





The perfect combination

Macro or wide angle? Fill or ambient? Resort or liveaboard? At Wakatobi, you can have it all. Our waters offer everything from stunning reef panoramas to rare critter portraits. To round out the picture, add an image-making cruise aboard the Pelagian to your Resort stay.

This luxuriously appointed 36-meter yacht carries a maximum ten guests while cruising farther afield in the Wakatobi archipelago and southern shore of Buton Island. Custom-built tenders carry small groups of divers to venues ranging from open-water seamounts and dramatic coral reef formations to legendary muck diving sites.

Photographers are provided with a dedicated, climate-controlled camera room with numerous charging stations. Dive guides and crew are familiar with the needs of shooters, and assist or respect your requests for autonomy. On board, five staterooms provide ample space, including private shower rooms, while a gourmet chef provides fine dining.

Discover the possibilities of a combination resort and liveaboard experience by contacting your Wakatobi representative: office@wakatobi.com.



www.wakatobi.com

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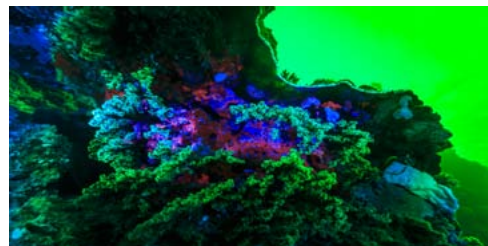
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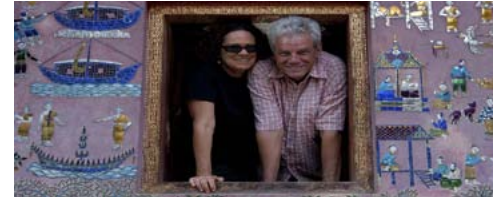


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Underwater Photography

A web magazine Uwp88 Jan/Feb 2016

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

Rant about the PNY DUO-LINK

This may sound way off topic but bear with me and you could save yourself a whole lot of time.

When I heard about the PNY DUO-LINK I was genuinely excited. Here was, for the first time, a device which could effectively plug into an iPhone or iPad and become like an external hard drive. I have a 32gig iPad Air which is not quite large enough capacity to copy my video files to during a trip to both view the footage and be a very useful backup.

So when I heard about the PNY DUO-LINK I did my research and was reassured that this would be the perfect device to effectively increase my iPad's memory and it also meant I wouldn't need to travel with a full blown laptop. Win, win, I thought and forked out £60 for a 64gig beauty.

Upon plugging the USB DUO-LINK into my desktop it's reassuring icon popped up and I copied a few files onto it to transfer to my iPad.

At this stage you have to download their free app onto your iPad to make the DUO-LINK work correctly. Did that. Sorted.

Unbeknowns to me and I can only assume all other IOS9 iPhone and iPad owners, the DUO-LINK doesn't work out of the box with

Editorial

IOS9. The drive wasn't recognised when I plugged it into the iPad or the iPhone.

Now at this stage, I usually blame myself. I've probably done something wrong or done it in the wrong order. That makes me back track to check what I've done but when that doesn't reveal a reason it's time to go on the internet and hopefully find a forum for lost souls all looking for a solution. However I searched on Google it came up with nothing except links to what a great product the DUO-LINK is.

After at least an hour I eventually found an FAQ pdf which, way down at the bottom, it stated: "In order to make your DUO-LINK OTG Drive for iPhone and iPad compatible with iOS 9, download the firmware update on your computer a - See more at: <https://www.pny.com/duo-link-otg-usb#sthash.s6sbUT5V.dpuf>" bla bla bla.

Elated that I had found the solution reasonably quickly I downloaded the firmware update only to find that it was a .exe file which is only compatible with Windows computers. I must have made a mistake, I thought and went back to check the link but I was right. PNY

don't offer a .dmg update file to update the firmware using an Apple Mac.

I apologise in advance for the gratuitous use of capital letters but **THE ONLY WAY TO GET THE DUO-LINK TO WORK WITH IOS9 DEVICES IS TO UPDATE ITS FIRMWARE USING A WINDOWS COMPUTER!!!!@!!@!!@fff**

Guess what? I don't have a Windows computer. I don't have anything against them. I'm sure they are perfectly wonderful machines. It's

just that I've always be a Mac man. And I've just bought a product that is for use with Mac products.

Fortunately the kind staff at PC World updated my drive using their Windows computer and all is well with the world.

The PNY DUO_LINK is an excellent solution but it hacks me off when I'm the guinea pig to highlight their imperfections.

There. Now I've written it down, I feel better already.

Happy New Year and all the best for 2016

Peter Rowlands
peter@uwpmag.com



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News, Travel & Events

Blue Heron Bridge UW Photo Workshops

January 14-17, 2016

March 10-13, 2016

June 23-26, 2016



Take advantage of one of the finest macro sites in the world, our own Blue Heron Bridge, located in West Palm Beach, FL. This 3 day clinic focuses on macro photography, and there may not be a better setting anywhere in the world to hold this kind of class.

From composition to exposure to achieving that critical focus, this class will help you dial in your macro skills. We'll dive each of the 3 days, and given the shallow depth, you can expect to be able to dive for upwards of 2 hours depending your air consumption. We'll do classroom before and after the dives, and we'll do daily critiques.

www.uwpmag.com



This class is intended for beginner to intermediate shooters, and all types of underwater camera systems are welcome. An orientation session will be held Thursday evening at the Reef Photo & Video Underwater Photography showroom in Fort Lauderdale.

www.reefphoto.com

Wetpixel Socorro June 2016



Join Wetpixel and trip leader Jason Bradley from 8 to 18 June 2016 aboard the Nautilus Belle Amie to dive and capture the amazing scenes.

Mexico's Revillagigedo Islands are well known for a profusion of pelagic life. Bait balls, hammerhead, whale and silky sharks as well as the possibility of pilot whales make this adrenaline diving that is also amazingly photographically productive.

www.wetpixel.com

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Lembeh Photo Fun Week 30th July to 6th August 2016



Following on the success of our Underwater Tribe/NAD Lembeh Resort Fun Weeks over the past few years, we will once again host a 7 night/17 dive package in 2016 at the best photo resort in the Lembeh Strait, NAD Lembeh Resort.

We will be limiting the number of divers who will be able to attend this workshop in order to maximize everyone's personal time with the instructors both underwater and in the resort.

One of the highlights of an Underwater Tribe workshop is that the instructors don't bring their cameras with them underwater, instead we spend time one on one with each participant helping them to compose their photos, aim their strobes, and anything else that helps them make the most of their time underwater.

Arrival is planned on the afternoon of the 30th with a "Meet and Greet" plus Introduction planned for the evening where everyone will get a chance to get to know one another.

The diving will start on the 31st with three dives planned per day for the 31st – 4th and the final two dives on the morning of the 5th for a total of 7 nights and 17 dives.

Each day will consist of two morning dives followed by lunch, a short lecture, an afternoon dive, and then evening critiquing sessions, dinner, and after dinner presentations by the instructors. On the 5th we will have a bit of a party with a final "End of the Week" slideshow of everyone's best shots.

www.underwatertribe.com



Scottish Nudibranch Festival 2016 16th to 19th June Eyemouth, Scotland.

Boat diving, photographing and learning about nudibranchs in the company of Scottish Nudibranch expert, Jim Anderson.

A full programme of boat dives, seminars, laboratory and social events will be provided over a jam packed nudibranch weekend.

The Festival is being held in conjunction with Marine Quest, Eyemouth on the SE coast of Scotland with easy boat access to the nudibranch rich waters.

The weekend includes-

- 7 Boat dives over the 3 days
- Talks and workshops
- 3 nights B&B accommodation
- Lunch each day
- Evening meal on the final night

Air fills
Cost £325.00 pp
£100.00 deposit secures your space. Price based on 2 people sharing

November 6th update:

We have decided to add a second boat so there are 9 spaces now available. Please contact Iain at Marine Quest for more information and to book a place

www.marinequest.co.uk



**Lightroom Total Immersion,
Little Cayman Beach Resort
with Erin Quigley**
April 2-9th, 2016 (BEGINNER).
April 9-16th, 2016 (ADVANCED)

This 7-day total immersion workshop is the perfect combination of fantastic diving and expert Lightroom training. You'll learn how to apply Erin's simple step-by-step workflow and image editing techniques to photos you shoot during the week at beautiful Little Cayman Beach Resort. This workshop is hands-on, high-intensity, and FUN! Think Bootcamp in Paradise.

In order to get the most out of this workshop, you must have basic computer skills and understand how to navigate your computer's operating system.

Lightroom Total Immersion is limited to 12 participants, in order to



insure plenty of one-on-one time with Erin. Sign up soon – these spots will go fast!

www.underexposures.com

Check out our special
Whale Sharks trips in
2016



Download our online brochure
HERE

Basking Shark Scotland is proud to release our 2015 basking shark and wildlife film



The footage was shot during summer 2015 around the Isles of the Inner Hebrides, mainly Mull, Coll and Tiree. Filming was conducted with specialist underwater equipment, such as DSLR cameras in underwater housing with supplementary lights, along with Go-Pro cameras and even an aerial drone to capture the landscape.

Basking Shark Scotland had it's best ever basking shark year yet with sharks from April - Oct and over 700 sightings, both from the public and from undertaking it's own studies. In addition to being an incredible year for sharks, there was sightings of over 1000 cetaceans along with exciting rare sightings such as oceanic sunfish, the heaviest bony fish in the

world, and a leatherback turtle. Both of which are very rare summer visitors who conduct huge migrations to feed here.


All footage for the film was shot by Luke Saddler (Head Guide and Freelance Videographer) and Shane Wasik (Owner of BSS and Underwater specialist). With the cutting of the film carried out over the last month by Luke. The filming is part of a multi year project to capture the very best of the Hebridean wildlife and create a stunning film to showcase to international audiences.

Shane Wasik says ' We are really happy with the incredible footage we were able to capture this year. It was an amazing year for marine wildlife and we are really lucky to be able to


get into the right spots every day.

We have world class wildlife on our doorstep but so far we haven't seen any film that properly showcases it from an underwater perspective. We have high hopes to finish off the overall film this year and submit it for approval at international film festivals. In this way, we are hoping to bring the magic of the Hebrides to the whole world. However in addition, inspiring local people about the ocean that they live and work beside, is one of the rewards of doing such a project. With such precious marine life, everyone needs to take a part in looking after this environment.'

www.baskingsharkscotland.co.uk



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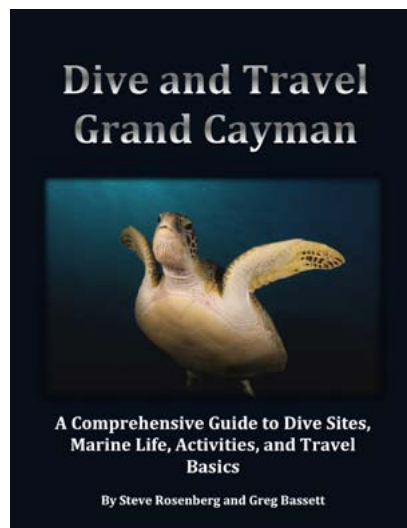
Dive and Travel Grand Cayman eBook Guide

Dive and Travel Grand Cayman is now available from iBooks (iTunes), Kindle and Google Play. It is the definitive guide to diving and visiting Grand Cayman.

This interactive eBook includes detailed information on more than 75 dive sites, marine life, above-water activities, travel, accommodations, shopping, touring and sight seeing, island history and much more.

As with all of Steve's books, it includes stunning photography and now video content. Dive and Travel Grand Cayman is the perfect companion for anyone travelling to Grand Cayman or contemplating a trip in the future.

The book can also be used as a dive log and has useful social media components, as well as a digital table of contents and term search features. You can download the book from iBooks, Google Play or Kindle.



www.rosenbergebooks.com

Galapagos Master Liveboard July 25-August 1 2016



The most spectacular pelagic diving on the planet! The Galapagos is one of those rare places where you can dive through hundreds of hammerhead sharks to find a whale shark cruising along. Toss in silky sharks, sea turtles, giant morays and schooling fish in their thousands...

And that's just the first dive at Darwin! At Wolf Island you can expect huge Galapagos sharks and eagle rays up close whilst dives at Cabo Marshall may put you face to face with giant manta rays and inside a school of millions of black-striped salemas. Mola mola (sunfish) may be seen in the depths too. Macro life is plentiful. Black coral bushes shelter seahorses, blennies, nudibranchs, hawkfish and frogfish. Sea iguanas are a unique sight, along with speedy penguins and playful sea lions. This is but a mere taste of why divers consistently proclaim the Galapagos to have the healthiest marine life in the Pacific.

Built of steel and with a cruising speed of 12.5 knots the Galapagos Master is set to be the most eco-friendly, dive liveboard in the Galapagos Islands. She has 9 well-appointed modern cabins, a spacious interior and generous outside space



for relaxation and dive gear preparation. An experienced crew of 10 is waiting to welcome you aboard and show you the best of the Galapagos, both underwater and on land.

On a typical day, 4 day dives are offered. However, the 4th day dive may be substituted for a night dive when the boat is anchored within a sheltered cove. A 7-night itinerary provides for between 18-20 dives.

www.reefphoto.com

ANTARCTICA

Wide Angle Boot Camp, Bonaire April 30th - May 7th, 2016



NYE 2016/17



DIVE



SNORKEL



PHOTOGRAPH



Join us on the trip of a lifetime for snorkelers, divers and photographers (11 days Fly/Sail)
<http://www.scottportelli.com/antarctica/>
Scott Portelli

Wide angle photography is one of the more difficult techniques to master underwater. Our simple approach demystifies what can be an intimidating skill to learn. Both in the classroom and underwater, our instructors teach how to combine proper camera, lighting, and post production techniques in order to produce consistently better wide angle shots.

The instructors will assist each student individually underwater, helping them to shoot, review and adjust their shots. This “In water instruction” will consist of shooting specific setups alongside our experts.

Who Should Attend? Beginner and intermediate underwater photographers that are looking to improve their wide angle UW photography skills. Do you struggle with strobe position? Balancing ambient light and flash exposure? Do you want to learn the post processing techniques to take your images from Blah to Ahhh? Then this is the course for you.

This course is limited to 14 guests in order to maximize your one-on-one time with our instructors. Before you arrive, we’ll have scouted out the best wide angle setups in advance. You’ll start seeing results



© Erin Quigley

right away as you apply your newfound knowledge on some of Bonaire’s most beautiful dive sites.

In addition to shooting techniques we’ll be teaching you the best ways to edit your images. Learn how to maximize the potential in your wide angle shots using Lightroom and Photoshop.



© Erin Quigley

www.underexposures.com

OWU and DEEP Competitions 2016



The 11th edition of the Underwater Competition Series, organized by founders DivePhotoGuide.com and Wetpixel.com, is returning in 2016 with over \$100,000 worth of prizes up for grabs.

The series comprises Our World Underwater, known as the “Super Bowl” of underwater imagery events, and DEEP Indonesia, the signature component of Indonesia’s prestigious diving, adventure travel and extreme sports expo.

There is a host of amazing prizes to be won, including the latest underwater photography equipment as well as trips to the best resorts and on the top liveaboards. Prizes are

awarded to winners in 13 categories, with the grand prizewinner of the Our World Underwater competition receiving \$1000 in cash for the “Best of Show.”

The competition categories are aimed at photographers of all levels. Our World Underwater features technical categories, while DEEP Indonesia offers themed entry categories. Debuting last year, DEEP includes a category dedicated to in-water surf, wave, and watersport photography.

www.underwatercompetition.com

The leading online resource for underwater photographers and videographers



TECHNIQUES

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

TRAVEL

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

ARTICLES

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

NEWS

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

GALLERIES

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

EXPEDITIONS

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

DIVE PHOTO GUIDE

www.divephotoguide.com · contact@divephotoguide.com

The Junk and the Similan National park



Worldwide Dive and Sail, and especially The Junk crew, are very excited this month since the Similan National park has finally reopened its doors to divers and non divers!

The Marine National Parks of the Similan Islands and the extensive reefs in the Surin Islands are without a doubt the best diving in Thailand. Over 200 species of hard corals spread between walls and coral gardens where turtles, napoleons, bumphead parrot fish, barracudas, manta rays and all kinds of tropical fish patrol. All this as well as one of the best dive sites in the world, Richelieu Rock, and the chance to see

the majestic whale sharks!

This new season, The Junk liveaboard is offering you 4 or 6 night cruises around the Surin and Similan Islands onboard the most charming and distinctive vessel in Thailand. So distinctive in fact that she has been used for several famous movies!

The Junk is a 33 m sailing boat with three masts that can take up to 18 divers in 6 air conditioned cabins with a choice of double cabins, triple cabins and quads. All of them with their own private bathrooms with hot water.

www.thejunk.com

A new species of Galapagos tortoise



A new species of tortoise has been found in the Galapagos!

Until recently, experts believed that the two giant tortoise populations on the Island of Santa Cruz were of the same species (the *Chelonoidis porter*), but DNA testing from tortoises bones that were almost a century old found in museums in the US, the UK and the Galapagos have shown that those living on the eastern side of the island are different from the ones living on the west and southwest side. Not only they were different species, but were more closely related to species on different islands than to each other!

The findings are helping to better understand how these tortoises made it to Santa Cruz and the process that led to their diversity on the island.

Would you like to see them? Then come on board the Galapagos Master in February – the only month where we still have some spaces left. We organize land excursions to see them!

www.wwdas.com



David Fleetham Hawaii

David grew up in Ontario, Canada just outside Toronto and in his last year of high school learned to scuba dive in a man-made lake. Soon after he purchased an Ikelite housing and a Minolta SLR camera, started working in the dive industry, and focused on his passion: underwater photography.

Since then David has become one of the most published underwater photographers in the world. He now has over 200 magazine covers under his belt, including the only underwater image ever to be used on the cover of LIFE magazine. David's philosophy is to shoot what you love, and try to capture it in a way that is unique to you.




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New Products

Nauticam WWL-1 wide lens shipping now



elements are coated with a broadband anti reflective coating to keep flare and internal reflections to an absolute minimum.

WWL-1 is a full zoom through lens, performing well through the entire zoom range of popular compacts and Micro Four Thirds systems with power zoom lenses. This feature distinguishes this lens from all other wet lens options at the market, which are designed to be used at a single focal length. The ability to be used with zoom makes WWL-1 extremely versatile! A touch of zoom can be used to crop a subject in camera, or for close-up shots without removing the lens.

The WWL-1 is the highest quality wet changeable underwater wide angle conversion ever made, featuring unmatched contrast, overall sharpness, corner sharpness, and clarity. The design is truly full zoom through, allowing zoom to be used as a tool for framing, and removable in water for close-up and macro shots.

Every Nauticam lens is a “clean slate” design. These optical systems are engineered entirely as underwater corrective and conversion optics, and not adaptations of in air designs. The process isn’t an easy one, but the images captured by WWL-1 and previous Nauticam optical designs prove the effort is well spent.

