

Underwater Photography

May/June 2015
Issue 84

The magazine that doesn't
have to say anything here





Pelagian Wakatobi's luxury dive yacht

Resort or liveaboard? At Wakatobi, guests can enjoy the best of both by adding a cruise aboard Pelagian to their resort stay. This luxuriously appointed 36-meter private yacht carries a maximum of ten guests, and ventures farther afield in the Wakatobi archipelago and southern shore of Buton Island. Five staterooms, each with separate shower rooms, offer ample private space; a dedicated chef provides fine dining; and a one-to-one staff-to-guest ration ensures the utmost in service and personalized dive experiences.



"The Pelagian liveaboard was over the top! Love the 70+ minute dives, the briefings and extra presentations. The dive guides are very knowledgeable and found interesting and rare sea life. Everyone worked very hard to make our experience perfect."

Frank and Barbara Maloit



www.wakatobi.com

Contents

- 4 Editorial
- 5 News Travel & Events
- 15 New Products



- 28 Nauticam CMC macro lens
by Phil Rudin



- 33 Saga Dive Fibre Ring Flash
by Jack Connick



- 36 Leak Sentinel
by Ron Lucas



- 39 Canon G7X mini review
by Alex Tattersall



- 42 Thresher shark birth
by Attila Kaszo



Cover shot by
Alex Tattersall

Underwater Photography

A web magazine Uwp84 May/June 2015

- 45 Giant Australian Cuttlefish
by Attila Kaszo
- 59 Reefs & Rebreathers
by Karen Stearns



- 49 Glorious Cuba
by Erin O'Neill



- 64 SouthWest Ramblings 13
by Mark Webster



- 54 Mergui Mysteries
by Chris Mitchell



- 70 Parting Shot
by Dan Bolt

Underwater Photography 2001 - 2015 ©
PR Productions
Publisher/Editor Peter Rowlands
www.pr-productions.co.uk
peter@uwpmag.com

Editorial

Retail

When I was in u/w photo retail from the mid 70's to 90's it was a different world.

In the early days of my era communications were nowhere near as quick as today; faxes were only just starting to replace written letters, envelopes and stamps. My customer's phone enquiries were nearly all from the UK and usually resulted in posting out a printed catalogue or a series of brochures for the customer to study at their leisure.

It all sounds so quaint now.

The market was so small that manufacturers dealt directly with specialist retailers like myself and there was no financial room nor business logic in having a distributor because there were so few retailers. In addition the manufacturers only communicated with these specialist retailers so they were the font of all knowledge about that particular manufacturer's products and their plans for new models.

The result was that customers came to such retailers for help, advice and specialist knowledge.

Nowadays it is totally different; knowledge, opinion and gossip are all available worldwide at the scroll of a

mouse, day or night. Manufacturers need to let the world know what they're working on to steal a march on their competitors so they let everyone know and the customer, with more time and motivation to surf, can often be more up to date than a retailer.

In addition the advent of online retail has proved to be a real threat to established, premises based, retailers whose overheads are eye watering by comparison and add to that the need to create and maintain a website and you have a whole new way of doing business.

A recent trend that I have noticed is that most major retailers worldwide now have to have a comprehensive library of information on their sites by way of tutorials or knowledge bases which, if collated, would end up being a most comprehensive book on u/w photography and that all costs.

And so it still comes down to knowledge and our long established retailers are, by and large, still more knowledgeable and have far more experience of a wide range of equipment than an individual could ever have. As a result they have a definite value in the purchasing process.

I know it's tempting to find the lowest price but sometimes value for money counts for a lot in u/w photography retail.

Backgrounds are the new foreground

I've said it before but u/w photography (and the retail trade) loves nothing more than a trend; top, back and underlighting, snoots, supermacro, fashion, filters and fluorescence to name but a few.

The video world is the same with a big one recently being 'shallow depth of field' which produces a 'film like' effect and is helped by using video cameras with larger sensors.

This trend has found its way into still images; yet for decades we were all desperate for AS MUCH depth of field as possible; especially for macro shots. Now, it seems, we want no more of it.

"Bokeh" has become the word to fool others into thinking you know what you're talking about. Terms like "That bokeh is beautiful" and "He/she has used bokeh so well" have people scurrying away to Googletown only to find out that it's just a fancy word for being out of focus. Quite nice out of focus, I grant you and, if well used, it can create a beautiful sense of isolation which, in a modern post film world, can only enhance what was already unknowingly there.

Discuss.

Great White Basking Sharks

All the signs are here again that, in the UK, the start of the 'wind Rowlands up' season has already begun with a vengeance and the Daily Star were first out of their putrid traps with

Jaws attack: Terror after GIANT SHARKS spotted circling the coast of England

HOLIDAYMAKERS have been placed on alert as huge sharks hit British shores thanks to the recent hot weather.

Now I'm not going to mention the 'journalist' responsible in case she (that narrows it down a bit) slaps me with a legally wet haddock but suffice it to say it was the usual conscience-free scaremongering which, only towards the end, when the reader it was aimed at has long since lost concentration, does she begrudgingly admit that they are in fact harmless basking sharks.

Me thinks it's going to be a long season.

Deep breaths, deep breaths and.....relax.

Peter Rowlands
peter@uwpmag.com

www.uwpmag.com

News, Travel & Events

Focus Grand Cayman

Aug 29-Sept 5 2015



Join us for a week of diving and learning in Grand Cayman at Focus on Underwater Imaging!

Take your underwater imaging to the next level with daily photo & video seminars, personal instruction and the latest in underwater imaging gear from Reef Photo & Video and Nauticam, available to demo in the Caribbean's premier dive destination.

This trip will cater to underwater photographers and videographers alike, with extended bottom times to refine your technique and nail the shot! All while enjoying Cayman's crystal-clear visibility, dramatic walls, turtles, rays, wrecks, and more...

www.uwpmag.com

Every afternoon, two one hour hands on clinics are available that address specific skills. Evening video and slide shows showcase techniques, with presenters sharing shots from Cayman and around the globe, and sharing the tips and tricks behind producing captivating underwater images.

Demo gear is available for participants wanting to try out the latest equipment. Housings and accessories from Nauticam, as well as lighting systems from Inon, Keldan, and FIX NEO will be available to test.

www.reefphoto.com

Dive Alor with Downunderpix 29th Aug to 9 Sept 2015

We will be leading a dive trip to the unique archipelago of Alor, Indonesia on 29th August to 9 September 2015.

This is pristine diving amongst the most beautiful setting. It is a must for divers and underwater photographers.

The cost of \$3215 per person includes return Airfares Bali (Denpasar) to Alor, 1 night in Bali, 9 nights at Alor Divers Resort in a beachside bungalow (twin share), all meals, drinking water, tea, coffee, 2 boat dives per day, unlimited shore reef, tanks, weights and unlimited air refills, laundry service, airport transfers in Alor and entrance to the Alor Marine Park

www.downunderpix.com



Summer of the Siren
10% OFF
From May to September 2015

Siren Fleet
Affordable luxury liveaboard diving
in Asia & the Pacific

Fiji • Palau
Indonesia • Philippines

Specialists in
Underwater Photography

info@sirenfleet.com • www.sirenfleet.com

The advertisement for Siren Fleet features a large image of a white sailboat with blue sails on the water. Below it is a smaller image of a diver's gear on a boat deck. At the bottom is a close-up of a diver's camera housing. The text includes a 10% discount offer, the company name in a stylized font, a list of destinations, and contact information.



Komodo Photo Expedition

Jan 28 - Feb 8, 2017



Check out our special
Whale Sharks trips in
2015



MSY SEAHORSE.COM

Download our online brochure
HERE

Komodo National Park is composed of three major islands (Rinca, Komodo, and Padar) and numerous smaller ones, all of them of volcanic origin. The park is best known for the Komodo “dragon” monitor, the world’s largest living lizard, measuring up to 8’ long!

Upwelling of nutrient-rich water from deeper areas of the archipelago is responsible for the rich reef ecosystem. Because of the strong currents for The variety of marine life that you can see in Komodo rivals any of the world’s best dive destinations. From sharks, mantas, tuna, sunfish, mantas, dolphins and eagle rays to pygmy seahorses, ornate ghost pipefish, clown frogfish, nudibranchs and blue-ringed octopus, all are at home amongst a spectacular range of colorful sponges, sea squirts, tunicates and corals on a variety of walls and reef systems.

The Damai I offers a smaller groups (total of 10-12) large luxurious accommodations in space single or twin-share en-suite cabins all with queen or king-sized beds. The vessel has been designed with three large deck areas for relaxing in both the sun or shade, and for enjoying relaxing massage and spa treatments.

Your trip leader Jack Connick from Optical Ocean Sales will be available to help you with equipment assistance and evening presentations on subjects ranging from strobe positioning to Photoshop Lightroom. Prices: Single Cabins (1-2 spaces available): \$7350 Twin Share Cabins (3-4 spaces available): \$5600.

<http://bit.ly/dive-komodo>

www.opticaloceansales.com

www.uwpmag.com

UPY 2015 Exhibition at Plymouth National Marine Aquarium

The prints from the Underwater Photographer of the Year 2015 competition are now on display for the next 12 months at the National Marine Aquarium, Plymouth.

The opening event was highlighted with a talk by UPY Chairman Alex Mustard “Adventures in Underwater Photography” which was attended by over 140 people on a rainy Friday evening.

Mark Parry, Project Manager of the Community Seagrass Initiative based at the National Marine Aquarium said:

“The National Marine Aquarium is proud to host a collection of finalist images from the Underwater Photographer of the Year awards. With 300,000 visitors a year to the NMA the display demonstrates the talents and hard work of the diving community in raising awareness of the variety of marine life to the wider public. The images have captured the imagination of many of our visitors and helps with our aim of driving marine conservation through engagement.

Marine habitats are currently facing the most rapid loss of any habitats on the planet, this is partially due to awareness of where these

habitats are. With a collection of stunning images from the UPY awards these images are helping the NMA communicate to its visitors what is a threat. The exhibit is an excellent example of passionate coastal communities contributing to the message of marine conservation.

The launch of the UPY exhibit was a huge success with over 140 in attendance to view the images. We received some excellent feedback from the people that left the building feeling inspired to contribute to change in marine conservation after viewing the amazing images. If you feel like you have time to contribute towards a marine conservation project while diving, the NMA is looking for volunteer divers to get involved in the Community Seagrass Initiative, if you like to know more please e-mail

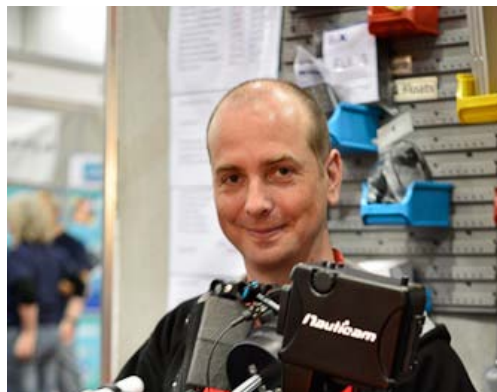
mark.parry@national-aquarium.co.uk

Since the announcement of the UPY results in February the website has had over 32,000 page views and the Yearbook has been downloaded over 2600 times, and the results published all over the world in both print and online media.

www.upylondon.com



Alex Tattersall workshop Philippines 21st April - 2nd May 2016



Popular photo workshop leader, Dr Alex Tattersall is an award winning underwater photographer and the founder of UnderWaterVisions/ Nauticam UK.

Following on from some hugely successful photo workshops, Oonasdivers is providing another in Dumaguete, led by Alex, ideal for moderately experienced UW photographers.

Alongside the exploration of 'technical' areas of photography such as exposures, compositions, and camera settings, the course will give a greater understanding and sensitivity to the behaviour of marine life can enable anyone to take award winning photos.

Atlantis Dumaguete has one of the most spacious camera facilities you will find in any dive resort worldwide and easy access to approx

33 dive sites, most of which are under a 10 minute boat ride.

The archipelago is home to more than 3000 species of fish and 448 species of coral – where else can you combine unbelievable muck-diving with pristine coral reefs, shoals of schooling fish, the odd shark, manta, sea snakes, eagle rays or whale shark? The Philippines offers some of the most vibrant, weird and wonderful both above and below.

The course is open to all who are seriously interested in improving their photography skills in an informal, friendly, non-competitive environment. Please contact Oonasdivers to register your interest. Places are booking up fast!

www.oonasdivers.com



Lembeh with Backscatter Aug 22nd-Sept 2nd, 2015

We're going back to Lembeh in 2015 and we'd love for you to join us!

Lembeh Strait is a name synonymous with "critter" or "muck" diving. Consistently rated among the top dive locations in the world, Lembeh is home to many unique and rare animals. It's not only a macro paradise; there are some equally good wide angle sites nearby.

Lembeh Resort, a spectacular boutique style resort, is situated on Lembeh Island and perched above the beautiful Strait. The property is surrounded by lush tropical gardens and blends perfectly into the landscape.

All guest cottages boast spacious verandahs for perfect views of glorious North Sulawesi sunsets and an intimate connection with nature. Modern amenities including air-conditioning, mini bar,

wifi internet and massage ensure your comfort and relaxation.

Photo Guides:
Jim Decker & Erin Quigley.

Jim is one of the top experts in the world on underwater photo and video equipment and shooting technique.

Erin Quigley is a Adobe ACE certified digital imaging consultant specializing in customized workflows and editing strategies using Adobe Photoshop and Lightroom.

www.backscatter.com



OONAS DIVERS

ESTABLISHED 1985 *Dive Adventures* FOR DIVERS, FROM DIVERS

PHOTOGRAPHY & VIDEOGRAPHY

with John Collins in

Marsa Shagra

9-16 September 2015

Successful in competition and widely published, in magazines, brochures and books, John has a big following of underwater photographers, eager to join him and enhance their photo skills. What better place than Marsa Shagra which benefits from an extensive and diverse house reef with hard and soft corals of offshore quality.

PLACES ARE LIMITED. CONTACT OONASDIVERS TODAY TO REGISTER YOUR INTEREST



egypt
where it all begins



Tel: 01323 648924

Email: info@oonasdivers.com

WWW.OONASDIVERS.COM



Visayas with WWDAS

The Visayas, known as the mecca of diving in the Philippines, offers a wide variety of macro life that will keep you so busy looking for the most incredible sea critters that you won't notice the time pass under the water!

Tiny sea critters hidden in amazing coral reefs such as nudibranch, sea horses or ghost pipefish but also hidden in black sands are frogfish, blue ringed and mimic octopus! Not everything is about tiny



critters! In the Visayas, you will also have the opportunity to dive with big schools of barracudas, trevallies and sardines being hunted by Thresher sharks! As well as snorkel with the majestic whale shark!

www.worldwidediveandsail.com

blue o two photo workshops with Saeed Rashid

blue o two are pleased to offer you exclusive liveaboard photographic workshops hosted by Saeed Rashid. A lecturer at Bournemouth University and popular speaker at UK dive shows, Saeed will guide you through the underwater photography process from start to finish.

Over the course of the liveaboard week, there is plenty of time to learn new skills and the warm, clear waters of the Red Sea provide the perfect environment to practice! You don't even need to own a camera to get involved - you can hire all equipment from blue o two!

12th - 19th June 2015 'In Focus: Red Sea South', M/Y blue Voyager £1199

10th - 17th July 2015 'In Focus: Red Sea North', M/Y blue Horizon £1149

21st - 28th August 2015 'In Focus: Red Sea North', M/Y blue Horizon £1299

2nd - 14th September 2015 'In Focus: Indonesia at Lembeh Resort' £1199

www.blueotwo.com/Specialist-itineraries

Ocean Geographic Cenderawasih Bay and Raja Ampat Expedition on board MSY Seahorse 25 Sep to 6 Oct 2015



To many intrepid scientists and professional underwater photo journalist such as David Doubilet, Alex Mustard, Dr Gerry Allen, Dr Mark Erhman, Michael AW, Raja Ampat is the final frontier, the last remaining coral reefs to be found in pristine condition harboring the world's most prolific marine life.



Copyright © Ocean Geographic

Expedition Platform - the exquisite fine diving & fine dining live-board - MSY Seahorse; Expedition leader is Michael AW - author of Essential Digital Underwater Photography Masterclass. USD 4180 per person twin sharing; deposit is USD 1500.

expeditions@OGSociety.org

Fiji workshop with Joseph Tepper 11th -21st June 2015



On the 11th -21st June 2015, the Siren Fleet is happy to introduce a new underwater photography workshop, specialising in wide-angle photography, hosted by Joseph Tepper in Fiji on board the Fiji Siren.

Joseph Tepper is an award-winning photojournalist, specialising in underwater photography. Whether you want to learn the basics of wide-angle or master advanced techniques, this workshop is just for you!

Whether you want to learn the basics of wide-angle or master advanced techniques, this workshop is just for you! Joe will deliver a number of seminars on different types of underwater photography techniques such as how to create motion in your images as well as giving some post production tips and tricks in Photoshop. He will also spend some time with each guest to help improve particular underwater photography

skills. The colorful Fijian reefs and their large number of schooling pelagics will provide you with many opportunities to practice what has been learned during the classes and seminars, as well as improving your skills on every single dive.

“Built by divers for divers”, the Siren Fleet yachts feature individually air conditioned cabins with en-suite facilities and plenty of space for you to relax and enjoy your time onboard.

www.sirenfleet.com

Your advert could be here for just £50 and will be seen by over 10,000 underwater photographers worldwide. No other publication has such a targeted audience. For more details visit: www.uwpmag.com/?p=advertise

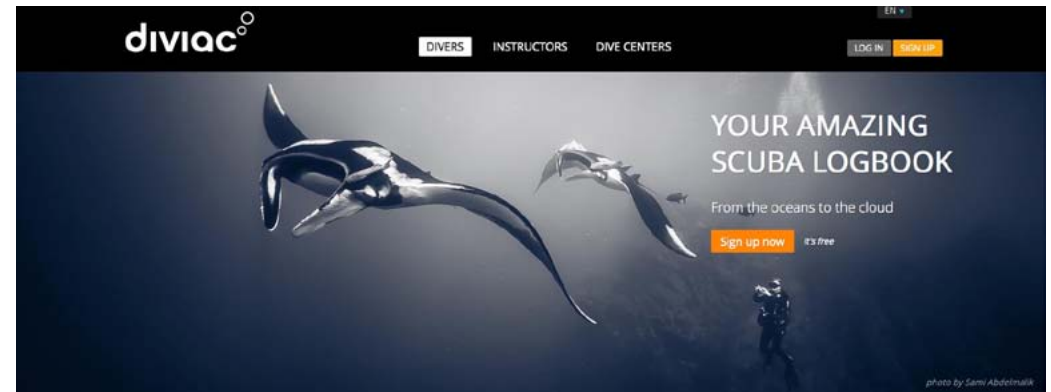
For **\$50**, you could go on a 3-WEEK LONG, **ONCE IN A LIFETIME EXPEDITION** to **Svalbard & Greenland** with the world's foremost **Artists, Scientists, Explorers** to help **Save the Arctic**



The Elysium Artists for the Arctic expedition is looking for its 60th and final team member to help give a strong voice to this critically important region of our planet. Elysium Epic promises to be the most exciting, innovative, and inspirational journey of this decade. You can be part of this **Adventure with Sylvia Earle, David Doubilet, Ernie Brooks, Michael AW, Leandro Blanco, Susan Eaton, Stuart Ireland, Alex Rose, Goran Ehleme, Eric Bettens**, and many more – see ElysiumEpic.org

The Epic lottery on RallyUp begins Friday, May 1st and runs for one month. Each “ticket” costs \$50 and enters you for the chance to win the last space on the Elysium expedition (1st place) or a spot on a 2016 Ocean Geographic expedition to Cuba, Gardens of the Queen (runner up). Money raised through the lottery will be used to purchase carbon credits in an effort to make the expedition carbon neutral.

This spot on the Elysium expedition is valued at \$18,500 and for Cuba is \$3000. If you win one of the spots, your expedition on board is covered with the exception of travel costs to and from the arrival and departure cities, port fees, and sanctuary fees. Don't miss out on this incredible journey for just \$50 – you will be helping to Save the Arctic. Sign up at RallyUp.com - search for ElysiumEpic. Welcome to the Adventure!



