cash amount in form of a 'reef lease' payment into their communal budget. This amount is meaningful enough to motivate them to keep outside intruders away from their revenue generating "prime underwater real estate" and convinces them, and all community members, to stick to the agreed upon



Diver with Cuttlefish at the nearby site Pockets - Photo by Walt Stearns

respective non-fishing zones. For that purpose it has to be a multiple of the potential fishing yield as you can easily imagine. In addition, the village nearest to the resort obtains its electrical power supply from the resort.

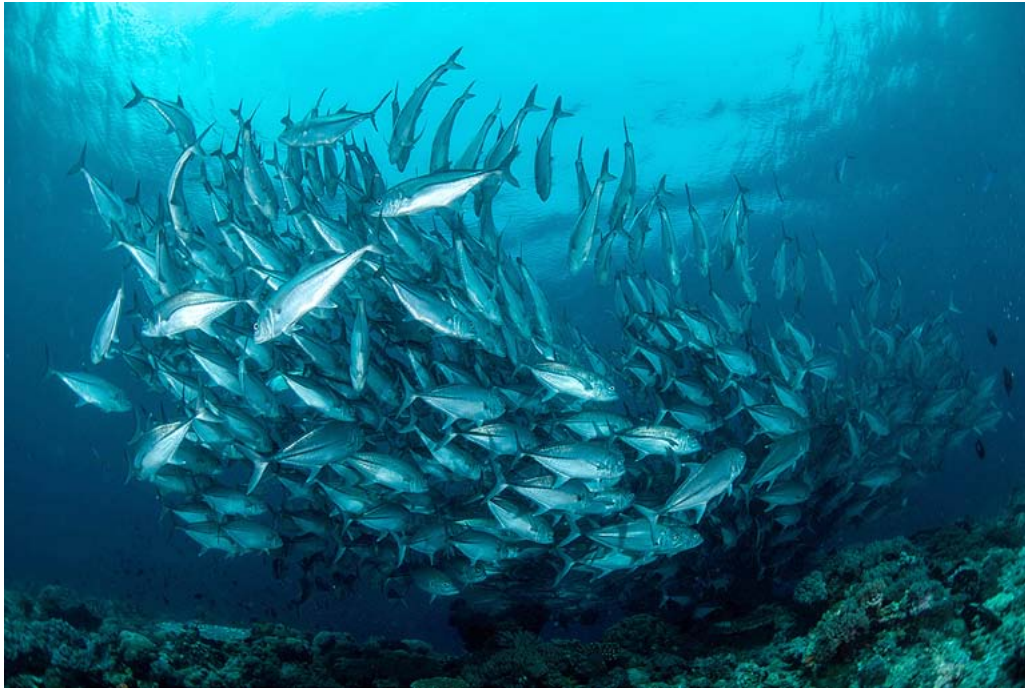
What special marine life is found in the protected area (reefs, wrecks, macro, sharks, big stuff)?

The Coral Triangle - as this region is also called - is defined by Indonesia, Malaysia and the Philippines, and home to more than 605 coral species, at least 2,000

varieties of fish, and an even greater number of invertebrate species. Everything from reef sharks, rays, whales and turtles to crocodile fish, cuttlefish, stonefish, nudibranchs, shrimps and crabs, and precious pygmy seahorses are found within the Wakatobi reef system.

What changes and improvements have you seen in the protected area since it was established?

Overall the protected reefs are in better shape than before the sanctuaries have been established. They have turned into a huge



School of jacks on the House Reef - Photo by Wade Hughes

sheltered breeding area and there is so much fish, the fisherman now catch more fish swimming out at the fringe of the protected area than they caught before in the entire area. Most locals understand now the benefit of reef resource management, which includes more income for the fisheries.

What is the importance of the protected area to your dive operation?

The protected reefs include some of the world's most pristine and beautiful marine ecosystems and are therefore the most important business asset, which also provides the

financial means to sponsor the resort's conservation initiatives.

What challenges have you faced in establishing and maintaining it?

It took years of steady support and communication to establish solid trust and motivate the majority of the local population. By today compliance with the rules in the sanctuaries is 95 to 99% depending on how close the reef section is to the resort and patrol posts. Also it was not easy for a small private business to maintain steady reef lease payments through all economical downturns. Still, the



Divers on the wall - Photo by Walt Stearns

business approach proved to be by far the most successful and economical conservation approach in the area.

Any other comments?

A point that we are taking on board is that we will more carefully explain to our guests what we are doing in conservation without being too serious for a holiday setting. As many interests need to be balanced, conservation is a serious matter and has more to do with drawn out negotiations and attention to detail

and management than with putting hope in changing habits by preaching to and educating adults. It is neither romantic nor achieved by putting out a few catchy slogans. That is why we prefer to just do it rather than speak about it and let our guests enjoy their precious holidays without being bothered by the complexities involved in keeping the marine environment pristine.

If a guest shows an interest, we are always delighted to go deeper and explain. We find that it is often those



Hard and soft corals on the wall - Photo by Wayne MacWilliams

among our guests who are themselves professional communicators, or have built their own companies, who are intrigued by this successful and effective conservation approach and take the time to understand more. Either way, anyone who comes to Wakatobi endorses conservation through his or her enjoyment, and that is the way we believe it should be.

Wakatobi Dive Resort is located in Southeast Sulawesi, Indonesia in the remote Wakatobi



Reef Scenic— Photo by Warren Baverstock

archipelago (formerly called TukangBesi islands) on the edge of Indonesia's Banda Sea, 1,070 kilometers Northeast of Bali.

High season/low season:

There is no unsuitable period or season for diving in Wakatobi. The climate is drier than in other parts of Indonesia, and the location is quite protected by the surrounding reefs and islands.

Wakatobi is one of the most arid regions in



Sunset at the Wakatobi Jetty Bar overlooking the house reef drop off – Photo by Walt Stearns

Indonesia with sunshine most days and air humidity can be as low as 65 60 75%. For 90% of the year, air temperatures range between 26 - 30 degrees Celsius (78.8 - 86 Fahrenheit).

The overall water temperature range is ideal for coral growth and there is no coral bleaching. The warmest water is found in October - ranging 28 to 30 C (82 - 86 F), and the coolest fall in the latter half of August with a minimum of 26 degrees Celsius (78 degrees Fahrenheit). March until May average 28 degrees Celsius (82.4 degrees Fahrenheit); June averages 27 C (80.6 F); July 26 C (78.8 F); September is between 26 - 27 C (78 - 81 F) from November until March the temperature averages 28 - 29 C (82.4 F- 85 F).

Underwater visibility is mostly between 20 m and 50 m, with an average of 35 m or 100 feet. There are no rivers or lakes bringing sediments, therefore visibility is not affected by rain.

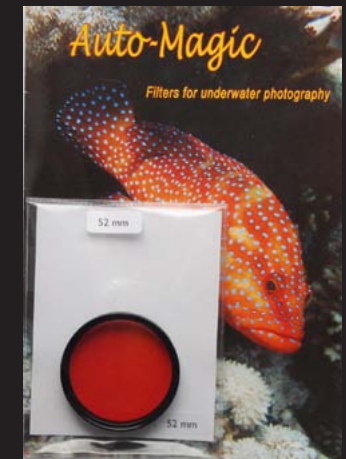
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Diving with the Pros: NAD Resort Lembeh

by Tony Myshlyaev

Rarely does anyone come to Lembeh without a camera in tow. Before Larry Smith's discovery a quarter of a century ago, divers had no interest in diving sandy slopes and bottoms. Yet the unveiling of nutrient rich volcanic sands and nourishing substrate has turned this remote channel of water into an underwater macro mecca. Since then this style of diving has spread throughout the world and inevitably coined Larry as the King of the Muck.

Although it is known for its endless array of macro subjects there are also most of the large culprits passing through as well. If lucky enough to have brought a close focus wide-angle kit (mini domes with glass such as the super wide Tokina 10-17mm f/2.8 for crop frame DSLR's or fisheyes with 1.4x teleconverters for full frame cameras), it is possible to add the occasional whale shark, manta ray, pilot whale and the like into compositions. Although Lembeh is one of the unique places where the wide-angle kit should only be brought if baggage allowance will permit because macro lenses such as the

60mm, 105mm and 150mm will be the bread and butter.

The 60mm and 150mm lenses should be used for specific occasions. On one end of the spectrum the 60mm lens allows one to stay close to larger critters giving more versatility in creating good lighting. Shooting the same subject with a 105mm could often mean moving back and increasing the water column also potentially removing the opportunity for side-lighting and back-lighting - the strobe arm may not cover the distance from the camera to the subject. This often leads to the subjects being lit from head on and having a flat appearance. Shadows are necessary to aid the viewer's imagination in translating a two-dimensional image into a three dimensional reality.

Rare critters like blue ringed octopus or perhaps scorpionfish from the Rhinopias genus deserve proper lighting and the 60mm lens will lend itself well to that. Although the 60mm lens has this benefit, it is less effective with small subjects. Despite having the same level of magnification as a



Aerial perspective of NAD Resort. (Photograph courtesy of Simon Buxton)



Interior of the sea view bungalows. (Photograph courtesy of NAD Resort)

105mm, it requires the photographer to get a lot closer to the small critters in order to fill the frame in the same manner. This often leads to missed opportunities, as the skittish subjects will dart for cover when approached too close.

On the other hand the 150mm



One of a number of individual spaces in the camera room under 24-hour surveillance. (Photograph courtesy of NAD Resort)

is useful for the extra small critters and is more often in the arsenal of full frame photographers. On a crop frame, the 105mm is roughly equivalent to the magnification of a 150mm on the full frame. A problem



Blue-ringed octopus (Hapalochlaena spp.). Nikon D700 with Subal housing. Nikkor 105mm f/2.8D. 1xInon Z240 and Glow Dome diffuser.

with 105's on full frame bodies is tiny subjects like the hairy shrimp may still leave too much negative space (even with a +10 SubSee or even the SMC.)