WWL-1 is constructed of 6 precisely ground elements of highly refractive optical glass. All internal

www.nauticamusa.com

Diveandsee DNC-GP3 housing



The DNC-GP3 housing allows you to connect any Dive And See external HDMI monitors, capture amazing high quality 4K wide angle video and view over a large, bright external monitor.

We modified the GoPro Dual Camera Housing to provide space for an internal HDMI cable and external HDMI female connector. The housing comes with a 12 inch waterproof HDMI female connector and protective cap. When you are not using the bulkhead connector, simply cover with provided waterproof protective cap. The waterproof bulkhead connector allows you to transmit live video above the surface (over underwater HDMI extension cable up to 100 feet) for watching or recording HDMI signal from a GoPro camera.

www.diveandsee.com

ACQUAPAZZA
GripBase

GripM+BaseGM
(General purpose)


M10 Ball Joint

(Short / Medium)


<http://acquapazza.jp/en>

The advertisement for Acquapazza GripBase features a dark background with a blue circular logo at the top left. The text 'ACQUAPAZZA' is in blue, and 'GripBase' is in large white letters. Below this is a white line drawing of the GripM+BaseGM component, which is a long, thin metal piece with a ball joint at one end and a connector at the other. The text 'GripM+BaseGM (General purpose)' is centered below the drawing. Further down, the text 'M10 Ball Joint' is in large white letters, followed by another white line drawing of the ball joint component, which is a short metal piece with a ball joint at one end and a connector at the other. The text '(Short / Medium)' is centered below this drawing. At the bottom of the advertisement, the website URL 'http://acquapazza.jp/en' is written in white.

Nauticam
innovation underwater



NA-A7II Housing
for Sony A7 II/A7RII camera



NA-RX100IV Housing
for Sony Cyber-shot DSC-RX100 IV Digital Camera

www.nauticam.cn

Nauticam 蓝天海

Hugyfot Pro+ Housing System for GoPro 3 / 3+ / 4



OCEAN LEISURE CAMERAS



OCEAN LEISURE CAMERAS

The Pro+ housing comes standard with a powerful battery-pack (lasts up to 6 hours) and a separate 4.3" LCD screen in a waterproof housing. The Pro+ housing comes standard with the flip-up red filter and screen protection and the Hugyfot 'double decker wings' with handles and mount balls.

Machined out of solid aluminium, it is pressure rated to 200m and offers full camera control. The Pro+ housing can accommodate a GoPro Hero 3/3+ or 4 camera.

- Up to 6 hours of runtime instead of

40 minutes;

- Extra large (4.3") screen in a separate watertight housing;
- Connection for extra external battery pack for extreme time lapse shots;
- Depth rated to 200m.

The Hugyfot Pro+ housings can be equipped with a 'video out' connection (option). This connection can be used with a 100m cable (max. length) that will transfer the underwater images 'on-the-fly' to a monitor at the surface.

www.oceanleisurecameras.com

ACQUAPAZZA



Coming soon!

APS0-A72
Underwater Housing for the Sony ILCE-7M2/7RM2



<http://acquapazza.jp/en>

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Ikelite TTL Housing for Sony Alpha a7 II, a7R II, a7S II



We would like to introduce an important term that has been missing from all previous discussions about taking the Sony Alpha 7 series underwater: TTL. When your subject is quickly approaching, you'll be glad to have the only housing that provides TTL support for Alpha 7 cameras. An integrated TTL circuit features model-specific encoding, which has been fine-tuned to Sony's latest flash exposure protocol. The circuit is powered by the strobe for zero maintenance and no batteries to change. Exposure compensation in TTL mode is supported using the camera's built-in control. At this time, only Ikelite DS strobes are capable of powering the circuitry. SEA&SEA, INON, and Nikonos strobes will still enjoy fast recycle times and improved battery life, but must be used in manual exposure modes only.

This housing provides a direct electrical connection to the camera's

external flash hot shoe. Cord attachment is as easy as screwing in a lightbulb, and the threaded fit prevents accidental detachment during use. The bulkhead connection has been moved to the top of the housing to keep cords out of your way and reduce strain on the cord ends. A variety of sync cord terminations are available for Ikelite, SEA&SEA, INON, or Nikonos strobes for ultimate versatility.

It couldn't be faster to change ports than this system—just press the port on and snap the four locks closed. This housing accepts a variety of ports to accommodate all of the most popular zoom, macro, and wide angle lenses from Sony, Canon, Sigma, and more. Our custom optical grade acrylic domes provide the color, clarity, and durability of glass at a fraction of the travel weight.

www.ikelite.com



Nauticam NA-RX100IV for Sony RX100 IV



"Amazing 4K Compact"

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

www.reefphoto.com



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www.uwpmag.com

Updated Retra Light Shaping Device (LSD)

Retra has announced an updated version of their Light Shaping Device (LSD). The LSD Ultimate has a lighter aluminum housing and a separate optical tube and mounting module. The latter are interchangeable and available for Sea&Sea, Inon, Seacam and Ikelite strobes. The company is also offering three different packs of masks to accompany the LSD.



The LSD Ultimate is available now at €300, with the mask packs available at an additional €40 each.

www.retra-uw.com

Recsea housing for Canon EOS 7D Mark II



Recsea are shipping their housing for the Canon EOS 7D Mark II SLR. Constructed from aluminum, it has a rear control dial with a push button function. Recsea support a wide range of lenses and there are a range of

accessories available, including the new Recsea Airlock Vacuum System RAV-S2.

www.recsea.com



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



“Ready to Dive”

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

www.reefphoto.com

Issue 88/17





ACQUAPAZZA



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



<http://acquapazza.jp/en>

Green Force introduces the Travel Kit



Your perfect travel companion! Green Force introduces the Travel KIT.

This KIT is composed of a Tristar 1070 light head, a Hybrid 2 canister and a charging KIT. The charging KIT is composed of 2 x 18650 Li-Ion rechargeable batteries, a charger and charging cords for EU, UK, US and cigarette lighter.

The Flexi KIT is modular, hence expandable with lots of other Green Force accessories to offer even more functionality.

www.green-force.com

Fisheye FIX Neo 1000 WR FS Focus Light



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Nauticam Epic LT Housing for RED EPIC and RED SCARLET Cameras with Mysterium-X and Dragon Sensors

Unveiled at the 2015 NAB Show in Las Vegas, this exciting new housing is the most travel friendly system available today for Epic and Scarlet cameras.

Built around Nauticam's N120 DSLR Port Mount, and compatible with dozens of Canon EF Lenses, Epic LT is capable of being packed in a carry on backpack that can fit "under the seat in front of you." The housing weighs in at under 7kg / 15lbs. This results in a weight & form factor you can truly take anywhere.

On location, the usability of this system is unmatched. Set up and tear down in minutes, Battery and media changes while the camera is mounted in the housing, and lens swaps in seconds. The small size and light weight dramatically decrease resistance in water, especially when free diving.

"My work takes me to the ends of the earth, on small planes, and deep into the jungle. Finally I have a digital cinema housing I can take with me all the time, on all projects, even those with tight luggage limits."

— Cristian Dimitrius

The entire Epic LT system can be assembled in a matter of minutes!



A top mounted Arri Dovetail Plate use used to mount the camera in the housing, and an intermediate "block" interfaces between the SWITCHBLADE Module and the housing. controls need to be preset when installing the camera, and the camera can even be installed with Red's quick release plate mounted on the bottom.

Setup is simple, putting our shooters in the water capturing 6k content in as little time as is possible.

www.nauticam.co.uk

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Subal FS-7 housing for Sony FS7



The Subal FS-7 Underwater Housing has full manual control, as well electronic LANC control via the handles. The housing also has an inbuilt depth gauge. It comes with the Subal port size 4. The Subal FS-7 Housing features a built in Monitor and magnifying viewfinder with diopter adjustment. Output control via SDI or HDMI is possible as accessories, and external monitor can be used (Odyssey Q7 or Atomos Shogun)

www.backscatter.com

FIX Fisheye Conversion Lens UWL-28M52R



With the UWL-28M52R an ultra wide photography with approximate FOV of 168 degree and 0.41 magnification is possible with 28mm (35mm resp.) lens cameras.

Inert gas is injected into the lens to keep the fogging possibility due the temperature difference on the minimum. The UWL-28M52R has M52 thread and can be mount directly on housings equipped with the M52* thread. For prevention and lens protection of the flare , exclusive flower-shaped hood is attached.

*With optional FIX Wide Adapter Ring F52-M67, even housing of the M67 mount is usable.

www.fisheye-jp.com

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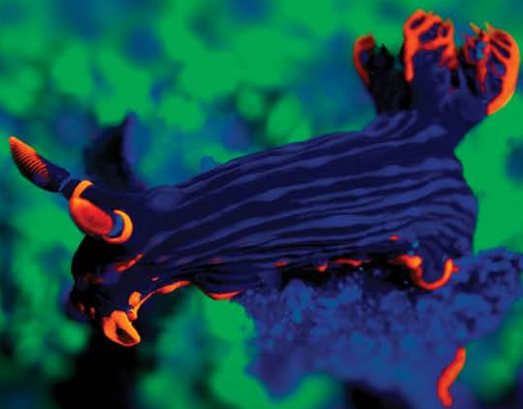
**SONY α7 MkII
SONY α6000**

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NA-5DSR for Canon EOS 5DS/5DS R camera



Nauticam NA-A7II Housing for Sony A7II / A7RII



Nauticam is pleased to announce the NA-A7II, the newest entry in its mid-range series of fine underwater camera housings. The NA-A7II is an incremental improvement over the outstanding NA-A7 housing, and is the ultimate underwater machine for full frame mirrorless image making.

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

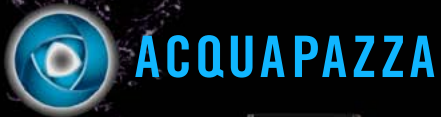
button to be programmed for AF-ON meaning "thumb focus" fans can easily have perfect functionality.

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.

www.nauticamusa.com



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Saga Magic Ball lens



The Saga Magic Ball lens consists of two parts, one part where the lens is inside of a compartment with two crystals to maintain the effect in the air and the other holding either the front, lens, or the lens holder.

It has a screw-focus and set the diameter of the lens

The acquired images have an angular effect on the center and show the inverted image and reflecting back the same blurred image).

www.sagadive.com

Missing Bits by Deepshots



Deepshots is a UK based one man company that designs and 3D prints lens gears and other bits and bobs for underwater photographers.

Jussi, the Finn, behind the outfit is a keen UW photographer himself and spends his free time tinkering with UW photo kit. You can find his “from the shelf” products from his Missing Bits Web shop. Deepshots also makes custom parts for underwater photo and videographers. If you have a lens you want to use but no manufacturer makes gears for it drop him a line. He might be able to help you.

New products are added from time to time and the Deepshots’ latest project is the tentacle fibre optic snoots for macro photography. New Olympus Pro lens gears will also soon be available. Deepshots products can be shipped all around the world and his gears are in use from Japan to Brazil and everything between.

www.deepshots.myshopify.com



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



“Truly Refined”

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

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www.magic-filter.de filters



Magic Filters for actioncams are available at www.magic-filter.de. Filter adapters are made for many different actioncams beside GoPro, such as AEE, PNJ, SJ, Actionpro, etc.

As well as Magic Filters there are also magenta filters available for greenish sea or lakes. Their latest product is a macro lens that is easy expendable up to +30 dpt. or even more. A complete set including red & magenta filter & a +10 dpt. macro lens costs 59,95€ for GoPro.

www.magic-filter.de ships worldwide to resellers and end customers. Additionally the donate 0,50€ for every sold article to a various shark protection projects.

Check out on www.magic-filter.de! There are many videos in the gallery which demonstrate the effect of the colour filters and macro lenses very well.

www.magic-filter.de

GoPro Pistol Trigger Set



The perfect grip for the capturing the perfect shot, the SP-Gadgets Pistol Trigger Set gives you total control over your takes, whether on, under or above the water. The grip keeps your hand steady and your shot stable. The grip floats on the surface, but can be filled with water for shooting during diving sessions.

Get the most out of your submarine shots with the Pistol Trigger Set!

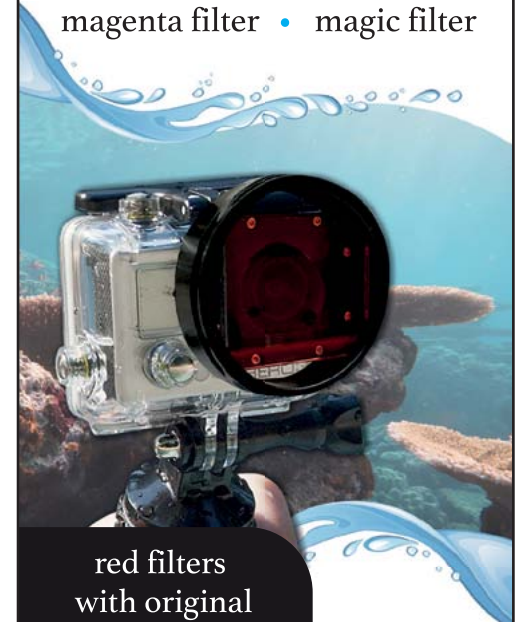
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Ikelite TTL Housing for Canon EOS M3



The two biggest advantages of shooting underwater with an interchangeable lens camera are the variety of great lenses available, and the ability to connect an external flash directly to the camera. The Ikelite housing for the Canon EOS M3 is designed with these key points in mind to deliver a system that truly helps you take better photos in and under the water.

The Ikelite Housing for the Canon EOS M3 provides a direct electrical connection to the camera's external flash hot shoe. Electrical strobe connection is dozens of times faster than firing the camera's built in flash and extends the battery life of the camera—which is essential when shooting a mirrorless system. Cord attachment is as easy as screwing in a lightbulb, and the threaded fit prevents accidental detachment during use. A variety of sync cord terminations are available for Ikelite,

SEA&SEA, INON, or Nikonos strobes for ultimate versatility if you have multiple sets of strobes.

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LenzO iPhone 6/6s housing



Designed for both everyday users and professionals alike, the LenzO iPhone 6/6s housing has all the features you expect from your phone while incorporating professional controls for serious underwater pictures and video.

Pre-ordering is now opened. The pre-order requires a \$30 deposit (plus any applicable tax), and will leave a balance of \$265 (plus shipping and any applicable taxes). Expected shipping is late February, 2016.

It's the most feature packed iPhone 6/6s housing available today.

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- Depth rated and tested to 100 meters (330 ft)
- Smartphone retaining system keeps phone secure
- User friendly safety lock aids in opening and secures proper sealing
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- Dual tripod mounts
- Compact and lightweight
- Multiple filed patents

www.valstech.com

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the side handles, the light arms and the outer monitor as required.

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Fotografie di David Salvatori



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Italian underwater photographer David Salvatori is pleased to announce the release of his first photographic book, titled “Reflections from the Past”.

“Reflections from the Past” is a photographic exploration in the heart of Tirino valley in Italy, ending in the crystal clear waters of the Capodacqua lake, at the culmination of a journey in which the places visited by the author stimulated fascination and personal reflections.

The lake of Capodacqua is located in the Gran Sasso National Park and Laga Mountains, surrounded by unspoiled nature of vast archaeological interest.

The cold and pristine water that feeds the lake comes straight from Gran Sasso along a 27km-long limestone path.

The lake hosts two submerged Middle-age windmills and a partly emerged paint manufacturer, located on the edge of the basin. This year the lake was included by Sport Diver among the 50 Best Dive Sites in the World.

Besides being an amazing dive destination, Capodacqua and the surroundings can offer much more, history, nature and culture.

www.reflectionsfromthepast.com

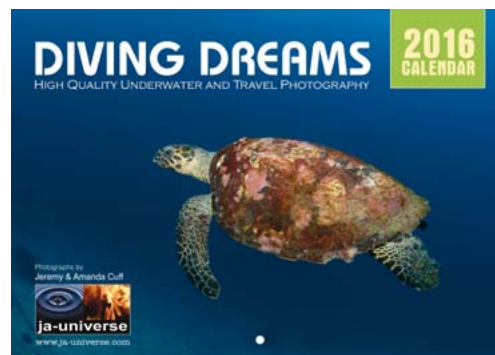
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2016 calendar by
Jeremy and Amanda Cuff



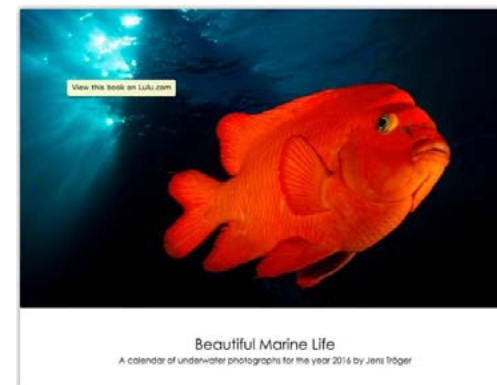
Photographers and photojournalists Jeremy and Amanda Cuff have published a new 2016 Calendar titled “Diving Dreams”.

Jeremy said, “The Diving Dreams 2016 Calendar features a variety of images, mostly from our dive travels over recent times, and includes destinations such as Egypt, the Turks & Caicos Islands, the Socorro Islands and the UK.”

The 2016 Calendar can be obtained from Jeremy & Amanda at a cost of £9.00 including postage (within the UK).

www.ja-universe.com

Marine Life calendar
by Jens Tröger



Another year of diving the American Westcoast—from California to British Columbia—has passed. And so it is time for a new calendar!

Again, this calendar shows my favorite photographs, from the tiny polyps living on Red Gorgonians and curious Fringeheads to larger fish like California’s Garibaldi. I’ve tried to portrait this beautiful marine life in the context of their respective habitats, and to make the pictures as engaging and interesting as I’ve experienced them during my dives.

This calendar wouldn’t have come to life without Anacortes Diving and the Lu-Jac’s Quest, Tom Heinecke and Berni Landau, and Richard Salas. I’m also thankful to Andy Lamb for telling me what I’m actually looking at.

www.lulu.com

www.uwpmag.com

10Bar Snoots Review

By Erin Quigley



(Far left) 10Bar Snoot Set with Aiming Laser for Inon Z- 240 & D-2000 Strobes

(Left) 10Bar Snoot Set for Sea&Sea YS- D1 and YS- D2 Strobes

Although I'm a seasoned underwater photographer, I'm relatively new to snooting. On a recent trip to Lembeh, I brought along the 10Bar Snoot with Laser Aiming Light for my YS-D1. Setup was beyond easy; install three LR 44 batteries and snap the base onto the front of the YS-D1. It also fits the newer YS-D2. Even as a snoot novice, I was able to successfully aim and shoot it without assistance.

My initial fears that the laser pointer might injure or alarm the critters disappeared when they appeared not to notice it at all. In fact, they ignored the laser completely, while my red or white focus light caused many critters to turn away or hide. Because you can't see whatever's directly under the intense red dot of the laser, it's a good idea to aim it just to the side of where you want to focus. The laser turns off as you fire, so it's never visible in the shot.

The 10Bar Snoot size can be varied by using different widths of screw-on nozzle segments, and the distance between the snoot and pointer is adjustable via a small external wheel. Getting





snooted shots was MUCH easier to accomplish with the help of the laser pointer.