Diviac Travel is live!

With more than 10,000 dive operators, thousands of reviews from real divers as well as scuba specific destination information, diviac.travel is the most comprehensive website for scuba divers to find, compare & book their next dive vacation.

Diviac’s founders are on a mission to bring the best of the Web to the scuba diving industry. After having launched diviac.com, one of the world’s most popular cloud-logbook with users from over 135 countries, they have now released their newest platform, diviac.travel, with the simple ambition of becoming the Booking .com of scuba diving.

In the future, the rich information provided by divers in their Diviac logbooks will also be increasingly integrated into Diviac Travel, both as additional content and as ways of creating rich filters.

For example, leveraging other divers’ marine life sightings, users will be able to search for the best location at any month of the year to spot any particular species.

When asked about the new business, Diviac co-founder and CEO Joel Perrenoud stated: “We are working hard to build the online travel platform that divers deserve. A place where information is transparent, decisions are based on reliable user-generated content such as ratings and reviews, photos and marine life sightings, and a place where bookings can be made live.

The launch of diviac.travel today is a first step in this direction and much more should be expected in the future.”

www.diviac.com

Reef Check

The Siren Fleet and Reef Check are working together this July to give you the opportunity to learn a little bit more about reef conservation. Whilst on-board the Philippine Siren, you will have the opportunity to participate in several courses and presentations by Dr. Gregor Hodgson from Reef Check.

Reef Check was founded in 1997 as an international non-profit foundation that monitors reefs in over 90 countries, mainly tropical coral reefs. Their protocol is the largest coral reef monitoring program and is used by many national governments as their primary coral reef monitoring tool. The Reef Check Mission is to “empower local people to save their reefs through research, education and active conservation”.

Dr. Gregor Hodgson is a coral reef ecologist and the founder of the Reef Check Foundation. Greg holds a Bachelor’s Degree in Marine Biology, specialising in Coral Reef Ecology and Integral Coastal Management, and attained his doctorate studying the impacts of logging on reefs in El Nido, Palawan. the courses and guests who prefer to simply dive the reefs.

The itinerary of the 6 night trip will include Cabilao, Balicasag, Dauin, Apo Island and Pescador Island.



“Built by divers for divers”, the Siren Fleet yachts feature individually air conditioned cabins with en-suite facilities and plenty of space for you to relax and enjoy your time onboard. Siren Fleet offers 4 Guided Dives per day in small groups with free scuba equipment rental and Nitrox. All this surrounded by their professional, experienced and friendly crew.

Book today and receive a 10% discount! Have you already been onboard the Siren Fleet? Quote Summer of Sirens when you contact us and receive something extra special!

www.sirenfleet.com



WETPIXEL

THE SOURCE
www.wetpixel.com



The Summer of Sirens

Komodo – Indonesia ,
 Visayas – Philippines , Palau and
 Fiji - Experience these incredible
 destinations on board the Siren Fleet.
 “Built by divers for divers”, the
 Siren Fleet offers affordable luxury
 liveaboards in Indonesia, Philippines,
 Palau and Fiji all year round with
 a variety of itineraries from 6-14
 nights. All this surrounded by their
 professional, experienced and friendly
 crew. All vessels feature a/c cabins
 with en-suite facilities and plenty of
 space for you to relax and enjoy your
 time onboard.

Each yacht has a dedicated
 camera set-up and charging station
 with plenty of additional storage for

all your extra lenses, strobes and
 batteries. It is thoughtful touches such
 as these that make Siren Fleet the
 best choice for both professional and
 amateur photographers.

The Siren Fleet offers 4 Guided
 Dives/Day in small groups, free
 essential scuba equipment rental and
 free Nitrox.

Dive Fiji, Palau, Philippines or
 Indonesia with the Siren Fleet from
 May to September and receive a 10%
 discount on all destinations!

Have you already been onboard
 the Siren Fleet? Quote Summer of
 Sirens when you contact us and
 receive something extra special!

<http://sirenfleet.com/liveboard-offers.html>

www.uwpmag.com

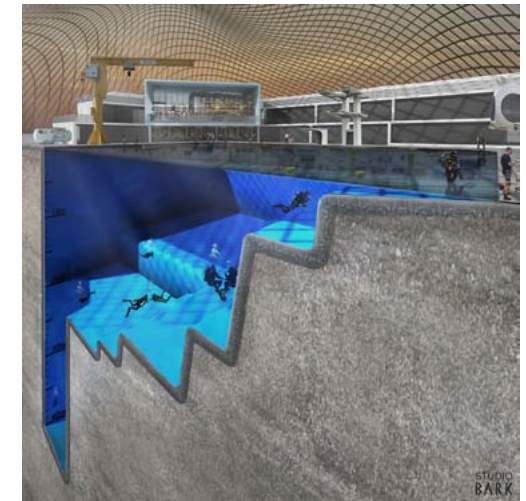
Proposed 50m Blue Abyss pool, UK

John Vickers, a former IT
 consultant from London, revealed his
 plans for the Blue Abyss on Facebook
 earlier this month.

The pool is set out to be
 50m deep and 40m wide, holding
 22,000m³ of water - five times the
 capacity of Y-40 which opened near
 Padua, Italy last year.

‘We compliment them [existing
 indoor diving pools] by adding
 the layer of training not currently
 available to the diving community;
 namely indoor, 360+ days a year, in a
 totally controllable environment.’

Next to recreational divers,
 the pool is designed to be a training
 facility for tech and freedivers, police
 and fire service rescue teams and
 commercial dive operators. While
 both the European (ESA) as well as
 the North American Space Agency
 (NASA) have confirmed the unmet
 need for such a facility, researchers
 and students of human physiology
 programmes and underwater ROV
 (Remotely Operated Vehicle)
 developers are also believed to benefit
 from the controlled underwater
 environment. Features of the £25
 million project include a permanently
 installed loading crane to heave



vehicles and other obstacles in and
 out of the water to create a range of
 underwater scenarios.

Water temperature and light
 will be regulated manually and high-
 definition cameras installed to record
 all training sessions.

With a hyperbaric chamber on
 site, class rooms and a hotel, the
 vision of the Blue Abyss will be
 the world’s most comprehensive
 underwater training facility if the
 project goes ahead.

The team aims to realise the
 project by October 2016, given that
 the funding comes through and the
 ground survey delivers positive
 results.

www.facebook.com/BlueAbyssPool



Jacques de Vos South Africa

At the end of 2007 while enjoying 'days off' from his position as an engineer in the oilfield services, Jacques de Vos was inspired by his scuba instructor (also a talented underwater photographer) to purchase his first underwater compact camera and Ikelite housing. Since then he has qualified as a SCUBA instructor and Commercial Diver, and upgraded through numerous camera systems. He now shoots both stills and video and has developed the skill set to do all of this while freediving.

 *Follow your vision...*

Find an Authorized Ikelite Dealer at Ikelite.com.

New Products

2015 FIX Neo Photo/Video Lights



The Scuba industry's most popular photo and video lights, FIX Neo, has announced the release and immediate shipping of 5 new photo and video lights.

Building on the success of the previous FIX Neo models; the newly minted Neos feature the signature blue LED display panel, 100° beam angle, sealed charging with removable battery, swappable light heads, and remote control ability.

The new 2015 FIX Neo models include: FIX Neo 1500 DX SWR - Offering Spot-Wide-Red light modes in one lighting package. The 1500 DX SWR forever ends the photographer's dilemma about which lights to choose for their rig. This single light delivers the performance

www.uwpmag.com

for wide-angle, macro, and red light for a stealthy focus light at night. FIX Neo 3000 DX - The most powerful Neo yet at 3000 lumens. The perfect video solution. FIX Neo 1000 DX SW - At 1000 lumens this Neo is the perfect balance of power and price. FIX Neo Mini 1000 WR - Focus light featuring Wide and Red beams in a tiny package. FIX Neo Mini 1000 SW - Spot and Wide beams for micro camera solutions.

Whatever your ambition, the FIX Neo line brings together all the features that photo and video shooters have asked for.

Stop making compromises and just make memories.

www.fixneo.com

Cyana Olympus EM10



Custom designed for the OLYMPUS OM-D EM10, the Cyana OM-10 is extremely lightweight yet big on features. Waterproof up to a depth of 60 metres, you can clearly see what you're photographing underwater with Live View on the LCD.

Standard port for 14-42mm lens has 67mm thread, so you can use various lenses without any adapter. You can use wet type 67mm close up lenses or INON UWL-H100 28M67 Type2 wide conversion lens.

Front cover and back cover, locked by three buckles. and the port is screw type and changeable.

Two optical fiber connectors for TTL flash control with Olympus dedicated underwater strobes.

Large buttons and dials for easy operation underwater.

www.uwdigitalcamera.com

ACQUAPAZZA
GripBase

GripM+BaseGM
(General purpose)

M10 Ball Joint

(Short / Medium)

<http://acquapazza.jp/en>

Nauticam
innovation underwater



NA-7DMKII

Housing

For Canon 7D MarkII Camera



www.nauticam.cn

蓝天海

Trade in your old focus light for a \$200 credit on a FIX Neo 1200 DX SW



LED technology has come a long way in the last few years, and let's face it, lithium batteries don't last forever. Have you found that your old focus light just won't run as long as it used to? Send us your old, tired lights and we'll hook you up with a \$200 credit for the awesome FIX Neo 1200 DX SW.

Lights Eligible for Replacement Credit: * Light & Motion Sola * Light & Motion Sunray Mod * Fisheye HG or LED series

www.reefphoto.com

i-Pix GP-H3 Housing for GoPro 3/3+/4



OCEAN LEISURE CAMERAS

GoPro 4 compatible diving housing for GoPro with external battery. This aluminium housing comes with a unique external battery extender that can boost the GoPro battery life up to 3h from the normal 60 minutes. This housing is depth rated to 150m and works with GoPro 3, 3+ and four with the LCD screen attached.

- Aluminium construction
- Depth rated to 150m
- External battery holder with 3400mAh Li-ion battery
- Can also be used without the battery extender-

www.oceanleisurecameras.com



ACQUAPAZZA

NEW TYPE



APSO-A7

Underwater Housing for the Sony ILCE-a7R/a7/a7s



<http://acquapazza.jp/en>



Issue 84/16

www.uwpmag.com

OPTICAL OCEAN SALES
UNDERWATER PHOTOGRAPHY PRODUCTS
Visit us Online at: OpticalOceanSales.com



**Realize
Your Vision**

Dealers for Nauticam, Sea & Sea,
Aquatica, Gates, Seacam, Olympus,
Ikelite, Fix, Zen, Light & Motion, 10Bar,
Big Blue, Keldan, i-Torch/i-DAS,
Seahorse, Fantasea Line, and more.
We dive what we sell!

Orders@OpticalOceanSales.com
+1 206-284-1142 or 800-359-1295

Nauticam NA-A7II for Sony Sony A7II

Nauticam is pleased to announce the NA-A7II, the newest entry in its mid-range series of fine underwater camera housings.

The NA-A7II looks quite similar to the NA-A7, and the housings are approximately the same dimensions. As those photographers who have experienced the NA-A7 housing have discovered, that housing is a stunning blend of aesthetics, ergonomics and functionality and the A7II housing only reinforces this mission.

The NA-A7II ships with built-in, yet adjustable handles, featuring Nauticam's famous contoured rubberized grip. The "AF/MF/AEL" button is given special treatment on the right side of the housing with a direct access lever immediately reachable by the right thumb. This allows the button to be programmed for AF-ON meaning "thumb focus" fans can easily have perfect functionality.

The shutter release can be accessed at the same time, offering extremely quick focus-to-shoot finger action. Like many Nauticam housings, the play button is brought up to the left thumb, and the three command



dials (think shutter speed, aperture and exposure compensation) can be adjusted quickly with minimal reach.

The ISO button is within short reach of the right thumb, important for video shooters. Speaking of video, the record button is on the top right, thus eliminating camera shake during video start/stop.

The Function Menu button opens up common camera settings to a quick menu, and this button is a short reach with the right thumb.

The housing features a switch to change between the EVF and the LCD providing rapid and secure transition between viewing modes, and supports Nauticam's well renowned viewfinders.

www.nauticamusa.com



Nauticam NA-RX100 III Sony RX100 III



"Simply Awesome"

With 20mp, this camera and housing package offers the complete control and image quality of an SLR system with the size and convenience of a compact system. 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. Full 1080P 50 mbps HD video performance and excellent wet lens options make for one powerful, compact package.

www.reefphoto.com

CRAZY ABOUT UNDERWATER PHOTOGRAPHY?



SO ARE WE...

**LIKE DIVING?
LIKE PHOTOGRAPHY?
YOU'LL LOVE US**



London's premier underwater camera store

Ocean Leisure Cameras is the one-stop central London underwater photography specialist store.

Address:
11-14 Northumberland Ave
London, WC2N 5AQ
Underground: Embankment

Contact:
Phone: 020 7930 5051
info@oceanleisurecameras.com
www.oceanleisurecameras.com

Open 7 days a week

CAMERAS

HOUSINGS

LIGHTS

LENSES

KNOWLEDGE

Recsea CWOM-TG3/4 Olympus housing



Recsea has announced the release of its CWOM-TG3/4 housing for the Olympus TG-3/4 compact camera. The camera is rated to be waterproof to 15m/50ft without a housing, but with the Recsea housing, this camera is waterproof to 60m/197ft.

The new housing is compact and durable, constructed of lightweight acrylic. It has a convenient rear dial mode and push button functions, along with RECSEA dial locking system for easier opening and closing.

www.recsea.com

Hugyfot HFN-D810 for Nikon D810



FOTOGRAFIT

The HFN-D810 housing is machined out of a solid block AlMgSi1 high strength aluminum. Each housing is sanded by hand, sandblasted and finished with a hard anodisation and Teflon coating. The housing is pressure rated to 100m.

All Nikon D810 camera controls can be accessed (on/off, shutter release, shutter speed, aperture, program dial, main dial, push buttons, lens release).

Technical data for the D810:

Dimensions (W x H x D): 220 x 230 x 130 mm

Weight (without camera): 2,7 Kg

Color (anodized): black

Pressure rated: 100m

www.fotografit.eu

www.uwpmag.com



Scuba Symphony Malaysia
Free Shipping Worldwide* !!!!!
Scuba Gear, Strobes, Camera Housing, etc
(Almost) All brands available!
www.scubasympphony.com

*Min. order USD \$ 99.00, terms and conditions apply

Ikelite Panasonic LUMIX TS30 Camera Kit



This waterproof camera and housing kit is a win-win-win for dive, snorkel, and surf photography! This kit provides everything you need to get wet, including the famous UR/PRO filter which is perfect for adding color to your photos and video in sunny, shallow conditions!

Ikelite products are designed, built and tested in the USA. We use locally sourced, top-grade materials. Our housings are built by hand and individually tested for fit, function and waterproof integrity. We back our products with over 50 years of experience and service within the dive industry.

www.ikelite.com

FIXneo
LIGHT DX

Now on
SALE!

FIXNEO 3000 DX

A massive 3000 lumens in your palm



FIXNEO 1500 DX SWR

Wide, spot and red light all-in-one



FIXNEO 1000 DX SW

Switchable wide and spot by thumb only



FixNeoDxLightSystem



Fisheye

www.fixneo.com



www.scubasympphony.com

FLIP3.1

COLOR CORRECTION SYSTEM FOR GOPRO HERO3 & HERO3+



BACKSCATTER
UNDERWATER VIDEO & PHOTO

Free Lifetime Tech Support
Worldwide Shipping

USA West HQ +1 831-645-1082
USA East +1 603-432-1997
Backscatter_West Backscatter_East

FLIPFILTERS.COM

Ikelite Olympus OM-D E-M5 Mark II



It's everything you love about an Ikelite DSLR Housing, shrunk down into a perfectly-sized package for travel. You can impress friends with your photo gear or your photos—the only housing with built-in TTL strobe exposure helps you do both!

Other housings simply waterproof your camera. An Ikelite TTL housing improves your photos. TTL or “Through-The-Lens” flash metering means the camera controls flash duration to properly expose an image. Our built-in proprietary circuitry tells your camera that a TTL external flash is attached, allowing the camera to adjust exposure more accurately than with slave fiber optic TTL strobes.

Fiber optic slave flash units require the camera's flash to fire every time. Firing the camera's flash creates a shutter lag as you wait for the it to recycle in between shots, drains your

camera's battery life, and builds up heat inside of the housing. Ikelite electronics translate direct electrical impulses from your camera, triggering your strobe and precisely adjusting its power without the need to fire the camera's flash. This eliminates the slave TTL strobe issues of signal interference, inconsistent exposure due to weak fiber optic transmission and false triggering caused by light rays bouncing off the water's surface or your buddy's flash going off.

Ports are available with either optical grade acrylic dome for wide angle zoom photography, or a glass flat front to focus on macro close-up. Unique interchangeable zoom sleeves are super lightweight and allow the camera to be slide into the housing with the lens attached for easy installation.

www.ikelite.com



Nauticam NA-GH4 Panasonic GH4



**“Stunning 4K Video,
Compact & Affordable”**

Nauticam has crafted the ultimate housing for one of the industry's most exciting new mirrorless cameras: The Panasonic Lumix DMC-GH4. The NA-GH4 is designed with the video shooter in mind, featuring 15° angled ergonomic handles, the most user friendly control set in the business and a host of features now standard. Signature Nauticam Port Locking Lever, effortless but secure housing latch, integrated vacuum check and leak detection system. 4K is ready - are you?

www.reefphoto.com



ACQUAPAZZA

High definition in the palm of your hand.

APSO-RX100M3
Underwater Camera Housing for SONY RX100 III



<http://acquapazza.jp/en>

4 new Sealife lights



The Sea Dragon 2500, Sea Dragon 2100 Dual Beam, Sea Dragon Mini 650 Flood & Sea Dragon Mini 650 Spot. These are our most powerful and advanced lights yet - featuring the compact body, high power with long burn time, and versatility of the existing Sea Dragon line, the four latest Sea Dragon lights will also offer superior brightness,



wider beam angles, and cutting edge LED technology.

The revolutionary new lighting caters to underwater adventurers of all kinds. Underwater photographers and videographers using a wide camera lens (like those on the SeaLife Micro HD or GoPro) will be able to illuminate an entire frame.

Divers exploring wrecks and reefs can reveal their surroundings in stunning full color and vibrant detail, day or night.

www.sealife-cameras.com

Isotta CC-G7X for the Canon G7X



The Isotta CC-G7X for the Canon G7X is an outstanding example of the next generation of high-end housings for compact cameras. With excellent fit and finish, rugged construction, and meticulous attention



to detail, all in a user friendly sized package, this is a beautifully executed housing. Ergonomic command dials make this housing a joy to use.

www.isotecnic.it

FROM POINT & SHOOT TO PROFESSIONAL



BACKSCATTER
UNDERWATER VIDEO & PHOTO

We Dive, Shoot and Service Everything We Sell
Free Lifetime Tech Support!

USA West HQ
+1 831-645-1082

[S Backscatter_West](https://www.backscatter.com)

USA East
+1 603-432-1997

[S Backscatter_East](https://www.backscatter.com)

BACKSCATTER.COM

THE OLYMPUS TG-4 AMAZING SUPER MACRO



Now Shooting In RAW
PREORDER TODAY!