Be warned, with such extreme magnification, photographers should be prepared to have their patience tested. Prescription lenses in the mask will be necessary if there are any issues with vision because the field of focus will now be at a minimum. After a successful photograph, zoom in as much as possible on the LCD. It is imperative triple check that everything is in focus. If not careful, it

could lead to extreme disappointments when brought up on a big monitor only to find the focal point before or after the eyes.

Therefore the 105mm is often seen as the happy medium for both crop frame and full frame shooters. It can allow for the greatest versatility and the least amount of missed opportunities. However full framers will sometimes need a diopter in order to avoid empty negative space.

For the bokeh-holics, a reverse ring macro set up will be a tempting choice. With no focus control or zoom the photographer is stuck with a



Hairy frogfish (Antennarius striatus) - due to its larger size, my 55mm lent itself well to getting up close and having better control of the lighting. Nikon D700 with Subal housing. Nikkor 55mm f/2.8AF. 1xInon Z240 and LSD Retra snoot.

working distance of 2-5cm and must find a subject that fits perfectly for this set up. That is best saved for shallow house reef dives that are available at any point as it is a unique high-risk high-reward technique that may take a large portion of air supply to get a single decent frame.

With an opportunity to join the group of professional underwater photographer Alex Tyrrell in Lembeh, only the finest would do. Thus NAD Lembeh Resort was chosen for the retreat. Owned and run by camera pros Simon Buxton

and Serge Abourjeily there was no shortage of expertise for technical and photographic assistance. Whether it was an inquiry about biology or camera issues, their knowledge and experience had everything sorted before the next dive. Along with much of what is explained in this article came from the daily on-board knowledge of Alex himself who made sure everyone on his team had a thorough understanding of their gear and its full potential. If not for all Lembeh has to offer, the level of accelerated experience gained by

the proximity to such professionals was worth the money alone.

Meanwhile Simon and Serge spared no expense in setting up the finest dive operation. Following the guidelines of Lembeh diving – only 15 divers total per dive site - a none issue for all NAD guides since there are well over one hundred sites they are thoroughly trained to choose based on a remarkable understanding of the strait's ever changing conditions. At the farthest, travelling to the other side of the island will take at most thirty minutes on their two 4 stroke engine custom made boats (8 guests per boat maximum.) For that reason it is best to have everything set up in the camera room prior to the dive as most dive sites are rather 5 to 10 minutes away and will leave just enough time to get the wetsuits zipped up and do some final checks.

The local dive guides live and breathe their occupation, often sitting in the village at night talking about all of their finds and comparing notes of the critters' whereabouts. And despite all of that they are still trained for a year before they are even allowed to start doing trial guiding. Even then they may not even make the cut. Despite their extensive training, some of the best photographers come through the resort and will not accept anything less than true expertise of the local sites. It takes up to three years for the select few to start officially taking guests out on their own. Then it is taken a step further by offering the best ratio in Lembeh - every guide can be dedicated to a maximum of two divers, ensuring no shortage of subjects throughout the dive. To boot, Paulus Naumang, one of the original seven guides trained by the late pioneer and King of the Muck, is a guide for NAD Resort. The knowledge he shares with the guides is his alone.



Peacock mantis shrimp with eggs (Odontodactylus scyllarus). Nikon D700 with Subal housing. Nikkor 105mm f/2.8D. 1xInon Z240 & Glow Dome diffuser.

Only three of the original seven are still diving today and while that is the case now, the other two are considering retirement in the next few years. Their knowledge is indispensable and it is likely he will soon remain as the last original guide in Lembeh.



Thecacera picta nudibranch . Nikon D700 with Subal housing. Nikkor 105mm f/2.8D and +10 SubSee. 1xInon Z240 and LSD Retra snoot.

The same level of quality can be expected of the accommodation. Three meals a day are provided along with variable daily snacks. Rooms and bungalows are all situated on the water, overlooking the strait and Sulawesi Island. The resort is surrounded by jungle with no neighbors



Fuzzy dwarf lionfish (Dendrochirus brachypterus). Nikon D700 with Subal housing. Nikkor 105mm f/2.8D. 1xInon Z240 and Glow Dome diffuser.

in nearby. The lobby and rooms are an ideal place to spend the evenings, sorting through hundreds of images taken during the day. For how remote the resort is situated, the guests will be happy to take advantage of all the high-end western comforts. The unbelievably warm high-pressure showers and air conditioning were a personal favorite.

Given the reputation of NAD's operation, individual and more so, group bookings need to take place well in advance. Especially during high season which begins in August

and runs through to November when the water temperature drops to 25 degrees and triggers the largest abundance of critters to enter the strait. Depending on what the preferred subjects are or what behaviors are sought after, it is best to arrive during specific times, which they have fine-tuned, to a tee.

Specific requests such as the mandarin fish, fluorescent and the newly founded black water dives (using one or two 20,000 lumen Seawolf lights) can be arranged as well. Along with the technical



An unexpected find – a weedy scorpionfish (Rhinopias frondosa). To minimize working distance, a 105mm was unsuitable for an image of the entire scorpionfish so to compromise an up close portrait was a better option. The 60mm would have been more appropriate. Nikon D700 with Subal housing. Nikkor 105mm f/2.8D. 1xInon Z240 and Glow Dome diffuser.

divers having their place too - Simon provides three CCR systems for rent as well as having helium and oxygen at the resort to make all requested blends. House reef dives are complimentary and best suited for the early evenings - lots of the critters come out after sunset. This is a good opportunity to play around with more complicated techniques before taking them to the field on the following day. After a ten-day trip with the team,

there was no shortage of content for every level camera enthusiasts – enough to last until the next trip. But they will be forgiven if they return before having processed all of their original shots.

Tony Myshlyaev
www.nad-lembeh.com
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Gangga - Island Of Dreams

by Len Deeley

I was first introduced to Gangga Island Spa and Resort, NE Sulawesi, in 2004 by an Italian, travel agent. I decided to organise a trip to Lembeh for a week and then transfer to Gangga for another week, which is just a boat ride north with diving on the way so no dive time is lost. I organised a group of underwater photographers and the combination made for a very successful trip. While Lembeh is well known and rightly so, Gangga was less well known in UK, being mostly visited by Italians, Germans and Japanese at that time. With excellent accommodation, food and facilities it is quite upmarket and still attracts honeymooners and guests who just want to get away to a small part of paradise, as well as divers.

Since then I returned twice more with the two centre set up with underwater photographic groups. So it is fair to say that it is one of my favourite destinations. Therefore, in December 2015 my wife (non diver who accompanied me on the three previous trips) and I decided to return to Gangga for a two week trip just on our own.

Gangga Divers is the only resort on the island and therefore there is

little chance of seeing other divers at any of many dive sites that are visited by their dive boats. Normally the arrangement is to go out and do two dives in the morning, return for lunch and then take another boat for a single dive in the afternoon. Night dives are also available each day (including an excellent mandarin fish site).

For some of the sites that are slightly farther afield a full day diving excursion is organised stopping off at one of the islands to enjoy lunch.

Located at the conjunction of the Indian and Pacific Oceans with more than 30 world class dive locations around the archipelago of islands such

Diver with feather star. I had a one to one dive guide which made life very pleasant. This was taken with a Nikon D300 in a Sea and Sea housing and two Inon Strobes. 12-24mm lens at f11 and 1/40 sec. The lens had a Polaroid +4 close up lens filter to enable the lens to get closer to the foreground subject.

Mandarin fishes mating. Gangga has an excellent mandarin fish site. This image taken with Nikon D300 in a Sea and Sea housing 60mm lens at f16 and 1/60 sec





Frogfish taken with Nikon D300 in a Sea and Sea housing and two Inon Strobes. 60mm lens at f29 and 1/60 sec

as Lihaga, Tindila, Talisei and Bangka as well as sites on the North Sulawesi coast, the diving offers some excellent reef diving as well as amazing muck diving sites. It is a paradise for critter lovers with all the exotic variety that you would expect from a part of the world that is the epicentre of marine diversity. Critters include Frogfish, anemone shrimps, ornate ghost pipefish, nudibranchs, cuttlefish, banded cleaner shrimps, banggai cardinalfish, stonefish, stargazer snake eels, weird scorpionfishes .

As we have come to expect in this part of the world everything is done for you leaving you to relax and concentrate on your diving and photography. The dive guides are amazing in their ability to find even the most allusive of creatures, such as boxer crabs, pigmy sea horses, harlequin and marble shrimps, crinoid shrimps of amazing variety matching so well the colours of their host feather stars, nudibranchs, leaf fish, frogfishes from the giant to the tiny and much more.



Barnacle blenny taken with 60mm lens with wet close up attachment. Nikon D300 in a Sea and Sea housing and two Inon Strobes. F18 and 1/60 sec. I find the wet close up attachment useful to give a bit more flexibility for very small subjects.

There are thirty elegantly furnished and air conditioned wooden bungalows with high ceilings and a spacious veranda overlooking the white sand beach set against the backdrop of a jungle covered hill. Facing west you can normally expect to get some spectacular sunsets from your veranda.

There is a large salt water pool and a traditional spa with a high quality service, which offer various treatments and massages, manicures

and pedicures by well trained staff.

The restaurant and bar area has large lounge facilities also and a large collection of books, although many not in English so be sure to stock up on your reading matter.

