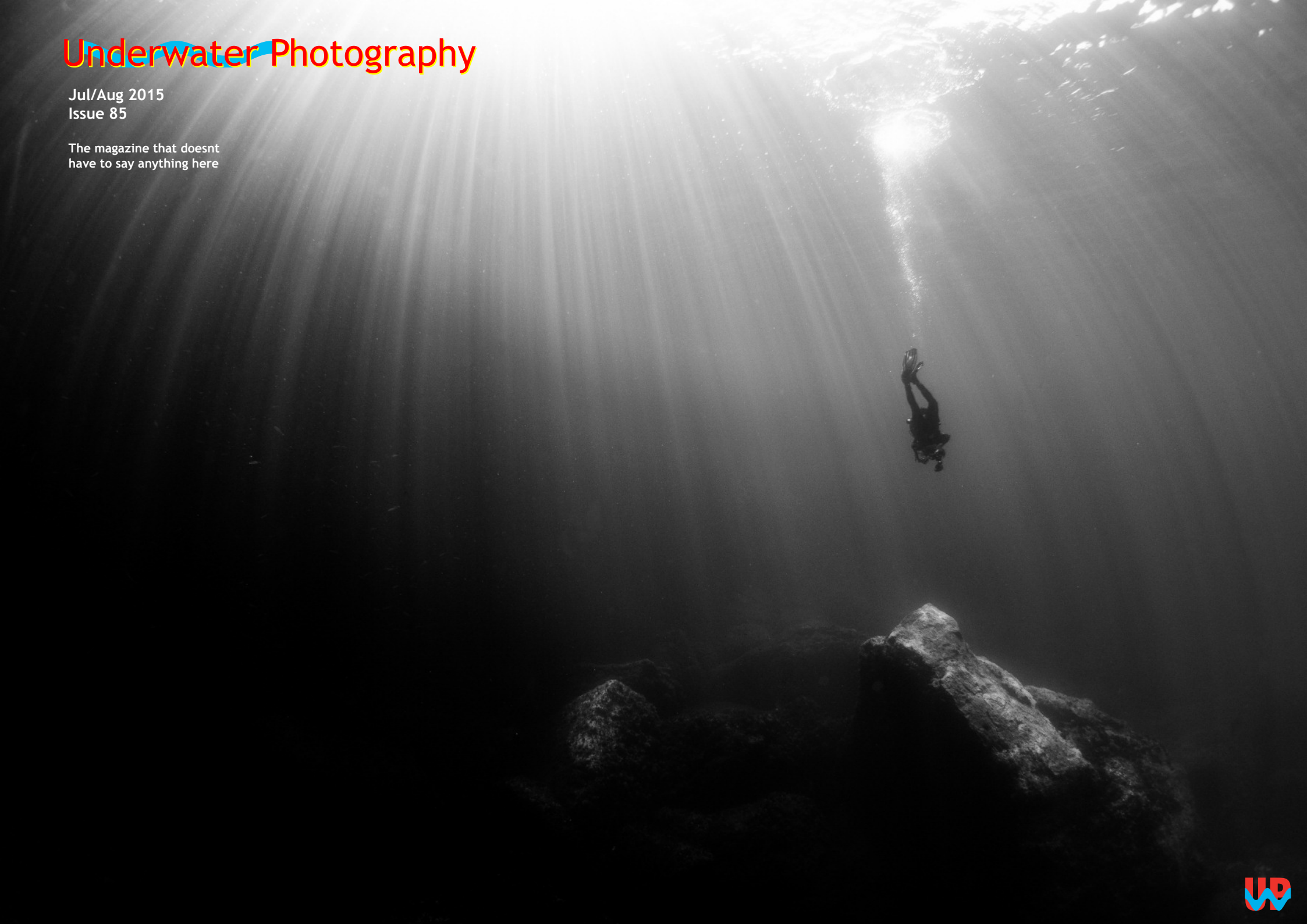
Underwater Photography

Jul/Aug 2015
Issue 85

The magazine that doesnt have to say anything here



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

Frank and Barbara Maloit

Pelagian

Wakatobi's luxury dive yacht

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

wakatobi

www.wakatobi.com

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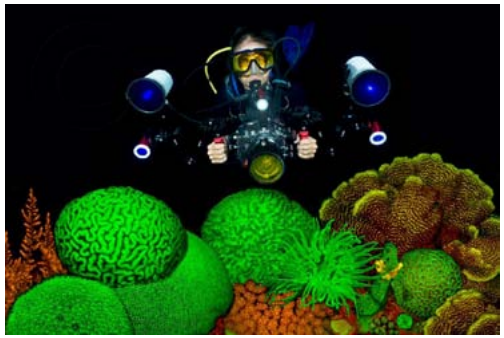