BACKSCATTER
UNDERWATER VIDEO & PHOTO

USA West HQ
+1 831-645-1082

[Backscatter_West](#)

USA East
+1 603-432-1997

[Backscatter_East](#)

BACKSCATTER.COM

UK Aqualite Dive and Photo Video lights



Adjustable Power Dial

Dial In The Perfect Amount Of Light

- Smooth wide angle beam
- Ideal for photo & video
- Works well with wide angle camera lenses & GoPro®

Power	Lumens	Burn Time*
100%	1200	1.1 Hr
60%	680	2.2 Hr
40%	500	3.3 Hr
25%	300	12.0 Hr

*Measured in water

Included Photo Mounts

Ball Arm Adapter
Integrates with ball joint style photo arms

Swivel Mount
For use with UKPro Flex Grip & GoPro® style mounts

Fixed Mount
For use with UKPro Flex Grip & GoPro® style mounts

Interchangeable Lamp Heads

Made From HYDRALUM™
UK's corrosion resistant alloy

- 100° Wide Beam (included)
- 20° Spot Beam (accessory)
- 90° UV-395 (accessory)

UK have replaced the original Aqualite with the entry level Aqualite-S and the higher spec'ed Aqualite-PRO. Both models are available as a dive light with a 20° pencil beam or as a photo-video light with a diffuse beam of 90° (-S) and 100° (-PRO). The Aqualite-S models have three power settings via a push button switch on the rear, a brightness of 500 lumens and are depth rating to 100mts. The Aqualite-PRO models have four power settings via a rotary rear switch and a depth

rating of 150mts. The PRO dive light has a brightness of 750 lumens and the PRO photo-video light is a massive 1200 lumens! All lamp heads are interchangeable and all lights are compatible with the Aqualite 90 395-UltraViolet head, ideal for revealing the fluorescent colours of many corals and anemones!

www.sea-sea.net

YS-03

Underwater Strobe

**SIMPLE DS-TTL
CONTROL ONLY**

**TURN ON AND SHOOT
IT'S AS EASY AS THAT!**



PACKAGE AVAILABLE

CAMERA-HOUSING NOT INCLUDED

WWW.SEA-SEA.COM

SEA&SEA
THE UNDERWATER IMAGING COMPANY

KELDAN⁺

Advanced Lighting Technology

NEW

Keldan Video 4X

6000 lumen
5000 kelvin
5 power settings
Rated to 200 meters
110° beam in water



For Professionals Who Know The Difference

www.keldanlights.com

i-Das Color O-rings for arms



Personalize your arms with colored O-rings. You'll never again take the wrong pair from the boat! Green, Yellow, Red. Will fit on all Ultralight, Nauticam and i-Das armsystems. (2 O-rings in a pack).

www.i-divesite.com

Nauticam NA-EM5II for Olympus OM-D E-M5 II

Nauticam is pleased to unveil an all aluminum housing for the Olympus OM-D E-M5 II camera, the latest in its award winning line of underwater imaging gear.

Nauticam was the first to release a housing for the original OM-D E-M5 camera, and its innovative designs and meticulous engineering have lead the way in the mirrorless category.

Like all Nauticam housings, particular attention is paid to ergonomics. Buttons and dials are easy to access, with minimal reach required. The Olympus Main and Sub dials are easily accessed by thumb or forefinger with no need to release grip on the housing while adjusting aperture and shutter speed. The important Fn1 and Fn2 buttons are just as easy to reach and can be programmed for a multitude of functions.

A few of the useful settings are AF Lock, One-touch White Balance, Manual Focus, ISO and Exposure Compensation. Switching between LV and the EVF is a snap and a quick press of the Info button can show or hide Olympus' new LV Super Control Panel on the OLED screen for quick access to many critical settings.



The mode dial can easily be turned through the P, A, S, M, Movie mode and some "easy shooting modes".

Controls need to offer a proper "feel" and Nauticam's patented two-stage lever shutter release allows for natural, precise focus and shutter release activation.

Every one of the features on the new NA-EM5 is engineered to the same exacting tolerances of Nauticam's now famous line of DSLR housings. That quality will surely be reflected in every picture taken with this remarkably powerful imaging system.

www.nauticamusa.com

NA-G7X Housing For Canon PowerShot G7X Camera



NA-LX100 Housing For Panasonic Lumix DMC-LX100 Camera

Intova ConneX System

Intova® today unveiled the revolutionary ConneX™ system, a proprietary underwater camera/cable system that delivers live video output and 12volt power input up to 300 feet underwater.

Via a waterproof cable port, the Intova ConneX action camera can be connected to the user's monitor of choice above water. The cable's power supply allows continuous recording without battery limitations.

Designed for immersive environments that demand extended camera operating life and live viewing, ConneX provides never-before-available imaging flexibility for boaters, anglers, commercial operators, explorers, researchers, and more.

Varying ConneX cable lengths provide flexibility in set-up and operations, and can provide video to a wide range of monitors, including many marine electronics displays from major suppliers like Lowrance®, Raymarine®, Garmin® and Simrad®. The cable also provides access to unlimited power for the camera.

12-volt power can be hardwired



to a vessel or vehicle, connected via a cigarette lighter adapter, or supplied by external battery.

The ConneX camera itself features 1080p HD video capability, with selectable live feed outputs in VGA or HD mode.

With a rugged housing rated up to 300 feet of depth, the camera is designed to capture full HD video in any environment.

www.intova.net

www.uwpmag.com



Not a Digital SLR,
not a film SLR,
but with a picture quality
that exceed the two!

APSG-DPM

Underwater Camera Housing for SIGMA DP1 Merrill
DP2 Merrill
DP3 Merrill



<http://acquapazza.jp/en>

SEALUX HX1000 Panasonic HC-X1000

The SEALUX HX1000 housing is a custom-made housing for the Panasonic HC-X1000 4K camcorder. It is one of the smallest and lightest aluminium underwater housings for the HC-X1000 on the market.

With this housing our main focus has been on an entirely manual control system. A new, high-definition 5-inch display at the back provides a brilliant image at any time. As a whole, the dimensions of the housing were optimized so that it fits inside a piece of standard hand luggage with



the grips detached.

All controls are sealed twofold and up to fourfold. The provision of the highest degree of safety is our command.

www.sealux.de

FIXneo LIGHT DX

Purpose Built Underwater Photo & Video Lights *Fisheye* www.fixneo.com

Swappable Battery

Swap the battery to allow continuous shooting while a spare battery charges.

OR

Charge the Neo through the back to never break a water tight seal.

Remote Controller

Attach the optional FR I Remote Controller to your housing and have full light control just a thumb's reach away.



100° Beam Angle
30° Beam Angle

Interchangeable Light Heads



Modern LCD Screen



FixNeoDxLightSystem

REEF PHOTO & VIDEO

Nauticam A5000 Sony A5000



"Small & Versatile"

The Sony A5000 is blurring the lines between compact camera and DSLR with its 20mp APS-C sensor and selection of lenses allowing your pick of the right lens for the job. The 16-50mm power zoom kit lens is easily and comfortably controlled in the Nauticam A5000 housing, offering a user experience familiar to compact users, but elevating image quality to that of a DSLR system twice its size. So feel free to shoot it like a compact, but when you are ready, it can do so much more.

www.reefphoto.com

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-SER.COM

UK Underwater Kinetics

BASICS OF BETTER UNDERWATER PHOTOGRAPHY

CHOOSING CAMERAS & HOUSINGS



OPTICAL OCEAN SALES
UNDERWATER PHOTOGRAPHY EQUIPMENT

Optical Ocean Sales Resource Center

Optical Ocean Sales Resource Center contains a wealth of free information for diving photographers of all skill levels. Organized in various formats, there are articles, handbooks, charts, tips and tricks, a blog and links to make learning more about underwater photography an easy and accessible way improve their skills and techniques.

The unique, downloadable acrobat Handbook series Guides to Better Underwater Photography, offer short explanations, charts, photos

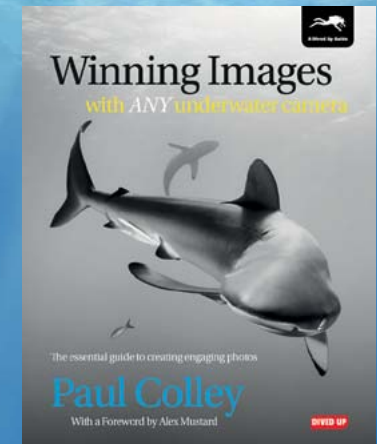
and illustration that quickly explain basic and advanced concepts. Topics include: Getting Started, Choosing a Camera & Housing, Choosing Lighting, Strobe Positioning, Composition, Close Focus Wide Angle Photography, Maintenance and many more.

These are written and designed to take technical aspects and make them easily accessible to experts and novices alike.

www.opticaloceansales.com

Your advert could be here for just £50 and will be seen by over 10,000 underwater photographers worldwide. No other publication has such a targeted audience. For more details visit: www.uwpmag.com/?p=advertise

'...for all U/W photographers who want to get ahead of the game': UWP



Paperback & Ebook | 224 pages | Out now!

Order from DivedUp.com

Subal Sony Alpha 7



Subal has entered the system camera segment using their experience gathered in the SLR and video housing manufacturing.

With its new revolutionary design, ergonomic handling and renowned quality, Subal α 7 housing offers the lightest, most compact and ergonomic housing available for the SONY Alpha 7 in the market, setting a new standard in the underwater imaging industry.

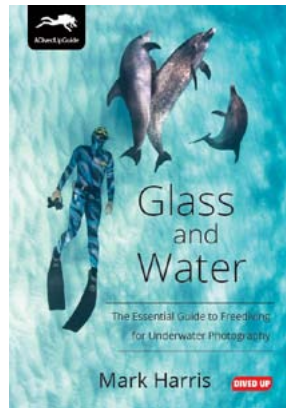
Designed with handling in mind, the Subal engineering team played a key role in delivering the ergonomics and perfect arrangement of the Sony Alpha 7 controls and functions. This allows easy operation for the photographer and access to all photo and video functions including video function, menu, white balance, ISO, exposure compensation, OK, multi function keys, info, AFL and AEL among others.

www.subal.com

GLASS AND WATER The Essential Guide to Freediving for Underwater Photography by Mark Harris

Rather than seeking to replace books on underwater photography, Glass and Water focuses on freediving techniques, equipment and photo opportunities. By carefully choosing or adapting freediving and photographic equipment some early hurdles can be avoided. Using appropriate freediving techniques can increase the length of time available for taking photographs underwater. And by being aware of the possibilities, frustrations can be avoided and good subjects sought out.

Includes photos and/or contributions from Fred Buyle, Sue Flood, Danny Kessler, Dr Anne-Marie Kitchen-Wheeler, Laura Storm, Andrew Sutton, Shane Wasik, and a Foreword by Dan Bolt.



www.divedup.com

WORKSHOPS

BALI
Oct 11-18

INDONESIA

PHOTO
+
VIDEO



BLUE HERON
BRIDGE

PALM BEACH

PHOTO
/
INTENSIVE



LIGHTROOM™

FT. LAUDERDALE

WORKFLOW
/
PROCESSING



www.reefphoto.com
877.453.8927

Nauticam CMC macro lens

by Phil Rudin

DEMA, (The Dive Equipment & Marketing Association) show was held once again during November 2014 in Las Vegas, Nevada USA. Every November dive equipment manufacturers from around the globe meet for the United States largest diving event. Included in the show is a large image resource center dedicated to the art of underwater photography and videography.

The 2014 show much like past shows debuted many new and interesting products including Nauticam's new CMC Macro Accessory Lens, now shipping world wide which is optimized for Compact and Mirrorless cameras.

The Nauticam CMC Macro Lens is another excellent example of the fusion of advanced innovation, lens engineering technology and compactness that Nauticam has become known for.

Wet macro accessory lenses like the CMC are quite popular with super macro photographers looking to obtain image magnification beyond the 1:1 (life size) magnification produced by most of the modern macro lenses sold these days.

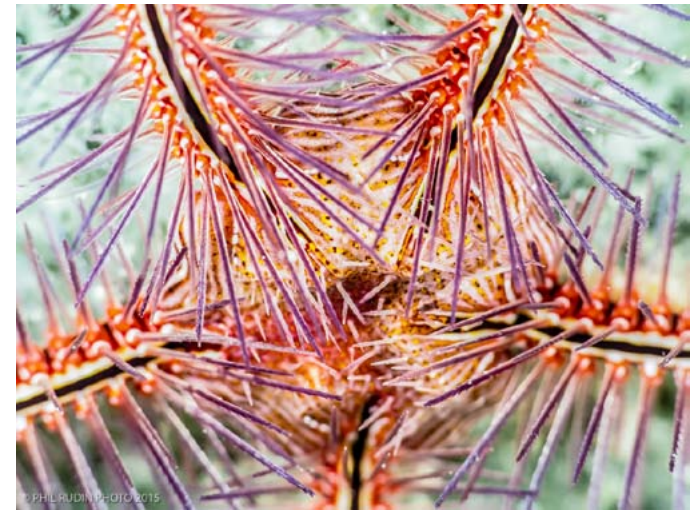
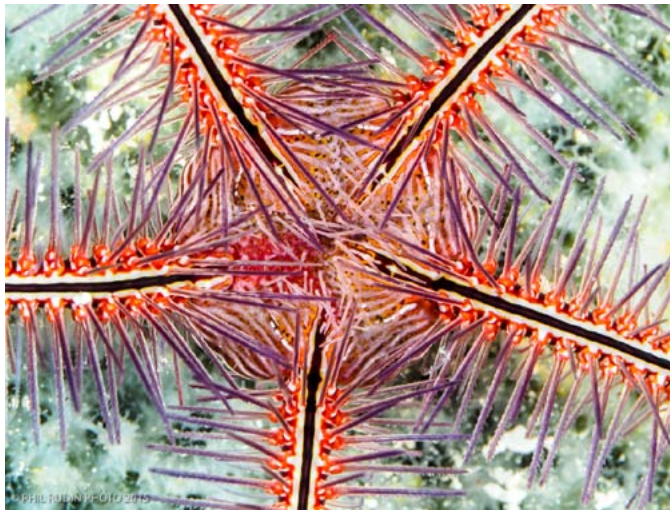
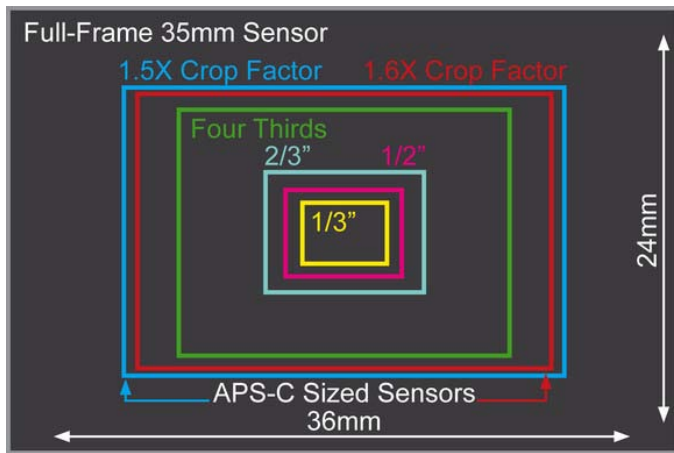
To understand how wet close-up lenses will work with your macro photography equipment you must first have a starting point of reference for the equipment you are shooting with. Not all digital image sensors are the same size and as a result the size of the images captured with a macro lens set at 1:1 will not all be the same size. So how do we define what is a 1:1 or "life size" still or video capture. The term 1:1 or "life size" represents a reproduction ratio where the subject you are photographing is the same size on the image sensor as it is in real life.

If you have set your macro lens to 1:1 and you take a sharp photo of a subject which is 20 mm in length then it should take up the same 20 mm's on the image sensor. If you are using a camera with a 35 mm "full frame"

*Juvenile Conch Eye, Olympus E-M5
Ii, Olympus 60Mm Macro Lens, Ikelite
Prototype Housing, Iso-200, 1/320Th,
F10, Two Ikelite Ds-161 Strobes,
Nauticam Cmc, 2:1, Twice Life Size.*



© PHIL RUDIN PHOTO 2015



sensor like the Nikon D-810 or Canon 5D MK III where the sensor size is 36 X 24 mm your subject should have about 8 mm of negative space on each side if the subject is centered and on a flat plane in the frame.

With a 1.5 X “cropped” sensor like the one in the Nikon D7200 the sensor size is 23.5 X 15.6 mm so at 1:1 the 20 mm subject would have about 1.75 mm of negative space on each side when centered. With a Micro 4/3 camera like the Olympus OMD E-M1/E-M5 II the image sensor is 17.3 X 13 mm and in this case the 20 mm subject would be cut off by 1.35 mm on each side.

Compact cameras sensor are even smaller but the fixed lenses don’t go all the way to 1:1. So the smaller the sensor the smaller the subject that will fully fill the frame with a macro lens set at 1:1. Smaller sensors also increase depth on field for a given angle of view with like F/stops. So a lens with a 24 degree angle of view on a 35 mm sensor at say F/11 will have less depth of field than a lens with a 24 degree angle of view on a M43 camera at F/11. Bottom line is that everything in photography is a tradeoff. Better overall image quality with a larger

Without: Brittle Star, Olympus E-M5 Ii, Olympus 60Mm Macro Lens, Ikelite Prototype Housing, Iso-200, 1/320Th, F10, Two Ikelite Ds-161 Strobes, 1:1, Life Size To Demonstrate Size Difference Without CMC.

35 mm image sensor verses a much smaller critter filling the frame with a small sensor camera.

When you add the Nauticam CMC close-up lens into the equation nothing changes regarding the physics of the sensor size. Using a M43 camera with the Olympus 60 mm macro lens and the CMC magnification goes from 1:1 to 2:1 or twice life size rendering an image 8.5 mm x 6.3 mm. This combination then becomes one of the most powerful in todays super macro market.

With the Panasonic 45 mm macro lens at 1:1 you get 1.6:1 magnification with an image 11 mm on the long side. With compact cameras like the Canon G-16 you get 1.6 X magnification with the CMC and go from a minimum image size of 30 mm to an image of 19 mm on the long side.

Other compacts like the new Canon G7X have

With CMC: Brittle Star, Olympus E-M5 Ii, Olympus 60Mm Macro Lens, Ikelite Prototype Housing, Iso-200, 1/320Th, F11, Two Ikelite Ds-161 Strobes, Nauticam CMC, 2:1, Twice Life Size.

a 3.0X magnification rendering a 68 mm image width with CMC the image width becomes 23 mm. The difference in image size between Canon G16 and Canon G7X is the result of the larger sensor in the G7X.

Lenses like the Olympus 12-50 mm zoom and the Sony E 18-55 mm zoom also have increased magnification benefits when used with the CMC. Lenses like the Zeiss Touit 50 mm macro for Sony E-mount cameras like NEX-7 and A-6000 also increase in magnification from 1:1 to 1.5:1 with the CMC reducing image width from 23 mm to 16 mm.

What sets the Nauticam CMC apart from other closeup accessory lenses is the unique design. The CMC was inspired by the original Nauticam SMC (Super Macro Converter) for larger sensor camera and is even more powerful than its big brother.



Nauticam Cmc With Spacer Mounted To Ikelite Macro Port For Panasonic 45Mm Macro.

Current wet macro lenses basically use the same design approach as in air using diopter lenses which do not take into account the interface between camera, lens, air, port glass and water. The Nauticam engineering team headed by Managing Director Edward Lai has sought to design a new level of super macro lenses that complements this interface and elevates image quality to new heights.

Nauticam's new design places the rear element of the macro lens closer to the camera lens. Every millimeter of extra distance between the macro lens and the CMC reduces magnification.

The big news is that Nauticam's CMC design creates greater distance between the subject than that created by conventional wet macro lenses. With magnification of approximately +15 the CMC to subject distance at 1:1 almost doubles from around 12 to 15 mm to 22 mm using the M43 60 mm macro example.

While this extra distance may not seem



Nauticam CMC Macro lens on a Nauticam Olympus housing with their flip adaptor.

like much it is huge allowing more distance between fragile subjects and making lighting less problematic. The CMC also optimizes image quality over the entire focus range of the lens rendering excellent Bokeh in the out of focus areas.

At a length of only 34 mm I found the CMC quite compact and light at only 280 Grams (9.88 oz). In the field my test shots were made using an Olympus E-M5 II M43 camera with Olympus 60 mm macro lens and Canon G7X compact. The CMC worked well threaded directly to the macro port using the included spacing ring or with a Nauticam Flip lens holder.