If you want to take time out from the diving there are various land excursions, including Tangkoko Nature Reserve where you might see the smallest monkeys (*Tarsius spectrum*) and birds of paradise. You can also climb one of the magnificent



Harlequin shrimp taken with a Nikon D300 in a Sea and Sea housing and two Inon Strobes. 60mm lens with wet close up attachment at F20 and 1/60 sec.

volcanoes in the Minahasa Highlands or take one or other of various excursions that are available.

It is difficult to select particular dive sites for special mention but I was pleased to re-dive on two occasions on this trip the Efratha dive site, which is situated off the North Sulawesi coast. This I included in the book by Karen Gargani and myself called Ultimate Diving Adventures in 2007. Efratha is not listed on their normal publicity and I had to ask them to give me location details for the book. Some sites they keep to themselves solely for the benefit of their guests. It has beautiful corals and a drop-off to die for with wonderful exotic species. You start the dive in about 20m where there are areas of white sand interspersed with outcrops of coral. On red branching corals you may find cowries with mantles that match the colouration



Imperator Commensal Shrimp on sea cucumber. Taken with a Nikon D300 in a Sea and Sea housing and two Inon Strobes. 60mm lens plus wet close up attachment at f25 and 1/60 sec.

of the coral. Clams also display their colourful mantles and seem quite insensitive to your presence, enabling photos to be taken of the wonderful colourations of the living tissue. Many species of nudibranchs can be found on the sand and among the corals. Various species of shrimp that live in symbiosis with sea anemones can be found within the anemone tentacles as well as other arthropods



Sea snake taken with a Nikon D300 in a Sea and Sea housing and two Inon Strobes. 17-35mm lens with T4 close up at F14 and 1/60 sec.

such as orangutan crabs. There are plenty of fish such as blacktipped grouper, trumpetfish, lionfish, scorpionfish, frogfish and pipefish.

Once you reach the sheer wall you will find it festooned with marine life including leaf fish butterflyfish, spinecheeks, angelfish, trunkfish and



Ornate Ghost Pipefishes. Taken with a Nikon D300 in a Sea and Sea housing and two Inon Strobes. 60mm lens at f18 and 1/60 sec.

many more species on this unspoiled reef. Another delight was the electric clam. It's name derives from what appear to be streaks of electricity flashing across the red mantle. This is in fact caused by phosphorescence and is an amazing light show in miniature.

You finish the dive swimming along the wall, which enables you to ascend slowly while discovering more and more species and enjoying the dive right to the end.

Another dive site that I made a point of going to twice on this trip was Paradise Reef. This is very much a muck dive and the variety of critters is simply amazing, including

sand eels, frogfish, various anemone shrimps, nudibranchs, shrimp gobies with their accompanying shrimps, shoals of razer fishes, trunk and puffer fishes, ghost pipe fishes, banded boxer shrimps, stonefish, crocodilefish, and cuttlefish, you can finish the dive under a pier which is festooned with life.

Gangga Island SPA and Resort is certainly worth considering for some exciting diving in a resort that gives many creature comforts. It is not beyond the realm of reason that I may return at sometime for a fifth visit.

Len Deeley

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Cenote Diving - Your guide Eric Budgie Burgess has spent the last 10 years as a cave and cavern guide in the Riviera Maya meaning his knowledge of the cave and cavern systems is extensive. All the caverns are unique and offer gin clear visibility with superb light penetration, so those worried about being claustrophobic needn't.

Itinerary:

08 JAN Arrive Cancun met and transferred to Beachscape Hotel, Cancun 4 nts B & B Beachscape Hotel
09 JAN 3 days of Sailfish trips.
12 JAN AM Transfer to Playa Del Carmen, 5 nts B & B Unic Design Hotel
13 JAN 2 days Bull Shark diving, 1 day Cozumel
17 JAN AM Transfer to Los Lirios, Tulum 5 nts Half Board Los Lirios
18 JAN 3 days Cenote Diving inc torches, entrance fees, lunch & guide
22 JAN Transfer from Tulum to Cancun airport
Price per person £2,655 inc flights, transfers, board, accommodation & diving as above escorted by Len Deeley

Lochcarron

by Peter Rowlands

I wish I would ask more questions when I'm told about a possible diving trip. It started with Charlie Hood inviting me on an Iceland jaunt and forgot to tell me the water was 2°C and then Dan Bolt and Terry Griffiths told me about sea loch diving in Scotland but omitted to say how far it was and that it would be shore diving.

And so it was that in April this year I made the 12 hour drive to the top of England and then almost to the top of Scotland to arrive in the village of Lochcarron to rendezvous with Messrs D&T who had been up here several years running and, now that my body is slowly recovering, I can fully understand why.

My favourite film of all time is Local Hero and the star of the movie is the fictional fishing village of Furness with its pub. There are several similarities between 'Furness' and Lochcarron and, believe it or not, I was booked to stay in the pub for 4 nights! What a great start.

The Lochcarron Hotel is a good honest dwelling house that provides a warm welcome with basic, comfortable accommodation, above average pub grub and well kept local beers; if they are still offering pizzas, snap them up. Delicious.

Well fed, watered and slept, the first morning dawned a bit grey and windy. We had decided to concentrate on Lochcarron sites but there are others a little further away which offer a different variety of subjects and landscapes but slightly deeper. The first dive was off the launching slip at Stromeferry into about 15 metres of water with dead mens finger strewn walls and a brittle star carpeted



The slip at Stromeferry. iPhone 6 panorama.

The seabed at 15 metres was carpeted with brittle stars, anemones and dead mens fingers. I even spotted a nudibranch without any help but don't know it's Latin name. Panasonic GX7 in a Nauticam housing, Olympus 8mm F1.8 lens, FIT dome. Available light. Greenwater Magic filter. 1/60th @ F4. ISO 500



sea bed. Actually Strome ferry should really be renamed Strome because the ferry stopped running in 1970 and there is a local tourist must see road sign indicating the direction to the Strome Ferry followed by (no ferry)!

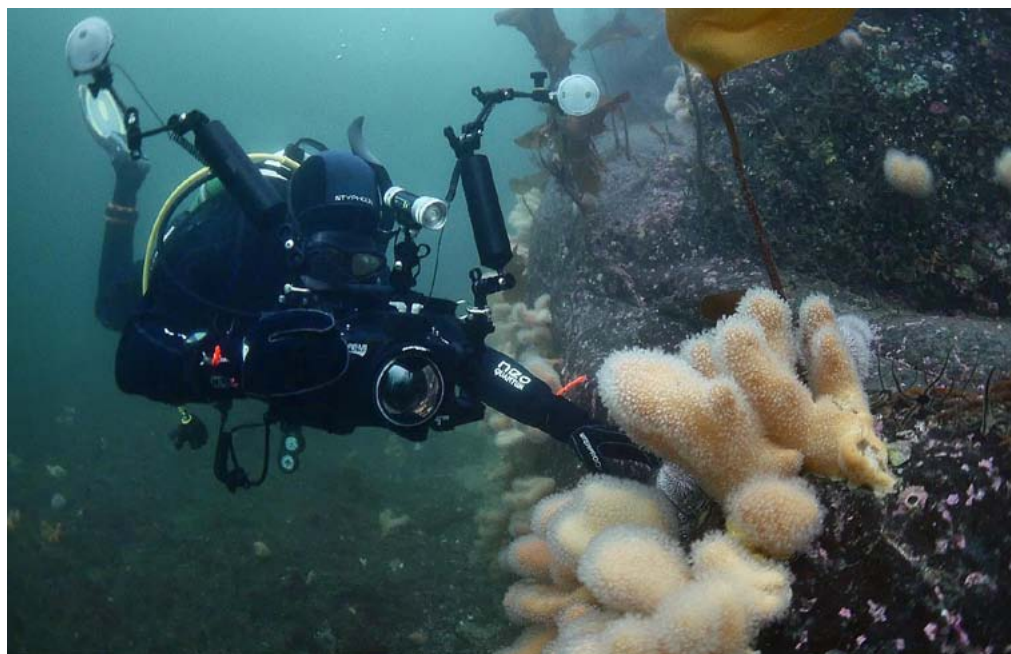
Fortunately the loading slip still remains and provides comparatively easy water entry. Now the terms comparatively easy and shore diving, to me, don't go together; overseas I am a liveaboard fan and in the UK I have the luxury of the good ship MV Magic. Kitting up and walking down to the entry point is no big distance but it is still quite physical and the final struggle, for me, is putting



The scenery is beautiful. The outdoor clothing models, less so. iPhone 6 panorama.

Two shots taken at the same time using different techniques and they illustrate very well the different results achieved by shooting with a filter and available light (left) and a strobe lit shot (right)

(Left) My shot of Dan photographing dead mens fingers. Panasonic GX7 in a Nauticam housing, Olympus 8mm F1.8 lens, FIT dome. Available light. Greenwater Magic filter. 1/50th @ F1.8. ISO 1000



(Right) Dan's shot of me shooting the same Dead Mens Fingers. Olympus EM-1 in an Aquatica housing with dual Sea & Sea strobes. 1/80th @ F3.5. ISO640



on my fins. Fortunately I am not blessed with the longest of legs so you would have thought that being nearer to my feet than most would have made it easier but no. The combination of a less elastic body these days clad in a 5mm rigid drysuit and hindered by last night's steak and ale pie with chips meant I had to inelegantly use Dan or Terry as a leaning post. They on the other hand didn't need me. They simply waded into the water and, with a well balanced quick one two movement, were off. If I was to try that unaided I might get one fin on and would probably have to conduct the dive like that or drown in the attempt to don the second one.