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Editorial

The Silent World

Jacques Cousteau was pushing it a bit with his description of life underwater. The invention of the 'aqualung' enabled an increasing number of ordinary people to sample the underwater world but, with the exhaled bubbles, silent it was not; however in a strange sort of a way, in between breaths, it felt so. Here we were, able to stay down and observe this new life in an alien environment comparatively unfettered for the first time. It was bound to be revolutionary.

What Cousteau saw, filmed and communicated was truly groundbreaking but it was in a different era. The footage he transmitted was sometimes barbaric (dynamiting reefs in the name of science to see what the effect would be?!) but this was accepted by the viewing audience of the day because the overall perception of the 50 minute movies was that the underwater world was full of adventure, beauty and, more importantly, capable of limitless supply.

Fast forward 50 years and we have a dwindling situation but with the same perception still existing. The general public can't see what has happened and what is being done to the underwater world by mankind's activities in general.

Renewable energy

Then there's the race for renewable energy; solar, wind and tidal being the front runners. Mark Webster's excellent article about the threat to The Manacles Reef area in Cornwall is just one example of how the good lord giveth with one hand and taketh away with the other.

A tidal lagoon in Swansea Bay, Wales has been given the go ahead and money and company executives are swarming to the honey pot.

"The return of British Sea Power: Consent for world's first Tidal Lagoon Power Plant opens new door in global effort to address climate change" is what Mark Shorrock, chief executive of Tidal Lagoon Swansea Bay Plc said.

Yes, you can't deny that harnessing the power of the sea seems the obvious solution to renewable energy but when you consider that the Manacles Reef area next to where 5 million tonnes of ideal construction rock will be dug out and transported by sea from a newly built harbour, this pristine reef will certainly be affected and possibly even smothered to extinction.

Now that doesn't sound as green or renewable as was first thought, does it?

Fortunately, or unfortunately, actually, the voting public can't see what's going on underwater.

Video lights

Anyway, enough of all this doom and gloom; we have an energy success story in our own world with the emergence of the LED (light emitting diode) which is providing more output than energy consumed to create it, if you get my drift.

Traditional lighting from halogen bulbs required large rechargeable battery packs to provide the ampage to drive the wattage output of these heat generating bulbs whose colour temperature was too warm for daylight balance films. Not ideal.

Fast forward a decade or so and ignoring the slight detour into HID bulb technology, we have the humble LED which when developed into 'arrays' can produce the amount of light output to equal and even surpass the halogen bulb. Add that their light output is the 'colour' of daylight, that they generate far less heat (but still significant amounts) and that they require far less power and you have a technology which provides benefits all round.

Who knows? If they are developed even further they may even challenge the performance of strobes for still photography.

There. I've left you with a good news story :-)

Peter Rowlands
peter@uwpmag.com

News, Travel & Events

Wetpixel Isla Mujeres Whale Shark Expedition

26 July to 1 August 2015

Wetpixel has two spaces available on their Whale Shark Expedition to Isla Mujeres this year.

The trip is running from 26 July to 1 August and like our previous trips, will give the very best opportunities to snorkel and photograph large numbers of whale sharks.

During the past two years trips, we have seen large numbers of manta rays too. We leave early and come back late, which makes not only for better encounters, but also means the sharks tend to be a lot more concentrated.

The trip is land based, staying at the comfortable Playa Media Luna hotel on Isla Mujeres.

Trip leaders are Emmy Award winning filmmaker Cristian Dimitrius and Wetpixel Editor Adam Hanlon.

www.wetpixel.com/i.php//wetpixelwhalesharks2015

New Scuba Dive Asia website

Scuba Dive Asia make it easy to plan and book your diving adventure online.

A breathtaking scuba diving holiday in Fiji. A liveaboard scuba vacation to the Galapagos aboard a luxurious 100-foot yacht. A romantic honeymoon dive resort in Raja Ampat. All these diving vacations and more can be easily perused and booked on the new and improved Scuba Dive Asia website.