The CMC did not work with my SAGA flip holder and does not work with the ReefNet flip holders because of the way the lens extended through the back of the flip holder to position the CMC closer to the port glass. My preference when using a lens with magnification like the CMC is to have a flip holder so that the lens can easily be



Juvenile Hermit Crab, Olympus E-M5 II, Olympus 60Mm Macro Lens, Ikelite Prototype Housing, Iso-200, 1/320Th, F20, Two Ikelite Ds-161 Strobes, Nauticam Cmc, 2:1, Twice Life Size.

moved in and of the frame. This allows me to focus more easily on a very small subject and then just flip the CMC in for even greater magnification.

Auto focus with the CMC was excellent, when I wanted to be completely sure that the lens had reached 1:1 I locked focus using the rear focus trigger or manual focused and "rocked" the housing in and out until I could see correct focus in the



Coral Polyps, Olympus E-M5 II, Olympus 60Mm Macro Lens, Ikelite Prototype Housing, Iso-200, 1/320Th, F16, Two Ikelite Ds-161 Strobes, Nauticam Cmc, 2:1, Twice Life Size.



Candy Cain Lobster, Olympus E-M5 II, Olympus 60Mm Macro Lens, Ikelite Prototype Housing, Iso-200, 1/320Th, F20, Two Ikelite Ds-161 Strobes, Nauticam Cmc, 2:1, Twice Life Size.



Hard coral, Olympus E-M5 II, Panasonic 45mm macro with Ikelite yellow filter on the macro port, Ikelite prototype housing, Ikelite DS-161 strobes with Dichroic filters, two Ikelite Vega video lights with Dichroic Filters, Nauticam CMC at 2:1, ISO-500, F/9, 1/400th, precessed in LightRoom.

viewfinder.

The CMC has 67 mm threads so you can stack additional closeup lenses, filters for video and so on. A lens with this much magnification on the M43 sensor requires proper subject selection and may at first be frustrating to entry level super macro photographers.

Depth of field is quite shallow with using lenses with this much magnification, so critical focus and camera control is paramount. For the uninitiated you may first want to familiarize yourself with the limits of your 1:1 macro or compact lens before trying to add magnification. I have had many students shooting with accessory macro lenses from too great a distance to their subject and then wondered why they weren't get better magnification.

Since a macro lens and compact shoots through

the entire range from infinity to closeup I find little need for an accessory lens unless I want to go beyond the magnification already provided by the native camera lens. The CMC rendered very accurate color without the distortion or fringing problems associated some accessory macro lenses.

The CMC has a very robust construction and comes with an adapter ring for direct mounting to the port, caps for both front and rear glass elements, a very nice padded pull-string pouch with the Blue Nauticam logo and a Nauticam cleaning cloth along with the Nauticam product warranty.

The Nauticam part number is 81301 and the CMC retails in the US for \$320.00 and in the UK for £250.00 (inc VAT). I have used a wide verity of macro closeup lenses from a number of manufactures over the past forty plus years with SLR's, DSLR's, Mirrorless cameras and compacts

using macro lenses from 30 mm to 200 mm and this is without question the best accessory closeup lens I have used to date. It provides a great deal of magnification for super macro and the increased distance to subject has added to my success rate.

The CMC is also a bargain compared to others in its class including the SMC. If you are shooting a mirrorless or compact camera you won't find a better option in todays market. The CMC also works with the Nikon 60 mm giving 1.5:1 magnification.

Phil Rudin

Phil Rudin is the Professional Photo Instructor for the MexicanDiver's event, Underwater Digital Fiesta held in Cozumel Mexico in April 2015.

ULTRALIGHT

CONTROL SYSTEMS



We manufacture trays for your digital camera & video housings and arms to add a strobe or light.



18 years in business. 100% customer satisfaction guaranteed. “Do not be fooled by all the copy cat brands that look like ours. Ask for genuine ULCS parts made in the USA”

Special
GoPro
mounts

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

ULTRALIGHT CONTROL SYSTEMS SELLS THE ONLY TRAYS, HANDLES, ARMS, CLAMPS AND ADAPTERS THAT ARE MANUFACTURED AND ASSEMBLED IN THE USA. QUALITY AND CUSTOMER SERVICE ARE OUR #1 PRIORITIES. ALL PARTS ARE MACHINED (NOT MOLDED) FROM THE HIGHEST GRADE ALUMINUM AND HARD ANODIZED. OTHER PARTS ARE STAINLESS STEEL.



Made in
the USA

www.ulcs.com

“Often copied,
never equaled”

Saga Dive Fiber Optic Ring Flash

By Jack Connick

Ring lights have long been a popular way for macro photographers to get bright, even light directly onto small subjects.

Due to the magnification involved, macro photos can consume a lot of light. Underwater photographers have long struggled to get their camera housings with two strobes into tight spaces, or get the lights positioned close enough to the front of the lens without creating lens flare or shadows from the port.

Ring lights take care of many of these difficulties, and while a bit bulkier they are fast and easy to shoot with.

Until now there haven't been many choices. Athena Industries produced a ring flash for a while, although it's been pulled off the market now. It had a large ring strobe light unit, power unit, electrical sync cord and needed adapters to fit ports. Thus it was a good, but somewhat heavy, bulky and expensive system. It also would not work with electrically synced cameras, as it used a re-worked Sea & Sea YS-01 strobe as the "power unit" that need a fiber optic cord to fire.

The Saga Dive Fiber Optic Ring Flash uses fiber optic technology, this is an add-on to existing strobes that transfers the strobe light output through a parallel series of fiber optic cords held in place around the front of the port. One advantage is that the fiber optics at the front of the port are much smaller in diameter and lighter than other ring lights with dedicated large, round flash units.

The light from the Saga flash adapter is very

even. Light was bright and even on the subject and rapidly tapered off in the background, creating nice bokeh, or a black background. Ring lighting is very even, so if you want more creative lighting solution, you're better off sticking with standard strobe setups, there's not much you can adjust on the ring flash.

TTL is the preferred shooting method, and my Sea & Sea YS-D1 strobe and D800 Nauticam housing worked very well and easily. Finding the subject at great magnification became the hardest part; I knew the lighting would be perfect, or at best I'd dial the EV up or down on the strobe with one click of the dial.

The Saga Ring Light also has an adjustable collar that allows you to pull or push the ends of the fiber optic cords in and out, thus focusing the light narrower or wider, and allowing for different lengths of diopter lenses. It

All shots taken in Raja Ampat with a D800 in a Nauticam housing with a Nikon 105VR and either a SubSea +5 or Nauticam SMC diopters.



Optical Ocean Sales, 2015



actually also can be used to give slightly more or less light on a subject as well.

Saga Dive designed the unit to be mounted on a short arm with the strobe upside down and centered over back of the housing. This does allow for the best flexibility of adjustment of the fiber optic cords, but it seemed in the way for me and blocked the use of a focus light mounted on the port.

I flipped the strobe cover over on the fiber



optic taking them out plugging them back. Then I mounted the strobe directly onto the left handle ball mount with a clamp. This freed up the focus light holder, and also mounted the unit out of the way of looking over the housing at the subject. The fiber optic cords are at a slight angle, but I was still able to adjust them in and out without difficulty or creating strain on them. One other note was that I found the strobe cap to be very slightly loose on the front of the strobe, but a single wrap of gaffer tape created a little “stiction” to hold it firmly in place.

They also sell it with a flip holder for a 67mm macro diopter, and if you want to use a flip holder that is the only answer – the popular Nauticam flip diopter holder doesn’t fit.

I decided to buy my demo unit with no holder, figuring I’d be shooting with my 105VR Nikon lens with a ReefNet SubSee +5 or Nauticam Super Macro Converter all the time. But in practice, flip holders are a nice adaptation, and several times I wish I had the choice of taking the diopter off as you can then refocus the ring light wider.

Shooting was very easy, but you are limited to shooting tight macro. Usually with my normal

macro setup I can flip up the diopter and shoot fish “portraits”, or larger objects farther away. My dive buddy tried it on his Nauticam 7DMKII, but also mounted a second strobe off to the side; not a bad idea to have more flexibility, at the cost of a larger unit.

Mounting it off to the side, you also lose the ability to add arm floatation. I found the Stix FB-AQ float belt to fit well, and this added quite a bit of floatation to balance the rig nicely.

I found it to be very durable; the fiber optic cords are quite stiff and won’t bend or break in normal use. You do have to be a little careful not to get too close to a sea fan and catch the fiber optic cords on them!

About the only negative to the Saga Ring Flash is that it is sort of bulky to pack. However, it’s light and fairly unbreakable, so I just wrapped it in a few layers of bubble wrap and t-shirts and stuck it in my dive bag.

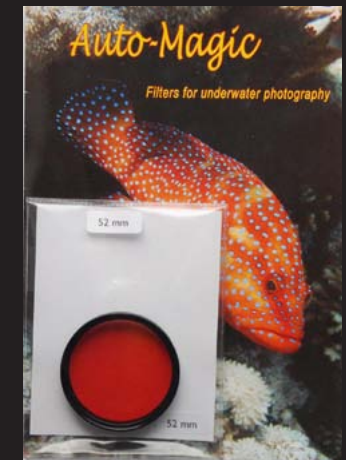
Currently, they are shipping the DSLR model and a much smaller compact camera version. They are studying adapting that model for use with mirrorless cameras using the Olympus mz 60mm macro lens as well.

The Saga DSLR Ring Flash Adapter is available custom made to your order; mounting option, strobe (Inon z240, D2000 or Sea & Sea YS-D1), port and housing all have to be allowed for. Longer 100mm ports that have no steps are necessary for it to fit. Turnaround is about 15-20 days and they ship directly to customers worldwide.

Jack Connick

www.opticaloceansales.com

We've got you covered!



Magic filters are now available in 3 options. Original Magic for use in blue water with DSLR and compact cameras with Manual White Balance, Auto-Magic for compact cameras in automatic point and shoot mode. GreenWater Magic for use in green water with DSLR and compact cameras with Manual White Balance. Prices start at just £19.

The Auto-Magic formula is now available in a Plexiglass filter that can be added or removed underwater.

www.magic-filters.com

Vivid Housings Leak Sentinel

by Ron Lucas

If you are like me, you probably carry many thousands of dollars of underwater camera equipment to your dive destinations. I have little room for clothes after my camera outfit and scuba gear are packed. I have no space for a spare set up in case of a flood. The last thing I want to worry about when I dive, but will anyway, is the housing leaking.

I got serious housing envy when I met John on a 2014 vacation to South of Komodo. He had a Nauticam housing with the manufacturer's new pre dive vacuum leak detector fitted. John took pleasure in showing the confirmation light on the back of the housing before dives! It just made so much sense.

In non technical terms pre dive vacuum leak detectors work by registering air pressure before and after vacuuming sufficient air out of a housing. This is possible because housings are sealed to the water and air by O rings. Lights or pressure gauges reflect the two states. So in the case of the Leak Sentinel by following the correct procedure, once it is turned on, a red LED light flashes and then when the correct partial vacuum or underpressure is achieved it flashes green. The housing is then left to ensure the light is still flashing green for 15 or so minutes, following which it is safe to use up to its rated depth. Leak Sentinel has been compressor tested to over 100 meters which is much deeper than recreational dive limits. This replaces dunking in a rinse tank and looking for bubbles. One seldom mentioned benefit is that until the partial vacuum is released, the housing, dome etc are effectively

locked into place. It is quite difficult to accidentally knock of, say a dome, on the surface or underwater. It does not make any operational difference to housing controls but the underpressure must be released before opening the housing.

You may be fortunate to have bought a housing recently with a built in pre dive vacuum leak detector fitted. I missed out on one for my housing by 6 months and a retrofit would mean sending the housing overseas to the distributor before it needs a service with associated courier costs and customs problems - a particular Bermuda nightmare scenario! So when I read about the Leak Sentinel V3 on scuba diving forums I was anxious to try the system for myself and ordered one direct from the manufacturer, Vivid Housings, for 200 Euros including postage. It arrived, was a perfect fit and operated as stated.

I then bought a DeepPro GoPro housing which had a spare bulkhead fitting and wanted a unit for it. DeepPro and Vivid Housing liaised to ensure the correct adapter was manufactured to fit the housing. In discussion with Vivid Housings I relayed concerns I had read about and were of interest to me. The first was battery consumption which would be greater if a housing is prepared some hours before use or in my case usually overnight and the vacuum unit left on. Battery consumption may be 100 hours or so and the battery easily replaced, however if it is left on for 12 hours at a time this is not many dives. Secondly a theoretical problem of expansion of air within a housing related to



Yellow-Mask Angelfish - Nikon D7100 In Nauticam Housing, Inon Z240 Strobes on TTL f8 1/80 sec ISO 200



for Ikelite (short adapter)



for Subal

There are adaptors available for Ikelite (short and long), Nauticam (M14 and M16), Subal and Seacam.

***Nikon D7100 In Nauticam Housing,
Inon Z240 Strobes on TTL f8 1/125 sec
ISO 200***

temperature changes causing false readings by a pre dive vacuum leak detector in the absence of temperature compensation. Pressure of a gas, in this case air, changes with temperature. This could be a potentially important consideration if a housing was put together in a cold, air-conditioned environment and then taken out to a hot dive deck level and onto a very warm water temperature dive.

I was delighted when Vivid housings informed they had listened to users and would redesign their circuit board to incorporate these improvements and provide a test circuit board for me to take on an upcoming trip to Raja Ampat. Further minor refinements have now been completed and Version 4 is on sale from their web site direct and through distributors. Improvements include

temperature compensation, low battery warning, overnight function to save battery and reset function in the event of an (unlikely) electronic problem. So what are my findings?

Installation

Installation is facilitated by removing a bulkhead or accessory port. I found this straight forward for the very different fittings on my Nauticam and DeepPro housings. However on the Nauticam the light was not facing me so it required taking the unit apart and repositioning the circuit board so the flashing LED light faced me when diving. A little allen wrench and spare O rings are provided. This gave me an opportunity to become familiar with how to replace a battery. A User Manual is sent by an email as a PDF and Vivid Housings thoughtfully



provide your first spare CR1632 battery. I also decided to use a permanent silver marker to make small marks on the housing and Leak Sentinel so I can see at a glance they are aligned properly.

Set Up

Achieving an underpressure (partial vacuum) is very straight forward by following the instructions and using the included pump which requires only 20 or so strokes on a normal size housing - a lot less on my DeepPro. If a lot more pumping is required and the green light does not come on then likely one of two

scenarios has occurred - the housing has a leak or the rubber valve in the Leak Sentinel is somehow not properly seated which is easily fixed by following the instructions. The circuit board switch is actually operated by a red button which is atop the rubber valve that seals in the underpressure. I found the switch to be a little temperamental in that sometimes I could not always immediately get the light to stay on and a couple of times I have caused a reset by holding the switch in too long when switching back on after using the overnight function. This is not a major problem as it is easy to release the pressure and re pump some more air out to get the green light steadily blinking.

I used my Nauticam Leak Sentinel V4 on 18 dives in Raja Ampat as well as on a dive at home and took advantage of the overnight function every evening including for a 4 day period when I got the flu and could not dive. It really works and is more convenient as there is no immediate need to carry out the full procedure before the dive as with the Leak Sentinel V3. The evening before my last dive day I got a low battery signal (fast red flashing) when switching the unit on. Replacing the battery took only a few minutes.

There is a little knack to releasing the valve to let the air in but

do not let this put you off. One just has to make sure that the top of the rubber valve/switch is properly seated afterwards.

A very important component is the black protective cap with an O ring that must be screwed on prior to immersing in water as the valve is not waterproof and the circuit board could be damaged. I suggest putting your initials on this in silver marker pen so it is not easily lost. Vivid Housings recommend that you never dive without underpressure achieved although there should be no risk provided the cap is in place.

Operation

I no longer dunk the housing to look for bubbles. I check the green light is still flashing and the protective cap is secure prior to diving. I did find on a very shallow dive in Bermuda on a very bright day with the V3 I could not easily see the green LED light flashing underwater so I decided to black out the spare acrylic window spaces behind the light with a marker pen. This works to make the LED light appear brighter for very shallow tropical diving but is not necessary for deeper or less bright dives. The Leak Sentinel lights are a lot smaller than the one that comes in the back of the Nauticam housing for the standard leak detector but the Leak Sentinel unit is in my line of view on top of the housing which is a bonus. One can leave a traditional leak detector working if fitted to the housing so you could get two alarms in the event of a leak. So long as the LED light in the Leak Sentinel is green there is no leak detected but if it flashes alternately green and red there may be a loss of vacuum and a leak.

Final thoughts

If you are buying a new housing, electronics for a pre dive vacuum unit may well be included with the valve and pump an optional extra. In this case I would recommend you consider the manufacturer's unit. However the Leak Sentinel V4 works really well and is a very good choice if you already own a housing with a regular leak detector or no detector at all. It will probably be about half the price of having a Manufacturer's system installed during a housing service - if one is available - and you can install the Leak Sentinel yourself. Vivid Housings have a range of fittings for most popular housings. Once you have used a pre dive vacuum leak detector you are unlikely to go back. However in case of problems on an overseas trip I would suggest taking the bulkhead fitting supplied with the housing with you and of course you will not need it. However, if you leave it at home and you say mislay the Leak Sentinel cap...

Throughout my trip to Raja Ampat the V4 gave me peace of mind before and during dives and saved me having to dunk the housing to ensure waterproof integrity. I could prepare the housing in an air-conditioned cabin if I wanted the night before diving. The Dewi Nusantara live-aboard has an excellent camera room on the main deck level so I did not need to prepare the camera in my cabin this trip.

If you have an earlier version of the Leak Sentinel and wish to upgrade to V4, Vivid Housings will sell you a new V4 circuit board for 75 Euros, including postage.

If you are interested in considering a Leak Sentinel V4 I do suggest you enquire through the contact email at www.vividhousings.com to see if they have an off the shelf fitting for your housing or

to find out the name of a distributor in your area.

You can see a gallery of my images from this trip and other destinations at www.ronlucasphoto.smugmug.com

Note that although I received a prototype Leak Sentinel V4 Circuit board free of charge for testing I paid full price for my Nauticam Leak Sentinel V3.

Ron Lucas

Ron is the author/photographer of the Bermuda Zoological Society Bermuda Reef Portraits book and Bermuda Reef Life HD app for iOS and Android smartphones and tablets.

BERMUDA ZOOLOGICAL SOCIETY

FREE DOWNLOAD

Photographer Ron Lucas

BERMUDA REEF LIFE HD

Bermuda's #1 app for marine life identification

Featuring photos of Bermuda's coral reefs, marine animals, buoyed dive sites, and so much more!

Perfect for ocean lovers of all ages!

Available from:
iTunes Amazon Google Play

Canon G7X mini review

by Alex Tattersall

Last month, in lovely Lembeh, I had the opportunity to test Canon's latest gem of a compact camera, the G7X. There were many things to love about this little camera, the image quality, the ability to minimise flash output for fast recycling, the focusing speed, the impressive dynamic range, the high flash sync speed, the diminutive size, the list goes on.

Not quite so lovely is the fact that this compact camera's lens is physically shorter at its widest (24mm) than at its 100mm telephoto end. For land photography this detail would be irrelevant but in an underwater housing it makes a significant difference because it makes attaching wide wet lenses a challenge as the standard housing front results in a significant air gap between the camera's lens and the rear of the wet lens, giving unacceptably poor sharpness with the wide lenses we tested.

To compensate for this, Nauticam have adopted a multi port system which includes a shorter port for use with wide wet lenses, a standard port which works well with no wet lens or a wet macro lens, and a minidome to restore the camera's native 24mm

FOV. When I first discovered this, I thought that this negated the advantage of having a compact camera, wherein the ability to change between macro and wide angle is perennially a source of smugness among compact users watching DSLR shooters agonising over lens choice. Having used the camera though, I am very convinced by its ease of use and image results and will not be selling mine for a long while yet.

The Canon G7X has been brought to market seemingly to challenge the might of the Sony RX100 range, whose three generations have pushed the boundaries of compact camera image quality through large sensors. The Canon G7X has adapted the same size sensor but combines this with, to my mind, a more intuitive user interface. The ability to minimize internal flash output for faster recycle times pushes the underwater advantage of the Canon over the Sony even moreso. Combine this with more effective underwater white balancing (the nemesis of the Sony range) and the super high strobe sync speed through



G7X CMC F11, 1/320 ISO 200, 2x INON Z240

This is an example of where the compact allowed me to take a shot I would have found difficult with the larger DSLR system.