All of this physicality fades away as you follow the wall round. The conditions here are very tidal so you must get your timing right or face an exhausting swim if not. The shallows are quite keply down to about 10 metres but then the wall begins and you are greeted with a healthy reef festooned with colourful life. Compared to my usual Devon based sites this was much more like a scaled down version of Port Hardy in Canada. There was a freshness and healthy-ness to everything. That freshness extended to the water temperature which was around 8°C! The trick of warming up your gloves with hot water from a flask helped extend the dive but after 40 minutes my hands were cold but still working.

We were not blessed with the best of viz, I'm told. Usually 10 metres and clear is the norm but we were met with a silty 5 metres at best but still very 'doable'.

The second dive is known as Conservation Bay. Dan and Terry were a bit economical about the 200 yard slog from the car park to the water's edge. In truth I think they are both part mountain goat whereas I am mostly honey monster; however splitting it into two journeys helped fill up the in



Even a prawn portrait is possible with a full frame fisheye lens. For some reason Terry decided to do the dive with just one leg. Panasonic GX7 in a Nauticam housing, Olympus 8mm F1.8 lens, FIT dome. Available light. Greenwater Magic filter. 1/80th @ F2.5. ISO 200.

between dive time and in the end it wasn't as bad as it first looked.

Dive-wise it is not much different to Stromeferry slip because it is just round the corner but there seemed to be much more crustacean life here. Also I am not a good nudibranch spotter but D&T are aficionados and they rave about these sites. They would surface from each dive and most of the initial conversation was mostly in Latin.

The drive back to the hotel nearly always included a stop at the Tea Room where a pot of hot brew had to be accompanied by a plate of something sticky, sugary or chocolaty and preferably all three. The bottles were filled by a local diver who has a compressor (obviously) but I

never actually met him. He had a day job and if he wasn't home the bottles were just left filled in his garden. So trustworthy and refreshing.

With such tidal waters the two dives a day either meant two in the morning or two in the afternoon if you get my drift (pun intended) so this gave plenty of relaxation time to soak in the atmosphere and live at a more leisurely pace. The first two days were grey and windy but the third dawned bright, calm and sunny. Naturally this was when we took all of the land photos which always shows Scotland in its best, but not really normal, light. The surrounding scenery is stunning and fortunately the nearby honey pot of Skye keeps Lochcarron with a feeling of being original, normal



Crustaceans were plentiful. Panasonic GX7 in a Nauticam housing, Olympus 8mm F1.8 lens, FIT dome. Available light. Greenwater Magic filter. 1/80th @ F2. ISO 200.

and, as a result, very charming although I am sure that the winters will be hard and long.

The local shop is right next door to the Hotel and, as local shops do nowadays, they sell most everything you need including half wooden barrels which I needed to buy for my wife as a present for her to plant up with something pretty. It was £14 and I offered a Scottish £20 note. Now Scotland and England are two neighbours with the same currency but differently printed notes. The result is that most shops in England aren't keen to take 'foreign' Scottish notes and vice versa. "Sorry about this," said the man behind the till. I just assumed he meant that he had no £5 notes and would have to give me my £6 change all in £1 coins. It was only when he gave me an English £5 note that I realised what he meant! "That's nae bother" I said in my best Scottish accent and walked out with my barrel.



2 iPhone panoramas. Both spoilt by Dan Bolt.



Leaving Lochcarron was like the final scene from Local Hero which, if you haven't seen the movie, will mean absolutely nothing but, if you have, I look back on my few days here with fond memories, aching limbs and with an urge to ring the local phone box when I got home to find out how everyone is.

Peter Rowlands
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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

Cryptic Crustaceans

by Mark Webster

If you have an interest in macro photography as I do then you have an almost endless choice of marine subjects to keep you occupied during a dive. One of the fascinations for me are the many symbiotic and cryptic relationships between species and that applies particularly to numerous species of crustaceans that are found on corals, anemones and larger invertebrates.

Some of these species are easy to find and some are well camouflaged to match their hosts and whilst there are a few to be found in temperate waters the majority thrive in tropical conditions with particular hot spots in Malaysia, Indonesia and the Philippines. A few are regarded as unusual or even rare and consequently become a grail or must have for the avid macro imager. Most trips overseas to a tropical location are a significant financial commitment on top of the substantial investment you are likely to have in underwater photography equipment, so it is only natural to want to ensure that you get best value from the trip and that of course means successful images. We often rely on the abilities of a local guide to find difficult subjects and that

can work well with a small group, but it does help to do a little research of your own to know a little about your target subjects and habitats. This will enable you to not only find your own subjects but also plan a little better for the images that you would like to capture. What follows are a few of my favourite subjects and some notes on habitat and photographic technique that may help planning for that next special trip to the far east.

Sea Urchins and Starfish

There are numerous species of sea urchins, but not all are host to crustaceans and only by looking carefully at each species you encounter will educate you as to which are the most likely candidates. The fire urchin is the most spectacular looking sea urchin and is also home to two or three species of crab and shrimp, but not on the same host at the same time.

One of the rarer species is the Coleman shrimp which are usually found in pairs towards the crown of the urchin where they will pick out spines to create a small home. These are small shrimps, the larger female maybe 10-12mm, which have the



Coleman shrimps are the undisputed stars of a symbiotic relationship with the fire urchin. They are difficult to find, being very small and only seen on a handful of urchins, so a good local guide is a great help in your search. Once found they are an easy and co-operative subject but can be difficult to achieve the correct colour balance due to the strong red and blue hues reflected by the urchin spines. Nikon D7100, Subal ND7100, 105mm macro, SubSee +10 wet lens, Inon Z240 flash guns, ISO 100 f18 1/125.

most striking black and white livery which is easy to over expose. You will need additional magnification with ideally a 105mm macro lens and then simply work around the urchin for the best composition and lighting angle. The shrimps don't move, so from that point of view are an easy subject, but you will often find in post processing that the reflected light from

the blue and red spines of the urchin is absorbed in the white of the shrimp and it may take some adjustment in these channels to reduce the effect.

Fire urchins that do not host Coleman shrimps often have the alien looking zebra crab, which as the name suggests is also black and white. This species is normally found singly on the urchin, although I have seen pairs,



Fire urchins are also occasional hosts to the Zebra crab which sports the same monochrome livery as the Coleman shrimps. The crabs are generally bigger and will be found initially close to the base of the urchin. They are not as patient as the shrimps and will move amongst the spines of the urchin once they realize your interest, pausing every now and then for you to take a shot. Nikon D100, L&M Titan housing, 105mm micro, Inon Quad flash, ISO 200 f22 1/100.

and they prefer to live at the base of the urchin close to the seabed and do not clear a residential patch of spines. The dive guides will normally gently persuade the crab up onto the top of the urchin with a chop stick where they will pose for a few seconds – so it is up to you if you approve of this level of interaction but the crabs don't seem to mind so much. As with the Coleman shrimp getting a pure white

can be a challenge if you want to retain the very saturated colours of the urchin.

A third species of crustacean encountered on the fire and other spiny urchins are small squat lobsters that also make their home on other hosts and will often have a colour pattern that closely matches the urchin so can be difficult to spot initially.

The larger cushion urchins which



Sea cucumbers of various species are very common around tropical reefs and muck sites, but only some are host to pairs of these attractive Imperial shrimps. Dependent on the size of the host they may be found on top, particularly if the sea cucumber is on the move and the shrimps are looking for a passing meal. The female is the larger of the pair and they are a fairly co-operative subject with strong colours which are a fantastic contrast to their normally drab host. Nikon D7100, Subal ND7100, 105mm micro, Inon Z240 flash guns, ISO 125 f16 1/125.

have a patterned smooth textured surface to them are also home to small imperial partner shrimps but they tend to be a much closer match in colour to their host and are sometimes a challenge to find a contrast. This species generally like to be on the underside of the urchin but will venture briefly on to the upper surface if you gently lift the urchin. This also applies to some species of starfish, in particular the blue starfish commonly seen in Indo-Pacific seas, which often have small colour matched Imperial shrimps on their underside.

Sea Cucumbers

There are several species of sea cucumber to be found in tropical waters but not all are host to crustaceans. On the larger spiny species of sea cucumbers the most common hitch hiker are the brightly coloured imperial shrimps which are frequently found in pairs with the female being the larger of the two. These shrimp may be spotted on top of the sea cucumber but often they are camera shy and may retreat underneath their host. Generally this species is large enough for a 60mm or 105mm macro lens without additional



Sometimes it is difficult to position yourself to capture the shrimps against open water which can lead to a distracting or competing background as negative space. If the reef is far enough away the macro lens will render it soft due to the narrow DOF, but if it is closer you may need to open the aperture to reduce it further. Nikon D7100, Subal ND7100, 105mm micro, Inon Z240 flash guns, ISO 125 f16 1/125.

magnification, although the additional working distance of the 105mm is a benefit. There is also a species of crab, often with a colour and pattern to match the host, which prefers to live close to the exhaust end (anus) of the sea cucumber and are often very small with a low profile which makes them difficult to discern.

Sea Whips

Sea whips play host to several different species of shrimp, crab and occasionally squat lobster in addition to the small gobies that favour them. The shrimp varieties include horned, beaked, rhino and needle or saw blade shrimps as common names dependent on where you are in the world. Under natural light their partly transparent bodies and colouring provide a near



Zeno crabs are often mistaken for shrimps but do have a very different body shape. They are far less common than the shrimps and once again a guide with good local knowledge is your best guarantee for finding one during a trip. Their colour tends to match the host sea whip very closely and they are often found submerged into the polyps until they begin to sit up under the focus light. Nikon D300, Subal ND20, 105mm micro, Inon wet lens, Inon Quad flash, ISO 100 f29 1/40.

perfect colour match to their host, but with the addition of flash the carapace and internal organs will reflect light and glow creating a better contrast with the sea whip. Contrast can also be improved by trying to position the subject against open water so that you can create a black background or if conditions allow a natural light background. Single shrimps and pairs are quite common and every now and

then you will encounter a sea whip with six or more which may provide more compositional choice.