Highlighting the relaunch of website is an eye-catching, user-friendly format that offers visitors their first taste of how easy booking their dream dive vacation can be if done through Scuba Dive Asia.

The updated website is mobile friendly, with responsive web design, visually breathtaking photos of scuba diving destinations, and full optimization for improved readability on any device, including tablets, smartphones and desktop computers.

www.scubadiveasia.com

John Collins Sharks Bay workshop Sept 2015

John will be offering photography and video workshops at Sharks Bay Umbi Village.

For this 5-day workshop, John plans to offer a combination of photo and video instruction. This is suitable to a wide variety of divers from those with entry-level compact cameras right through to DSLR-experienced photographers and those starting out with GoPro action cameras. The content would be adapted to fit the experience and needs of the group and a broad outline would be modified to suit as the week progresses.

John already enjoys running these successful courses and the instruction is an easy-going coaching style, with an emphasis on working with participants' existing knowledge and skills and building on it.

Sharks Bay Umbi Village have day boats that charter the classic northern Red Sea dive sites as well as a house reef. This is a fantastic all-round diving experience for any budding photographer.

Sharks Bay Umbi Village is suitable for all levels of qualification from non divers to instructors – there really is something for everyone.

John studied at Trinity College Dublin, learned to scuba-dive with Dublin University Sub-Aqua Club and went on to gain experience both in Ireland and abroad, eventually becoming a PADI instructor in 1991. He went on to start Cork Dive School in 1992 and continued to develop his own diving skills and was an early adopter of the advances in technical diving.

www.oonasdivers.com

www.uwpmag.com

Amos - the movie

I am writing to you today to tell you about a new project that I am involved in.

Over the last five years I have become the subject of a documentary that tells of my adventures in the wild, and my special relationship with wildlife.

The film is called AMOS, and right now, I am in need of your support!

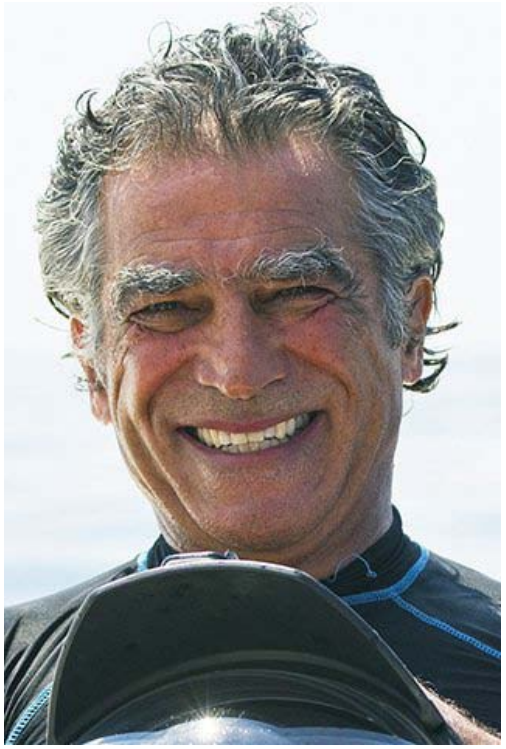
We have received most of the funding for this project from television networks and production companies around the world, but we still need just a little bit more in order to tell this story.

This is why we made a campaign on Indiegogo to ask for support from our dear friends and family.

Indiegogo allows you to make a contribution to the project in exchange for wonderful perks (such as high quality prints of my photography, and even a chance to join me on an adventure to the Arctic).

I urge you to see the campaign, look at the trailer, and consider making a contribution to the project. We only have 19 days left to reach our goal, and if we do not raise the money, we cannot finish the production!

It is extremely important to tell



the message the man and wildlife can co-exist in harmony with LOVE, and of course it is a message that all humans can take for themselves.

amos the movie

Diving the Galapagos Master

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 will 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 liveaboard in the Galapagos Islands. She has 9 well-appointed modern cabins, a spacious interior and generous outside space for relaxation and dive gear

preparation. Our experienced crew of 10 is waiting to welcome you aboard and show you the best of the Galapagos, both underwater and on land.

www.masterliveaboards.com

Travel Photographer of the Year 2015 opens for entries

It's time to pack your bags and get your camera clicking as the 2015 international Travel Photographer of the Year awards (TPOTY) open for entries. This year TPOTY has introduced a new category – Smart Shot - for every traveller, alongside a new set of exciting photographic themes.