G7X CMC F11, 1/400 ISO 200, 2x INON Z240
Another excellent subject for a compact camera with a strong dioptre, an imperial partner shrimp on a nudibranch.

fibre optic cable and the true potential of this compact camera comes to light. Cited frequently as a negative is the battery life which may be an issue for TTL shooting or video but for stills with minimum flash output, I was never concerned about battery life but changed battery between dives in any case.

I tested the camera with Nauticam's recently released Compact Macro Converter (CMC) and a soon to be released prototype Nauticam wide angle converter.

The CMC was used with the Nauticam G7X housing with standard port and a flip dioptre holder. It can be effectively used from about half way through the zoom range until maximum zoom with no apparent degradation to the IQ. Working distance is more than acceptable to allow easy lighting of subject matter but it is of course important to select subject matter appropriate to this combination (i.e.



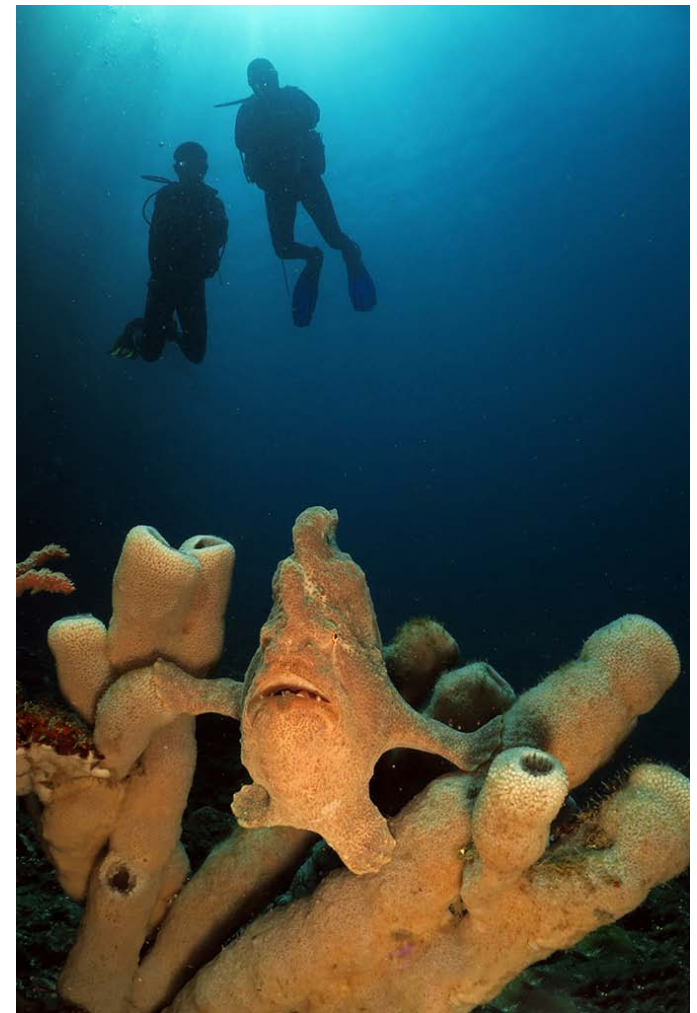
A full size 100% crop

slow moving and not easily spooked).

I also tried the G7X with no external lens with the standard flat port at 24mm. Although very competent, there is some evident chromatic aberration (CA) to the edges of the image as a result.

Finally, I used the prototype wide angle conversion lens with the G7X using the short front port. Uncropped results follow which show corner to corner sharpness, independent testing shows sharpness throughout the aperture range on the G7X. The lens is designed to be used at 28mm and gives a FOV of approx. 120 degrees at 28mm. I suspect the final product will have some modification to this but watch this space.

To conclude then, the results from this little powerhouse of a camera speak for themselves. If polyvalence is what you are after in a compact, the Sony RX100ii may still be a better choice but



G7X, F11, 1/320, ISO 250
Wide angle frogfish and divers

for ease of interface, fast recycle time and overall enjoyment of use, the G7X wins hands-down for me.

Alex Tattersall
www.uwvisions.com

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 ovnoraminrobin@hotmail.com

Your advert could be [here](#) instead for just £5.00



For sale – extrem'vision(up to 100 m!!) and video camera sony vx 2000

I'm selling a fantastic underwater housing extrem'vision(up to 100 m!!) and video camera sony vx 2000 in really good condition!!!coming with a pelican case!!!!The underwater housing is coming with :- 2 lenses (1 macro and 1 wide angle) - 1 red filter. - 2 set of o'rings - Sillicon for the o'rings. - Digital screen.The sony camera vx 2000 is coming with : - A set of batteries (2 large,i medium,1 small) - 5 new dv tapes. - 2 cleaning tapes.Extrem'vision is a French Brand known worldwide.it's strong,reliable and easyto repair if any problems....REALLY GOOD CONDITION!!!!2000 euros!!!!!!fabien mouret

Email: maddox666@gmail.com [Ref:c147]



SOLD! – Subtronic Nova analog version no ttl converter

Subtronic-Nova-analog-version-no-ttl-converter

The strobe is 3-years-old-in-good-condition

All sockets in S6

800-€

Rudolf Sollböck

Ref C146

Your advert could be [here](#) instead for just £5.00



For sale – Aquatica housing 5D, 8 inch dome, dome shade and canon 5D body

Aquatica housing 5D, 8 inch dome, dome shade and canon 5D body including 2 spare batteries and spare charger for sale £1600 + p&p.Housing:Aquatica 5D housing - good to 90m, 8" optical acrylic dome port – some minor scratches but not visible in photos, 8" dome shade / guard, for wide angle lenses, Spare O ringCameraCanon 5D, 3 Batteries, 2 Chargers, StrapAll for £1600+ p&p, will accept paypal, or cashPlease feel free to ask any questionThe equipment has not been used for a while but I have just upgraded to a canon 5D mark II package so have this for sale.I am based in London and if you wish to come round and have a look/examine the equipment prior to parting with your money we can arrange that.

Email: martin.abela@hotmail.co.uk [Ref:c145]

Sell your stuff You'll be amazed at just how quickly your unwanted underwater photography kit could be converted into hard cash with a UwP small ad. You can have your own UwP small ad for just £5.00 and it can have one photo as well as up to 100 words.

Check out small ads here

Buy your small ad here

First image of a thresher shark birth

Shot by Attila Kaszo

Interview by Peter Rowlands

First of all, congratulations on your amazing photograph. It is quite literally extraordinary. Where and when did you take it and was this a trip to specifically photograph thresher sharks?

I went specifically to Malapascua in 2013 to film Thresher sharks. What I didn't know was just how hard it was to get a good shot. Firstly, I had to get up by 4:00am each morning to get my stuff ready, then walk in the dark along a sandy track for about 500m lugging nearly 12K of camera gear just to get to the boat.

Still dark, the boat leaves and we arrive at Monad Shoal about 5:30: dive into 25m of water and wait for sharks by 5:50am. They only seemed to be around for about an hour in numbers then went back to deeper water. This was the daily routine for most of my stay, although I did manage to get out to a few regional dive sites in between.

At what point did you notice that it may have been a pup emerging?

This is the irony of the whole thing, I actually didn't realise I had shot it. We had continuing power failure on the Island, and as a consequence I couldn't charge anything. So I only checked my images a few times just to make sure I had something that resembled a shark. The birthing



*This is the Pelagic Thresher shark (*Alopias pelagicus*) giving birth. Because no artificial lighting can be used on these sharks, a high ISO rating is required. That coupled with early morning and significant cloud cover makes it a fairly dark scene. The shot was also cropped adding even more noise to the image. So what it is as they say, is what it is. Nikon D800, Nauticam housing - 16-35 lens @ f4.5 1/100th, ISO 1600 / No Lighting*



picture was a lot further away than some of the other encounters I had, so really it was just a casual shot of a shark in the distance and I couldn't see anything else. Also there were a lot a jelly fish in the water for a few days making good shots even harder to get, so after one shot I was looking for better angles from sharks that were moving in closer to me.

I only realised what I had after I got back home and started processing the images. But even then it didn't really resinate because I had actually discarded the picture in a trash folder I keep for editing. It was only after I had finished editing that I thought I should have a profile shot, so I went back to the trash folder and found "the" shot but realised it had a blob at the bottom of the shark which in an un-cropped image looked like a jelly fish. Even after I had cropped it I still couldn't accept that it was a pup. You know, these sort of things just don't happen for me or most people, so I tried to explain it away as some freak angle with an incoming fish or whatever. I showed my wife Marg the shot and she said "it looks like it's giving birth, how extraordinary".

Who did you contact in the scientific community and what was their reaction?

I sent it to Dr Simon Oliver, at the university of Liverpool UK, who is the world leading authority on Pelagic Thresher sharks. We received two emails in response, the first, said something like...sorry to disappoint you...but its a common cleaner wrasse going about its business....

I was obviously disappointed but not surprised. Made a cup of tea and talked the whole thing over with Marg who suggested it was still a very unusual

shot and could be marketed. Curiosity got the better of me after about ten minutes , so I opened the second email.

The second email started with HOLY SH.T I just made a huge mistake..... So what had happened was the image had come in to the university server and sent out to Simon as a thumbnail image. From something that small no one could deduct anything much. However, a colleague rang him and said: "have you seen the photo that't just come through on the Thresher...." That's when he saw the full scale shot I had sent and the excitement started.

How long did it take to verify and what was the criteria in the validation process?

I agreed not to publish the image at Simon's request. Their research was in full swing and the shot I had threw a bunch of deductions they had made into question. I don't know what criteria they used or how it was applied, only that overall including peer reviews, it took thirteen months before the prestigious scientific journal "Coral Reefs" published it. I guess anything like this needs thorough investigation and scrutiny, and so it should given the ramifications it eventually has. But I'm glad I held off publishing it because it really helped the project readjust its term of reference and enabled parts of the research to be redirected.

What has been the reaction since the photograph was verified?

The reaction to the image has been extraordinary. BBC published it first, then FOX and CBS followed by Discovery and the Washington

Post which made the effort to at least interview me. Simon allowed a Canadian TV team to put up a clip on YouTube, which last I saw was viewed 52,000 times, and lots more international media had picked it up. The thing that pissed me off though, was my own country of Australia hardly gave it a mention, yet the country of my birth Hungary, gave it a fantastic accolade.

In conclusion, can I just say that I still haven't fully accepted what I shot. It's weird I know.. but that's the reality of it!

Many thanks for your answers, Attilia. It has provided a fascinating insight into an amazing image and how the scientific community works.

Attila Kaszo



Peter Rowlands
peter@uwpmag.com

Don't settle for 2nd best



Film - No Filter No
White Balance



Digital - No Filter Manual
White Balance



Magic Filter Manual
White Balance

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

www.magic-filters.com

Giant Australian Cuttlefish - Molluscs With An IQ

by Attila Kaszo

Whyalla in South Australia seems to be a hot spot when it comes to Cuttlefish aggregation.

Visitors worldwide go there to see the Giant Australian Cuttlefish (*Sepia apama*) do their thing in huge numbers. This only occurs once a year and over the past few years numbers of these intriguing cephalopods have decreased significantly. A year ago it was thought they would never return as no sign of aggregation was recorded. The culprit was believed to have been a new desalination plant construction nearby. There was understandably an outcry from many quarters, but there weren't the facts to back up the allegations.

When I visited, numbers were certainly down on previous seasons according to some local divers, but still significant enough to present a spectacle to any underwater visitor. This season in 2015, it appears numbers are again back to previous high peak seasons. So an anomaly seems to exist but one which for the present defies explanation.

These beautiful animals belong to the same family as octopus and

squid and like the rest of their family possess a high level of intelligence and cunning. Having an ability to not only change colour but skin texture, makes them even more intriguing and challenging to work with.

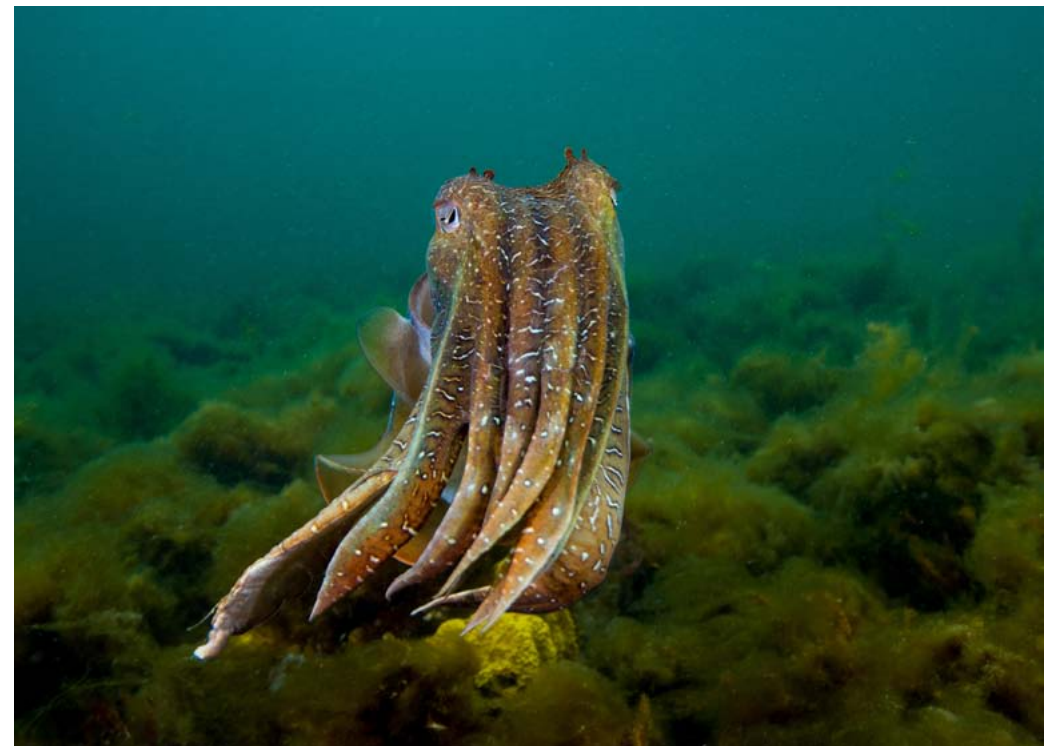
They come to Whyalla in great numbers to mate and reproduce. Their habitat are shallow reef assemblages under which the female lays her eggs and uses the thick vegetation covering as camouflage.

These sorts of habitats can be particularly vulnerable to pollution: so even a relatively minor change to water conditions can trigger a range of effects which can have a dire impact on fish fauna, and in this case cuttlefish aggregation. It seems that cuttlefish numbers are tied to a range of factors, particularly environmental conditions and accordingly the biomass of the subsequent year depends on successful reproduction from the previous season.

The day I went there the sky was overcast but the water was smooth and clear. I saw cuttlefish almost immediately in water as shallow as a metre. Cuttlefish ranging from



Cuttlefish signage at Spencer Gulf, South Australia.



Male cuttlefish posturing to elevate its size and strength. Nikon D800, Nauticam housing – 16-28 lens @ f8, 1/50th ISO 200 / 2x Inon Z240



Male cuttlefish fertilizing the eggs held by the female. Nikon D800, Nauticam housing – 16-28 lens @ f8, 1/50th ISO 200 / 2x Inon Z240



Mating Cuttlefish at rest near their lair. Nikon D800, Nauticam housing – 16-28 lens @ f8, 1/50th ISO 200 / 2x Inon Z240



The female can just be seen under the male which is “skirting” her trying to prevent the large male cuttlefish from having any access. Meanwhile, another male lurks in the background. Nikon D800, Nauticam housing – 16-28 lens @ f8, 1/50th ISO 200 / 2x Inon Z240

as small as 20cm to much bigger ones well over 50cm seem to be everywhere. These are the largest species of cuttlefish in the world and can grow to a metre and weigh around the 10kg mark. These ones weren't that big but impressive just the same.

The mating season brings out the very best displays in these animals. Generally they are inquisitive and will approach divers without reservation paying particular attention to any bright

colours the diver may be wearing or handling. I had one follow me around for about fifteen minutes, clearly intrigued by my fluorescent yellow fins.

I spent two and quarter hours underwater watching some courtships take place while in other areas of the reef, eggs had already been deposited and the lifespan of the adults was coming to an end. Sadly, cuttlefish only live for about two to three years and die shortly after mating. So what I was



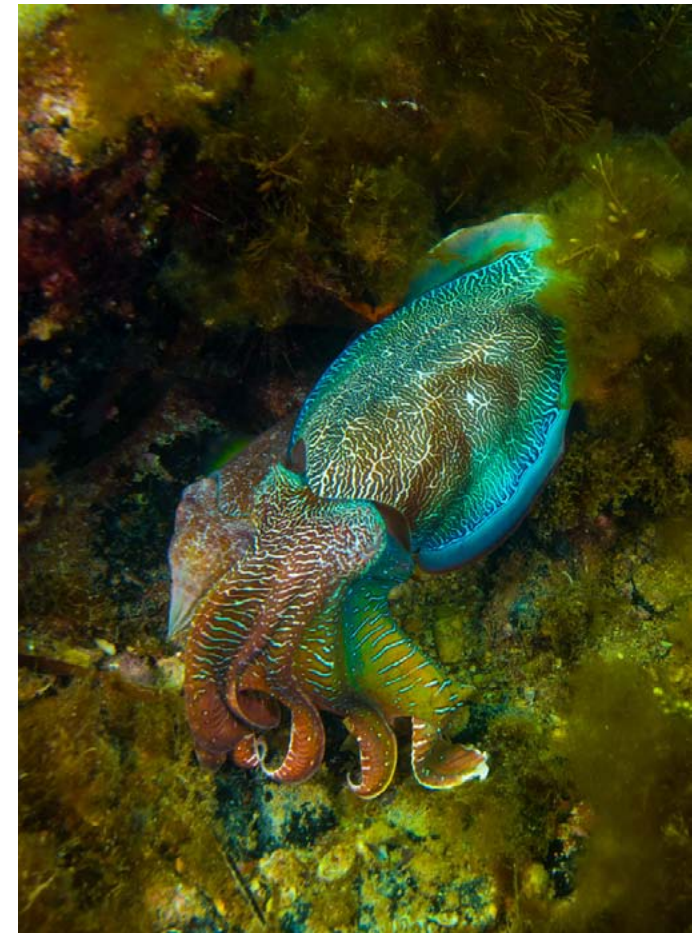
All these males are trying to get to a female firmly wedged under a rocky ledge and fiercely guarded by her partner: the one facing them. Nikon D800, Nauticam housing – 16-28 lens @ f8, 1/50th ISO 200 / 2x Inon Z240

really witnessing, was the cycle of life and death, all played out on a shallow reef in the Spencer Gulf.

I watched a male perform some amazing antics: lunging at other male suitors when they ventured too close and when that failed he covered the female with skin on its outer body, known as a “skirt”, to prevent other males from mating with her. All these manoeuvres together with flashing colours and skin texture changes made for an alluring and

mesmerising spectacle.

What I found fascinating was how tactile and gentle the courtship was. When left alone, a mating pair behaved very much like some land animals during courtship. I saw instances where a male and female embraced for a few moments then they swam in a small circle parallel to each other, all the time changing colour before moving back to their lair to lie side by side both shaded in white.



This pair are about to mate. colours that each display are truly mesmerizing. Nikon D800, Nauticam 16-28 lens @ f8, 1/50th ISO 200 / 2x Inon Z240

In reality of course we are talking about a mollusc, but a very sophisticated one that has tendencies very much like the ones we can clearly identify with. But unlike other molluscs, cephalopods are highly developed invertebrate group of animals which can capably defend themselves, change their colour and skin texture faster than a chameleon and propel themselves out of danger through a mass of black sepia (ink).