One popular and rarer sea whip critter is the Zeno crab, which may be mistaken for a shrimp until you have a closer look at the body shape and the arrangement of its limbs. These guys like to hug the sea whip and are often almost covered by the polyps which makes them quite difficult to spot.

They are also not as frequently seen as the shrimps but normally a good guide will know where he can find resident Zeno crabs if these are on your hit list.

Both shrimps and Zeno crabs are often very small so are best shot with additional magnification whether you use a DSLR or compact. Sea whips are mostly found on walls or slopes where they can reach out into the current to feed. If there is current flowing then the sea whip is likely to be vibrating which makes focusing a real challenge. You may be able to position your body upstream of the current and create a lee to reduce the current flow on to your target and mitigate the movement, but this often is not the best position for your composition! Try also fixed focus and shoot as the subject drifts in and out of focus – many will be out of focus but now we have almost endless image capacity you can simply discard these and thank the photo gods that you are no longer shooting film!

Crinoids (Feather Stars)

You will find feather stars in the Red Sea and throughout the Indo-Pacific regions. The main difference between the locations appears to be that in the Red Sea you will most likely see feather stars out at dusk and during the hours of darkness, whereas in the Indo-Pacific seas they decorate the reefs throughout the day and night often in huge numbers. In the Red Sea I have seen cling fish, squat lobsters and only once a shrimp in the arms of feather stars, but you have to look hard for them. In contrast Indonesia, Malaysia or the Philippines finding these critters is much easier, but getting a good image of course is another matter.

To begin your search choose crinoids that are fully open and feeding in the current. When the host is fully open the shrimp and squat lobsters often



Crinoid squid lobsters are normally very closely coloured and camouflaged to their host and so can be quite difficult to spot. If the crinoid is open and feeding then look towards the ends of the arms where they are often located to feed themselves. If the crinoid is closed then may guides have a method using a chop stick to encourage the crinoid to open and reveal the critters. You need to decide if you accept this level of manipulation and advise the guide. Nikon D100, L&M Titan housing, 105mm micro, Inon wet lens, Inon Quad flash, ISO 200 f22 1/160.



There are some exceptions to the camouflage rule and occasionally you will find a crinoid shrimp like this one that contrasts totally with its host. Whether this is intentional or perhaps this shrimp is a refugee from a yellow crinoid I do not know but it provides a striking contrast. Nikon D7100, Subal ND7100, 105mm micro, Inon Z240 flash guns, ISO 200 f22 1/125.

find their way toward the end of the arms to feed as well which helps to spot them and also makes them more accessible to photograph. If the crinoid is partially closed or the critter is at the bottom of the arms close to the body then there are tricks that the dive guides employ with chop sticks or reef sticks to encourage the crinoid to open and make the subject more accessible. Once again, it is your personal choice if you accept this level of intervention by the guides, but if you don't then make it clear as for most guides it is standard practice.

These subjects are very small and will need additional magnification to fill the frame and need patience to shoot, so when you find a co-operative subject make the most of it. Good buoyancy control, a stout reef stick and neutrally trimmed camera rig will help to stay steady enough at high magnification to capture sharp images.

Anemones

Anemones maybe most commonly associated with a variety of clown fish species, but they are also host to numerous different crustaceans as well. Sometimes finding these critters is the easy part as there are some clown fish that take the defence of their anemone host very seriously and will launch persistent attacks on the persistent photographer..... one actually drew blood biting my hand in the Philippines early this year! So be prepared to suffer for your art if the clown fish mob decide to see you off the premises.

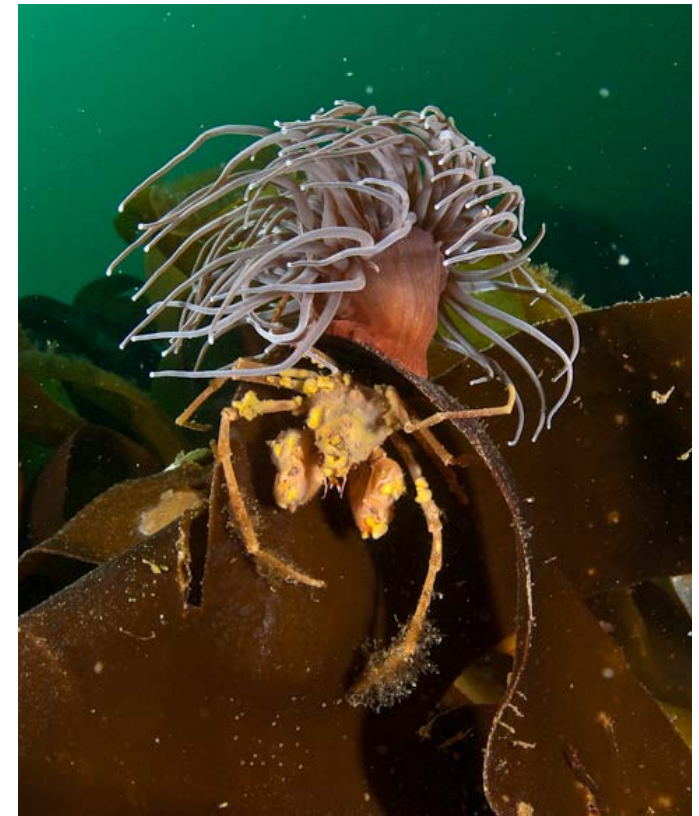
Those anemones that do not host clown fish are equally good hunting grounds for colourful species of shrimp and crabs. Some are almost transparent, but still show well under flash, whilst others are brightly coloured in red, blue, yellow and white. You will find the striking clown crab most often just



There are numerous different species of translucent shrimp to be found in anemones. Some are only associated with a specific anemone species, but they can all be a challenge to list well enough to create a contrast with the host and also avoid casting shadows from the anemone tentacles. D7100, Subal ND7100, 105mm micro, SubSee +10 wet lens, Inon Z240 flash guns, ISO 100 f22 1/125.

under the skirt of carpet anemones or at the base of tube anemones, whilst porcelain crabs prefer the edge of the anemone where they can sift passing plankton.

Perhaps surprisingly we also have critters dwelling symbiotically with anemones in UK



We even have our own anemone crabs in UK waters. The symbiotic relationship between the Leach's spider crab and the snake lock anemone is very similar to the tropical species. The crab helps keep the anemone clean and healthy and also shares any meals that may come their way. Nikon D300, Subal ND20, 10-17mm FE zoom, Inon Z240 flash guns, ISO 200 f11 1/40.

waters. The Leach's spider crab is commonly found on snake lock anemones in the summer months and a Mediterranean species of shrimp (*Periclimenes sagittifer*) is now seen regularly off the coast of Devon and Dorset in the snake locks, although I have yet to find one in Cornwall. Fortunately there



There are a number of similar looking species of small porcelain crabs that live amongst hard corals, soft corals, sea pens and in this case a gorgonian. They are most active at night but can be seen during the day as well. This one has some even smaller neighbours in the background. Nikon D300, Subal ND20, 105mm micro, Inon wet lens, Inon Quad flash, ISO 100 f25 1/40.

are no clown fish to attack us in the UK!

Most of the anemone critters can be shot with a 60mm or 105mm macro lens or compact system, although there are some smaller shrimps that will benefit from the use of a wet lens to fill the frame.

Corals and Sea Fans

You will find many similar species of crab and shrimp on corals,

but they are often more difficult to spot particularly during the day when many prefer to hide amongst the polyps. At night it is a different story as many of these critters come out to feed and will remain exposed under your lights long enough to capture a few images. Sea fans and soft corals are a good place to look for decorator crabs and various shrimps whilst porcelain crabs are common on hard corals and sea fans too. The porcelain



All sorts of fantastic critters emerge at night like this decorator crab that has a spectacular covering of polyps to camouflage itself. At night they creep out onto a gorgonian in this case in search of a meal. Nikon D300, Subal ND20, 105mm micro, Inon wet lens, Inon Quad flash, ISO 100 f25 1/100.

on capturing any critters discovered before they shy away from your light.

Sponges

Sponges are another popular habitat for a variety of crustaceans including exotics like the hairy squat lobster, tiger shrimps, bumblebee shrimps, decorator crabs, hermit crabs and other more humble looking shrimps. Some of these species only reside on particular sponge types and have very good camouflage to blend in with either the sponge or other residents. For example the hairs on the hairy squat lobster have evolved to match the appearance of the hairs on brittle stars that inhabit the barrel sponges so that they are very difficult to spot until have seen them a few times.

If you are seeking the exotics like the tiger or bumble bee shrimp then the habitat is very specific and you will really need the help of a good guide to locate them for you. These shrimp, the bumble bee in

crabs in particular will retreat into the coral fairly quickly after a few seconds of surprise when caught in your focus light, so it is often best to pre-focus and lock the lens before moving in to take a shot, which will avoid the lens hunting whilst the crab disappears back into the coral. Decorator crabs are much bolder and move more slowly and can look quite spectacular with their decoration of polyps or sponges. In your search don't ignore sea pens on the sand between the reef patches as they also provide a habitat for many of these critters. In the dark it is best to keep your rig simple with a fixed flash position so that you can concentrate



Another really striking but very tiny shrimp is the bumble bee shrimp. This is another species that you are very unlikely to find without the help of a guide who generally know which rocks to look under. They will stay still for a few moments before they hop a short distance so need a good dose of patience to photograph well with the extremely narrow DOF of a wet diopter. D7100, Subal ND7100, 105mm micro, SubSee +10 wet lens, Inon Z240 flash guns, ISO 250 f40 1/180.

particular, are very small and will need high magnification which can be a real challenge when you have water movement and subject movement at the same time. Shoot lots and be prepared to discard lots of images due to soft focus or poor composition!