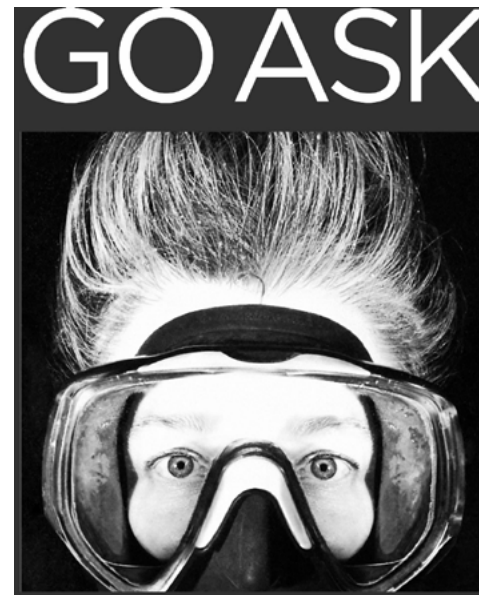
My only complaints, and they're really nitpicks, are that the snoot arrives without instructions of any kind, and it could use an accompanying tool for opening and closing the battery compartment. A quarter or other coin does the job, but strips the anodizing from the metal. The separate screw-on nozzle segments are a little awkward - it would be better if they somehow telescoped into the base, and although the batteries are cheap and easy to travel with, they had to be replaced every ten or twelve dives, even though

I turned off the laser when it wasn't in use.

In short, the 10Bar Snoot with laser pointer is a big winner. It was so popular on my trip that another guest bought it from me to use for the rest of her vacation, and I ordered a replacement as soon as I returned home.

Erin Quigley
www.goaskerin.com

10Bar snoots are available from:
www.backscatter.com



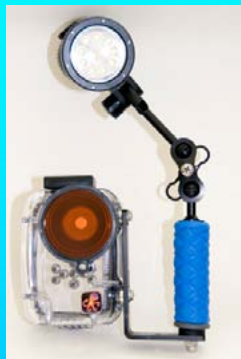
Erin Quigley is an Adobe ACE certified digital imaging consultant specializing in customized workflows and editing strategies using Adobe Photoshop and Lightroom. She is an award-winning underwater photographer and video editor, and creator of GoAskErin.com, which provides one-on-one instruction, custom video tutorials, and Photoshop and Lightroom resources specifically developed for underwater shooters.

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Ikelite Gamma II Flashlight

By Phil Rudin

Ikelite Underwater Systems is headquartered in Indianapolis Indiana USA and distributes worldwide through dive centers, water-sports and camera stores. With over fifty years in business Ikelite has earned a reputation for outstanding customer service with both new and aging equipment, offering upgrades and speedy service to their many loyal customers. With an ever expanding catalog of quality products Ikelite has recently introduced the Gamma II waterproof flashlight.

This small flashlight is beautiful in both functionality and design using cutting edge LED technology Ikelite has improved brightness by sixty percent. Ikelite's special light concentrating optical design produces a narrow ten degree beam angle of 350 lumen.

The Gamma II is precision-machined from aircraft grade aluminum with a military-grade anodized finish. The Gamma II has a non-slip contoured body which is 142 mm in length and only 36 mm in diameter (5.6 X 1.4 in). The flashlight weights in at a mere 113 g (4 oz) and is powered by two included CR 123 batteries which provide over ten

hours of burn time. The batteries are installed by removing the threaded tail piece which has two O-rings to provide an excellent seal. When installing the batteries the sealing surfaces should be clean and a small amount of the included O-ring grease should be applied.

Once assembled the Gamma II is depth rated to 120 m (400ft) and has a color temperature of 6500K. The on/off switch is recessed in the bottom of the tail piece to prevent accidental activation. As with all battery powered devices the batteries should be removed for travel. After each dive the Gamma II should be thoroughly rinsed in fresh water and dried. When storing, the batteries should be removed and stored in a cool place.

The Gamma II ships with an O-ring, wrist lanyard with slip locking device, a 2cc silicone lubricant tube and a set of two CR 123 batteries. The Gamma II is available in Black, Silver, Purple, Red and Pink with a US retail price of around \$130.00. A two pack of CR 123 replacement batteries can be found for US \$4.00.

How you decide to mount the Gamma II will depend on your personal needs. If you are using the



Gamma II as a flashlight the lanyard can be used to hang the light from your BCD or your wrist. Ikelite has several mounting kits for a variety of lighting configurations.

A top mounting kit can be used with a single ball mounting clamp on the top of the housing as a narrow beam focusing light and flashlight, the light can be integrated into just about any ball arm system using a triple clamp or single clamp.

Ikelite Flex arms can be used to mount the Gamma II on the Ikelite Steady Tray for GoPro making a single or dual light video lighting system with the M27 Diffuser for Gamma and more. Several of the Ikelite mounts have a reusable mounting system much like a Zip-Tie



to secure the light to a variety of strobe and video arms.

This is an excellent light for your boat, home or car and an excellent multi-purpose dive light. I like to keep one handy for a number of different uses. I like the narrow beam angle as a focus light for macro and as a secondary light while night diving. A single set of batteries will get you through most dive vacations but I always carry spares just in case.

Because the Gamma II is small and light weight it packs neatly into any piece of luggage or it could be carried in your pocket.

Contact your authorized Ikelite dealer for more information and pricing on this excellent flashlight. You can also check out Ikelite's full line of flashlights and video lighting at Ikelite.com.

Phil Rudin

www.ikelite.com

www.uwpmag.com

SONY 16-35 mm F/4 lens

by Phil Rudin

Sony's new ultra wide-angle full frame Vario-Tessar T* FE 16 mm to 35 mm F/4 ZA OSS lens is a rectilinear lens designed for the Sony alpha A7 series cameras and E-mount APS-C sensor Sony cameras as well.

The lens has Optical SteadyShot image stabilization which reduces camera shake realistically up to 2 or 3 shutter speed settings. The lens can be used with sensor stabilized or non-stabilized sensor E-mount cameras. The F/4 aperture remains consistent across the entire range and the zoom ring is well dampened giving a buttery smooth zoom.

The 107 to 63 degree zoom range on the full frame Alpha series sensor is an excellent range for underwater wide angle. While the APS-C sensor range of 83 to 44 degrees is a more moderate zoom range for U/W use. While this lens will work on APS-C other choices like the Sony E series 10 to 18 mm zoom makes more sense.

With a minimum focus distance of .28m (11 inches) the lens will focus just off the Nauticam 180mm port glass. This Zeiss branded lens has five aspherical elements, including one AA and three ED elements for reduced chromatic aberration and the

Carl Zeiss T* antireflective coating to enhance color, clarity and contrast by reducing lens flare and ghosting.

The lens has internal focusing which means only the inside elements move during focusing with no movement of the lens. The lens extends when zooming with the wide angle 16 mm end being at the fully extended end of the zoom range. This is common with the new wide angle digital lens designs and is the opposite of many legacy lenses which were at the widest AOV before being zoomed.

The seven rounded diaphragm blades offer decent bokeh wide open. Corner sharpness is diminished somewhat at the 35 mm end of the lens in the F/4 to F/5.6 range and vignetting occurs at the 16mm end at F/4. This lens features focus by wire which is quite accurate in auto focus and when manually focusing. The lens accepts 72mm filters and ships with front and rear caps, a snap on lens hood and a quality padded lens bag for storage and transport. Sony's US retail price is around \$1350.00 and the lens is available at your local authorized Sony dealer.

I have had a chance to shoot with the 16-35 zoom using both the



© PHIL RUDIN PHOTO 2015

Schooling Yellowtails, Sony A7R II, Sony FE 16-35mm F/4 at 16 mm, Nauticam NA-A7II housing, with Nauticam 180 mm dome port, two Inon Z-240 strobes, ISO-250, F/8, 1/200 sec

Sony A7 II and A7R II cameras in the Nauticam NA-A7II Housing. I used the lens in auto focus mode with the Nauticam SE1635-Z gear to zoom the

lens.

Nauticam's recommended port configuration is the N100 to N120 35.5 mm port adapter with zoom/

focus knob which allows manual focusing with Nauticam focus gear (SE1635-F). This port adapter allows the housing wheel to zoom the lens while the port adapter wheel handles manual focusing. With this port configuration the two zooming wheels sit quite close together and required me to zoom the lens with my left thumb from behind the zoom wheel. Since this was the most comfortable zooming position I did not find this to be an issue and it also allowed me to reach the focus wheel with my left forefinger while using my thumb to zoom at the same time, quite ideal even with gloves.

Auto focusing worked quite well for me so I did not opt for the focus gear. The recommended port extension is Nauticam extension ring 50 which has an outside locking device and installs between the 100 to 120 port adapter and Nauticam 180 mm optical glass wide angle port. Nauticam now has a second port configuration using a 30+50 extensions that does not have the manual focus wheel.

The 180mm port has a builtin shade which helps prevent lens flare and protects the port glass. This is an excellent glass port with a quality optical coating to prevent ghosting and lens flare. The port has the 120 mm port mount and 110mm of curvature so it will work



Sony A7 II, Sony FE 16-35mm F/4 at 16 mm, Nauticam NA-A7II housing, with Nauticam 180 mm dome port, two Inon Z-240 strobes, ISO-400, F/6.3, 1/160 sec

with large diameter lenses. The port configuration will also work with the Sony FE 24-70mm F/4 and Sony 28mm F/2 with FE ultra-wide adapter (21mm) by replacing Extension ring 50 with an extension ring 30. It will also house a variety of other non Sony lenses and fits several other Nauticam housings.

The Nauticam 180 mm optical glass port ships with a neoprene port cover and rear storage cap and retails for \$1050.00 US, SE1635-Z zoom gear \$175.00, SE1635-F focus gear \$175.00, N100 to N120 35.5

port adapter with zoom/focus knob \$280.00, extension ring 50 with lock \$310.00. Please remember that these parts are for Alpha 7 series II housings and may not work with the older Alpha 7 series housings.

In addition to the equipment listed above I used two Inon Z-240 strobes fired with the Nauticam manual flash trigger for Sony and fiber optic cables, two ten inch Nauticam float arms and two Nauticam eight inch ball arms.

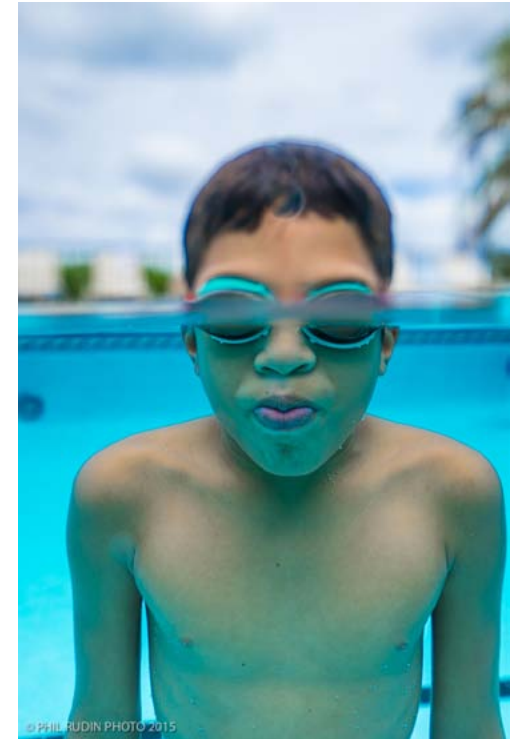
With this configuration the housing was balanced to my liking



Aquatic Plants, Sony A7 II, Sony FE 16-35mm F/4 at 16 mm, Nauticam NA-A7II housing, with Nauticam 180 mm dome port, two Inon Z-240 strobes, ISO-400, F/6.3, 1/160 sec

and I had no wrist fatigue even after several hours. The air pocket captured by this port configuration adds to the ease of use and while the dome had a tendency to float up a bit it was overcome with little difficulty.

The Sony lens worked very well behind the 180 mm port both below water and while shooting split images. I shoot split images at F/14 to F/22 for greater DOF using strobe lighting



on the underwater side in some cases. This lens is an excellent for wreck scenes, reef scene and model photography.

The lens will focus just off the port glass and will work well as a close focus wide angle lens for larger subjects while a fisheye with a smaller (100-140mm) dome port would be most ideal for smaller foreground subjects. As I stated above auto focus is fast and accurate and with the 180mm dome corner sharpness is quite excerpitable at around F/8 and above.

While the Sony 16-35 lens is large compared to Sub-full frame

(Left) Model Roman, Sony A7 II, Sony FE 16-35mm F/4 at 16 mm, Nauticam NA-A7II housing, with Nauticam 180 mm dome port, ISO-100, F/4, 1/800 SEC. This image was shot directly on the port glass and you can see the forced perspective distortion of the models head at 16 mm.

(Centre) Sony A7 II, Sony FE 16-35mm F/4 at 16 mm, Nauticam NA-A7II housing, with Nauticam 180 mm dome port, ISO-100, F/4, 1/1000 SEC. One foot from subject with little distortion at 16 mm.

(Right) Sony A7 II, Sony FE 16-35mm F/4 at 35 mm, Nauticam NA-A7II housing, with Nauticam 180 mm dome port, ISO-100, F/4, 1/1250 SEC. One foot from subject with little distortion but loss of focus at the top of the image because of the limited DOF at F/4 at 35 mm.

mirrorless lenses it uses the same 180mm port as lenses like the Olympus 7 to 14 for M43 cameras. By comparison the Nauticam NA-A7II housing and 180mm port are a good bit smaller than full frame DSLR

housing and port configurations for the same zoom range DSLR lens.

Visit your authorized Sony and Nauticam dealers for further details.

Phil Rudin



AOI Port System For Olympus Pen Housings

by Jussi Hokkanen

Olympus is a weird sort of company. Some of the stuff they bring out is brilliant and then the next design can be downright bizarre. A good example is their underwater housings, especially the mirrorless camera ones. It's almost like there are two guys fighting at the top about where to take the housing designs next.

There are many examples, including a funny port light system that only appeared in one housing and then got forgotten. Another good example is the PEN port system. Olympus can't seem to make their minds up what kind of ports to use with their housings. It just makes no sense. Randomly some housings use the larger aperture port system and the rest the smaller, which the company does not even officially support at all... and do not even think should be changed...although it can be... trust me, it's a mess.

Luckily there are a few 3rd party companies that have come to the rescue. For some time now at least Zen Underwater and Anthis have supported the PEN housings with

ports. If you were able to find (and afford) these ports they offered a good option especially for wide-angle use. During my latest trip to Indonesia I was lucky enough to test the new AOI port system that covers all lens and port mount options. Moreover the AOI system covers all budgets as the basic ports start from way under £200, at least here in the UK.

AOI port compatibility

AOI is a Far East design and manufacturing agency that major brands like Olympus, Fuji, Sea & Sea, Fisheye, etc... use to design and produce all sorts of underwater photography kit. They basically have made the housings that are sold as Olympus around the world. No wonder they have an industry insider view of the ports desperately needed for the system.

Apart from making the Olympus branded products they have come up with a port system that carries their own name. The AOI port system will finally complete the Olympus micro four thirds housing system and make





them a serious contender against more advanced competitors.

With the current AOI port system you can use the following lenses:

- Olympus 12-50mm
- Olympus 9-18mm
- Olympus 60mm
- Olympus 8mm Pro
- Panasonic 8mm
- Panasonic 45mm (unofficially)

OK, here comes the confusing bit. The AOI ports will work with all current PT-EPx housings with both port aperture sizes. There are three ways of using these ports. Firstly the simple PEN ports that fit natively on the small aperture housings that include at least the PT-EP051, 061, 10, 12 and 13. For these “small” ports you can get a port adaptor AD-LP-01 that allows you to mount them on the two remaining current PEN housing that still uses the larger diameter

port system, the PT-EP08 and PT-EP11. There are also ports that will fit natively on the large port aperture housings but as the future is uncertain for this size I would advise stay on the smaller size that can always be adopted to fit the large size. You will not be able to convert the large ports to fit any of the small aperture housings.

Which port?

So what AOI port suits which lens then? I have made a small port chart that will try to clear this issue. As said earlier the company have decided to make various material versions of the ports to suit every budget. The cheapest one is a plastic bodied acrylic port for the Olympus 9-18mm lens. This costs in the UK only £175.00... which is a massive reduction from the other



brands like the ZEN whose only available 9-18mm port costs £420. These two ports are of course not fully comparable as the ZEN port body is aluminium and the dome is glass. But hold on... AOI actually has made 4 versions of this port: polycarbonate body with acrylic dome, polycarbonate body with glass dome, aluminium body with acrylic dome and ZEN equivalent aluminium body with glass dome (priced at £175.00 / £250.00 / £300.00 / £375.00 respectively). Take your pick!

All the Olympus housings are plastic anyways so accurately

manufactured plastic port will be perfectly fine.

AOI also offers a fisheye dome port for the Panasonic 8mm f3.5 and for the new Olympus 8mm Pro lens. The stubby Panasonic will fit straight into the fisheye dome, there are two to choose from again; an acrylic or a glass dome. The Olympus 8mm Pro lens, being quite a bit longer, will need a 24mm extension. The acrylic port will cost £450.00 and the glass one £600.00. The extension currently retails at £130.00

Finally there is also a port for the Olympus 60mm macro lens. This



small and thin flat port is crucial for the housings like the PT-EP12, which comes with a short flat port as standard and where the lens does not fit in at all. I would change the massive port of the PT-EP13 for the AOI port also just to make it easier to use, although you can fit the lens inside. The AOI flat port has a 67mm port thread for those important dioptre lenses and trust me, you will need them in places like Lembeh, where I used Inon UCL-165 lens on top of the 60mm lens. For the standard Olympus PT-EP13 you can also buy a plastic snap on 67mm dioptre holder but the large port and the adapter are quite unwieldy and with the slim-line port

you can actually see where your port/lens is positioned. This AOI port will also unofficially house the excellent Panasonic 45mm macro lens.

AOI has also thought of the EM5 MKII users by producing a small button replacement kit for the PT-EP13 housing. The RK-01 kit replaces the overly protruding front dial knob of the housing and allows the use of the fisheye ports. Very considerate of them.

Due to their low cost and high quality the AOI ports are the perfect companion for the PT-EP housings. The availability of these ports makes the Olympus PEN cameras a truly serious underwater camera system.



You don't need to hunt the almost non-existing Olympus ports high and low anymore or pay through the nose for the other 3rd party products. The only thing currently missing from AOI port range is the Panasonic 7-14 port. If you are planning to use this pricy lens you will still need to get a port from ZEN Underwater.

If Olympus finally ditches their old port system it would make life easier for everybody. For a second it seriously looked like they would as even the new EM5 MKII housing uses the smaller aperture system whereas the EM5 MK1 still used the large bayonet. Typically for Olympus they have now thrown a spanner into

the works by releasing a new large aperture port, the PP0-EP02, for the PEN 8mm Pro lens. This port will fit only the older housings and none of the new ones unfortunately. I would not bother with this £700 port as you might not be able to ever use it again with your next Olympus housing. Buy a small aperture AOI port instead and you will always be able to use it... unless of course Olympus decides suddenly to make a 3rd port system, which could easily happen knowing their track record.