The Many Glories of Cuba

By Erin O'Neill

Cuba has always been just an arms reach away for Americans, lying a mere 90 miles off our shores, less than an hour's flight from Miami. However, it has been one most delicious forbidden fruit for over a half-century. Now finally, finally, we can, with some effort and expense, visit! Ironically, this isolation from its closest neighbor may have inadvertently aided Cubans in keeping the country unspoiled with an environment to be envied by other developed western islands. I hope they recognize this and even with the temptations to modernize and expand tourist opportunities, we all fervently wish them to safeguard and value their island as a world largely still unrevoked and unpolluted. Go soon to ensure you'll have the same experience.

A couple of years ago the television news journal 60 Minutes announced the news that Cuba was finally accessible, under strict guidelines, to a few divers! We had known of the beauty of this part of the Caribbean and were impatient to dive in. We watched films of sharks, groupers, and corals that had become rare in the rest of the Caribbean Sea.

The international honor society and charitable organization Women Divers Hall of Fame took advantage of recently-relaxed visitation possibilities to see for ourselves what the fuss is all about. The group traveled with the ocean conservation organization Ocean Doctor and founder David Guggenheim. He led our trip, made all the legal preparation and introduced us to the noted scientists, conservationists, photographers, teachers and divers making the difference in Cuba today. We are all travel-savvy, all having dived the world's oceans; everyone felt it was a praise-worthy trip, one for the books! Everyone wants to return!

Bluestriped Grunts - healthy, vibrant fish life abounds. Nikon D7000 in Nauticam housing, 10-24 mm lens at 24 mm, Sea & Sea YS-110a dual strobes, f/11, 1/60 sec, ISO 200, manual mode.

Dueling photographers and a hawksbill turtle, WDHO member Robin Parish. Nikon D7000 in Nauticam housing, 10-24 mm lens at 24 mm, Sea & Sea YS-110a dual strobes, f/7.1, 1/80 sec, ISO 200, manual mode.





My big photographic draw, the Black-tip Shark, 8+feet long. Nikon D7000 in Nauticam housing, 10-24 mm lens at 24 mm, Sea & Sea YS-110a dual strobes, f/8, 1/80 sec, ISO 200, manual mode.

It's a miracle that Cuba has survived at all considering the world's most powerful country had condemned her. She is a marvel with her green landscapes, beautiful beaches, mountains and farmlands, marvelous music and rum, a rich culture and the most amazing, resilient people. How does this poor, rather isolated country provide such magic for seasoned travelers? They turn difficulties into assets. I believe the most wonderful and unique aspect of Cuba is the Cubanos themselves. They exude a joy for life and imbue

a love of fun and a can-do approach to everything. There seems to be a fun-loving aspect to every fragment of their lives. The atmosphere is saturated with music and rhythm, with smiles and hope. Our countries had just become officially friendlier and everyone seemed very happy for that significant shift. Generally well-educated, the Cubans are all very aware of the easing of poverty that tourism brings. "No problem" is often the refrain we heard whatever we may encounter.

Landing on New Year's Eve and



Red Hind Grouper/Sea Bass family. Nikon D7000 in Nauticam housing, 10-24 mm lens at 24 mm, Sea & Sea YS-110a dual strobes, f/7.1, 1/80 sec, ISO 200, manual mode.

the anniversary of the Revolution, we spent 3 marvelous days and 4 nights in Havana and environs, walking the streets of Habana Vieja (old Havana), marveling at the lovely, old architecture from the 16th and 17th centuries (some well-preserved, much crumbling, some in the restoration process, all beautiful.) Privatization is creeping in aided by money from those who fled Cuba fifty years ago. These ingenious people conduct businesses on the streets and in the old, magnificent homes, the paladors (family-owned restaurants) and the

casas particulares (family-run inns). The other restaurants and hotels are government-owned. The food is delicious, the famous rum drinks, too, and live music is everywhere. In the market square we picked up an old National Geographic magazine from the late 1950s which featured Jacques Cousteau's visit to Cuba and his encounter with Fidel Castro. This meeting was fortuitous for the country's conservation efforts; it led Castro from his life as an ardent sportsman to one of a dedicated conservationist. The Gardens of the



A Silky shark takes a speared lionfish. Nikon D7000 in Nauticam housing, 10-24 mm lens at 10 mm, Sea & Sea YS-110a dual strobes, f/7.1, 1/100 sec, ISO 200, manual mode.

Queen is the Caribbean's largest game preserve and a full one-quarter of Cuba's waters are protected.

After visits to a successful, enchanting eco-village with a zip-line and an art gallery, and the old Ernest Hemingway's estate seemingly ready for him to walk in again, it's time to dive! We traveled much of the day via bus to the South-central port of Júcaro to board a fast boat transporting us to the remote archipelago of Los Jardines de la Reina - The Gardens of the Queen, perhaps the largest, most successful of any Caribbean preserve.

At this intersection of the Gulf of Mexico with the Caribbean Sea, one must live aboard either a houseboat or a dive-boat for there are no inhabited islands in the archipelago. The dive sites are all moored and the area is vast, over 800 square miles. We had sixteen dives, returning to the mother ship after each dive for sustenance; we could have requested night dives but each dive of 3 daily dives was often over an hour of bottom time plus surface intervals full of snorkeling in now-rare Elkhorn corals, in the mangroves, island visits with local



Popular street artist in Old Havana. Nikon Coolpix AW110, 5 mm, 1/80 sec at f/3.9, ISO 125.

wildlife encounters (jutias, iguanas, hermit crabs, American crocodiles) and beach-combing for trash and treasures. They were long, glorious days, beginning with breakfast feasts, ending with dinner, drinks and dancing every night. Keep in mind that it takes a day of travel each way by boat and bus to and from Havana to The Gardens of the Queen.

We dived a rich seascape with walls, canyons, finger reefs, bommies and undersea prairies full of healthy,

vibrant life, packed with soft and hard corals and other invertebrates. Because of the weight limitations on the charter flights to and from Havana and Miami, I packed as lightly as I could, choosing to leave all the macro lenses and ports at home. After all, what I really wanted to photograph was the sharks, the black-tips and silkies, the big groupers, the Goliaths and the Nassaus, and the crocodiles!

We requested no chumming at all – we wanted to experience nature



American crocodile in the mangrove waters, photo by David Guggenheim. With 3 in the murky water displaying major territorial behavior, I chickened out of getting in the water with them. Canon EOS 60D, 18-200 mm lens at 190 mm, 1/500 sec, f/8, ISO 200.

naturally if we could, but nevertheless we were greeted on many of the dives with sharks in the water, one hammerhead showed but all the rest were either silkies or black-tips – that was thrilling. And sometimes a wee bit intimidating when the sharks got very excited – one young one kept nosing me, I think attracted by my focusing light but perhaps a bit hungry or curious? Hard to know, but that's the great thing about a big camera rig – comes in handy when

it's a barrier between you and a fish with lots of big teeth. She kept circling me as I whirled with her - we kept it up until she finally gave up and followed the rest of the pack. Whew. One dive the dive-master had speared several lionfish and there was a continual circling of him by about 20 eager sharks creating what looked like the spin cycle in a very large washing machine! There was also usually a grouper of one kind or another hanging around the mooring



line when we attached. The dive-masters are spearing and feeding the invasive lionfish to the sharks and groupers with varying degrees of success. Lionfish do not appear to have yet become natural prey to either species; there were a couple of feeding frenzies after the spearing but the sharks most often had to be lured in. I don't think the behavior has been adopted by the predators yet.

I logged about 20 dives, many of them deep and somewhat dark, and my bottom times sometimes required decompression stops by my computer. It wasn't necessary to dive deep, the moorings were always in shallower water – the visibility was never glorious as it was reputed to be in January, but there were storms at sea resulting in unusual silt in the water. The dive-masters expected the conditions to improve every day in the open water. It was crystal clear in the protected leas, so our snorkeling was fabulous, we constantly surprised

turtles, eels, rays, and conch are plentiful (bring the camera, good ops in the mangroves, especially for macro), and we had good ocean conditions with sunny days. The trips between the houseboat Tortuga and the dive sites were fun – fast speed boats well laid out for diving with good ladders, but dry boats they were not, so bring a dry bag if possible, a wind-breaker and a dry camera for sunsets, islands, wildlife, birds, scenics and fellow travelers. There is no Nitrox available on the Tortuga, by the way, although it reportedly is on the Avalon dive boats. Wear socks or booties so the sharks don't mistake your feet for edibles while climbing the ladder, ha!

The dive masters are excellent, never hovering but always keeping one in sight which is reassuring for a photographer who is often otherwise alone. We had at least 3, sometime 4 dive-masters in the water for each dive with our 13 divers. We were fortunate to dive with famous Cuban photographer Noel López who regaled us with diving stories and slide shows. One of the main perks of traveling with Ocean Doctor is the opportunity to meet with, learn and share with the Cubans themselves and David Guggenheim is in very good standing with the Cuban diving community. Remember, only 1000 divers are allowed annually. Avalon Diving



The wonderful dive crew on the Tortuga, leader and top dive exec Andreas surrounded by the peerless Avalon dive crew. Nikon Coolpix AW110, 8.4 mm, 1/1000 sec at f/4.1, ISO 125.

Services runs a good ship.

Things to know: Language is Spanish, English widely spoken; money system is interesting with two currencies, tourists use CUC\$, exchange rates vary, we were told \$1+1CUC but our exchange rate was not that good in January. It's OK to bring U.S. dollars or Euros, not sure about English pounds. Bring cash, Cuba is still largely on a cash basis, the use of credit cards is not

a sure thing. Public restrooms may or may not have toilet paper, there is often an attendant who expects a tip for giving you a bit, so carry small change and tip. in your pocket. Cell phones are problematic, too – don't count on using it, ditto for internet access though we did have it on the Tortuga and in our hotel (Hotel Parque Central in Old Havana). The local beer and rum is very good. When to go? That's always the question. High

season is November through March and again in July and August but the latter is also in hurricane season. Prices are higher in high season, of course. Weather is very nice in the November through March time frame, being cooler as well as drier. Guide book I recommend: Lonely Planet Cuba Travel Guide.

The main idea I'd like to leave you with is that you will have wonderful fun and abundant photo opportunities in both the city, countryside and underwater; take wide angle lenses for all. Would I go again? In a heartbeat. Would I have wished for more time in the water?

Always. Am I happy with my photos? If not completely, it wasn't from a lack of opportunity!

Erin O'Neill



WOMEN DIVERS HALL OF FAME

The Women Divers Hall of Fame™ (WDHOF) is a nonprofit 501(c)(3) organization dedicated to honoring and raising awareness of the contributions of outstanding women divers. WDHOF Members are the leaders, pioneers and record-setting champions in every sector of the diving community, including arts, science, deep sea exploration, underwater archaeology, medicine, free diving, equipment technology, cave diving, wreck diving, military diving, commercial diving, media, training and education, and business.

Each year, the Women Divers Hall of Fame™ offers scholarships and training grants in diverse fields such as marine conservation, underwater archaeology, technical diving, hyperbaric medicine, disabled diving, and more. WDHOF scholarships are available to women as well as men of all ages who wish to pursue higher education and training, further their career goals, and seek out opportunities in the aquatic and diving-related industries. Information on all scholarships and training grants administered by the Women Divers Hall of Fame is available on the WDHOF website: www.WDHOF.org.

Come dive with the members of the Women Divers Hall of Fame in Utila, August 22-29, 2015!

[Click here for information](#)



Like us on Facebook : **Women Divers Hall of Fame**



Follow Us on Twitter : **@TheWDHOF**

Reading through any given issue of UWPmag, it's easy to forget that behind every fantastic shot there's a multitude of hard lessons learned. No matter how long you've been using a camera, there's always room for a schoolboy error - as I was humbled to discover recently while diving with Thailand Aggressor at Myanmar's remote Black Rock. Three hours full steam from any other island in the Mergui Archipelago, Black Rock is one of South East Asia's premier dive sites because it's one of the few known places where giant oceanic manta rays gather in the region. We'd scheduled four dives here, and the first was uneventful, apart from finding a giant frogfish perched imperiously in full view on the coral debris at the base of the rock's sheer limestone drop to 20 metres. My camera was working fine and so at the beginning of our second dive, when I heard the frantic tank banging of our guide and looked up to see a truly huge manta heading straight towards me, I knew this was going to be The Shot. I raised the viewfinder to my eye, watched the manta fill the entire frame on my super wide-angle fisheye lens, hit the camera trigger... and nothing happened. I tried several times more until I realised the camera battery was as dead as my chance of getting the picture. Moral of the story - never leave the camera accidentally

Mergui Archipelago Mysteries

by Chris Mitchell

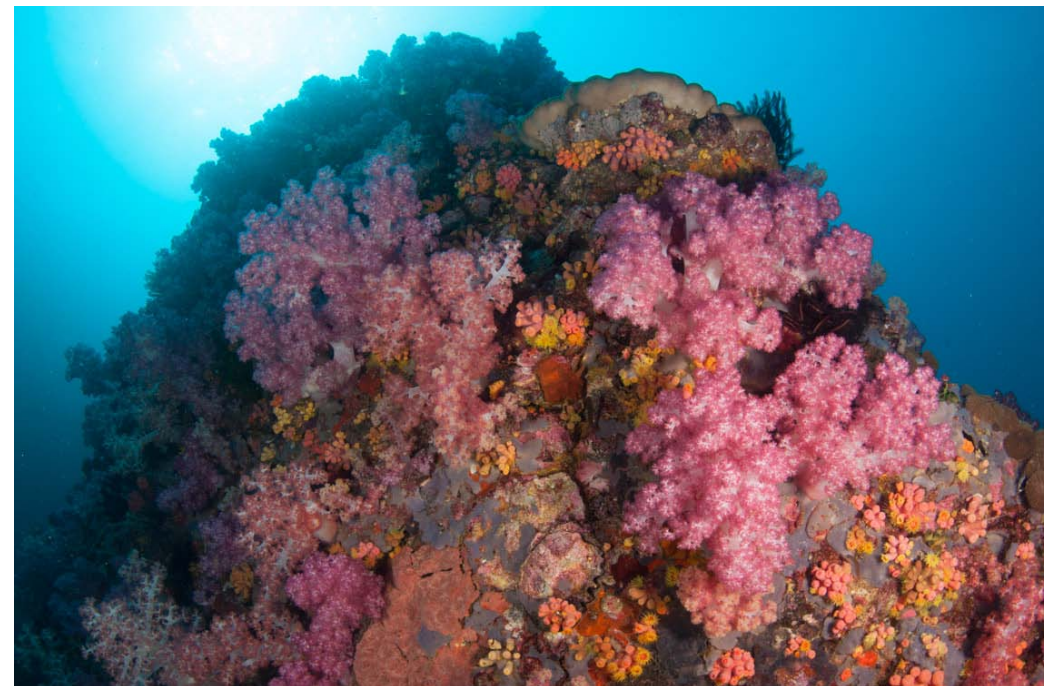


*Three Islets in the early morning.
iPhone 6, 1/2300 at F2.2, ISO 32*

switched on between dives.

That particular disappointment aside, it was still a thrill to spend the day at Black Rock. Oceanic manta rays were only proven to be a separate species from reef manta rays in 2008 by marine scientist Andrea Marshall. Members of the Marine Megafauna Foundation, which Dr Marshall co-founded, visit Black Rock annually on their Ray Of Hope chartered liveaboard expedition to observe and identify the oceanic manta rays to add to their global database. (The BBC documentary *Andrea: Queen Of Mantas* gives a concise overview of the MMF's work). During the four

A riot of soft corals at Frog Rock. Nikon D90, Tokina 10-17, 13 mm, Aquatica AD90 housing, Ikelite DS125 strobes 1/2 power, 1/125 at F13, ISO 200





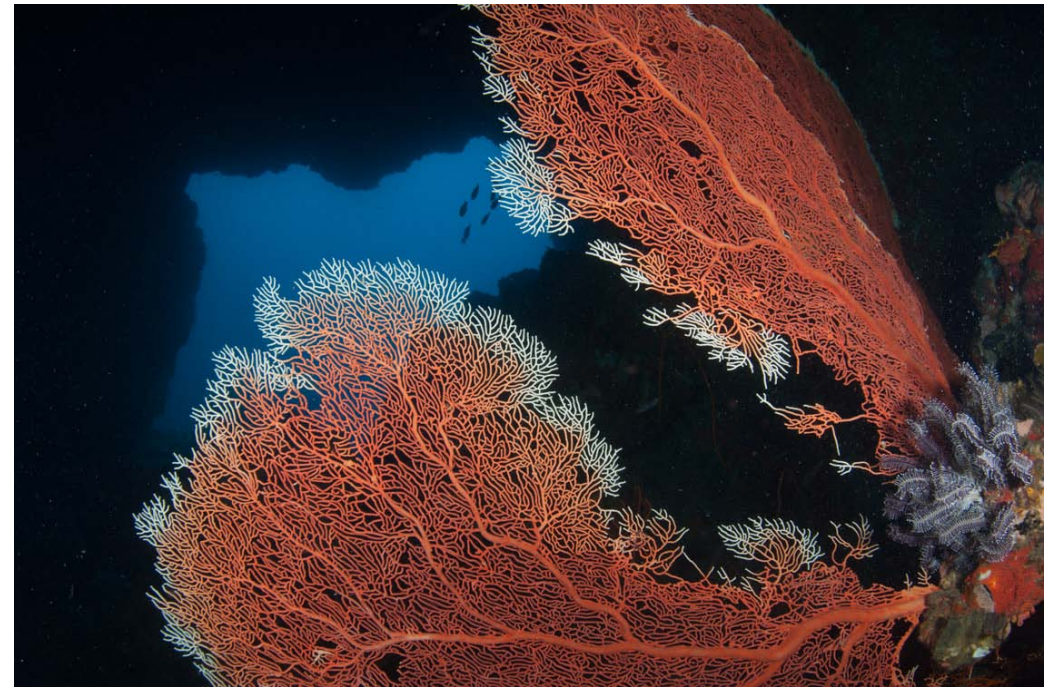
A school of glass fish over a coral bommie, Koh Bon. Nikon D90, Tokina 10-17, 13 mm, Aquatica housing, Ikelite DS125 strobes 1/2 power, 1/125 at F9, ISO 200

dives, we saw several more mantas, all sadly too far away for me to get any memorable shots, but it was heartening to know they were still around in numbers. We even had a blink and you'd miss it encounter with a speeding juvenile whale shark, cleaving through the water below while we were just nearing the end of our dive, a retinue of cleaner fish struggling to keep up.

Black Rock is the furthest north most Myanmar liveaboards explore - its isolation and distance from Mergui's other, more southerly, dive sites mean you need to be on a

solid, stable boat like the Thailand Aggressor in case weather conditions turn bad. During our 10 day trip, conditions in Myanmar seemed oddly better than neighbouring Thailand, where the trip began and ended - we had seas so flat calm you could see the clouds in the sky from under the water.

While Myanmar has opened up politically in the last couple of years and there has already been a huge influx of tourists and foreign investment, the Mergui archipelago - some 800 islands - remains one of South East Asia's last great wilderness



Coral fans at The Archway, Crayfish Cave. Nikon D90, Tokina 10-17, 13 mm, Aquatica AD90 housing, Ikelite DS125 strobes 1/2 power, 1/125 at F10, ISO 200

areas. There are still only a few liveaboard boats operating here, all crossing over from Thailand, and it's rare not to have a dive site all to yourself. Much of the archipelago is still unexplored due to its sheer size, although sadly Burmese fishermen seem to have most areas well mapped out and some sites occasionally show evidence of dynamite bombing, using Mergui's remoteness to easily evade detection.

Even so, it's precisely this sense of mystery that gives Mergui much of its appeal, and the recent realisation of just how scientifically important sites

like Black Rock are only increase speculation about What Else Is Out There.

Mergui also has a slightly forbidding reputation - its water are generally greener and slightly colder than neighbouring Thailand, despite their proximity, although we had generally excellent viz during our time in Myanmar. Topographically, most of Mergui's well-known dive sites are limestone islands, which have been shaped by the sea over centuries and provides a plethora of nooks and crannies for critters to find shelter. There is a huge array of macro



Octopus on the run, Richelieu Rock. Nikon D90, Tokina 10-17, 13 mm, Aquatica AD90 housing, Ikelite DS125 strobes 1/2 power, 1/125 at F13, ISO 200

subjects waiting to be discovered here - almost immediately after entering the water at Rocky One we discovered an white and yellow ornate ghostpipe fish, right next door to a juvenile frogfish so well merged into the surrounding wall that it went unnoticed for several minutes until there was a yelp of recognition through someone's regulator.