Nudibranchs

The same species of imperial shrimp that hitch a ride on sea

cucumbers can also be found on some species of nudibranch. In the Red sea the large nocturnal Spanish dancer nudibranch often has a small imperial shrimp which resides around the gills and normally sports a livery of red or orange to closely match the host. Further east in Indonesia and the Philippines there are several species of nudibranch that attract Imperial shrimps, but rarely with colours



Imperial shrimps are also found on larger nudibranch species, although sometimes the shrimp can be almost as large as the host. Nudibranchs move slowly enough for the shrimp to share a meal or leave the host briefly to feed and then return. Nikon D100, L&M Titan housing, 105mm micro, Inon Quad flash, ISO 200 f22 1/125.

on top and even poses on the head of the host for you.

If you want to shoot the nudibranch and shrimp together then a 60mm lens will be ideal whilst a 105mm will allow you to focus on the shrimp and detail of the host.

that match their host. Finding them on the larger species on nudibranch is most common but I have seen shrimps that almost dwarf their host, so there must be occasional jumping from one host to another or perhaps a fully grown shrimp has to join a juvenile nudibranch if an adult host expires. Observing the pair it would seem that the shrimp is simply along for the ride and will feed as the nudibranch cruises along and occasionally share a food source if it is suitable. The combination of these two critters together is irresistible to photographers and generally an easy subject to work with as the nudibranch is moving slowly and the shrimp stays

Whilst this overview is by no means exhaustive hopefully it will have given a flavor of the variety of different crustaceans and their symbiotic lifestyles with different hosts. The relationships between species in the macro world is fascinating and offers seemingly endless opportunities to photographers who are prepared to slow their pace and concentrate on the detail of both the hosts and hitchhikers. This will produce pleasing compositions and a glimpse into a surreal world for those who view your images.

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Book Review

Underwater Photography Masterclass

by Alex Mustard
by Peter Rowlands

Every now and then the underwater photography world benefits from new talent which appears from comparatively nowhere yet almost arrives perfectly formed; ready to push the boundaries further than we ever thought possible.

In my limited time I have had the privilege to have been associated with two of them, Peter Scoones and Mike Portelli and now Alex Mustard, the author of this new book on underwater photography. Peter and Mike never did get round to writing 'their book' before their untimely demise but Alex, fortunately, has and the underwater photography community is going to benefit from it for a long time to come.

'Underwater Photography Masterclass' follows in a long line of books on underwater photography and my claim to fame is to be part of that inner circle with a tome modestly titled 'The Underwater Photographers Handbook' in 1984. It was a different era then but Alex started his underwater photography around that time so he has experienced and learnt from both the traditional and the digital and this, I feel, gives this book a great deal of authenticity.

Underneath it all Alex is an academic. He applies and learns; going forward each time but fortunately he also has an artist's eye and instinct. That unique combination sadly passed away with

Peter Scoones but I feel sure that Alex has been 'passed the baton'.

And so it was that Alex's book arrived on my doorstep. I had known it was due to arrive for quite some time because Alex is a master of publicity. He wants you to know but not to tell anyone. I have a business relationship with him so I have been 'in' on this arrival for some time but it didn't stop me from taking time out to savour this new arrival.

UWPM (as I'm now going to abbreviate it) is a genuinely fresh take on underwater photography for several reasons. Firstly the author 'walks the walk' but secondly he has 'listened to the talk and soaked up the past' and thirdly, and most importantly for you the reader, he has the confidence to divulge everything.

I had already been told in the build up to this book that it was originally twice as long but had been

UNDERWATER PHOTOGRAPHY MASTERCLASS

CONTROLLING LIGHT UNDERWATER

Auto and manual exposure modes are there to help. Although everyone will tell you to shoot manual, it is OK to use auto exposure underwater, and TTL flash, if and when it helps. The truth is that auto modes, designed to work on land, are more often a hindrance underwater, particularly in more complex lighting situations. When auto modes get it wrong, and underwater they do frequently, you can't be completely sure why. Should you dial in exposure compensation for the flash, the camera, or leave it alone in case it gets it right next time?

Manual is the most popular route underwater simply because it is the easiest, most reliable way to get the shot. The big advantage of manual is that camera and strobes do what you tell them and they keep doing it. If the exposure is wrong, you see it, make a change, and it is right. As most underwater photos are taken from the same distance, exposures stay remarkably consistent.

HISTOGRAMS

A histogram is simply the image represented as a bar graph of exposure. It is a useful tool for checking exposures, when you are struggling. Histograms are particularly helpful on night dives, inside wrecks and caverns, when the LCD screen shines so brightly that correctly exposed pictures look overexposed, causing you to underexpose.

However, in my experience, histograms hinder underwater photographers more than they help. I have even banned people from having histograms overlaying their images on my workshops, because they are too focused on the graph and not the photo. Getting correct exposures is relatively easy underwater; what really marks out strong work is achieving a good quality of light, and the histogram tells you nothing about that. In fact, by overlaying a histogram on the picture, it stops you seeing the details of the lighting. Instead, look at your images full screen on your LCD to spot uneven lighting (with hotspots and unwanted shadows). Identify it and remedy it (see Chapter 4). There is no correct histogram, it depends entirely on the scene and photographer's intentions, which is why I have refused to show any in this book!

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EXPOSE TO THE RIGHT?

Some photographers extol the benefits of exposing to the right (known as ETTR), which theoretically gives better image quality. With the cameras of five years ago, there was definitely an advantage and I encouraged this technique. With the latest cameras and software, I do not see any difference between a correctly exposed image and ETTR in the final results. It remains a valued technique for my landscape photographer friends, who need something to think about to pass the time! But, underwater, I now believe it is a red herring. I see people missing shots because they were distracted trying to ETTR. It also greatly reduces the margin for error for over exposure and highlight clipping, which does ruin images.

TTL OR MANUAL?

I discussed this topic in the previous chapter (see page 32), but as it is a common question it is worth revisiting. In the days of film with just 36 exposures and zero feedback, TTL was a godsend and more reliable than guesswork. Digital cameras remove the need to use TTL to get the correct quantity of light. Good photographers now expect to get the right quantity of light and instead concern themselves with the quality of light.

TTL's Achilles heel is that it commands both strobes to give the same power, often giving a poor quality of light. As you will clearly see in the coming pages, this is far from ideal. Some suggest moving the strobes backward and forward to alter the amount of light that reaches the subject, but not only is this more effort than simply adjusting the flash power in manual, but also changes in distance alter the quality of light. Manual is easy: shoot, look at the LCD, adjust, and reshoot. The good news is that LCDs are bright and clear underwater and actually exposures vary very little!



UNDERWATER PHOTOGRAPHY MASTERCLASS



ALEX MUSTARD

CONTROLLING LIGHT AND CAMERA



A A SCREEN TEST
Use the LCD screen not to admire your work but to check for mistakes in focus and lighting. You'll be taking lots of verticals so turn off 'rotate tall' or 'auto-rotate' so that they are shown full screen (not as a thin strip). You want to see them big and in the same orientation as the scene is in reality.

WHEN I USE AUTO

I choose my exposure mode, manual or auto, and my flash mode, manual or TTL, based on what gives the best chance of getting the shot. Almost all the time manual is my preference, but I will use auto exposure when it is better, say when shooting fast-moving subjects like dolphins, with only available light. I will use TTL for macro, especially on very cold water dives. It limits my lighting options, but when it is that cold, I probably wasn't going to try anything more fancy than point and shoot.



A PUGET SOUND KING CRAB Canada
I use TTL when it is the best way to get the shot. When diving in Canada, I knew my finger dexterity would not last as long as my desire to take photos. I used TTL for point-and-shoot simplicity for this juvenile king crab with simple flat lighting.

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refined down to be of a manageable travel size format (more of this later) and this has certainly been achieved without leaving anything out. It's like the perfect cooking sauce which starts off with all the bulky ingredients but which over time, and with lots of stirring and care, is reduced to perfection. UWPM is like that but, as with the perfect sauce, it can too rich when you have too much of it so you must dip in every now and again to get the best from it.

I also think the cooking analogy is very apt when it comes to Alex's images. There can be no doubt that he is consistently 'ahead of the game' in both ideas and techniques and his image legacy displayed in UWPM is of the highest and most original quality. The result is that I think he is the most 'copied' underwater photographer and yet nearly all of his images have been taken while on workshops teaching others how to take better images!