One of the world's biggest travel photography awards, TPOTY attracts entries from over 100 countries each year, with amateur and professional photographers competing for a coveted TPOTY title.

The 2015 awards have three portfolio categories, three single-image awards, a New Talent category for aspiring professional photographers, an HD video category, Young Travel Photographer of the Year (for photographers aged 18 and under) and the new Smart Shot category (for images shot on a mobile phone or tablet).

TPOTY sponsors, Direct Photographic, Genesis Imaging, Plastic Sandwich, Photo Iconic and Railbookers, have been joined by British lifestyle brand StaaG, and have provided a great range of prizes for the successful photographers.

The awards are judged by a highly respected international panel of judges, which includes the adventurer, naturalist, wildlife filmmaker & environmental activist Catherine Capon, Daria Bonera (Photo Agency Director & Photo Editor for National Geographic Traveler Italy), curator Brigitte Lardinois, renowned wildlife photographer Chris Weston and Caroline Metcalfe, former Director of Photography, Conde Nast Traveller.

Travel Photographer of the Year is open to photographers of all ages and all nationalities. Images can be submitted online via www.tpoty.com or as prints. Entry fees start at £7.50 and entry for Young TPOTY is free. Entries close on October 1st.

www.tpoty.com

Worldwide Dive and Sail back in Truk

Worldwide Dive and Sail are pleased to announce that they will continue to offer Truk Lagoon as a liveaboard destination after the recent loss of the Truk Siren. They have decided to add Truk to the Master Liveaboards roster, alongside the newly commissioned French Polynesia Master and the Galapagos Master, which begins operations this month.

The Astral Star is a Codecasa built Long Range Cruiser designed by Camper Nicholson that is built to Lloyds class A1 standard. She was built and operated for private use and literally plied the seven seas before now being purchased by Worldwide Dive and Sail. She will visit dry dock for a refit and modernisation by the experienced Worldwide Dive and Sail team, led by Frank Van der Linde.

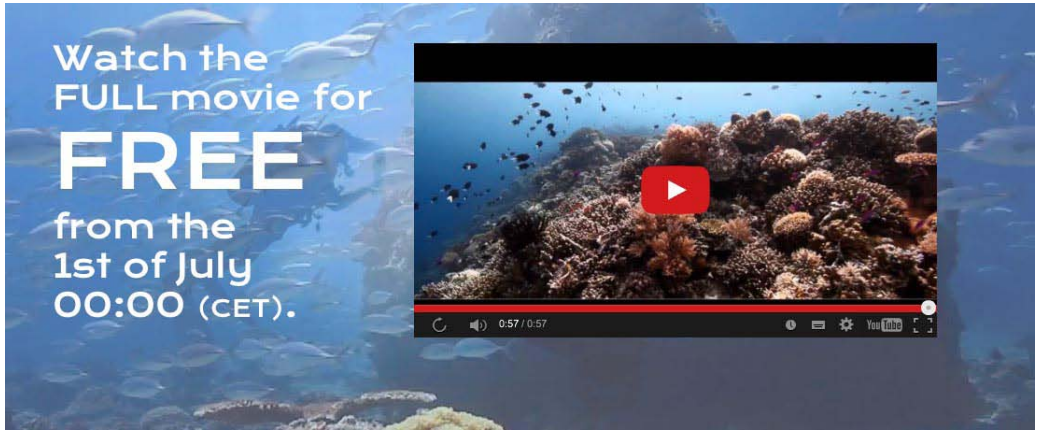
The vessel will be launched in February 2016 to offer a choice of 7-night or 10-night trips cruising Truk Lagoon, offering some of the best wreck diving in the world to both the recreational and technical diver. Guests are offered a choice of lower, main or upper deck cabins --- in a twin bed or double bed configuration.

With her sleek curves and elegant design the Truk Master is a worthy addition to both the Master Liveaboard fleet and to Truk Lagoon.

Visit the Master Liveaboards website for the full schedule listing and reserve your place on the Truk Master today!

www.masterliveaboards.com

Meet the new BigBoxfish



BigBoxfish presents dive travel movies from the most exotic dive destinations.