Three Islets is another happy hunting ground for small things, and after you've passed through the spectacular canyon swimthrough known as In Through The Out Door, you emerge with the surge onto a busy

sloping reef where cuttlefish and devil scorpionfish await.

Much as I love small stuff, taking wide-angle photos is more my thing, and despite the manta debacle, Mergui provided several other great opportunities. Fan Forest Pinnacle is exactly that, with dozens of huge fan corals almost growing on top of each other, arranged in serried rows on the site's slopes. Frog Rock was a real surprise, a collection of rocky outcrops thickly carpeted in a riot of soft corals - it was heartening to see the reef look so healthy and see the colours come alive in the



Diver surfacing inside Cock Coombe island lagoon. Nikon D90, Tokina 10-17, 13 mm, Aquatica housing, Ikelite DS125 strobes 1/2 power, 1/125 at F14, ISO 200

Sea snake in the glass fish, Koh Bon. Nikon D90, Tokina 10-17, 13 mm, Aquatica AD90 housing, Ikelite DS125 strobes 1/2 power, 1/125 at F14, ISO 200





Manta Ray, Koh Bon. Nikon D90, Tokina 10-17, 13 mm, Aquatica AD90 housing, Ikelite DS125 strobes 1/2 power, 1/125 at F11, ISO 200

morning light. My favourite was The Archway at Crayfish Cave, a massive cathedral-like window carved out of the limestone with perfectly-placed fan corals at its base. The eponymous cave itself is also interesting - it's actually a tunnel that runs from one side of the island to the other, around 3 metres wide and sloping up to the same above.

Perhaps Mergui's best secret is at Cock Coombe island - you submerge about three metres or so near to a particular spot by the sheer cliff wall - and once down, realise that there's a huge hole in the rock you can swim through. Once on the other side, you re-surface into a spectacular

lagoon carved out inside the island, surrounded on all sides by its towering cliffs and so invisible from the outside world.

The liveaboard had already explored Thailand's Similan Islands on the cruise up to the Myanmar border, and the difference between the islands and archipelago is quite dramatic given how near they are to each other. The Similans' dive sites are characterised by big, smooth-sided boulders and sandy slopes - at sites like Christmas Point and North Point, the boulders provide epic canyons and swimthroughs amongst stones the size of houses, perfect for wide-angle, while on the slopes are numerous

coral bommies that are teeming with glassfish and other life. Glassfish seemed to become a recurring motif for me on this trip, and I started getting a little bit obsessed with trying to capture their synchronised movement and how they caught the light.

Crossing back over the border into Thailand on the way home, the nearest dive site in Thai waters to Myanmar is Richelieu Rock, itself a horseshoe-shaped limestone pinnacle far away from other islands and widely regarded as the country's best dive site. The hundreds of resident schooling yellow snapper here make for great photos, and there is an abundance of other life both big and small that rewards multiple dives - the large octopus making its elastic way around the interior of the horseshoe was a real joy, while seahorses and harlequin shrimp were also found by eagle-eyed macro hunters.

Our final dive was at Koh Bon, Thailand's most famous manta ray hotspot. This was where I'd seen my first ever manta ray, back in 2004, but in recent years their presence had become very hit and miss. However,

during the 2013 - 14 dive season, there had been a huge resurgence of manta ray and whale shark sightings in the Similans, probably the best season in over a decade. We'd had no luck when we'd stopped off here on our way to Myanmar, and I felt a bit glum about our prospects now. Submerged on the huge limestone ridge that pointed out from Koh Bon's sheer wall, there was no sign of any manta. I contented myself with bothering yet more glassfish, suddenly enlivened by a sea snake bursting through the middle of the shoal as it hunted across the reef.

We were already doing our safety stop when there was a frenzy of tank banging and there, sweeping in with impossible grace across the ridge, glided a giant oceanic manta ray, at least four metres wide. Wishing I'd conserved my air better, I still managed to get a couple of shots as it stayed with us for a good ten minutes, wheeling around over the reef. There couldn't really be a better end to the trip.

As a 10 day trip, the Myanmar - Similan Islands combination offers a great mix of contrasting environments, and there's an excellent range of big and small stuff too. Mergui is likely to remain a niche destination for the foreseeable future simply because it requires a long cruise to get there - and also because there's a hefty \$200



Swimthrough at North Point with fan and glass fish. Nikon D90, Tokina 10-17, 13 mm, Aquatica AD90 housing, Ikelite DS125 strobes 1/2 power, 1/125 at F9, ISO 200

USD Myanmar marine park fee on top of all the standard liveaboard costs. That won't put me off though - I know I want to go back to Black Rock, and next time, I might even manage to avoid self-sabotaging my camera.

Chris Mitchell
www.divehappy.com

*Chris was a guest on
the Thailand Aggressor
www.aggressor.com.*



DPG EXPEDITIONS

The Yucatán Trail

June 3-18, 2015

Join DPG for a unique trip to southern Mexico to photograph cenotes, whale sharks and American crocodiles!



DIVE PHOTO GUIDE



Issue 84/58

More information: uwpho.to/yucatan2015 Email: trips@divephotoguide.com

Reefs and Rebreathers

by Karen Stearns

With more than 20 kilometers of protected reef to explore, most visitors to Wakatobi find they run out of bottom time long before they run out of things to see. Short of growing gills, one of the best ways to rack up a bit more underwater exploration is to dive with a rebreather. In recent years, the popularity of closed-circuit rebreathers, aka CCR, has continued to increase among the recreational diving community. There are a number of advantages rebreathers provide, including the possibility of increased no-stop bottom times, the unit's ability to deliver warmer, moister breathing gas, and the benefits of silent operation, which may allow closer approaches to marine life.

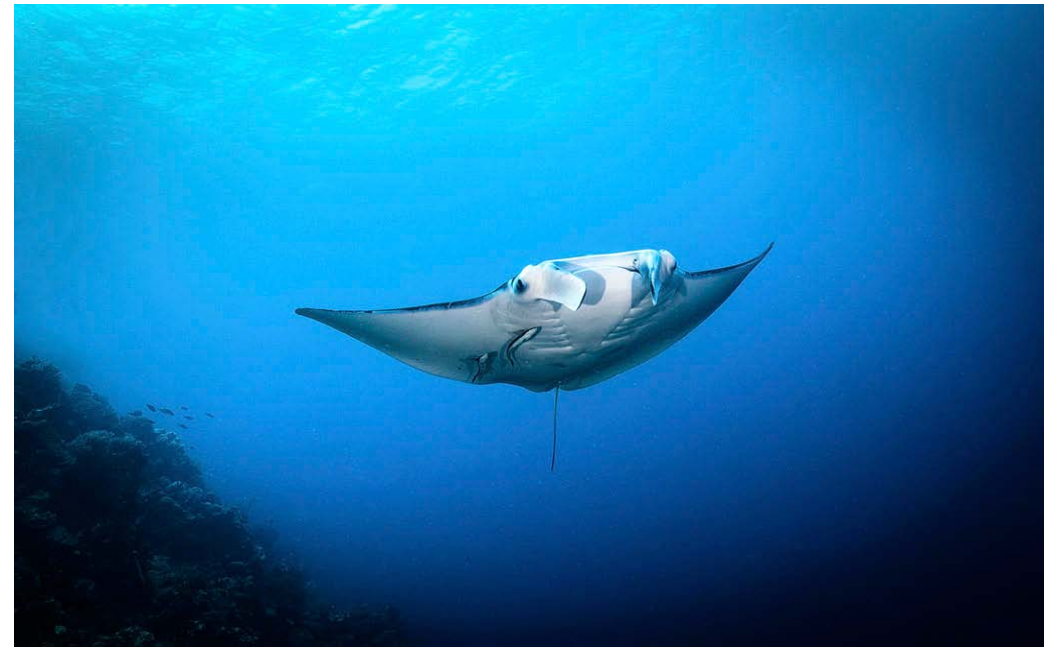
In many ways, Wakatobi is an ideal location for rebreather diving. The same high-relief reefs that allow open-circuit scuba divers to enjoy long multi-level dives are perfect for rebreather profiles, as divers can begin with an investigation of the deeper portions of the sites, then perform gradual hour-plus ascents to depths of five meters or less, enjoying spectacular scenery and abundant marine life the entire dive while incurring little or no decompression

obligation. A rebreather's lack of exhalation bubbles also provides advantages when viewing the many rare small and sometimes shy animals found on Wakatobi's reefs.

The only downside that many rebreather divers may cite is the difficulty of finding the supplies and support needed for operation. To accommodate closed-circuit divers, a resort has to stock absorbent medium, oxygen fills, supply cylinders and bailout tanks, all administered by a staff that understands the protocols and altered dive profiles a rebreather creates. Diving itineraries may also need to be modified to accommodate the typically longer bottom times CCR diving provides. Fortunately, there are a growing number of dive resorts now catering to the needs of closed-circuit divers, and Wakatobi is at the head of this list. Here, rebreather divers are provided not only the support structure their equipment requires, but also enjoy a marine environment that is ideally suited to maximizing the in-water benefits of rebreathers.

Craig Willemsen, the owner of Silent World Diving in Bellevue, Washington, has led several rebreather trips to Wakatobi. "Many on the last





trip were diving the KISS Sport or the Orca Spirit, and a couple had Evolutions,” he says. “Most of the group packed all their gear in a carry on and two regular 50-pound checked bags, or in the case of the Evolutions, 70 pounds. There’s really no problem traveling with a rebreather if you pack things correctly.”

Daily diving activity is also a smooth process for CCR divers at Wakatobi, Willemsen reports. “The dive staff at Wakatobi is very rebreather savvy. They understand the equipment and the profiles, and several of them are avid closed-circuit divers themselves.” To facilitate their diving activity, his group was provided with their own boat, which

allowed them to make longer dives without keeping open-circuit divers waiting.

Wakatobi’s closed-circuit rebreather diving program was among the first in the Indo-Pacific region, dating back to 2006. Soon after resort founder Lorenz Mäder purchased his first AP Evolution CCR, he realized the need to invest in the systems required to support closed circuit diving. The dive shop was equipped with gas booster pumps, and stocked with Sofnolime absorbent, two- and three-liter supply tanks in both steel and aluminum, and an assortment of off board bailout tanks and regulators. The resort’s oxygen supply was increased, and arrangements were put

in place for the delivery of helium to support trimix diving. Currently, there are three certified Advanced Gas Blenders on the dive staff.

New dive protocols and boat schedules were also created to accommodate CCR diving schedules. On many trips, CCR divers are paired with a dive guide who is also CCR qualified, and who will accompany the dive team through an extended profile. Even on those occasions when CCR-qualified guides are not available, the dive team can create a dive plan that allows CCR divers to enjoy extended bottom times with guides on open circuit equipment who split their services into two shifts.

Larger CCR groups are often

assigned their own boat, allowing them to take maximum advantage of the silent diving experience and enjoying the full freedom the technology allows. Currently, the resort maintains ample supplies of Sofnolime 797 (8-12 mesh) and N2050 (4-8 mesh) to support up to 15 CCR divers at all times, and even larger groups can be accommodated with advanced notice. Cartridge absorbent can also be provided given sufficient lead time to ensure shipping.

“We took a group of 16 divers to Wakatobi in 2013 and had a great time.” says Josh Thornton of Dive Addicts in Draper, Utah. The dive staff and resort staff were pleasant and eager to provide great service.

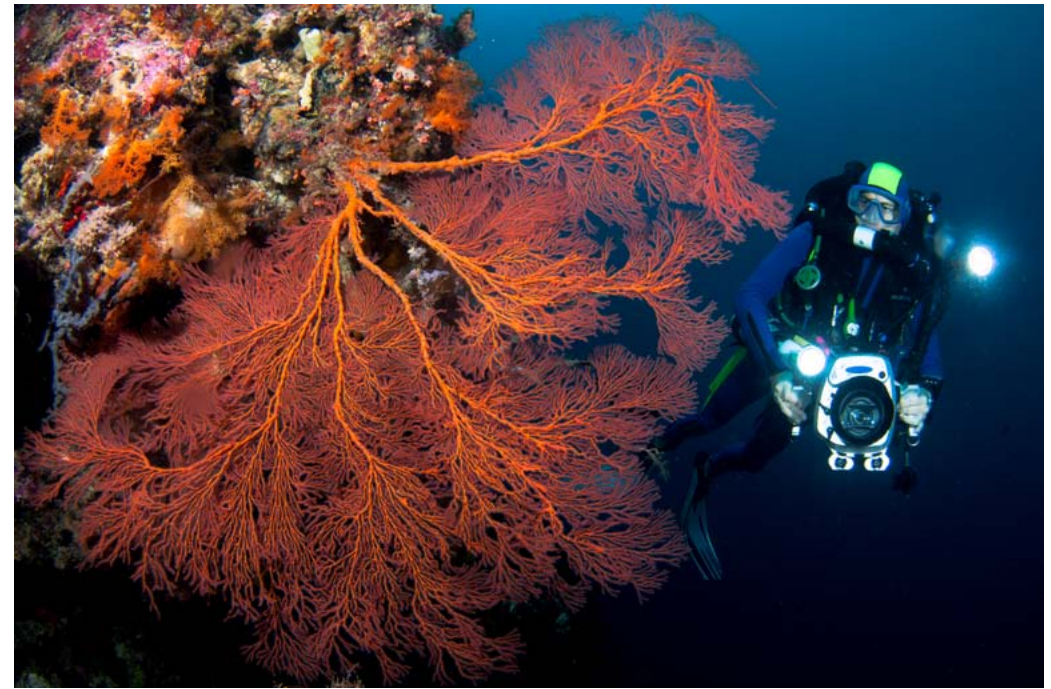


There were no problems whatsoever providing oxygen and sorb, and I would not hesitate to take a larger group of CCR divers back to the resort, in fact we are looking at planning a CCR-only trip in 2016. You may need to arrange the support before your trip, but let them know what you need and they will find a way to provide it.”

CCR diving is also available aboard Wakatobi’s liveaboard dive yacht, the Pelagian. Because diving activity on Pelagian is conducted from the ship’s tenders, diving a rebreather from these smaller boats requires a higher degree of fitness and comfort with the equipment than would be

the case aboard the resort’s large day boats. In addition, because gear space aboard the tenders is limited on trips when the Pelagian is filled to capacity, CCR diving at such time would be limited to a single off-board configuration rather than the more complex rigging needed to stage extended decompression or trimix dives.

Any CCR divers planning to visit Wakatobi should be certified on the equipment they bring. The resort is not currently geared to providing “rebreather experience” dives or basic training on CCR equipment, and visiting groups are not allowed to perform their own classes, as



the instructing would require an Indonesian permit. The dive center stocks spare parts for AP Diving CCRs, but divers diving other brands will need to carry any spares they feel necessary. A better option for those seeking to begin or enhance their CCR skills would be to complete an entry-level course (no deco, air diluent, 30m max depth) pre-trip and then collect hours on the unit during a Wakatobi holiday. While at the resort, divers trained on AP Divers CCRs could also engage Lorenz as a private instructor, and complete a second-level course (deco, air diluents, 45m max depth).

“Our last group was all about the quality of bottom time, not just

the quantity,” Willemsen says. “We typically stayed down longer on each dive, but we made fewer dives each day.” Instead of the five-dive-a-day schedule that some guests employ, the rebreather group usually made three dives a day, each lasting anywhere from 90 minutes to more than two hours. Profiles typically began with a visit to the deeper portions of the reef at 130 to 150 feet, with ascents that skirted decompression while taking advantage of the fixed PO₂ gas mixtures rebreathers provide, he says. Because Wakatobi’s reefs come within mere feet of the surface, what might be considered a safety or deco stop at other places becomes an extended



hangout on the light-filled shallows atop Wakatobi's protected reefs.

Many of the group's extended time dives were conducted as long drifts over two sites, connecting what would otherwise be two separate dives. Among these connections were Fan 38 East and West, from Galaxy to Fan Garden, Cornucopia and Magnifica together, and the entire length of Roma.

"In the end, we probably racked up a bit more bottom time than the open-circuit guests, but that wasn't the big payoff," Willemsen says. "One of the best things about diving a rebreather is the silence. We had a smaller group that was really

squared away underwater, and we were able to spend more time with any given subject without worrying about gas duration or decompression obligations." This combination of silence and time allowed the group to not just see the fish, but to enjoy the luxury of extra time and the silence needed to truly become familiar with the intricacies of life on the reef.

CCR can also provide some remarkably long bottom times when diving in the shallower waters of the resort's renowned House Reef. Divers can easily access the House Reef day or night (monitored from 6am to 10pm) by wading in from the beach right in front of the resort, or by using

the ladder off the jetty. Taxi boats are also available during daylight hours to drop divers up current, allowing for a nice long drift along the edge of the wall, ending back to the resort.

On the House Reef, CCR divers are asked to follow the same basic protocols as open-circuit scuba divers - either go with a buddy (also on CCR) or have a CCR instructor or solo diver qualification. Currents on the House Reef can range from mild to fairly wild during rising and falling tides. Wakatobi's dive center recommends for dives longer than two hours that CCR divers tow a small surface marker to show their position. This allows the staff to monitor the

divers' location (since there are no bubbles) and ensure that they are not drifting too far away.

According to Lorenz, the shallower depths of the House Reef, combined with the constant PO2 advantages of CCR, make it possible to do very long dives safely. In theory, you could spend up to 10 hours exploring the reef shallows, depending on the personal metabolism and equipment configuration. Lorenz has personally made dives of six hours, ending it there because, "well, then I got hungry."

The warmth and clarity of the water further enhances the enjoyment of extended-duration dives at Wakatobi, Willemsen says. "Overall, it would be hard to imagine a more perfect environment. You don't have to dive a rebreather to experience all the wonderful attractions of Wakatobi, but having these systems can add yet another layer to your enjoyment of this magnificent ecosystem."

Karen Stearns

For more information about Wakatobi's rebreather support services, or to plan a trip, contact our Wakatobi office at

office@wakatobi.com
www.wakatobi.com

Back issues



99p per issue or buy the complete set of 84 issues for just £19.95 (That's about 25p per issue!) Yours to keep forever.

As you know, the current issue of Underwater Photography is free to download but all of the previous issues, going right back to Issue 1, are still available to download for just 99p per issue. It's a fantastic reference library chronicling all that has happened in underwater photography over the past 14 years.



Add Uwp58 to cart

Uwp58 — Jan/Feb 2011, 76 pages.

[Click to show or hide issue contents](#)



Add Uwp57 to cart

Uwp57 — Nov/Dec 2010, 85 pages.

[Click to show or hide issue contents](#)



Add Uwp56 to cart

Uwp56 — Sept/Oct 2010, 90 pages.

[Click to show or hide issue contents](#)



Add Uwp55 to cart

Uwp55 — July/Aug 2010, 75 pages.

[Click to show or hide issue contents](#)

Buy back issues here

South West Ramblings 13

by Mark Webster

The weather this winter has been far kinder than last year when we suffered several very strong and damaging storms which blighted the visibility for several weeks throughout the south west. We had to endure a fine grey/white suspension in the water throughout February, March and April which often reduced the visibility to 1-2m at best which certainly made finding subjects and photographing them a challenge.

Dive sites also changed quite a bit due to the heavy seas with substantial scouring changing the topography which added to the fun of low visibility navigation on many shore diving sites. The milder and calmer conditions in January and February 2015 has meant more diving and also an early start to the season for some of the marine denizens.

You can definitely see the seasonal changes underwater just as you can on land. As the water temperature begins to gradually increase after the winter months one of the first real signs of spring activity are the tiny swirls and rosettes of nudibranch eggs that begin to appear.

This is a time of year that I really enjoy as hunting down these tiny

sea slugs requires patience, habitat knowledge and of course sharp eyes to spot a creature that is often only a few millimetres long.