Jussi Hokkanen
www.deepshots.co.uk

Macro Lens Test: Nauticam CMC-1 Vs INON UCL-100 and Subsee +10



Nauticam's Compact Macro Converter or CMC-1 is the new wet interchangeable add-on lens that promises even more magnification and higher quality macro shots.

It's predominantly designed to be fitted on compact and mirrorless camera housings, although it will work with certain DSLR lenses also. You can read manufacturers blurb about how amazing it is from their website but here I just wanted to compare it's magnification (that is said to be +15) to two other powerful and popular close-up adapter lenses; The Inon UCL-100 M67 and the Subsee +10

Test pictures are taken with Canon G7X camera inside Recsea housing. The aperture is f5.6 and the lens is zoomed to maximum. The images are taken from the closest possible point the lens will focus.

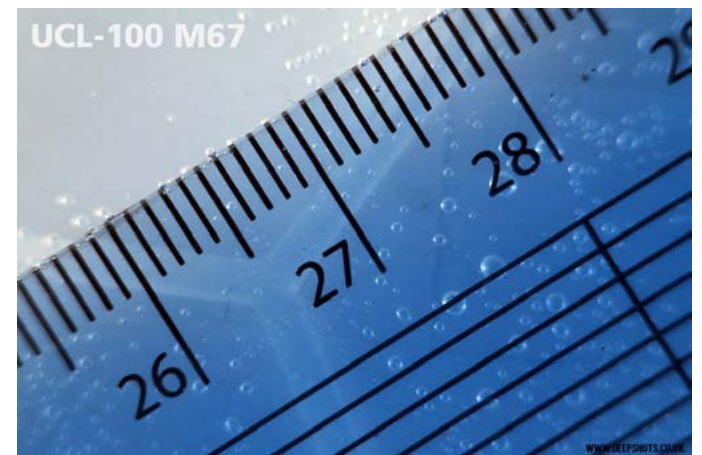
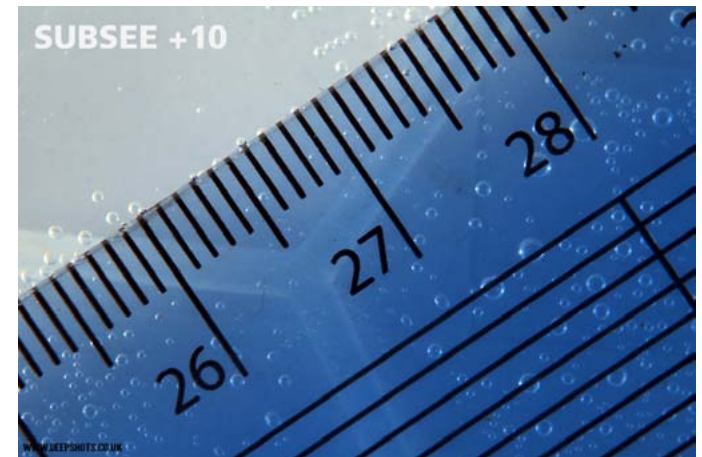
You can see that the mentioned +15 is not a completely invented figure as the achieved magnification with the CMC-1 lens is quite a bit more than with the Inon and the Subsee.

The INON UCL-100 fares worst in this test as it shows quite a bit softness on the edges of the frame.

The CMC-1 is not a bad buy at all as it retails for £250.00. For comparison the Subsee goes for about £210 and the Inon for £270.00

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www.oceanleisurecameras.com



Fluorescent Diving

by Lynn Miner

Fluo night diving is diving with a blue light torch and mask barrier filter for viewing bio-fluorescence. It has been on the scene for a few years now but it's not just for night dives any longer. This article discusses fluo diving science and also covers how to do it in daylight conditions.

Fluorescence is the property of some marine life to emit light of a longer wavelength (of visible light) when illuminated with shorter wavelength blue light. Not all marine creatures exhibit this effect but in those that do, the sight can be stunning.

This is NOT reflected light such as when you take your white light torch on a night dive. That "white light" is reflected off the reef and bounces back to your eyes/camera. Emission light, is light the organism is creating and "emitting" back to you.

The visible spectrum of light is the thin slice of the electromagnetic spectrum visible to the eye. It lies between the low energy, low frequency, extremely long wavelength radio waves and the high energy, high frequency, extremely short wavelength X-Rays. The "bandwidth" of light wavelengths the average person can see covers from approximately 400 nanometers (nm) which is deep purple to about 750 nm dark red.

When a high energy, short wavelength

photon of light (blue in our case) strikes a protein (referred to generically as a Green Fluorescent Protein - GFP), it absorbs that light energy. This causes the electrons of its constituent atoms to make a quantum jump from one electron shell to a higher shell. Then this change of energy state "decays" (effectively instantly) back to its quiescent resting state or shell.

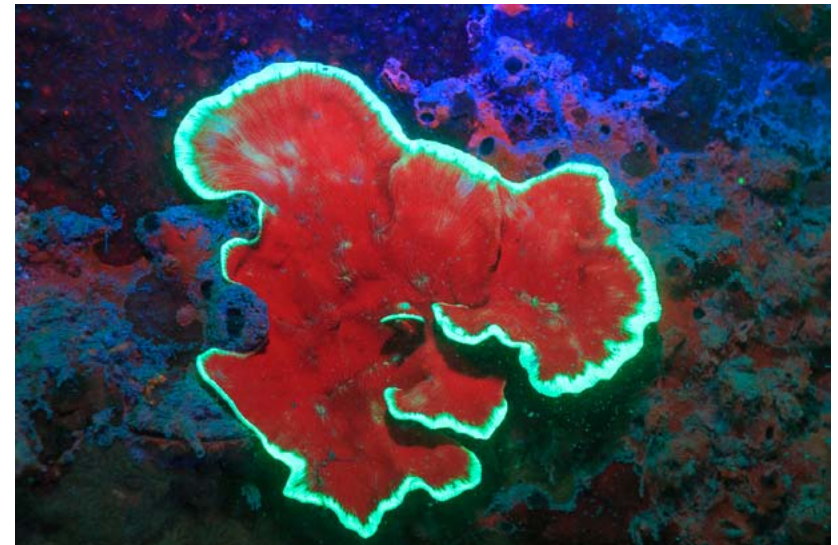
When this decay occurs, the electron gives up "emits" a photon of light but at a lower energy and longer wavelength. It also emits a minuscule amount of heat, hence the lower energy state of the photon. It's called conservation of energy – it must all balance out. This change in wavelength is referred to as the Stokes Shift named after the Geo. Stokes, the Irish Physicist who discovered it in the 1830's. This concept is shown again in the figure below. We are actually talking about quantum mechanics here.

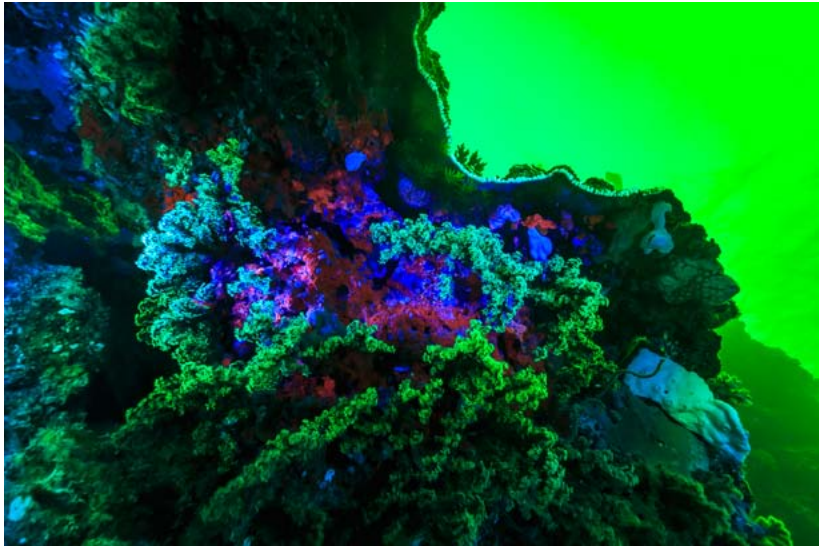
Each step, represents a quantum leap from one shell to the next. There are no intermediate steps or jumps. The further the jump, the greater energy required and the greater the difference in wavelength when the electron decays. These differences in energy manifest as different colors.

The wavelength of light used in most fluo torches is a narrow band in the blue, somewhere (manufacturer specific) from 440-480nm. It has been discovered that blue

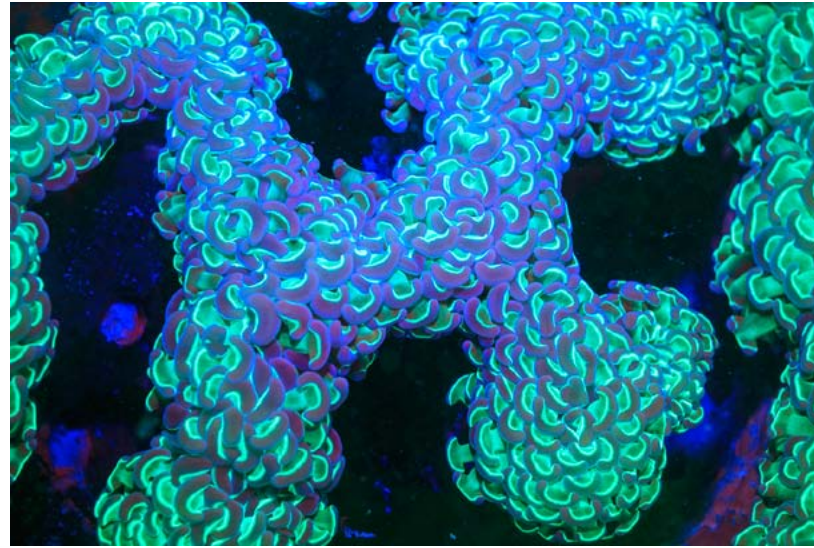


All Day Fluorescing Sheet Coral macro detail, New Dropoff, Palau – FireDiveGear (FDG) TL Azur Focus light with a single S&S YS-D1 strobe with FDG excitation filter and FDG camera barrier filter. Canon EOS Rebel T4i, Sea and Sea Housing. ©Lynn Miner2015 Tokina AT-X M35 Pro DX 35mm f2.8 Macro lens, ISO 800, f/7.1 1/100





All Day Fluorescing, encrusting corals and sponges among soft corals, under a ledge New Dropoff – FireDiveGear (FDG) TL Azur Focus light, 2 Ikelite 161 substrobes with FDG excitation filter and FDG lens barrier filter, Canon EOS 5D Mk III camera body, Ikelite Housing. ©Stuart Westmorland2015 Canon EF 17-40mm f4L zoom lens at 17mm, ISO 1600, 1/45 at f/11



Soft Coral (Eupyllia ancora) macro detail, New Dropoff, Palau. FireDiveGear (FDG) TL Azur Focus light with a single S&S YS-D1 strobe with FDG excitation filter and FDG camera barrier filter. Canon EOS Rebel T4i, Sea and Sea Housing. ©Lynn Miner2015 Tokina AT-X M35 Pro DX 35mm f2.8 Macro lens, ISO 800, f/7.1 1/100

light is much more efficient in stimulating fluorescence of Green Fluorescent Protein (GFP) and its mutations than ultraviolet light. The reason is that (as we all know from our Beginner Open Water Course), the only light available at depths beyond about 10 meters / 30 feet is blue. This is the light organisms such as coral have evolved in over the eons.

It is not well understood why some corals and other

sea creatures evolved to fluoresce. What is known is that some marine organisms (such as corals, tunicates, barnacles, sponges, anemones, jellyfish, clams, nudibranchs, cephalopods, shrimp, crabs, worms, fish) produce GFP and mutations of GFP (other colors than green) which react to blue light causing this effect.

Many theories abound as to why marine fluorescence evolved and is a very active

area of scientific research. Perhaps the most obvious answer to this question is that they simply do because they are made up of elements that display the fluorescence effect. This may seem confusing but consider this: human teeth fluoresce as do the teeth of nearly all animals. What possible evolutionary pressure could be at work here? The answer is that teeth are made up of elements that fluoresce. It may be just that

simple. As detailed above, you need a blue light torch. Additionally you need a barrier filter for your mask (and for your camera if you are doing photography). What this barrier filter does is “block” the blue light that is reflected back to you from everything you shine it on. Without the barrier filter, all you will see is very bright blue everywhere. The barrier filters are designed to “cutoff”

all or most of the wavelengths in the blue part of the spectrum. The intensity of the emission light from the organism is very diminutive. So dim in fact that it is completely overwhelmed by the blue light. Therefore, when you block the blue, all you will see are the emission colors.

There are many barrier filters available. The most common is a Tiffen # 12. Some use a Tiffen #8. Neither of these will provide the subtle blue backgrounds that are a feature of the custom engineered filters from sources such as FireDiveGear.com. The Tiffen series filters were actually the industry standard Wratten designations from years past and were designed for contrast enhancements for B&W film. This technology dates back to the 1920’s. These filters were never intended for color correction/bandpass limiting applications. The proper barrier filter will make all the difference in the world.

There are safety concerns of fluorescence diving at night. With white

light all the colors of the spectrum are available for you to “see”. Remember, in fluo diving the ONLY light you are using is a very narrow band in the blue. Now, put on your blue barrier filter and what’s left? Effectively nothing! You just eliminated your light source. You therefore must exercise excellent buoyancy control, be constantly aware of your surroundings and be situationally aware.

Many people think that fluo diving is done just to see the brilliant radiant colors for their “WOW” factor or for a different take on underwater photography. It certainly is all of that and it can indeed be a life changing experience for some people. I’ve had students surface after their first fluo dive so emotional that they are brought to tears by the overwhelming beauty of the hidden world inside a hidden world. Many people have described it as an underwater version of the motion picture Avatar. But it is much more than that. Fluo diving has become an indispensable tool in coral health research, coral propagation census (polyp bail-out) analysis. If you come upon a polyp or coral “recruit” release with white light, you will see nothing. With the proper fluo diving gear, the individual, nearly-microscopic organisms will shine in the sand like sparkles in the snow on a moonlit night. It is amazing to witness. We at FireDiveGear.com produce torches, strobe filters and barrier filters for some of the most prestigious marine institutes and universities on earth doing climate change work on coral structures.

Doing fluo photography in daylight is possible with strong excitation lights and the proper ambient lighting conditions. On a recent trip to Palau, Stuart Westmorland and I did a series of experiments to exploit this. As noted above, there are some safety concerns when doing this at night. During daylight

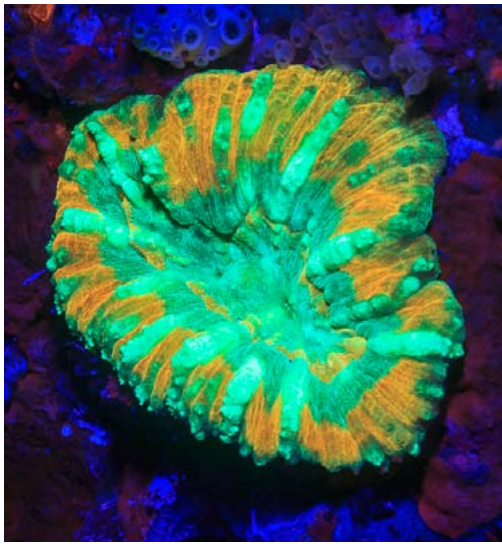


All Day Fluorescing – FireDiveGear (FDG) TL Azur Focus light with a single S&S YS-D1 strobe with FDG excitation filter and FDG camera barrier filter. Canon EOS Rebel T4i, Sea and Sea Housing. ©Lynn Miner2015 Tokina AT-X M35 Pro DX 35mm f2.8 Macro lens, ISO 800, f/14 1/100

condition, there are no concerns what-so-ever. Doing this work in daylight is much easier and you can get spectacular results.

First it’s best to have cloudy skies (but not required). Next look for a wall or overhang structure in the shadows. Obviously it’s best to have the sun on the back side of the structure so as not to be directly illuminating the wall. You can work around this also if the target is in a “pocket” or

“hole” in the wall or tucked up under an overhang. It’s best to use a strong excitation/focus light. This allows you to actually find a subject that fluoresces nicely and allows for plenty of light for the camera to adjust focus whether using manual or auto focus. If your excitation torch is powerful enough, you can get some great shots just using that. However, it often requires relatively slow shutter speeds and near wide open apertures which complicate things



Flower Coral macro detail, Freighter WWII Wreck Iro ©Lynn Miner2015 Tokina AT-X M35 Pro DX 35mm f2.8 Macro lens, ISO 800, f/11 1/100

with movement and poor depth of field. On the other hand, strobes with the appropriate excitation filters will do very well and solve both of those issues.

PADI has a Fluorescence Night Diver Distinctive Specialty Course that I wrote. There are several dozen certified instructors around the world teaching this course. It covers the science in much greater detail and has a great emphasis on the safety implications unique to fluo diving. A version for SSI is in the works also.

The web is a great resource for more information on this topic. Simply search on the term “fluo dive gear” to find several vendors of

www.uwpmag.com



Set up for macro

equipment, blogs, images and forum discussions on this fascinating subject.

Lynn Miner
www.firedivergear.com



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Burt Jones & Maurine Shimlock

by Duncan Whittaker

Burt Jones and Maurine Shimlock have been taking photographs underneath the surface for over 30 years. They are the authors of Diving Indonesia's Raja Ampat (2009) and Diving Indonesia's Birds's Head Seascape (2011); 2 books that are partly responsible for developing tourism to the Papua region of Indonesia. UwP uncovers their fascinating story.

Out of everywhere you have visited, where were your three favourite locations for underwater photography?

MS – Raja Ampat for everything, especially wide angle. Lembeh for critters and I really like the photography in the caves in Mexico.

BJ – Raja Ampat, Lembeh, and I would say Cocos in Costa Rica for big animals.

So where did it all start?

BJ – I got certified to scuba dive in 1968 and immediately went to Mexico and started diving.

MS – I was writing a dissertation about Mexico and I quit school to run a dive shop.

BJ – She gave up a PhD to run a dive shop in a place that nobody had ever heard of! I grew up in Texas so Mexico was the closest exotic destination you could get to. When I was a child we drove there with my family so I had a fondness for Mexico and

Mexican food from a young age. I spent one year at university in Austin then dropped out and went down to Mexico to have a lot of fun. After a year I realised I couldn't make a living out of having fun so I went back to school. Here I figured out how to make a living out of having fun; open up a dive shop!

I lived on the Yucatan coast for four years before I met Maurine. During the winter we would get storms and we couldn't go out on boats because the wind was too strong, so we heard about these fresh water caves called cenotes. We started diving in them as an alternative place to take our customers when we couldn't go onto the reef. The cenotes became very popular as time went by and we were some of the first people to dive and work in them.

MS – All of this was before Cancun. There was none of that development. You have to imagine that all of that coast was 300 miles of reef and beaches with nothing on it. Jaguars used to come down to the beach and hunt at night and we would see them occasionally. They're all gone now but there are lots of hotels!