A significant part of Alex's income comes from escorted workshops where he takes groups to the right place at the right time to expose them to improve themselves. I have been on some of these trips (not to improve myself, you understand) and I can vouch for how much he puts into them and how much his clients get out of them. The only problem I have is that a significant

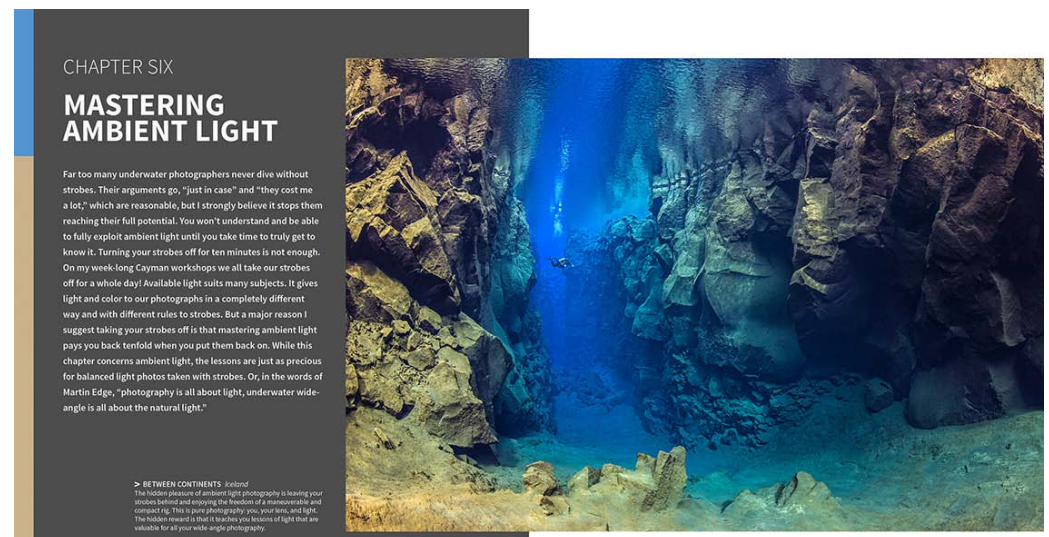
percentage are there (and those who buy this book will be, most probably) trying to emulate Alex's images and techniques; and this to me seems misguided but then it dawned on me that a cook book is a great analogy.

I like to cook and I have a collection of recipe books with excellent photographs of perfect looking food. I spend an inordinate amount of time and usually (as my wife points out) I use every pot, pan and work surface to try and create a meal which looks like the photograph in the book. More often than not the vision on the plate doesn't match the photo and that makes me despondent but actually I'm missing the point. The important thing is that the food should taste good and the ingredients should compliment each other.

In UWPM Alex tells you everything openly from the inception to the capture followed by the post capabilities. In UWPM he has literally imparted everything which makes him create his images and they are like 'the food on a plate' analogy. You can either use this book to emulate its images or you can use it to empower you to create your own. Either way, you have everything at your disposal.

Having said all of the above, there are a couple of points which I must raise for completeness.

Firstly, and to me most importantly, I had a growing feeling



of disconnect as I thumbed through this book; I was really enthralled by all of the background information and especially the images but, as an underwater photographer, I really wanted to know what equipment and settings were used for each shot (and with apologies for the capitals) WHEN I WAS LOOKING AT THE IMAGE (close capitals with apologies). Those details are included but as an appendix list at the end of the book. You have to refer back and forward to get this detail.

The second comment is an obvious one as I have been 'electronic' since 2001 and that is the lack of a downloadable version either as a direct copy of the print version or as an expanded and interactive

one (with photo captions next to the images!). Alex's preamble to the book was to have it in a format which would encourage it to be taken on location but in today's digital world surely the perfect format for travelling is the electronic one? I understand plans are afoot so I look forward to hearing about and publicising this development.

With all that said, Alex has produced a groundbreaking delivery with this book. He has shown you everything you need to know and the result is an excellent and visually inspiring tome.

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Book Review

Colours of the Reef by Roger Steene by Walter Starck

Roger Steene's three volume coffee table book is truly exceptional in scope as well as pictures and production quality. In over 1400 large format (265 x 315 mm) pages it presents almost 7000 high quality images of coral reefs and reef organisms from around the world of which more than 6000 of these images Steene has not previously published.

Uniquely for underwater photo books, scientific names are provided for almost all of the individual species depicted and great effort has gone into obtaining accurate names and identifications from numerous experts in the diverse groups of organisms involved.

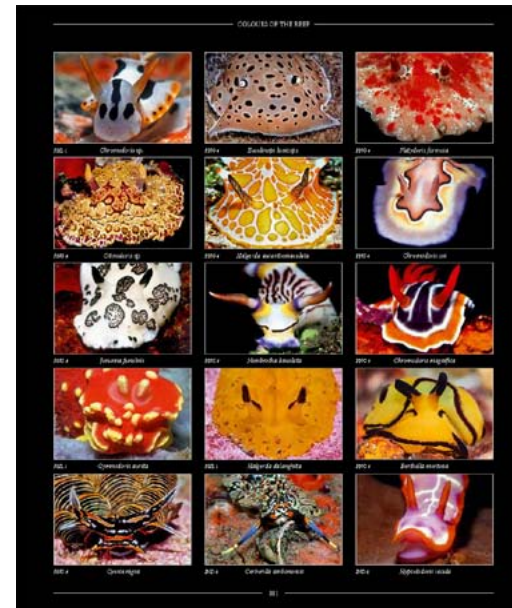
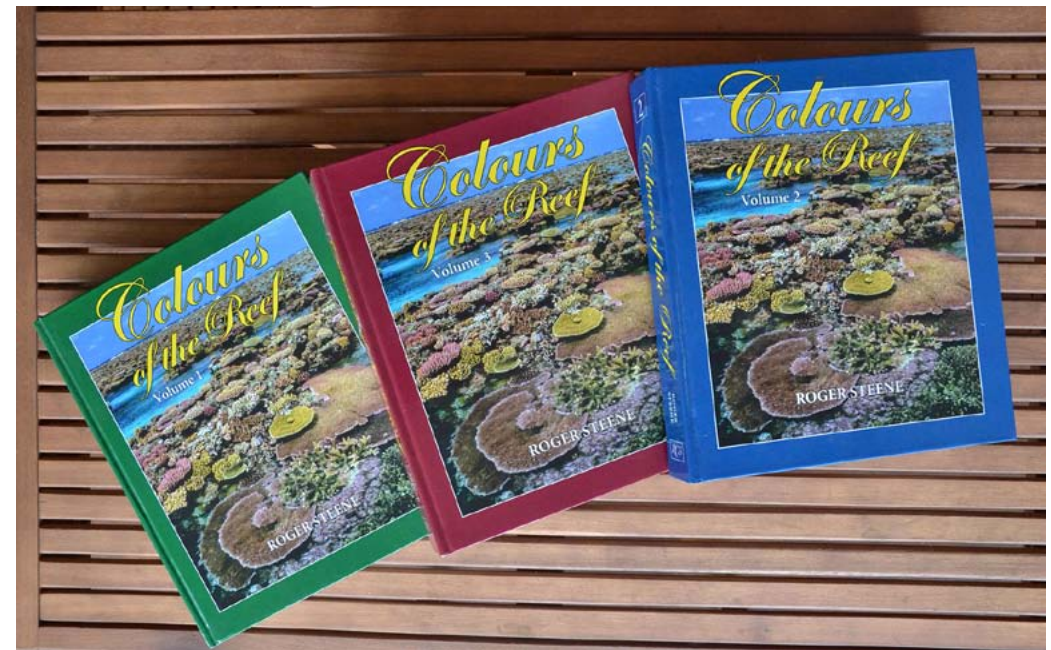
The vast majority of images presented come from Roger's personal archive of over 100,000 slides spanning a half century of effort. However, for Roger the subject matter and quality of an image takes priority over any personal concerns and 314 of the pictures used were taken by friends and colleagues who had an

image of something he didn't have or one he considered to be better than his own.

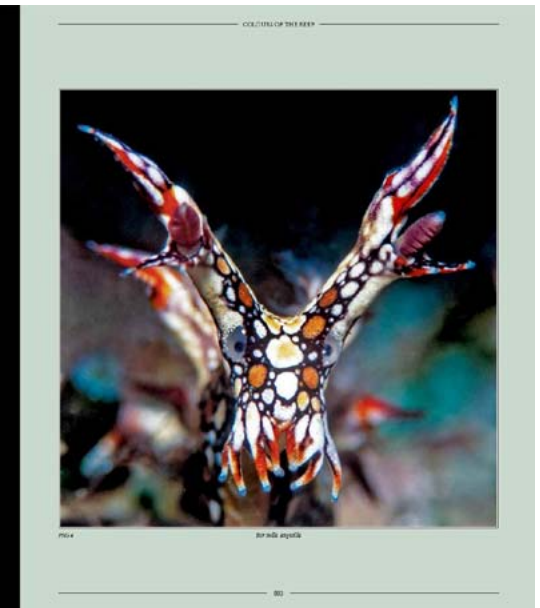
Over the years a dozen books of Roger's work have been published by various commercial publishers but like most photographers he found the care, quality and handling of his work in the commercial world left much to be desired and like most he dreamed of a book over which he would have control over its design and printing. Unlike all but a rare few, he decided to produce a magnum opus and take on the major risk of publishing it himself.

Being a committed Luddite intending to have as little to do with computers and the internet as possible was also not a small obstacle. It was solved through an immense effort by a friend and fellow nature photographer, Mike McCoy who had the computer skills as well as the near supernatural forbearance to scan the thousands of slides and work closely with Roger almost daily for two years to turn his photos and ideas into this monumental work.

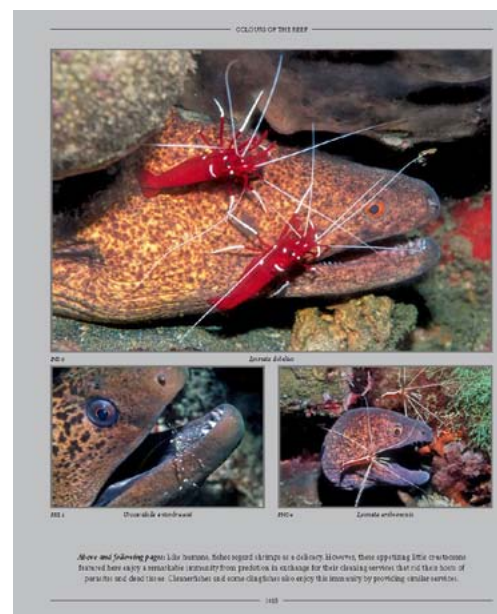
This effort included combining multiple scans of many slides to capture the full shadow and highlight details, trialling and tweaking numerous design ideas as well as repeated proofing to get the best colour possible out of the CMYK printing process. The result speaks



for itself. While not always perfect, within the limits of CMYK printing you won't see better and rarely



such consistent excellence. This is especially notable with the notoriously problematic blues some of which



Roger Steene ready for 'work'.

that even after years of diving you will have never seen. This includes new species, strange organisms in places we tend to overlook or choose not to dive, rare creatures in remote places and special behaviour or events which only rarely occur.