Some dives are totally fruitless but often it is right at the end of a dive returning over a patch of reef previously explored when I will finally spot a good subject, just when you are at your coldest and in increasingly urgent need of a bathroom break! For this reason I normally plan on a two dive excursion and spend a brief surface interval warming up before returning to the spot in the hope that the quarry has not moved too far.

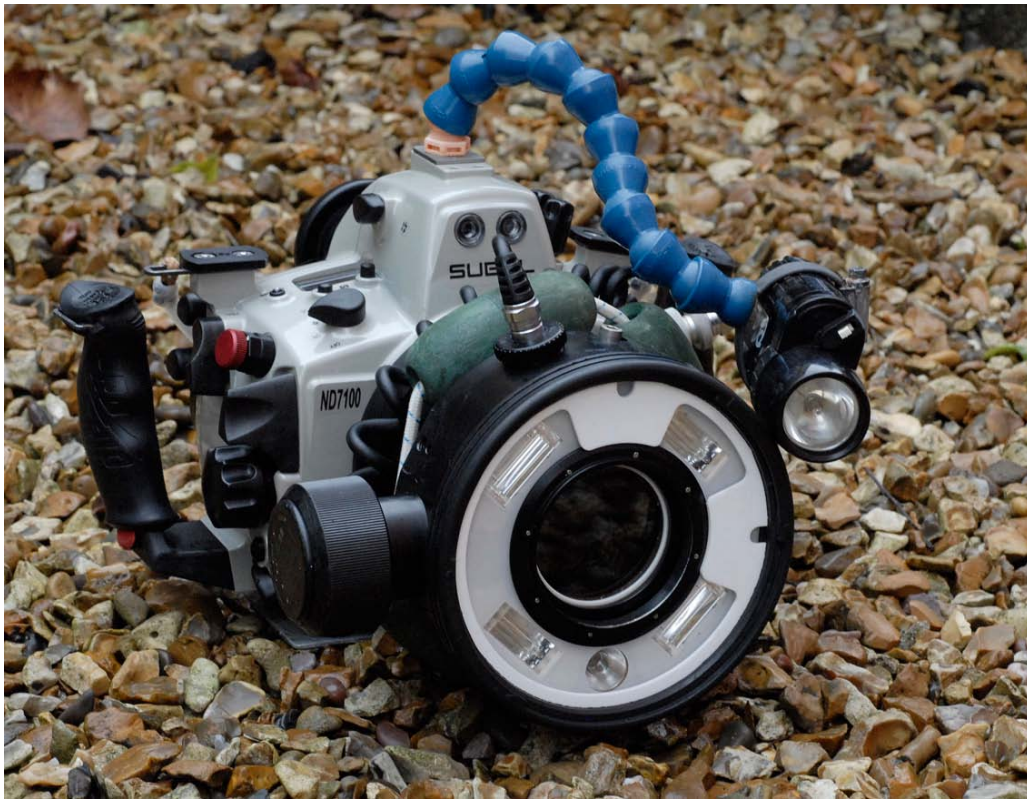
Even in winter with water temperatures of 7c or 8c I normally spend 50-60 minutes in the water so you can get very cold and it is important not only to wear enough thermal protection in water but also to warm up adequately between dives. Cold hands are a big frustration as it reduces your ability to operate controls accurately and distracts your concentration from the photography. In the winter months I wear 5mm three fingered gloves which make a tremendous difference and still allow you to operate the primary housing



Eubranchus farrani are one of the first species to appear and range in size from 8-15mm. They can be pure white like this example and also be decorated with yellow, orange and less often blue or black. Nikon D7100, Subal ND7100, 105mm micro, Nauticam SMC wet lens, Inon Z240 flash guns, ISO 200 f20 1/200.

Limacia clavigera is a common small species already making an appearance and seen here feeding on a sea mat (Bryozoan) on kelp. This species can be seen in profusion as the summer months approach. Nikon D7100, Subal ND7100, 105mm micro, Subsee +10 wet lens, Inon Quad flash, ISO 100 f22 1/200





In March I dusted off my Inon Quad flash and still continue to be delighted with the access and quality of light it provides for macro subjects despite requiring manual flash exposure. Nikon D200, 60mm macro, ISO 800 f8 1/50.

During the search for nudibranchs there is always the opportunity to practice your close up skills on classic subjects and compositions like this individual jewel anemone. Nikon D7100, Subal ND7100, 105mm macro, Subsee +10 wet lens, Inon Quad flash, ISO 100 f22 1/200.

controls easily after a little practice.

Back to ring flash?.....When I upgraded to the D7100 around 18 months ago it came with a welcome return to TTL photography using fibre optic triggering. This pleasure brought back happy memories of the

film days when using TTL for macro and in most circumstances you can rely totally on the camera to make the correct exposure for you. However, the downside of this was that I had been neglecting my beloved Inon Quad (ring) flash as this requires a





Using a fibre optic snoot to light a small nudibranch like this Polycera faeroensis is a bit of a challenge to say the least, particularly with a wet lens in the mix. There are many features in the macro world to cast shadows even when your snoot aiming is good. Nikon D7100, Subal ND7100, 105mm micro, Nauticam SMC wet lens, Inon Z240 flash and Sullivan fibre optic snoot, ISO 200 f20 1/200.

cable to synch with the camera and also requires the hot shoe and cable connection to be configured in the housing and it all seemed too much fuss the set it up and return to manual flash exposure! But on the first few dives this year I encountered several nudibranch subjects that were quite awkward to light with the twin Z240's due to the reef topography and yearned for the simplicity of the ring flash. So I determined to dust it off and return to the hunt with a flash

system that I have been using for more than 14 years and it has certainly rekindled my enthusiasm for this style of lighting.

There is an accessory wet lens for the Inon quad flash which increases magnification for small subjects but does not match the enlargement of a +10 wet lens. I had previously tried installing my SubSea +10 lens on the quad with an adaptor, but found it was too long and caused shadowing due to the close proximity



Polycera quadrilineata - nudibranchs often rear up like this when searching for a food source and apparently have an acute sense of smell and taste so presumably from this activity they know which direction to go next. Nikon D7100, Subal ND7100, 105mm micro, Subsee +10 wet lens, Inon Quad flash, ISO 100 f25 1/200.

of glass which gives just a little more magnification than the SubSea +10. But it does have a slightly larger girth and so will not slip into the port aperture of the quad flash and so can only be used with a regular threaded adaptor on the port and twin flash lighting.

So now I am burdened with the awkward decision of selecting the Nuticam SMC with the benefits of greater enlargement and TTL flash control, or the Inon Quad flash with the SubSea +10 with its improved access, zero flash positioning but requiring manual exposure control. Tough decisions to be sure!

Although nudibranch activity is beginning to increase so far the variety has been limited to perhaps four or five species. Normally the first species to be active and appear in profusion are the seam lemons (Archidoris pseudoargus) but I have only seen one so far and just a handful of their attractive egg rosettes. I wonder if this is restricted to my

of the flash tubes to the lens mount. However, a little lateral thinking made me realise that the SubSea lens will actually pass through the threaded port aperture of the quad flash and can be held in place by the friction of a stout elastic band. This arrangement leaves perhaps half of the lens extending forwards and does not cast shadows and allows me to maximise magnification for the really small critters.

The pleasure of ring flash lighting has though raised another dilemma for me. I was lucky enough to win a Nauticam SMC lens in the nudibranch photographic competition last year and it is truly a superb piece



This pair of Eubranthus farrani have finished mating and the larger one turns on the smaller to bite it! Nikon D7100, Subal ND7100, 105mm micro, Subsee +10 wet lens, Inon Quad flash, ISO 100 f25 1/200.

On my search for the elusive soft coral nudibranch Tritonia hombergii I was lucky enough to find this soft coral cowrie instead (Simnia patula) which I have only seen two or three times before. Nikon D7100, Subal ND7100, 105mm micro, Subsee +10 wet lens, Inon Quad flash, ISO 100 f25 1/200.

local area or whether this is common throughout the UK this year?

So with just a few species to photograph I decided to focus on the activity of feeding and mating in order to set myself a bit of a challenge. Having decided to do that I soon found that it is not so easy to capture a nudibranch with jaws agape as they often like to bury their heads into the food source, so you have to seek out those that are feeding on elevated targets like hydroids, ascidians and sea mats.

One strange thing I did observe (perhaps not?) was when a pair of Eubranthus farrani finished mating the larger of the two launched an attack on the smaller seemingly to chase it off. The larger one bit off a cerata from the other and seemed to consume it whilst the bitten nudi beat a hasty (well for a nudibranch) retreat. Perhaps this is just rough sex in the nudibranch world or maybe this pair have spent too much time reading Fifty Shades of Green seas.....but I digress. I also wonder if there is anyone

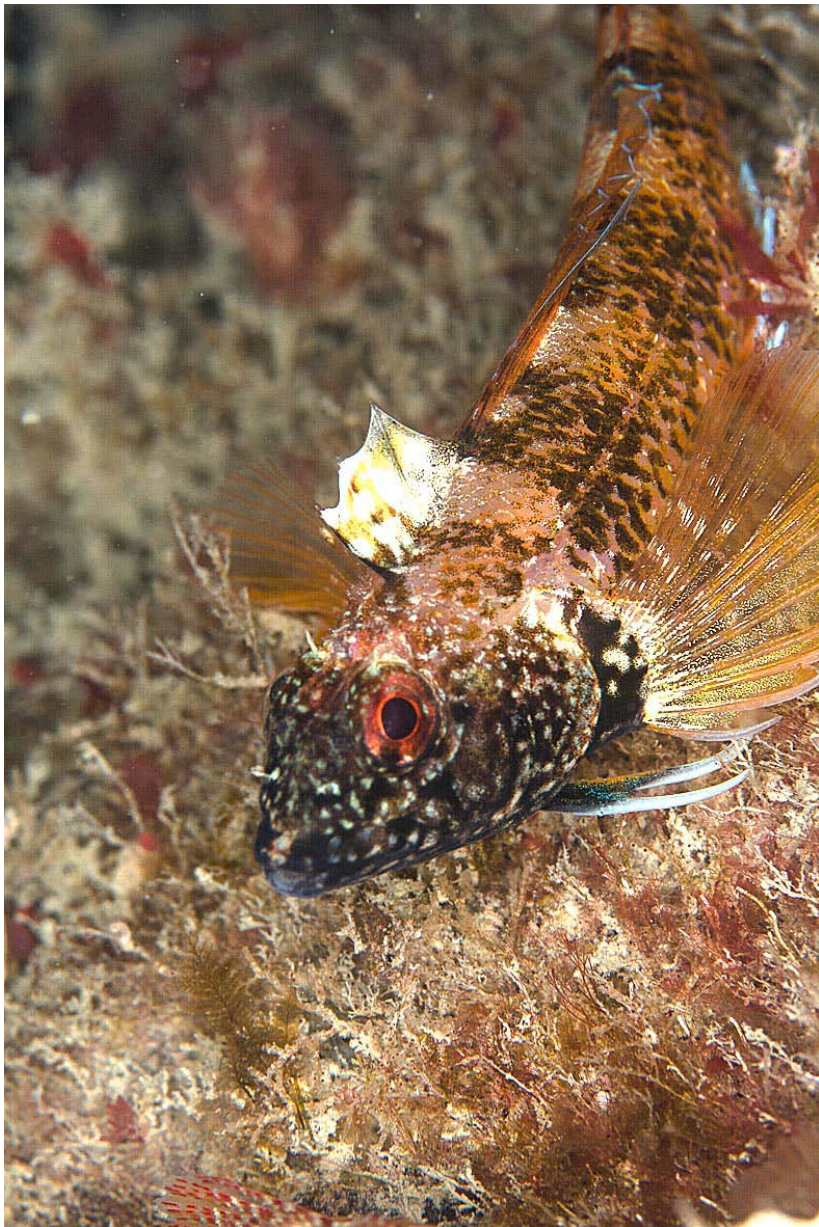
else equally as sad as me to have observed a mating pair long enough to observe this?

Another approach to keep the creative juices flowing with a common subject is to play with lighting techniques and in macro this often means snoots. That sounds easy to say but directing a narrow snoot or fibre optic snoot at a 12mm subject magnified to 2:1 can be an immensely frustrating task! Not only do you have to accurately aim a very narrow beam of light at this small subject, but you also need to

deal with multiple shadows cast by weeds and hydroids at a macro level which you don't see until you check a shot and then realise you have to start again!

Often in a quest for new subjects you will stumble across another which provides a pleasant surprise. One species I often look for is the soft coral nudibranch Tritonia hombergii which I have yet to see for the first time in the flesh. So I spend lots of fruitless hours (so

far) looking at dead men's fingers in the hope that I will finally discover one, but on a recent dive I was pleasantly surprised to find the equally unusual soft coral cowrie Simnia patula. I have only seen this species two or three times before back in the film days (you remember those surely!) so I was particularly please to capture this digitally at last. You often see bald patches on these soft corals which indicates the presence of these critters but you have



Another surprise in March was to see male black faced blennies already in their breeding livery and paired up with females. Hopefully a sign of an abundant spring and summer. Nikon D7100, Subal ND7100, 105mm micro, Inon Quad flash, ISO 100 f20 1/200.



In January and February many wrasse are almost sessile and can be found resting amongst seaweeds for protection. This small corkwing wrasse just patiently stared me out from its lair in a clump of red seaweed which has produced a warm light from the flash. Nikon D7100, Subal ND7100, 105mm micro, Inon Z240 flash guns, ISO 200 f20 1/200.

to look quite hard to find one in action as they match their host very well until lit by flash.

During the late winter months there is often not much fish activity and you will often find wrasse resting on the reef amongst weed when the water is cold and they may hold still long enough to catch a couple of shots. Fish activity this year has been more evident

this winter due to the higher water temperatures and I have been surprised to see mating pairs of black faced blennies already active in March.

These fish do not normally get together to spawn until May and June, but the males are already beginning to sport their mating livery and pair up with the more drab looking females. Another surprise has been the arrival of a few large

Rhyzostoma jelly fish, which again would not normally be around until after the first heavy plankton bloom in April and May, so this is yet more evidence of a very early start and hopefully an indication that this will be a bumper year for marine life.

If you have not started your UK diving season yet it is certainly time to do so. There is plenty of activity and a plethora of good macro subjects to keep a photographer happy.

Mark Webster
www.photec.co.uk



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

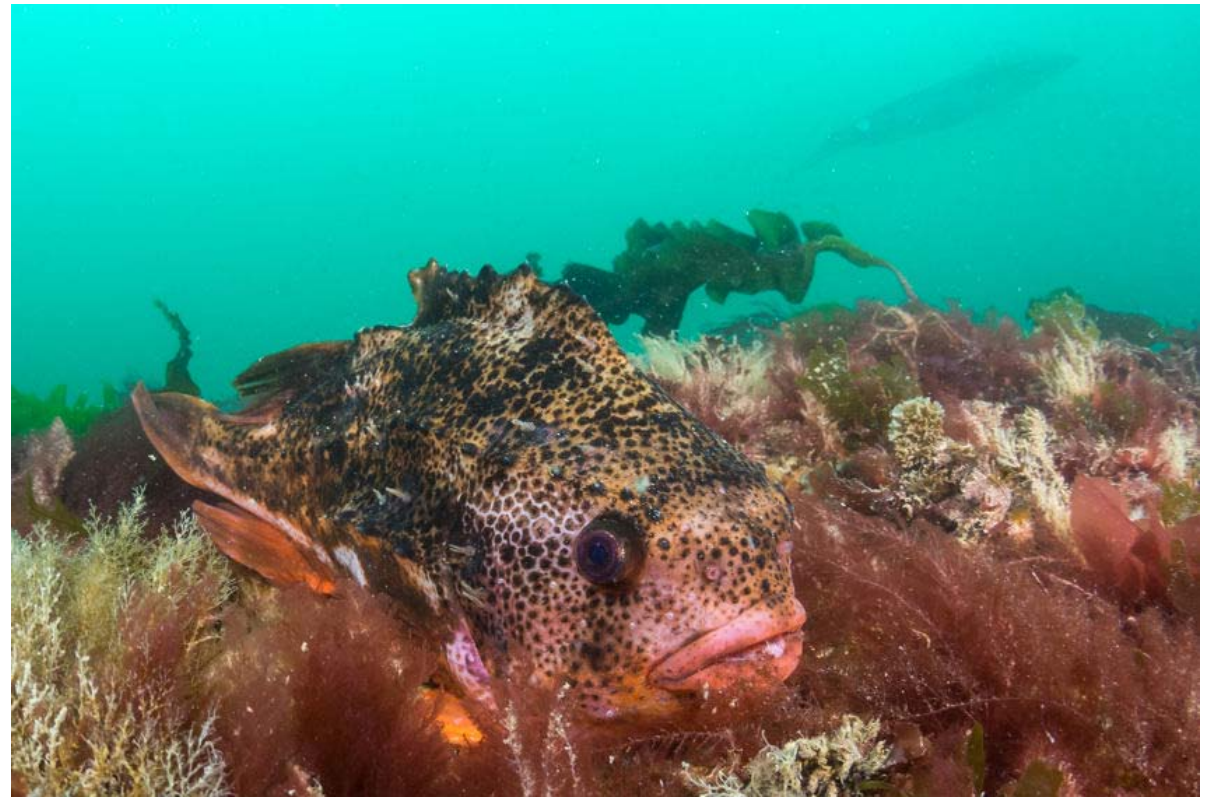
To keep UwP simple and financially viable, we can only accept submissions by e mail and they need to be done in the following way:

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 144dpi
Size - Maximum length 20cm i.e. horizontal pictures would be 20 cm wide and verticals would be 20cm.
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

When I started to write this Parting Shot for UwP I had an unnerving sense of déjà vu; hadn't I written this all before? Well as it happens I had, kind-of. Exactly 6 years ago in the May/June 2009 edition of UwP (no.48) I had a rather poor image of a female grey seal as a parting shot. It was accompanied by a moralistic tale of trying to enjoy the amazing experience that was playing out in-front of me rather than worrying about capturing a decent image. And so here I am again saying almost the same thing because I failed to follow my own advice - do as I say not as I do ;) Early spring is the only time us recreational divers get to see the extra-ordinary looking Lump sucker, or Lumpfish (Cyclopterus lumpus). For most of the year this north Atlantic species lives in waters far too deep for conventional scuba kit, but the need to ensure the next generation of baby Lumps brings them into very shallow water, often an easily accessible 10m or less. Here a large clutch of eggs will be attached to a patch of vertical rock to which the male will dedicate his entire existence for the next couple of months. In the UK these colourful creatures are considered a northern species, but every year a few turn up

on the south-coast (where water temperatures can be 4 or 5°C warmer) and this year is no exception. In just my small patch of local dive sites I know of four males with eggs which presents a great opportunity to document them and the progress of their solitary lives while in the shallow coastal waters for this brief period. And so to the point of this particular Parting Shot; you can see the gorgeous Lump sucker (for me it's like looking into a mirror) which was my chosen subject for the image, but also in the background is a large European squid (Loligo vulgaris). So focused was I on not spooking the resting Lump sucker, while avoiding stirring up the silty sea-bed and maintaining buoyancy in a considerable swell, that I totally missed this encounter. This might have been forgivable if I was looking through an SLR's viewfinder, but being a m4/3rds shooter I had my Olympus E-PL5 at arm's length framing with the screen. So in theory could have, should have, seen it out of the corner of my eye. To add insult



Olympus E-PL5 in PT-EP10. 8mm fisheye. 2x YS-D1 strobes. f/7.1, 1/160th, ISO400

to injury the squid was obviously not just passing quickly through because later, at home, I could see it in various positions in a number of frames taken over a 3 minute period. I'm only so upset because there a few species of UK marine life that I have yet to take a decent photo of and Loligo vulgaris is one of them. So lesson learned second time round? Probably not for me - I find close encounters with wildlife (marine or otherwise) so engrossing that, taking photos or not,

the chances of me seeing that squid were, at best, not good!

Dan Bolt

www.underwaterpics.co.uk

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

peter@uwpmag.com

www.uwpmag.com