BJ – We haven't been back there in over 15 years because it's just depressing to us; what we had there is no longer available.

Where did you go next?

MS - The Solomon Islands in 1988. We



***Flasher Wrasse, Triton Bay by Burt Jones
Nikon D 200 in Subal housing, 105mm lens, Inon D2000 strobes
F/10, 1/250th, ISO 200***



were the first cruise directors on the Bilikiki which is still the only liveaboard that works out there.

How do the Solomons compare to Raja Ampat?

MS – The reef structure is different. There are a lot more walls and everything is a lot more vertical in the Solomons. The islands are volcanic and not uplifted like they are in Raja Ampat. In Raja Ampat there's not that much real deep water whereas there is in the Solomons. Also, the further away you get from Raja Ampat which is the epicentre of biodiversity in the coral triangle then you get species fall off. There's still a lot of species in the Solomons but it's not like Raja Ampat.

And after the Solomon Islands?

BJ – We went to the Solomons with the idea of becoming underwater photographers. We sold our place in Mexico and spent a lot of money on housings and cameras then went to the Solomons to teach ourselves how to do it. And that's what we did. We had this crazy idea that we could make a living out of underwater photography. So we went back to the States for 10 years. We set up a travel and photography business and were taking people on scuba and underwater photo safaris during that decade and the first place we went to outside of the Solomons was Sipadan Island off the island of Borneo. It was a tiny volcanic island which you could walk around in 30 minutes and it had a 3000 metre drop off. Just 3 fin kicks from shore and you were in 1000 metres of water. There were huge schools of barracuda, huge schools of jacks, massive schools of bumphead parrot fish, and all of this was right off the beach.

MS – There was a green turtle rookery which is still going on today. There were literally hundreds

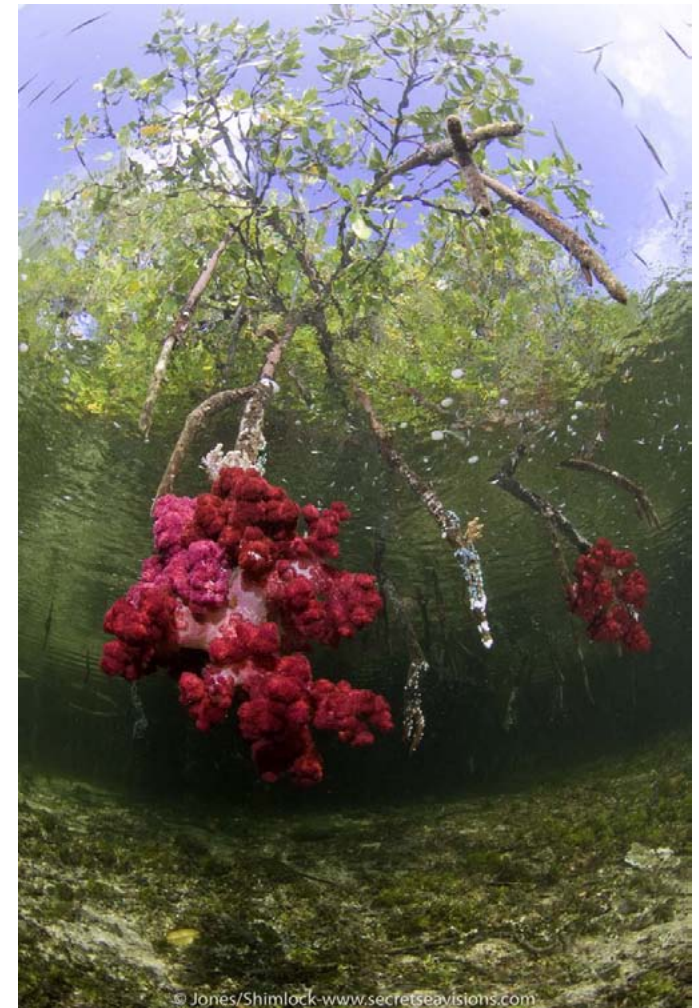


*Cenotes, Mexico by Burt Jones
Nikonos 3, 15mm lens, no strobes on the camera,
painted with slave strobe*

and hundreds of green turtles and they would come up at night in the right season and lay their eggs around the beaches. That was really cool.

Where next?

MS – That's when we went to Indonesia. We were going out to Sipadan one day and there was a guy on the boat called Dr Kal Muller and he was



*Soft Coral on Mangrove Roots, Raja Ampat by
Maurine Shimlock. Nikon D 200 in Subal housing,
Sea & Sea YS 250 strobes, Tokina 10-17 lens
f/5.6, 1/125, ISO 200*

researching the first book about diving in Indonesia called Underwater Indonesia. He asked us if we would be willing to go out there with him and check out this place called Komodo. He was part of a little company that took people to see the dragons



*Schooling Ox-Eyed Scads, Raja Ampat by Maurine Shimlock
Nikon D 200 in Subal housing, Sea & Sea YS 250 strobes, Tokina 10-17 lens
f/3.5, 1/60th, ISO 160*



*Manta Ray, Raja Ampat by Burt Jones
Nikon D 7000 in Subal housing, Sea & Sea YS 250 strobes, Tokina 10-17 lens
f/9, 1/125th, ISO 400*

and he was interested to find out if there was any really good diving. And indeed there was! After that, we were hooked and it was just Indonesia, Indonesia, Indonesia.

BJ – Then it just sort of mushroomed. We went from Komodo to the Banda Sea then up to Lembeh and then out to Raja Ampat.

So what took you to Raja Ampat?

MS – We began diving in Raja Ampat in 2002. The previous year Conservation International and The

Nature Conservancy, WWF and others had conducted a marine life survey and were totally blown away by what they had seen on Raja Ampat's reefs. There was one liveaboard operating out there at the time and we convinced the owner to join us on an exploratory on another boat. After we saw the reefs and the incredible fish biomass, we knew Raja Ampat was the holy grail of tropical reefs for diving tourists.

We returned to Raja Ampat for several weeks each year, wrote

articles, etc. and saw the tourism numbers rise to about 3000 divers per year until about 2007. In 2005 we had also explored a bit further south and saw Triton Bay for the first time. Again we were amazed at what we saw in term of fish life and especially soft corals.

On that trip to Triton Bay we crossed paths with Dr. Mark Erdmann of Conservation International. He had recently been promoted to Director of Marine Affairs for Conservation International. He knew our work

and approached us about writing a guide book for Raja Ampat as part of his plan to introduce tourism as an effective conservation strategy. Burt and I discussed this and decided that we would move to Bali in 2008 to begin researching a diver's guide to Raja Ampat.

It was a dream job for any underwater photographer. We were given a boat, money, time, etc. to explore, dive, photograph and write about what we found. Our mission was to record no less than 100

sites. Even by 2008, Raja Ampat was full of boats and they only dived the known sites; no one had time or money to explore. It was crucial to the reefs that the diver impact be spread out and not concentrated on just a few spots. It was also crucial for tourists to get to outlying reefs in order for commercial fishing operations to realize that eyes were watching and that no destructive fishing would be allowed on Raja Ampat's reefs.

We published Diving Indonesia's Raja Ampat in 2008; the year of the global economic crisis. Despite the fact that it was expensive and very time consuming to travel to Raja Ampat, tourism grew by nearly 40% and there were now at least 6000 divers that year visiting Raja Ampat. Tourism has grown exponentially since then; due in large part to our books and Raja Ampat's world class reefs.

By 2010 we had proven that "if we find it, they will come." Conservation International and Mark Erdmann wanted to include the rest of the geographical entity, Papua's Bird's Head Seascape, in the tourism development, so we decided on another guidebook. We wanted Raja Ampat to be seen and thought of as a part of the larger Bird's Head Seascape, not just a stand alone destination. So, we did it all again, we went to Cenderawasih and Triton Bay and explored and photographed, etc. and published a new guide in 2011, Diving Indonesia's Birds Head Seascape, which encompasses the entire area and includes most of the sites from the original Raja Ampat guide.

Books were quickly becoming a bit out dated as modes of imparting information to divers, so we decided that a web site would be the way to go to keep the Bird's Head Seascape at the forefront



Diver in Boo Window, Raja Ampat by Maurine Shimlock. Nikon D 200 in Subal housing, Sea & Sea YS 250 strobes, Tokina 10-17 lens f/5.6, 1/60th, ISO 250

of travelling divers' minds. We launched www.birdsheadseascape.com in the summer of 2014. The site includes all the info from the books, all the info on how to get there, and every dive site is mapped.



Split shot, Raja Ampat by Burt Jones. Nikon D 200 in Subal housing, Sea & Sea YS 250 strobes, Tokina 10-17 lens f/16, 1/125th, ISO 320

Tell us about Triton Bay.

BJ – Triton Bay is the third jewel in the crown of the Bird's Head Seascape. The visibility isn't as clear but the soft coral growth there is unprecedented in the world; there's no place like it on the planet. It's an amazing place. It's become

Whale Shark under Bagan by Burt Jones Nikon D 200 in Subal housing, Sea & Sea YS 250 strobes, Tokina 10-17 lens f/9, 1/80th, ISO 320

very popular for photographers and there is now a nice little resort that has opened up in the last year. The liveboards are going there and there are also whale sharks. In Raja Ampat, Cenderawasih Bay, and Triton Bay, the whole thing is the last best place on the planet. It's the bullseye of marine biodiversity. We've been working in the best place for over a decade; we're really lucky.

Where do you think you will go exploring next?

BJ – It's funny because the circle is coming back on itself. I think the Solomon Islands have the best potential of any country to develop new and exciting dive itineraries. The itinerary that they have been running for over 20 years only touches a small part. There's huge islands with reef everywhere that's never been dived. Infrastructure is a problem in the Solomons. Getting people from the main town of Honiara out to these remote islands is very difficult.

Which other underwater photographers do you admire?

BJ – You've got maybe the best underwater photographer that has ever existed in the UK and his name is Alex Mustard. He is phenomenal.

He's cutting edge. He's the best. He's just a sweetheart of a guy. He doesn't seem to have any ego involvement in what he does. He's willing to share all of his techniques. There's another guy who is still around who doesn't work in photography any more named Chris Newbert who was a big influence on us. He brought art to the world of underwater photography. And Howard Hall; a very good friend of ours who still shoots but he does video and his early work was a big inspiration to us.

The image of the whale shark and the fishermen is quite iconic; I have seen it a lot on the internet. Can you tell us about this shot?

BJ – The point with the photograph was to show what was happening with the whale shark experience. It was not just the fact that you have whale sharks out there feeding but the whale sharks are attracted to those boats. The whale sharks are considered good luck by the fishermen so they try to keep those whale sharks around the boat. The idea in creating that photograph was to show not only the whale shark but to show them in context with what's going on around them.

MS – And also to show the fact



that you didn't have to be in the water; you could also be on the boat and photographing the whale sharks from above. We were trying to get tourists out there.

Thank you for such a fascinating insight.

Duncan Whittaker

For more information about Burt Jones and Maurine Shimlock, visit www.secretseavisions.com

www.birdsheadseascape.com



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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

Anilao - A Mecca For Macro

by Nigel Marsh & Helen Rose

I'm sure most underwater photographers are like us and have a wish list of species they would dearly love to photograph. We plan many of our dive trips to reduce this list and on most trips we manage to tick off two or three subjects if we are lucky. However, on a recent trip to Anilao in the Philippines our wish list was decimated. In a week of diving we eliminating over a dozen species off the list, but we also saw species that we hadn't even thought of having on the list!

Over the last few years Anilao has built up a reputation as one of the best muck and macro destinations in the world - a Mecca for macro. Located 120km south of the Philippines capital of Manila, Anilao is an easy destination to reach by car, and has always been popular with divers living in Manila. As such countless dive resorts are located right around the Calumpán Peninsula, spreading well beyond the little town of Anilao.

Our resort of choice was one of the newest in the area, the wonderful Buceo Anilao Beach and Dive Resort (BABADR). Located at the southern end of the Calumpán Peninsula, BABADR is located close to the

best dive sites in the area, most only a 5 to 15 minute boat ride away. This brilliant resort has spacious rooms, with great views and air-conditioning, a bar, two pools and a wonderful restaurant serving a mix of local, Asian and western meals. They also have one of the best dive centres we have seen, with wash tubs, drying areas, gear storage and even a dedicated camera room for setting up cameras and charging batteries. We found all the dive staff first class and barely touched our dive gear, except to put it on and go for a dive.

At any good muck and macro dive destination the key to successful underwater photography is a good dive guide, and BABADR was some excellent guides to spot those weird, wonderful and tiny critters. Our guide was Nelberto 'June' Ilagan, who

Buceo Anilao Beach and Dive Resort (Nikon D7200, Nikkor 18-300mm, ISO 400, 1/500, f11).

The reefs off Anilao are colourful and home to many amazing macro species (Nikon D7200, Tokina 10-17mm, Ikelite Housing, Inon Z240 strobe, ISO 200, 1/100, f9).





Hunting flamboyant cuttlefish at Coconut Point (Nikon D7200, Nikkor 60mm, Ikelite Housing, Inon Z240 strobe, ISO 200, 1/100, f13).

is actual a freelance guide and was recommended to us by one of the resort owners Martin Nussbaumer, so that we wouldn't have to share a guide with other divers. You have to pay a little more for this service, which in reality isn't much at all, but having our own dedicated guide proved invaluable. June has been diving the sites off Anilao for longer than he would care to remember, but he wasn't fazed when we produced a wish list of twenty subjects we dearly wanted to photograph. June looked at the list, smiled, nodded his head and

said he would see what he could do.

BABADR operate several traditional style banca dive boats, and limit the numbers on each boat to avoid overcrowding on the boat and dive sites. They schedule four dives daily, two in the morning (usually done as a double dive), one in the afternoon and followed by either a sunset or night dive. They have over 50 dive sites to choose from, which are located along the Calumpán Peninsula and across the Maricabán Strait on Maricabán Island, Cabán Island and Sombrero Island.



Pebble crab found on a night dive at Secret Bay (Nikon D7200, Nikkor 60mm, Ikelite Housing, Inon Z240 strobe, ISO 200, 1/100, f14).

For our first dive we headed only five minutes away to Bubble's Point, a pretty site with a mix of muck and coral. It was also where we ticked off the first wish list species, a rhino shrimp. The sloping black sand at this site bubbles from volcanic activity, but we saw the most interesting species on the coral walls and coral gardens. Here were numerous nudibranchs, two giant frogfish, turtles, ribbon eels, cowfish, moray eels, lionfish and many other species. At the start of the dive June led us to a black coral tree and pointed

out a tiny little brown lump. At first I didn't realise what it was, but once my 60mm micro lens focused on the 1cm long critter I realised it was a bizarre rhino shrimp, horn and all.

Next up was Secret Bay, the most famous muck site at Anilao. The sloping black sand at this site provided a bounty of critters - thorny seahorses, longhorn cowfish, oriental sea robins, demon stingers, xeno crabs, shrimp gobies, shrimpfish and many other species. The highlight was two blackfoot lionfish, a rare lionfish species with lovely blue pectoral fins,



Weedy scorpionfish at Bethlehem (Nikon D7200, Nikkor 60mm, Ikelite Housing, Inon Z240 strobe, ISO 200, 1/100, f11).

and a new species for us.

June later informed us that Secret Bay is nowhere near as good as it was in the past, and at one time we would have got almost every critter on our wish list, and more, at this one site. But too many boat anchors and runoff from new resorts has degraded the site. It must have once been mind-blowing, as the dives we did here were still spectacular.

Top of our wish list was a flamboyant cuttlefish, a species that had managed to elude us at many top muck sites in Southeast Asia. June knew just the place to try, Coconut

Point. This dive site is now the premier muck site in the area and is a sensational dive. On the sandy slope at Coconut Point we saw ornate ghost pipefish, several species of snake eel, colonies of garden eels, razorfish, flounders, nudibranchs, dwarf lionfish, commensal shrimps and much more. But the climax came at the end of the dive when we finally found the flamboyant cuttlefish. This colourful performer was a delight to observe and photograph, and was completely unconcerned by two photographers acting like the paparazzi! It continued to walk slowly across the bottom



Anilao Pier is a great location to find mimic octopus (Nikon D7200, Nikkor 60mm, Ikelite Housing, Inon Z240 strobe, ISO 200, 1/100, f11).

on its tentacles and abdomen, stalking tiny shrimps and lashing out to capture them with its feeding tentacles.

Our first night dive at Anilao was a return to Secret Bay, and once again we saw something new and plenty to keep our cameras busy. At night Secret Bay transforms into Crustacean City, with shrimps, prawns and crabs of all types everywhere. But the pebble crabs were the most interesting, as they are rarely seen elsewhere. But new to us was a pretty carpet sole, found in a group of three just resting on the bottom. There

was also numerous shell species out grazing, including a rarely seen species, the Venus comb murex. These lovely spiny shells are popular with collectors so rarely seen at most muck sites, but on this dive we saw several.

The next day the wish list kept getting smaller. First up was a trip to Bethlehem; a reef, rubble and rubbish site that was very productive. This site, right next to a small village and used as their garbage dump, was home to moray eels, mantis shrimps, ribbon eels, garden eels, dragonets and two spectacular weedy scorpionfish. A weedy scorpionfish was near the top



Bobbit worm found on the house reef night dive (Nikon D7200, Nikkor 60mm, Ikelite Housing, Inon Z240 strobe, ISO 200, 1/100, f13).

of the wish list, but we never dreamt that we would see one of these rare fish at Anilao. We spent five minutes with both fish, one didn't move the whole time we sat with it, but the other was slowly walking across the bottom on its fins, and even did a long extended yawn for the camera.

At Saddle we ticked off another species, a tiny boxer crab with anemone boxing gloves. Saddle is one of dozens of very pretty reef dives off Anilao, with lovely gorgonians, soft corals, sunshine corals and sponges. We later returned with a wide angle lens to capture the beauty of this reef.

But even the reef dives at Anilao are loaded with macro critters, like nudibranchs, frogfish, shrimpfish, mantis shrimps, jawfish, hawkfish, filefish and sea whip shrimps.

Each dive we seemed to either knock another critter off our wish list or encounter something special we hadn't even considered adding to the list. On the afternoon dive it was a humpback turretfish at Coconut Point, a very cute fish closely related to the more common cowfish. But that dive also produced a little magic that we never expected when we encountered the flamboyant cuttlefish



This Donald Duck shrimp was a nice surprise at Apol's Point (Nikon D7200, Nikkor 60mm, Ikelite Housing, Inon Z240 strobe, ISO 200, 1/100, f14).

once more. This time it was laying eggs. As we watched, the colourful cuttlefish squeezed under a coconut shell to deposit a tiny round egg. June had previously shown us several eggs attached to the underside of a coconut shell, but to see the flamboyant in action was very special.

A second night dive at Secret Bay also produced something completely unexpected and unimagined, a pygmy squid. Actually a type of cuttlefish, the pygmy squid is the world's smallest cephalopod, only growing to 2cm long. How June spotted this tiny critter I will never

know as it was hidden in a black coral tree. I managed a few images of the minute critter with my 60mm lens and upon reviewing the images discovered it had captured a tiny shrimp, which must have been 1mm long!