Colours of the Reef was printed in a limited edition of only a thousand copies and has only two small distributors. True to his nature Roger has no interest in distribution, marketing or promotion so it remains a sleeper which few people even know exists. However, if you are a book lover with an interest in nature, coral reef life or underwater photography this should be a must have. Not only

is it unique and superbly well done, it also seems unlikely to be reprinted, superseded or even approximated by something similar anytime soon. It thus looks almost certainly destined to in time become a rare and valuable collector's item.

It is available in Australia through Ocean Ark Alliance for AUD \$399 which includes \$59 P&H charges. They have created an extensive web page for it at <http://www.rogersteene.com/>

In the US it is available from

New World Publications for US \$320 + \$30 shipping.

Both Mike McCoy and I have been pestering Roger to release an e-book edition to give it the availability it deserves but our chance of success at this point looks about like that of getting a vegan to try a Big Mac.

Walter Starck
www.goldendolphin.com

www.fishid.com/colours.html

www.amazon.com/gp/product/0646909703?redirect=true&ref_=cm_cr_ryp_prd_ttl_sol_0

www.rogersteene.com

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My Shot

On a recent trip to Lembah, I spared no opportunity to shoot. Whenever there was no night dive scheduled by boat, we would grab a tank and explore the house reef at the resort. I had been trying to refine the reverse ring macro (RRM) technique. This was perfect for house reef, as I would not be holding up the dive guides. Although it is a primitive style of macro, Imran Ahmad first showed underwater photographers of its unique bokeh powers. A lot of mystery lies behind RRM and how the optics work in order to achieve quality results. The minimal working distance and lack of aperture control is a challenge to say the least. My previous attempts left me frustrated and chewing through my air before seeing anything in focus. The house reef left me eager to refine it as success was growing with each attempt.

Inevitably the final night approached and it was going to be the last go. I did not hesitate for the usual RRM kit. I knew my battery was low from shooting that day but having 2 out of 5 bars left, I felt confident that it would last me through the dive. Keeping everything off to conserve the camera life, I found my first subject and set up the composition. When the shot was composed, I pressed the shutter and nothing happened. Having just spent so long on a cautious approach, I was not expecting any malfunctions

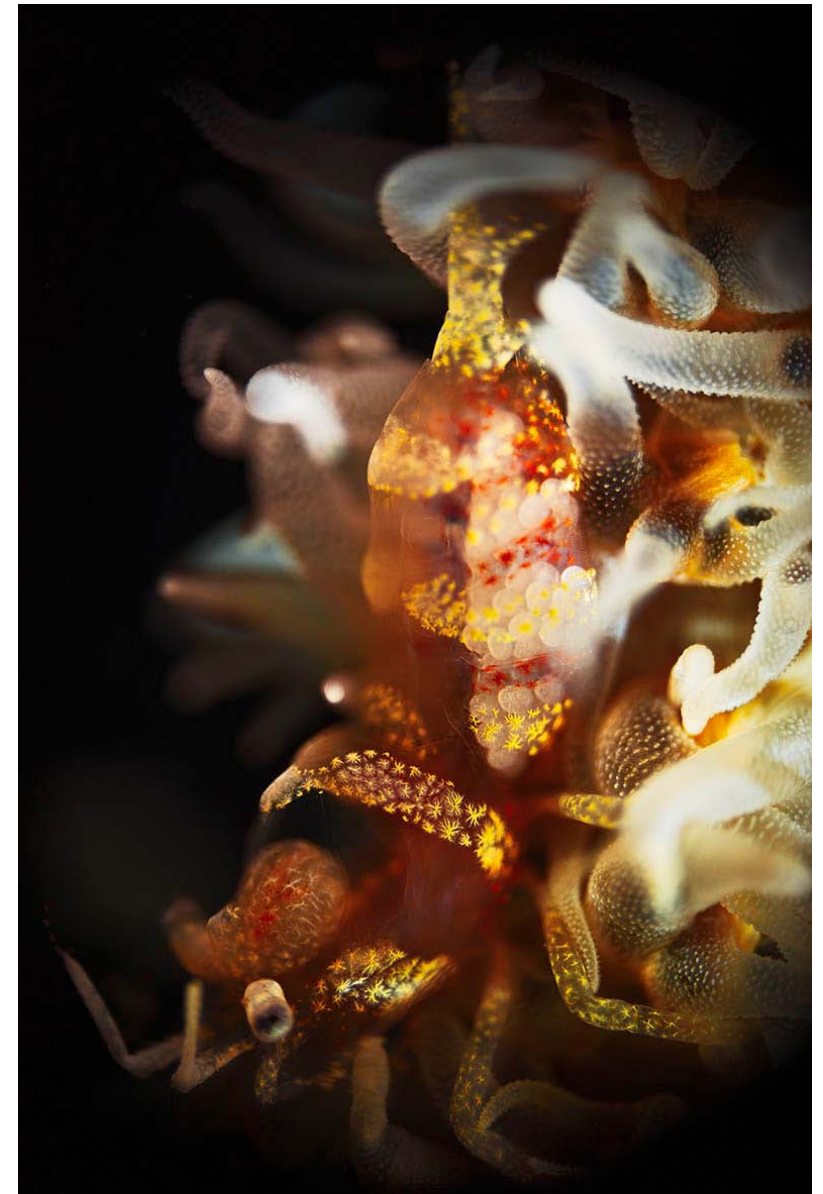
– there was a thorough pre-dive check as normal. I looked through the viewfinder to find the “no battery” icon blinking back at me. “How foolish!” We ascended from a shallow depth and saw the resort nearby.

I hesitated, thinking if it was worth it to quickly go back for a new battery. Since it was our last opportunity, I had no choice. My buddy waited and in no time I was back and descending, after many apologies of course...

It was going to be a brief one so I found a suitable sized subject for my fixed level of magnification. It was not ideal – an Ankara's whip coral shrimp surrounded by more coral below. I had no choice but to hover. Being stubborn with my lighting, I set up my snoot for a normal exposure on the right and a Glow Dome diffuser on the left, for some fill light. This did not make things easier. My tank ran low as I began shooting a shrimp with eggs. It was cooperating but that did not make things any easier and the dive ended shortly after.

None of the shots had the eyes in proper focus. Quite bitter about the affair I did not bother reviewing until the following day. However a closer look showed the eggs, being nurtured by the shrimp, provided a unique focal point. As unorthodox as the technique itself was this composition. It grew on me on account of its originality. It left eager to return to Thailand to further experiment with RRM and make it my own.

Tony Myshlyayev
www.tonymyshlyayev.com



Ankaras Whip Coral Shrimp (Pontonides ankeri) with eggs and night pattern. Nikon D700 + 105mm/50mm (RRM) with Subal housing. 2 x Inon Z240 - Glow dome diffuser on left & LSD Retra snoot on right 1/320 – f/5.6 - ISO 200

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

Australasian snapper *Pagrus auratus* (or *Chrysophrys auratus*) is perhaps the most popular fish among the fishermen and spearfishermen in New Zealand. It is a commercially important species, both for the commercial and recreational industries. The result is in the coastal areas it is more-or-less fished out. Also the fish are very shy and keep the distance from divers. One of the few places where even big snappers can be met and photographed underwater is the Goat Island marine reserve in Leigh, a bit more than an hour of driving from Auckland. Even though the fish are plentiful there, they either move too much, or keep the distance, or try to touch (read taste) the port of the camera. None of these situations help making pictures.

There are exceptions, however. In winter a couple of years ago I went for my usual shore dive in the reserve. Focused on taking pictures of small critters I entered the water. I spent about a quarter of an hour searching for anemones and nudibranchs, ignoring the fish swimming around. At some point I realized one fish was different. A big snapper was not moving much, it was just watching me. I turned my face up toward it. It started slowly swimming away. I

ignored it and turned my face back to the seabed. The snapper returned. I looked at it, it started to leave slowly again. After a couple of rounds of this behaviour I thought perhaps it wanted me to follow it. I gave up photographing macro subjects and followed the snapper through the kelp.

From time to time I stopped to photograph a small fish. The snapper stopped and waited. But never for long. If it “thought” it was waiting too long, it simply chased the fish away. After a while we got to open sandy bottom with no kelp around.

The snapper turned its face to me and waited using its pectoral fins to stay on one place. It was in perfect distance for my 60mm lens. I slowly pointed my camera to it and took a picture. Surprisingly, the fish did not move. I checked the histograms, adjusted the setting and took a picture again. The snapper was still there. I took another picture. And another. Then I tried a picture of its head from a side. Then another one. Landscape. Portrait. The fish was holding. I felt sorry for its eyes, they got exposed to so much light from my strobes.

When we both had enough the



Nikon D300 in a Sea&Sea housing with 60mm lens and 2 x Ikelite Substrobe Ai. Camera settings: manual mode, F/11.0, 1/125 s, ISO 200.

snapper turned around ... and stayed on the place. So I took a picture of its tail as well. After that I started to swim back to the shore. Now the fish was following me. It stayed with me the whole way to the beach and left only when I removed my fins and stood on the bottom.

I visited the reserve many times since that day, saw plenty of snapper, but has never had such a good photo session with one fish again.

Daniel Poloha
www.poloha.co.nz

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be the next Parting Shot.**
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