Another critter ticked off the list the following day was a two-spot lionfish at a site called Daryl Lout. This is the local wreck dive, once a floating casino it now looks more like an underwater construction site with beams, bricks and other building materials. The wreckage is home to schools of batfish and the odd turtle, but was also a good place to see leaf

Helen explores the colourful reef at Saddle (Nikon D7200, Tokina 10-17mm, Ikelite Housing, Inon Z240 strobe, ISO 200, 1/100, f9).

scorpionfish, dragonets, flatworms, nudibranchs, mushroom coral pipefish and flashing fileshells.

One species that we had missed after dozens of trips to Southeast Asia was a mimic octopus. June had looked for one at Coconut Point without success so suggested we head to Anilao Pier for an afternoon and night double dive. We assumed we would be diving under a pier, so were a little disappointed to discover a tiny pier in only 1m of water. The dive site was in the sandy bay adjacent to the pier, fortunately it didn't disappoint. Exploring the fine sand at this site we encountered a great range of muck critters; grinner, razorfish, gobies, nudibranchs, snake eels, demon stingers and a surprising number of murex shells out in the day. We even stumbled across a group of three murex shells laying eggs, in one large corn-cob-like clump.

But halfway through the dive we heard June tapping his tank frantically. When we found him he was with a large mimic octopus. This amazing animal was a sight to behold as it changed shape and colour before our eyes, even imitating a flounder as it swam at one point. We topped off this dive by finding another mimic octopus, this one much smaller and even more photogenic.

The night dive at Anilao Pier was also very special as a dozen coconut octopus and long-arm octopus had emerged from hiding. But we also saw countless crustaceans, molluscs, a bobtail squid and a strange little file snake.

Over the next few days the wish list continued to dwindle as June found us a Bobbit worm on a night dive at the house reef, known as Buceo Point,



a sawblade shrimp on another dive at Coconut Point and a Donald Duck shrimp while exploring Apol's Point. If that wasn't enough there were also those wonderful subjects we are happy to photograph again and again - a pair of Coleman shrimps at Bethlehem, a warty frogfish at Koala Point, Bargibant's pygmy seahorses at Sunview, hairy squat lobsters at Minilog and mating splendid Mandarin fish on a sunset dive at Dakaida.

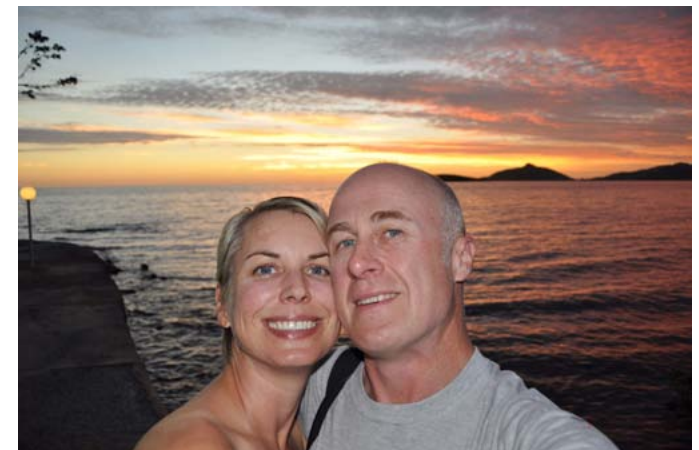
Anilao really turned it on for us thanks to our



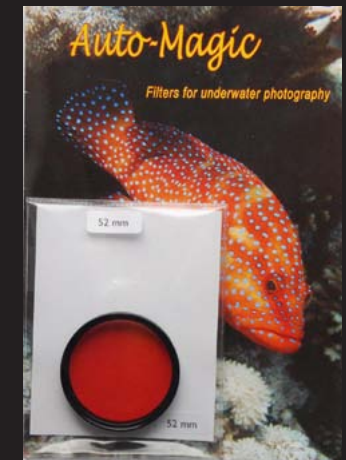
wonderful dive guide June, who provided an endless array of great macro subjects for our cameras. The only problem we now have is that our wish list has been so decimated that any future trips to Southeast Asia are going to provide very slim pickings.

Nigel Marsh & Helen Rose
www.nigelmarshphotography.com

More information visit
www.buceoanilao.com



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Voices in the deep

by Wade Hughes FRGS

It was an unusual, eerie, encounter. In cold, greenish water, clouded by plankton blooms, and the tiny pulsing invertebrate salps, feeding on them, the sperm whales were milling round. Slowly, ponderously, some were sinking head-first and disappearing into the haze beneath me. Others were rising from the depths, rejoining those on the surface, then dissolving away into the distance. Two drifted in from behind me, so close that their sudden bulks, appearing at my shoulder startled me. Constant chattering – strings of clicks and creaks – passed between the whales. One phrase, if such a human term is appropriate for describing sperm whale communication, seemed to be recurring. ‘Zizzzzzz...tuc tuc tuc’, is the best I can do at replicating it on paper. Louder and more sharply defined, it was, perhaps, emanating from the largest whale, a cow close to 11 metres in length. This cow appeared to be the centre of attention. The others, females and adolescents of both sexes, began aggregating around it.

Earlier, from the boat, we had observed a single large cow lob-tailing; raising its flukes to the sky and repeatedly bringing them down to bash the surface of the sea. On a whale this size, those flukes can weigh around two metric tons-about as much as a large four-wheel drive SUV. And so, each impact of flukes on water generated a resounding whoomp! that would have been audible for long distances underwater, and sent shockwaves of white spray flying into the air.

We had watched through the morning as small



Two adolescent sperm whales travelling in company towards the lobtailing cow whale.

Photo Robyn Hughes: Canon 7DMkII. Canon EF 100-400mm f/4.5-5.6L IS II USM

All the underwater shots were taken by Wade Hughes free-diving, using available light with Canon 5DMkIII in Nauticam housing with Zen mini-dome and Canon 8-15 fisheye zoom and Kenko 1.4x extender.



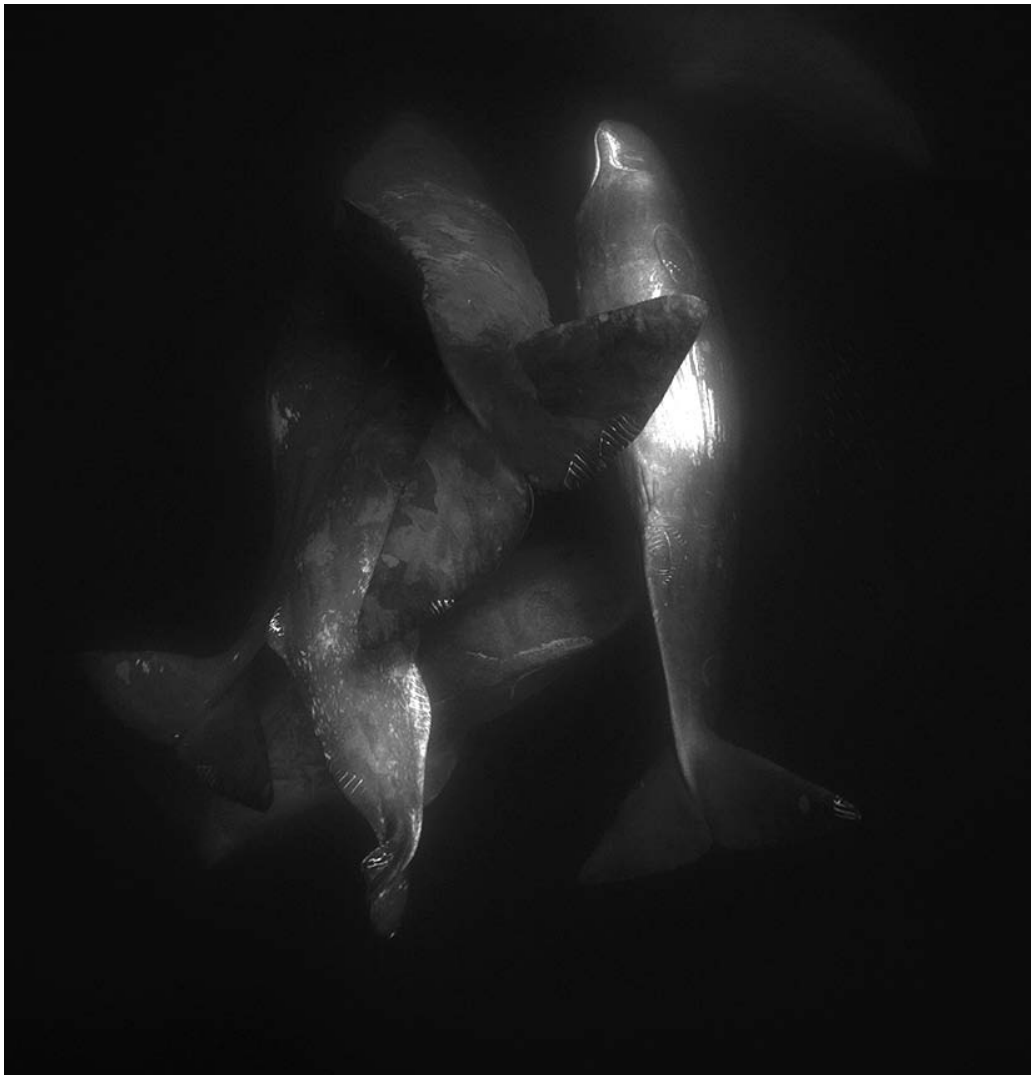


Sheets of dead skin fray from the flukes of the lob-tailing cow whale.

Photo Robyn Hughes: Canon 7DMkII. Canon EF 100-400mm f/4.5-5.6L IS II USM



Adolescent sperm whales swim on the surface accompanied by adult cows. One of the cows, swimming inverted, perhaps to maintain a clear view of activity on or near the surface, reveals the species' iconic white-rimmed lower jaw.



groups of whales had congregated on the surface, off the Azores. Sperm whales typically spend ten to fifteen minutes on the surface between foraging dives. On this day, in calm seas, under low cloud, numbers of them were laying on the surface for hours, side by side –“logging” as this

behavior is called. At one time, we could count seventeen whales in one group.

Now, snorkeling in the water, I could see the flukes of this largest whale clearly. It was the same cow we had observed from the boat. After swimming past me, it sank quite



Constantly clicking and spraying bursts of probing sonar, sperm whales emerge from the depths to gather as a group.

Whales milling around.

Something is clearly attracting their collective attention.

A tight-knit group forms around the larger cow whale...

...and sinks from human view,

quickly, head first, until it almost disappeared.

This was not a dive. There had been no final head-raised breath that characteristically signals the beginning of a sperm whale’s profoundly deep descent. They’ve been recorded reaching depths of around 3000 metres in their hunts for squid, octopus, and fish.

We don’t know how they

regulate their buoyancy. There’s certainly no gush of bubbles issuing from their blowholes as there is when a scuba diver sinks by dumping air from a buoyancy vest. Nor do they have the scuba diver’s reserve of compressed air for re-inflation. But, by one imperceptible means or another, they seem to be able to control their orientation in the water with ease, and, as I watched, the large

cow arrested its descent.

Other whales began to cluster around it. They remained in this formation for some minutes. Two or three individuals peeled away. Others moved in.

Eventually the assemblage sank further than I could follow by free-diving and disappeared from view. The water around me, more than a thousand metres deep, was empty. Only the distinct static that is the so-far unbroken code of sperm whale... conversation...if that's what it is... continued unabated.

Later in the afternoon, with the clouds now lifted, a group of whales wallowed on the surface, up sun, not far from the boat. In water clouded by those dense blooms of plankton and salps, and against the strong light, it was difficult to identify individual whales. But one unmistakable feature was visible; the curled and floppy flukes of an infant whale, recently emerged from the womb of its mother.

So, was this what the day had been all about? Had we witnessed some form of ritual surrounding the birth of a sperm whale? Had the lob-tailing cow been summoning the clan for the event? Had far-flung individuals gathered to greet the newcomer? Were they now dispersing to relay the news?

We don't know.

We had observed comparable events some years previously, some 250 nautical miles west of this latest encounter: a large lob-tailing cow whale; a brief but intense gathering of whales; new-born whales in the area within hours of the lob-tailing.

Writing in the late 1700s, French scientist Rene Lesson ruefully said "What an impenetrable veil covers our knowledge of cetacea!. Groping in the dark, we advance in a field strewn with thorns."

It is still true today. The observations



Part of a group of seventeen sperm whales. They "logged" on the surface like this for hours. The distinctive bushy blow of the sperm whale, issuing from the single blow-hole, low and to the left, is clearly visible.

Photo Robyn Hughes: Canon 7DMkII. Canon EF 100-400mm f/4.5-5.6L IS II USM

Two-tonne flukes propel the larger cow whale .

described above might be connected. They might not. In providing us glimpses of their lives, these enigmatic animals, the world's largest toothed predators, leave swirling in their wakes, not just sheets of sloughed skin and detritus, but hosts of unanswered questions.

Some notes on the photographs:

All the underwater shots were taken free-diving, using available light with Canon 5DMkIII in Nauticam housing with Zen mini-dome and Canon 8-15 fisheye zoom and Kenko 1.4x extender.

The water was clouded with plankton blooms and small salps and lacked the startling blue transparency often seen in open ocean. This resulted in low contrast, and greenish-tinted colour



files.

Conversion to monochrome enabled better contrast, and allows the behaviour of the whales to be more clearly expressed. These whales spend most of their life in the eternal gloom of the abyss. So, if viewed with a fertile imagination, the deep blacks of the conversions can also conjure aspects of their environment denied to mere human gaze. One of the great joys of photography is its capacity

to interpret and inspire, as well as record.

And some notes on working with whales

All the photographs are taken in strict accordance with guidelines laid down by the Secretaria Regional do Mar, Ciência e Tecnologia, which is the sole body authorized to permit entry into the water with cetaceans in the Azores. It is illegal to swim with whales in the Azores without written permission of the Secretaria. Their guidelines are soundly based and offer the best framework for approaching the difficult photography of these animals. But it is the whales themselves that dictate the terms of any encounter. They will approach, or not, as they choose. After several hundreds of encounters it becomes possible to judge, broadly, their mood from the boat. If whales appear unwilling to engage, we stay out of their way. There's no shots, nor satisfaction, to be had from dropping in and surprising whales.

On the other end of the spectrum, persistently curious whales, or whales that seemingly go about their business knowing full well that we are in the vicinity, afford us wonderful opportunities and experiences.

Working with wild whales, that have not been habituated to human presence, I think, dispels any notion

of “bonding” between whales and humans. Targeted sprays of whale sonar, frequent eye contact, and sometimes close and intense scrutiny, confirm that the whales are observing us, as we observe them. But I think that's as far as it goes. The whales have complex relationships of their own, they live in constantly threatening environment, and, in my opinion, have no reason to view human encounters as anything more than just another data point in the vast array of information that they have to collect and analyse every day and night to survive. I'd expect them to bond with their own kind, not with humans who likely appear to the whales to be some bizarre dwarf alien life form bobbing along inelegantly on the surface.

From my own side of the encounters, though, it's different. Every encounter, every opportunity to observe and record, is a privilege. And, hopefully, the observations and photographs might eventually contribute to pruning out just one of those thorns strewn in the path of greater understanding of these enigmatic whales.

To that end, the conditions of the permit issued by the Secretaria require that copies of all photographs taken must be lodged with the Secretaria for its own use. In addition, all the photographs we take are made



Later, a group reappears near the boat. An infant whale, floppy and uncoordinated, swims at the side of a large cow. It is the very beginning of a life that could span seven decades or more.

available free of charge for any non-commercial uses related to research, education, or conservation. We routinely share them with whale and cephalopod scientists in various parts of the world. For access to these shots, write to us at wadeandrobbynhughes@gmail.com,

Wade Hughes

wadeandrobbynhughes@gmail.com

Photographs taken under permit issued by Secretaria Regional do Mar, Ciência e Tecnologia with precautions taken to avoid disturbance to the animals. Swimming with whales is forbidden in the Azores without written permission of the Secretaria.

Small ads



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Reflections From The Past:

David Salvatori's First Book

“Reflections from the Past” is a photographic exploration in the heart of Tirino valley in Italy, ending with the dive in the crystal clear waters of the Capodacqua lake.

The lake of Capodacqua is located in the Gran Sasso National Park and Laga Mountains, surrounded by unspoiled nature of vast archaeological interest. The cold and pristine water that feeds the lake comes straight from Gran Sasso along a 27km-long limestone path.

The lake hosts two submerged Middle-age windmills and a partly emerged paint manufacturer, located on the edge of the basin. This year the lake was included by Sport Diver among the 50 Best Dive Sites in the World. Besides being an amazing dive destination, Capodacqua and the surroundings can offer much more, history, nature and culture.

Anyway, this book is not simply a journey in and around Capodacqua, as it's mainly an autobiography where the places visited stimulate fascination and personal reflections, an opportunity to speak about my personal experience with water and diving.

The Water And Me: Why a book on Capodacqua?

Water symbolizes my personal dividing line between my first and second life. It was the



Nikon D800E, Seacam housing and Tokina 10-17mm fish-eye @ 10mm. f/7.1, 1/60 sec., ISO 100

conduit for introspection that led me to renew and become aware of the true and balancing essence of my soul when, at the age of 36, the passion for diving exploded inside of me; the romantic, utopian dreamer of my youth came alive again.

Taking underwater photographs immediately revealed to me, a lover of the visual arts, a suitable way to show a new balance in my life; photography and diving was at first a catharsis and affirmation, and then became the tool to profess my infinite love

for the sea and the creatures that inhabit it.

In recent years I have had the chance to travel extensively, and I am committed to sharing my past experiences to capture through observance some of the most threatened aquatic species on the planet. I have used these photos in competitions and publications, but until now I had failed to see in my work a common essence on which to base a project and articulate all that is required in the creation of a book.



Nikon D800E, Seacam housing and Tokina 10-17mm fish-eye @ 10mm. f/8, 1/50 sec., ISO 100

Nikon D800E, Seacam housing and Tokina 10-17mm fish-eye @ 10mm. f/8, 1/50 sec., ISO 100

The desire to go further, to leave the first tangible evidence of my passion for water and photography was very strong. As often happens, sometimes what is hidden right before our eyes is unexpectedly revealed: the lake of Capodacqua.

I have been diving in Capodacqua since 2011, but it was only this year that I realized this magical place, rich in history and charm, was the ideal place to begin my photographic journey. The

crystal clear waters of this lake are the perfect means to seek out and discover yourself, a place where peace and tranquillity gives the opportunity for the spirit to grow.

Capodacqua is a unique place, and although well-known by underwater photographers, no one has ever made it the subject of an articulated work. Its proximity to Rome gave me a chance to immerse myself seamlessly and eagerly. The submerged watermills are





Nikon D800E, Seacam housing and Tokina 10-17mm fish-eye @ 10mm. f/10, 1/60 sec., ISO 100

the most famous, but in combing the lake inch-by-inch I had the ability to find my voice. It was here, in the quiet solitude of the cold waters of the lake, that I finally found the way to interpret myself, the key to the title of my book.

“Reflections from the Past” because there is an obvious line that connects all my photographic work: those of reflections of the images on the separate surfaces of water and air.

Even more so, the reflections on Capodacqua seem to come from

the past: the stones of the old mills that are reflected on the surface of the crystal waters of the lake tell of a unique area, of saints and warriors, popes and princes, give the perception of something that was, that no longer exists, yet continues to exist through a transformation, immersed in a dreamlike dimension. The suggestion is to perceive only the reflection, while the object and story belong to the past. It is a story of extraordinary Italian history, a contribution to the recovery of the central role that our country has always had and deserves



Nikon D800E, Seacam housing and Tokina 10-17mm fish-eye @ 10mm. f/6.3, 1/200 sec., ISO 100

to have in world culture.

Reflection is in the end an instrument “of reflection,” a mirror to past fears and troubles, for which the exploration of Capodacqua and its surrounding areas is a “journey” whose powers of suggestion become encapsulated and processed in a symbolic way. The final goal is the achievement of a positive thought, peaceful, calm and as clear as the lake’s water; the communion with water being the road to rescue, the map to discovery of what is true and real in life.

The Tirino Valley And Capestrano: The Journey Begins

The “journey” starts from the Tirino valley: this area, where life still centers on agriculture and shepherds, is among the Gran Sasso National Park and Monti della Laga (Laga Mountains), the Green Heart of Abruzzo. The valley lies between the communities of Bussi sul Tirino, Capestrano and Ofena, and the provinces of Pescara and L’Aquila. The Tirino River, one of the



Nikon D800 and Nikkor 60mm. f/8, 1/250 sec., ISO 100

most beautiful and clean in Italy and Europe, meanders through the valley.

The Tirino River is unusual, originating at a low altitude and with three sources, Capodacqua, Presciano and Capestrano. Its name comes from the Greek word “tritōn,” for triple sources. Immediately upon leaving the Rome-Pescara highway, driving along the SS153 road from Bussi to Navelli feels like traveling back in time, everything changing in an instant: the noise and images of modern life disappear. The mountains remain, the wind, the cloud of flying birds and old rural homes sparsely scattered on the

slopes of this large valley of tectonic origin. Often I leave the city and travel in stormy weather, yet when I arrive here I magically find the sun, thanks to the protection provided by the surrounding massive limestone mountains.

Tirino Valley is a place of the heart, welcoming with the silence, smiles and old-fashioned unobtrusiveness of its people. Capestrano overlooks the Tirino Valley, and is a beautiful part of our history and ancient culture; it is the perfect place to understand that our future must reclaim our past, that our



72 shots @ f/5.6, 300 secs., ISO 400 - Nikon D800 and Sigma 15mm fish-eye

traditions are the ways to rescue our lost balance. It is the ideal place to begin the journey.

The first thing that opened my heart here in Capestrano was finding the same houses and steep alleys of the rambling adventures of my happy childhood.

In Capestrano the elderly see you coming and look at you with curiosity and a desire to talk to you. If you stop to chat, they ask questions that invite you to talk about yourself, something unusual in a world where the “social networks” are a multitude of voices speaking only of themselves.

Capestrano has brought me back to my childhood, and enlightened me to the subconscious reason that led me to take a trip here: the physical journey was actually a personal search for the right place to examine my life.

Going back to my memories invited me to sit and make me ask the right questions, discovering that the path I took through Capestrano and its surroundings is the path of change that I have undertaken in recent years thanks to diving.



Nikon D800E, Seacam housing and Tokina 10-17mm fish-eye @ 10mm. f/6.3, 1/200 sec., ISO 100



Nikon D800E, Seacam housing and Tokina 10-17mm fish-eye @ 10mm. f/6.3, 1/200 sec., ISO 100



Nikon D800E, Seacam housing, Nikkor 105mm and +10 external diopter. f/25, 1/320 sec., ISO 100

Rocca Calascio: Letting go

After Capestrano, the “journey” took me to Rocca Calascio, a requisite stop on the path to change.

The silence and mysteriousness of Rocca Calascio are the perfect elements for clearing the mind before entering the water. reality is ever-changing, and to believe it is not so is simply an illusion that brings nothing but suffering. The abandonment of these illusions and acceptance of change sets us free.

Rocca Calascio, with its face carved out over centuries, shows us this sense of constant change. At first glance, we might see this as a difficult and cold place from which we just want to escape, but if you have the courage and optimism to accept the idea of change, if you know and understand that at some point in your life you need to leave everything behind and begin anew, to start over, then this abandoned place will welcome you with open arms.

It will adopt you, inspire you, and be your guiding light.

Capodacqua And The Mills: Renewal

After Capestrano and Rocca Calascio, the “journey” takes us to Capodacqua, where we are “ready” now to dive in the crystal clear waters of the lake

There is something very spiritual about being immersed in water. There is an ancient relationship between water and spirituality, like the deep-rooted link between water and religion.

Through the stories of mythical and metaphysical collective and individual catharsis we see a theme as to how water held such value in religion. The water that cleanses sin and shame, water that purifies and allows man’s rebirth.

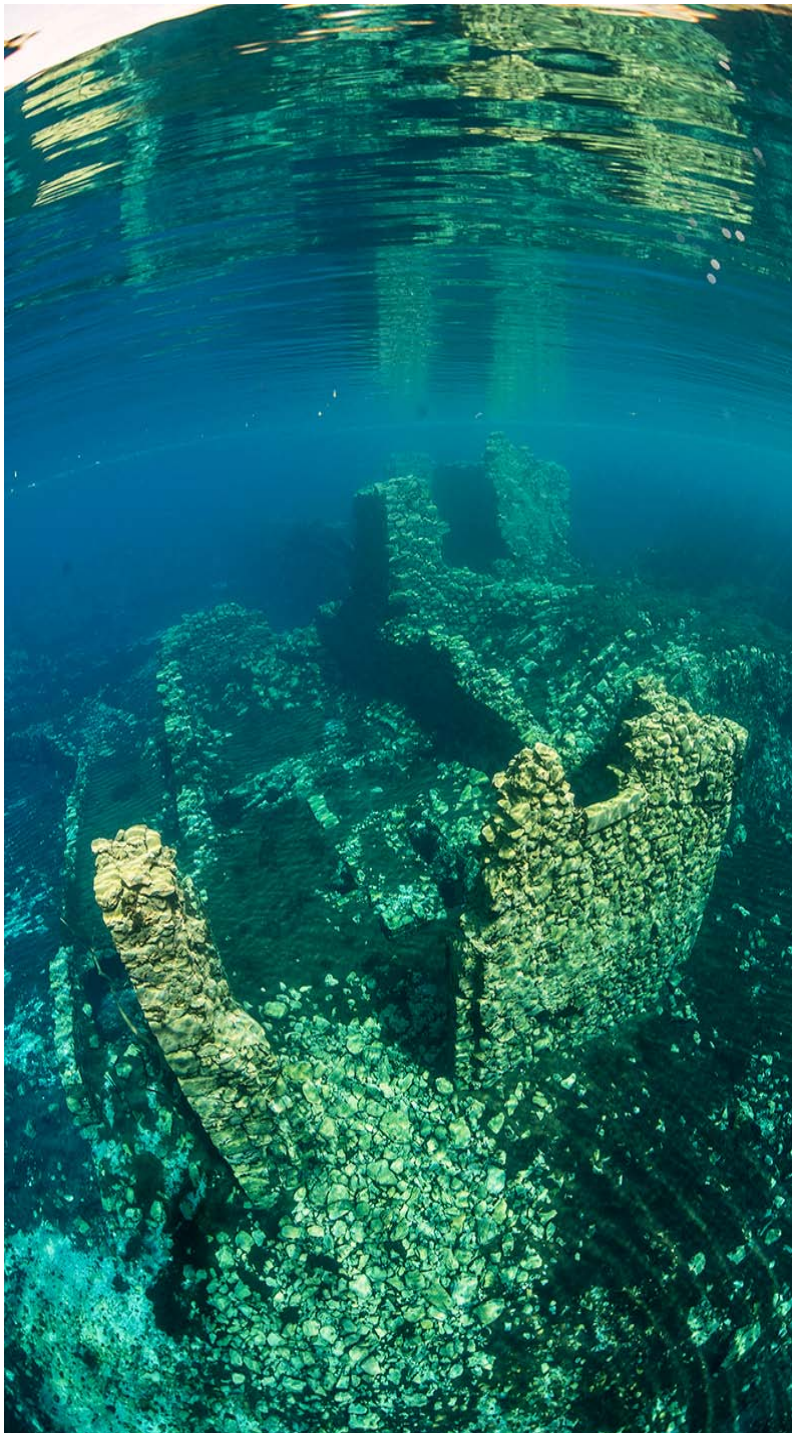
It becomes clear why water must therefore be part of the “journey”: the journey, from Homer’s odyssey to that of Dante and Joyce, is a metaphor

for the psychological journey of self-growth. Even the act of a shipwreck is an abandonment of self, a rejection of physicality and oblivion.

My dive in Lake Capodacqua becomes the critical step of the journey, the point of no return, the rippling reflections split the crystal waters; sinking into its depths is cathartic as an abandonment of the old self and the completion of my renewal and revitalization process.

Now the plunge into the lake is the culmination of a journey in which the places I visited stimulated my fascination and personal reflections. Exploring the submerged ancient structures of the mills, you find the key to understanding growth: the past, letting it go, change.

The submerged structures of the mills, once the scene of fervent human activity now forever silenced in the depths, become symbolic of the moment of change and personal transformation. The photographer portrays with crystal clarity the perfect representation of a transition that is



expressed in the present, the moment when diving among them.

The past regenerates and is reflected in this new light.

The Life In The Lake: Rebirth And Journey's End

Capodacqua is not only the lake of the submerged mills, it is also house and shelter for many animals being resident here. The lives in the lake are real and existing beings, giving a sense of change and rebirth. The new life in the mills is that of small beings that inhabit it, the water fleas, shrimp, water snails, water birds, and colonies of brown trout. They are the continuation of a never-ending cycle, the metamorphosis of a lively and intense past.

These animals invite us to live in the present moment, to turn our attention to the reality around us, the here and now, and to interact with it. Observing and photographing them gives serenity because it gives a sense of presence in reality, in life. This distracts from the obsessive thoughts and gives peace and tranquility to the mind.

The “new life” symbol of rebirth and continuous renewal of the lake are these little beings, delicate and gentle symbols of our Mother Nature that renews life where before there was death.

A few years ago I started to live a full and intimate contact with nature through water. By observing nature I learned love, love for life.

This is what gives meaning to my travels in and around Capodacqua.

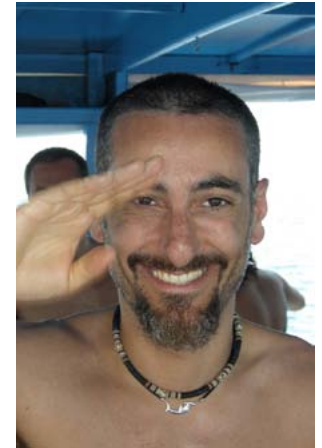
This is the goal of my inner journey.

David Salvatori

www.ilmaresonoio.com

David started underwater photography in 2008. Since 2011 he is participating in the most important national and international competitions, achieving many recognitions and awards.

His main interest is around nature photography and conservation issues, to which devotes his travels around the world. In recognition of his activities and awareness of some of the most endangered species of the planet, he was selected as a member of the Ocean Artist Society in 2015.



Fotografie di David Salvatori



www.reflectionsfromthepast.com

Atlantic Forest, Brazil

by Fernando Lessa

For as long as I can remember, I have been more interested in the unknown rather than boring beauty. As a result I was more attracted to swim in a beautiful river than from a beach.

Why?

Maybe is more about the unknown or for the feeling of doing something unique? Or maybe because it's so complex and rich that I couldn't describe it in words..

Considered one of the five hotspots of the world, the Atlantic Forest now covers only 8% of its original area. Spread all over the Brazilian coast, from the beach to almost 200km inland, this stunning biome still keep its secrets and beauty. And there are few people that have had the chance to see it from this angle - the underwater view of an ecosystem that is totally water dependent, and have never been explored.

Having decided to do it, about three months ago I put my hands to work: Shoot the most interesting and beautiful places of the Atlantic Forest.

As a personal project, without

any funding, I'm doing it step by step. There are still many places to visit, so at the moment I'm looking for diveup to around 200km from my home.

The Atlantic Forest has a very rich ichtiofauna, with high levels of endemecity. The water is also home to, as well as fish, many species of shrimps and small lobsters, crabs, frogs, snakes, turtles, jaguars...the whole Forest depends on its close relationship with the water.

Diving in rivers and being alone, demands some preparation and planning. Usually there are three kinds of dive:

Shallow river with rocky bottom: These are nice rivers to shoot for small and colourful catfishes and crustaceans. In the pools one can find other fish like Hoplias sp, Gymnotidae

Good morning Juruena! Ready for another day of jungle diving

Brazil is place of an insane variety of catfishes, this is being a Loricaridae. They are very shy and usually hide from the diver. Lots of patience is need. F90 1/250 ISO 400 Ikelite housing + Macro port +Nikon D800 + Sigma 105mm f2.8 + SB105.





Hollandichthys sp tends to stay more in the darker areas of the pools. They usually swim in small groups and are very territorialist.. Ikelite housing + Macro port +Nikon D800 + Sigma 105mm f2.8 + SB105.. F5.0 1/250 ISO 400

sp, Cichlids and many more. Bear in mind that these places are very original and you can easily find new species that haven't been described by science.

Medium deep pools, isolated by waterfalls:

These are the most interesting. Usually home to big schools of Characidae, and with incredible scenery. You can do some splits, taking the falls, with really cool

results. If you manage to bring tanks, some pools can be deep as four to five meters and on the bottom one can find interesting crustaceans and other predators. Here we have a freshwater shrimp, originally from Indonesia, that can grow up to 35cm.

Clean mangrove diving:

When the rivers get close to the sea you find more mud and obstacles like trees and big rocks. The tides affect these areas and you need to



This are the friendly Coridoras (Coridora sp). They walk around in small schools, looking for small creatures in the bottom. Ikelite housing + Macro port +Nikon D800 + sigma 105mm f2.8 + Sb105.. f9.0 1/250 ISO 400

know what state it is at. Here, you can have a mix of the sea and river fauna, so you can find cichlids mixed with juvenile jacks. As you go up river and farther from the ocean, they became more transparent and the fauna gets more "river like".

Free diving covers 90% of the situations, and the photo setup is my trusty D800 Ikelite housing, 2 Nikon SB105 being one connected to the flash arm, and the other hand

held. Sometimes, lighting is difficult and being able to move one flash, independently, is very useful.

Everything must fit and be well protected in my old 42l backpack for the hikes, with the diving gear and my 5mm suit and weights. When in more inaccessible places, you need to bring food, water, lights and patience, because the mosquitoes are very hungry inside the forest!

This time I've chosen two rivers:



Poeciliidae are very common and can be a nice subject for macro training. Ikelite housing + Macro port + Nikon D800 + sigma 105mm f2.8 + Sb105. f2.8 1/250 ISO 50



You can find mud banks covered with some amazing emerald green color. They are full of shrimps. Ikelite housing + Macro port + Nikon D800 + sigma 105mm f2.8 + Sb105. f2.8 1/250 ISO 50



Gobies are very common in the area, Awaous sp. They are very friendly and usually let you take lots of shots. Ikelite housing + Macro port + Nikon D800 + sigma 105mm f2.8 + Sb105. f10 1/160 ISO 20

Jaguareguava and Quilombo. Both are located close to the city of Santos, less than 20km from the biggest ports in South America. They are part of Serra do Mar National Park, but can be easily reached by car from outside the park.

Jaguareguava, means in the Tupi language, “where the Jaguar drinks water”. It is an easy option for your first jungle diving. You can begin in a very clean mangrove area and finish around big schools of charadics in some pools, after an amazing waterfall. Or with a short walk, you can reach more waterfalls and pools. I usually use an old canoe, where I can leave my equipment, and bring my

boots, in case any walking is needed.

Quilombo was more obscure. I saw some notes on a scientific paper, but didn't really know what to expect. A friend sent me the coordinates and that was it.

What I've found is a very preserved river and clean water. Good for macro and with lots opportunities to find rare fish. In 6 hours diving I could count more than 10 types of catfish (Loricaridae) and four different shrimps plus other fish.

All the fauna of this river depends on the water as due to their small size, they are very dependent on the rain. During the summer rains, some of them can double their size in minutes. The results are very unique animals, adapted to this crazy environment. Look close to find colorful details and interesting behaviors! Schools of White mullets, Snooks, mini jacks and pupperfishes are easily found.

The plan of that day was to be

in the river around 10am and finish the day with a night dive, at around 9pm.

I started with a Sigma fisheye 15mm f2.8, trying to use the sunlight, but the tide was too intense and the water wasn't clean enough. So I switched to macro for the last of the daylight. I enjoyed every minute learning how the gobies behave,



Nightdiving at Jaguareguava River. Ikelite D800 + plus dome. D800 Nikon camera+ Sigma 15mm f2.8 fisheye + tripod. The background light comes from a flashlight. F 3.5 1/30 ISO 800.

shooting shrimps and looking for a particular fish that I've seen here ages ago. A kind of Poecilidae with an yellow anal fin.

To finish, a quick night session. With the help of my wife, I manage to work on some underwater landscapes, shooting some wide angle with a tripod a flash and some flashlight (my wife would lightpaint the surface from topside). The tide was very strong, and besides enjoying the time, I called it a day after less than an hour.

When I woke up, the next day, I

could hear the rain on my tent. With no expectations, I packed and went to see if I could find Quilombo river and see how the water was down there.

The access was easy and after an hour I could see the river. It was a gray and rainy day, perfect for staying in bed, but it ended up being perfect for shooting: There was no one around, no sounds, just you and the river. The grey day also invited some more night animals to be around and there were interesting creatures everywhere.



A bromelia, Bromeliaceae, shot during a quick night dive. Ikelite housing wide port + Nikon D800 + sigma 15mm f2.8 + 1 Sb105. F4.5 1/40 ISO 800

The tip is to stay focused on small areas, until you really start seeing things moving. Life in this place are usually very camouflaged. Due to the rain, the water wasn't 100%, so I stuck to macro.

I could shoot schools of different species of Corydora, Characids and even a rare South American lungfish (sorry, no good pictures of this guy, yet.), which is a rare find.

There may not be the variety of life that you would find on dreamy pacific reefs, but unique creatures for

sure.

For the future I'm planning a return to Quilombo, for some night-diving. and also an attempt to another kind of Atlantic river: altitude rivers, up on 700m. These rivers are even more complex, with the average temperature around 12 °C (56°F), beautiful underwater gardens and with some of the most unknown ecosystems of the Atlantic Forest.

If you have knowledge in the field of tropical forest and river ecology in South America and would like to contribute, I would be very grateful.

Fernando Lessa
www.walkinglessa.com

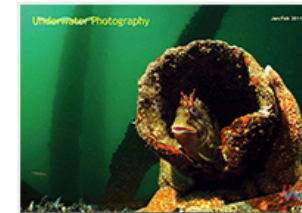


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South West Ramblings 17

by Mark Webster

I think that I have mentioned before in my previous scratchings that we should not ignore estuaries as an alternate habitat which can offer many imaging opportunities of different or juvenile subjects not seen on the open water reefs. I am fortunate to have both the Fal and the Helford estuaries close to my home which provide a range of habitats, the Helford being notable in particular for eel grass, including one habitat that is quite unique and only appears at a few locations around the UK coastline.

You may not be too familiar with Maerl, a form of calcified or coralline seaweed, as it needs quite specific conditions to thrive, but both estuaries and some parts of Falmouth Bay, extending to Nare Head in the east and the Manacles reef in the west, do offer the right conditions.

Maerl is a Breton word (sometimes written maërl) and if you did not know better you might mistake it for small coral nodules, but it is in fact a species of red seaweed with a hard chalky skeleton. The most common species is Lithothamnion corallioides which under the right conditions can form large beds, resembling a reef like structure,

several meters deep. These deep beds are constructed of a mixture of dead maerl at the base, with intervening layers of dead and living maerl topped off by a layer of vibrant pink to purple coloured living marl which is a surprising revelation when you see it for the first time.

Although there are small beds and concentrations throughout Falmouth Bay, the most spectacular bed is found in the Fal estuary on an area locally known as the St. Mawes Bank, directly below St Mawes Castle on the east bank of the Carrick Roads channel. This maerl bed is reputedly the largest in England and it is certainly an impressive sight with vast areas of purple coloured nudules dominating the seabed. The deep

A healthy maerl bed looks a little like a mini coral reef and can be quite a surprise when you see it for the first time. Just like a coral reef it is teeming with life but not all of it is immediately obvious. Nikon D7100, Subal ND7100, 10-17mm FE zoom + 2xTeleconverter, Inon Z240 flash guns, ISO 320 f13 1/25.



A satellite view of the Fal estuary and Carrick Roads. The St. Mawes Bank area is circled in red.





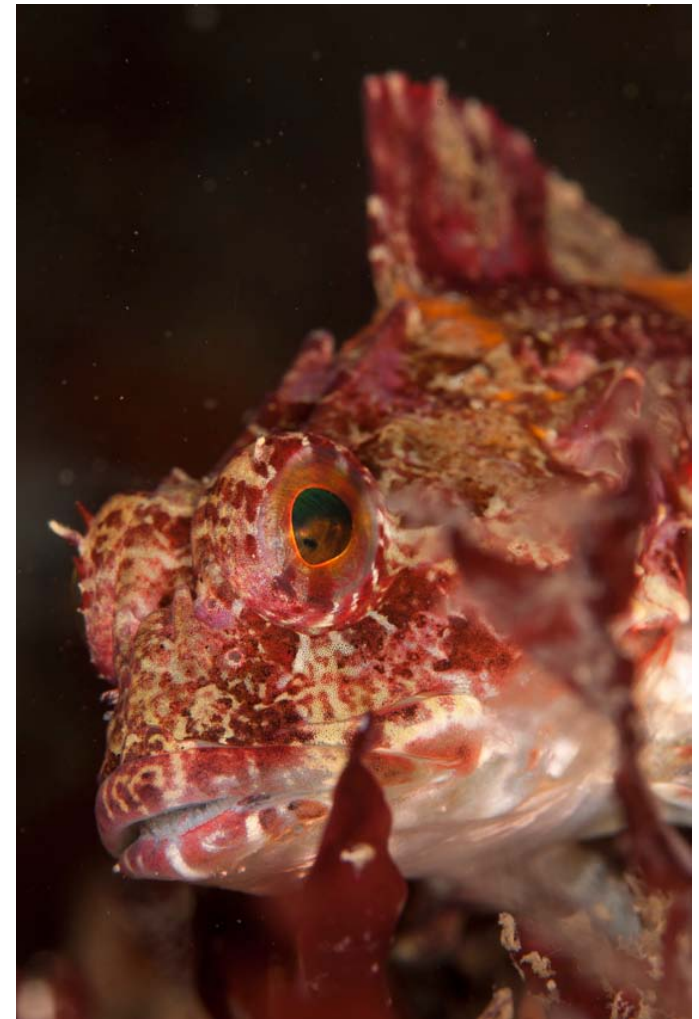
There are hundreds of hermit crabs in the maerl ranging from the size of a pea to a golf ball. The larger ones often have cloak anemones and can be quite bold like this pair marching towards my dome port. Nikon D7100, Subal ND7100, 10-17mm FE zoom + 2xTeleconverter, Inon Z240 flash guns, ISO 320 f13 1/25.

entrance to the Fal estuary, known as the Carrick Roads, is a drowned river valley and consequently has shallow gently shelving edges before plunging quite steeply with small drop offs to the main channel at 30-35m which is the original river bed.

This feature makes Falmouth one of the deepest natural harbours in Europe. The maerl beds are found at the top of the bank between 5m

and 14m where there is plenty of sunlight and high levels of nutrients born by the tidal flow, which even on a neap tide can be quite strong.

At this location the shipping channel is marked by two buoys, the East Narrows and the West Narrows buoys, and it is on the green east narrows buoy where we generally begin our dive. It should be highlighted at this point that Falmouth is a busy



Scorpion fish can colour themselves extremely well to match the maerl and so can be difficult to find unless you disturb one when working with another subject. They don't swim far so watch for it to settle and then make a slow approach for your shot. Nikon D300, Subal ND20, 105mm micro, Inon Z240 flash guns, ISO 100 f22 1/80.



A view looking east from the East Narrows buoy towards the shore at St. Mawes – the castle is just on the edge of right of the picture. Nikon D7100, 18-200mm zoom, Programme mode.

port and the dive is adjacent to the main shipping channel. Even though the maerl beds are situated on the east side of the buoy out of the deep water channel, there is still plenty of small boat and yacht traffic to be aware of. So you need good boat cover here and surface marker buoys or dive flags for when you surface, cautiously!

The tides can be strong here so the best plan is to dive on slack water unless you are very familiar with the area. Perhaps the best choice is to use one of the local dive charters who will be knowledgeable of all the required

precautions for diving this location. So if all that has not put you off, read on for more on what maybe the closest thing to a Lembah muck dive in the UK.

You can of course begin your dive anywhere along the bank by following the depth profile on your echo sounder, but it is handy to use the East Narrows buoy chain to descend as it provides an easy reference and the clump weight is on the edge of the maerl bed at around 12m dependent on the tide. Check out the loose ground chain around the



If you start your dive on the East Narrows buoy check out the ground chain for crabs, shrimps and the occasional tom pot blenny before moving on to the maerl for a slightly different composition. Nikon D7100, Subal ND7100, 60mm micro, Inon Z240 flash guns, ISO 200 f13 1/60.

clump weight for critters, particularly crabs, that have made a home amongst the links, but watch your fingers if there is any movement in the chain due to surface swell.

From here to find the best maerl ascend up the bank to 8-10m and then turn either north or south depending on any tide. If you swim far enough north towards St. Just then you will begin to encounter eel grass which marks the end of the maerl bed. It is best to swim into any current so

that disturbed sediment dissipates behind you and also means that as you surface you will drift back towards the buoy location.

As you ascend the bank you will notice that the maerl gets thicker until it has an almost uniform coverage with small rocks, clumps of seaweed and occasional areas of exposed sand. The sight of this deep purple field of coralline nodules is impressive on its own, but it is not until you get closer begin to realise that the maerl beds



This is a crab, really! There are hundreds of small spider crabs in the maerl that use sponges, weed and anemones to disguise themselves. This makes it very difficult to capture a successful image, but the temptation to keep trying is overwhelming! Nikon D7100, Subal ND7100, 10-17mm FE zoom + 2xTeleconverter, Inon Z240 flash guns, ISO 320 f13 1/30.

are alive with other marine denizens – invertebrates, crustaceans, molluscs and fish, many of them sporting impressive camouflage.

Maerl is home to a host of cryptic critters, but is also a valuable nursery for juvenile fish, crustaceans, molluscs and cephalopods and the habitat is quite crowded. For your first dive here with a DSLR a 60mm macro lens is ideal whilst compact users will have all the range they need.

Once you have a few dives under

your belt it is worth coming back with either a 105mm and wet lens for the really small stuff or with a fish eye zoom to try and capture the mood of the habitat with some wide macro compositions.

For macro you will of course need flash and there is always plenty of suspension in the nutrient rich water here and often some backscatter is unavoidable. On a sunny day this site could work very well with a Green Water Magic Filter, but



Some hermit crabs insist on going large, but carrying such a large anemone must seriously affect your maneuverability, but perhaps the feeling of security is more important. Nikon D7100, Subal ND7100, 60mm micro, Inon Z240 flash guns, ISO 200 f16 1/25.

although I have often contemplated it I have yet to try it (the editor may castigate me for this admission...).(Consider yourself well and truly castigated :-) Ed)

Where the maerl is tightly packed you will need to be cautious about making contact with the habitat and you may find that a stainless steel muck stick is useful for holding location and keeping above the maerl.

There are literally thousands of crabs here, the most obvious being

the occasional large common spider crab and edible crabs that burrow into the maerl. But once your eye begins to understand the topography you will realise that many of the apparent lumps of sponge are in fact a smaller species of spider crab that are experts in cryptic camouflage. They cover themselves in sponges, weed, hydroids and anemones so well that it is often difficult to work out where the head is even when you spot one following a bit of movement.



Juvenile spur dog fish have a much darker more defined pattern than the adults and an almost fuzzy appearance to their skin, which is rough to the touch. Being small they are an ideal size for a 60mm portrait. Nikon D7100, Subal ND7100, 60mm micro, Inon Z240 flash guns, ISO 200 f14 1/40.

Seeing the “crab” in your image can be a bit of a challenge and it sometimes helps to introduce a bit of side lighting from a single flash, perhaps with a snoot, to separate the shape of the subject from the background.

Next up are hundreds of hermit crabs ranging in size from very small in winkle shells to the size of a golf ball often sporting one or more cloak anemones. The size of some of the shell and anemone combinations dwarf the hermit crab and you wonder how they can manage to move all the weight around. You can then move on to huge number of Leach’s spider crabs which are normally associated with snakelock anemones. There are few if any snakelocks to be found here, but that does not seem to bother this species which are decorated with the familiar yellow sponge covering you would expect. Many of them are sitting in the maerl



Tom pot blennies are an appealing subject in any location, but this one has made its home in an algae encrusted bottle peeking out at the camera just like a Lembeh Strait veteran. Check any bottle or jar you come across for unexpected residents. Nikon D7100, Subal ND7100, 60mm micro, Inon Z240 flash guns, ISO 200 f18 1/30.

nodules which makes them hard to discern in an image, so it is worth looking for one that is emerged from the maerl for a lower angle, there are plenty to choose from.

Another crab species that is hard to separate from the background are the spindly dark decorator crabs that use weed and hydroids to disguise themselves. You will often find them close to

small outcrops of weed or the numerous small sponges growing amongst the maerl, so they blend in extremely well and again you might try some selective lighting to isolate them from the background.

Whilst you search for the various crab species you will encounter dozens of dragonets, gobies, wrasse, scorpion fish, topknots and the occasional



There are also healthy maerl beds to be found inside Gul Rock close to Nare Head at the eastern end of Falmouth Bay, adjacent to the wreck of the Hera. Red gurnard are commonly seen amongst the maerl at this location. Nikon D300, Subal ND20, 10-17mm FE zoom, Inon Z240 flash guns, ISO 200 f10 1/50.

dog fish, gurnard and thornback or blond rays. Juvenile spur dog fish are quite common here which have much darker pronounced markings than the adults, with a more textured skin, and at around 10-15cm in length are perfect for a portrait with a 60mm lens. Where you encounter a sand patch look carefully for cuttlefish which seem to prefer to bury themselves in softer soils when resting, perhaps they cannot match

the colour of the maerl, although you will also see juveniles and adults over the maerl hunting. Although you will be focusing on the maerl and its inhabitants, don't ignore the occasional clumps of seaweed which often have sea hares and pipefish amongst them and iridescent green juvenile ballan wrasse which make a great portrait.

Within the maerl you will see numerous yellow/orange sponge

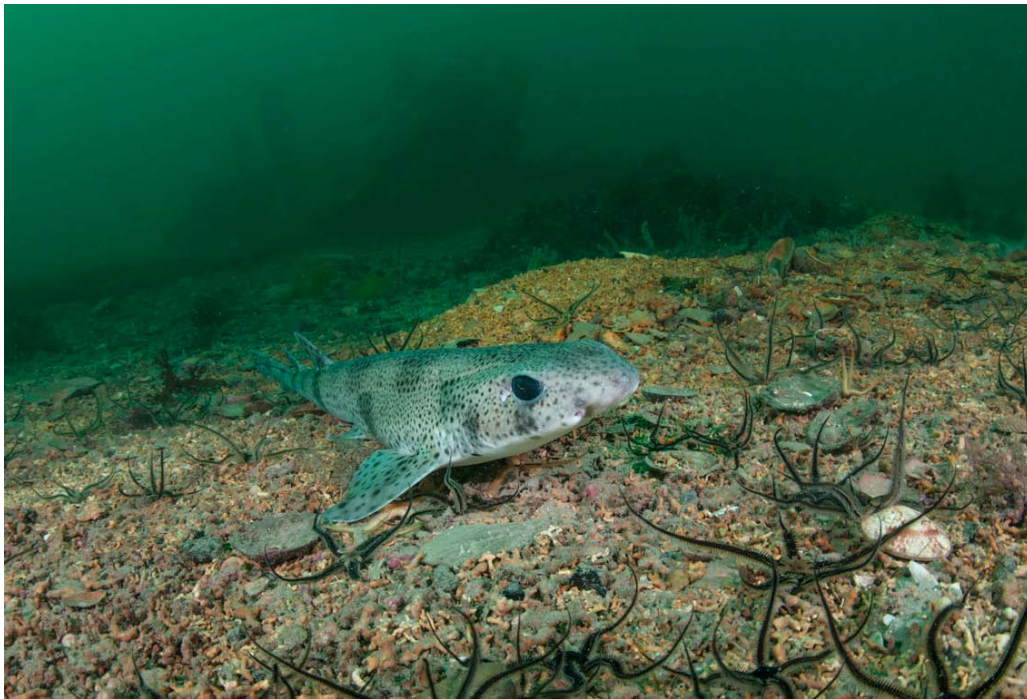


The most common nudibranch you will see on the maerl beds are the sea lemons (Doris pseudoargus). This one is coloured to match the orange sponge that it is feeding on. Nikon D7100, Subal ND7100, 10-17mm FE zoom + 2xTeleconverter, Inon Z240 flash guns, ISO 320 f13 1/30.

growths smothering some maerl nodules. Look a little closer at these as you are likely to find many sea lemon nudibranchs (*Doris pseudoargus*) dressed in matching colours feeding on these particularly between the depths of 5-8m. You will find other sea lemons amongst the maerl nodules often with a yellow and pink blotch pattern which camouflages them well. They are quite difficult to photograph well as they are quite shapeless when

curled around the maerl nodules to feed. In the springtime other nudibranch species will be found here as well, but it seems to be the sea lemons are the dominant species.

Like any estuary that has seen shipping activity over hundreds of years, the Fal and Carrick Roads has a lot of discarded items of varying antiquity. It is a great place for finding old bottles, cups, plates and stone jars and jugs that have been tossed over



A mixture of living and dead maerl can also be found around the wreck of the Epsilon in Falmouth Bay. The pink living nodules of maerl can be seen around this dog fish surrounded by brittle stars. Nikon D300, Subal ND20, 10-17mm FE zoom, Inon Z240 flash guns, ISO 200 f11 1/20.

the side by anchored boats and you will often find some of this debris amongst the maerl.

Just as you would in a tropical muck location, check out any discarded item that might provide a home and you might be in for a surprise. Tompot blennies in particular will choose a cylindrical home and beer and wine bottles are ideal, some of which have been there so long they are covered in encrusting algae's and sponges themselves and so frame a

cheeky fish perfectly.

As mentioned above there is maerl throughout Falmouth bay with very healthy beds in the mouth of the Helford river and inside Gul Rock close to Nare Head, adjacent to the wreck of the Hera. Whilst these locations have plenty of life on them they lack the diversity and high concentration that you find on the St. Mawes Bank location. Elsewhere there is wide evidence that healthy maerl beds must have covered much



There are also healthy maerl beds to be found inside Gul Rock close to Nare Head at the eastern end of Falmouth Bay. Whilst still full of marine life this area lacks the density of species found on the St. Mawes Bank. Nikon D300, Subal ND20, 10-17mm FE zoom, Inon Z240 flash guns, ISO 200 f11 1/20.

of the bay at some point in time, but many areas now only have small outcrops of living maerl amongst the dead or dying nodules. A good location to observe this is the wreck of the Epsilon which is surrounded by this type of maerl deposit and fields of brittle stars feeding on it.

So if you love muck diving you are sure to love maerl diving, even if it is colder, and you can mix this up with a wide variety of reef and wreck dives in the locality to cover all tastes

with a few days diving here. If you do not know the area well then please consult the local dive shops and charter boats to ensure you dive this location safely. The only other caution is that one dive probably won't be enough and, as with all forms of muck diving, there is a risk of addiction!

Mark Webster
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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](mailto:peter@uwpmag.com)

How to submit articles

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

1. The text should be saved as a TEXT file and attached to the e mail

2. Images must be attached to the e mail and they need to be 150dpi

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

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

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

Parting Shot

Whale-kill. Presumably killed by a bite that took out the head and a large chunk of internal organs, this female giant octopus (*Haliphron atlanticus*) was observed floating off the Azores. It brought to the surface some interesting questions: What killed it? Why was it only partially eaten? Why bright red?

The colour is probably the easiest to explain. Red pigment is relatively cheap to make in terms of energy required. But also, red light can not penetrate any where near the depths below 300 metres where this species lives. In the darkness of the abyss, red pigment absorbs whatever light from the blue end of the spectrum that reaches it, reflects none, and so cloaks the animal in black invisibility.

Colour though, is no defence against predators quipped with effective acoustic echo-location systems. Pings returning from dense but squishy tissue, will be vastly different from those bouncing off hard rock. So the killer was highly likely to have been a whale of some type; sperm whales and beaked whales would be the prime suspects. The shape of the bite - wedge shaped, and seemingly caused by a narrow jaw - perhaps offers additional evidence for that.

But why only partially eaten? Perhaps, with an abundance of food, predators can be selective and only take the choice cuts from their prey. Perhaps the energy yield from the head and internal organs is higher than from the remainder of the mantle and tentacles. Bears fishing for salmon in the Arctic autumn, rip away and eat only the fat-rich skin, and discard the seemingly valuable pink flesh for scavengers. Perhaps toothed whales do



Canon 7DMk11. Canon EF 100-400mm f/4.5-5.6L IS II USM

the same. Or perhaps it was simply that some event interrupted the meal, and the carcass floated away after the killing bite had been delivered, and before more of the animal could be consumed. In this

case, the photograph raises more questions than it alone can answer.

Robyn Hughes

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

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