Watch it for free on your smart phone, tablet or TV. We give the viewer quality movies from some of the very best dive sites in the world, presented by our own host from BigBoxfish.

Our host, Marcus Aurelius, will take the traveler through a visual journey with factual, practical and entertaining information about the dive destinations, and give the traveler an opportunity to see and experience the dive sites before choosing and planning a dive travel.

BigBoxfish wants to inspire and introduce, both the experienced diver as well as the novice diver and even a future diver, to the fantastic world of diving.

The first BigBoxfish production is from the colorful country of over 7,000 islands, the Philippines.

www.bigboxfish.com

NUPG Splash-In

Sat 15th August 2015

Anglesey Scuba Fest are delighted that the Northern Underwater Photography Group (NUPG) will be holding their annual 'Splash-In Underwater Photography Competition' during 2015 The Anglesey ScubaFest.

All underwater photographers are welcome to join in the fun whilst diving the Anglesey or North Wales coastline. You can shore dive or go out on one of the boats available as part of ScubaFest, the choice is yours. It doesn't matter if you have just got your first compact camera and are starting to take photos, or you are a seasoned diver with a beautiful SLR. Come and join in, we would love to see your photos.

This is a great competition where images must be taken on Saturday 15th August and then judged by those that attend the evening at The Anglesey ScubaFest. Trophies will be presented to the winners. At the same time the NUPG will also hold a print competition, showing off some of the best images from the British Isles and overseas.

You must register to enter the Splash-In before the event, by 8pm on Thursday 13th August. You can do this by emailing competition@nupg.org.uk

Everyone is welcome to enter.

www.theangleseyscubafest.com/underwater-photography-competition

Final reminder! British and Irish Underwater Photography Championship (BIUPC)

Sept 4th 2015

Plan now! Register by 10pm 28 August 2015

For the first time, photographers in Britain and Ireland will compete against each other to produce the most eye-catching images from the waters around the shores and within the inland lakes, quarries, rivers and even caves of the two islands.

Entitled the British and Irish Underwater Photography Championship (BIUPC), the ground-breaking competition is open to images taken on any type of camera which is or can be waterproofed.

These range from action cameras, smart phones, tablets and pole-cams to the most expensive professional digital models.

Only photographs taken from 10pm on September 4, 20125 and submitted by the same time the next day are eligible.

Image enhancement will be allowed and, as all entries are to be submitted by email, allowance will need to be made for poor connectivity in remote areas.

Categories will be separated by the sophistication of the cameras and also by the techniques involved – wide-angle and close-up.

There are also special categories for cameras with small sensors as well as an award for the best newcomer.

Organised by the British Society of Underwater Photographers (BSoUP), the scope of the contest has only been made possible by advances in digital technology.

www.biupc.org

2015 San Diego UnderSea Film Exhibition

This is a call for entries for the 2015 San Diego UnderSea Film Exhibition (SDUFEX), that will take place Friday and Saturday evenings, October 9th and 10th, 2015 at the Irwin M. Jacobs Qualcomm Hall in San Diego, California.

This is your opportunity to see your work projected in a High Definition format in a state of the art venue on a 30' screen. An independent panel of distinguished judges will select the approximately 30 films to be shown during the two night event. There is no entry fee!

Filmmakers whose films are selected are encouraged to come to the show and introduce their film(s) in person on the night of the exhibition.

SDUFEX now uses an all-digital video entry submission process. This means that video tapes will no longer be accepted.

Please submit your video as a high resolution H.264 file that has been archived (copied) to a data DVD disk or via internet file transfer.

The first San Diego UnderSea Film Exhibition was organized in 2000 by a small group who had been meeting at Chuck Nicklin's dive shop to share information on shooting and editing underwater video. In the past dozen years, it has grown into one of the most prestigious underwater film festivals worldwide. Our venue is state-of-the-art Qualcomm Hall, and last year was a sellout with over 500 people each night.

Our approach includes affordable tickets, no prizes except the opportunity to share your work with an appreciative audience, and a panel of independent judges who are distinguished in their fields.

Among the renowned videographers whose work has been displayed are Howard and Michele Hall, Flip Nicklin, Leandro Blanco, Terry Maas, Shawn Heinrichs, and Simon Spear.

www.sdufex.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.

New Products

FIX Neo 3000 DX

The FIX Neo 3000 DX unleashes a massive 3000 lumen output at 100° beam pattern. The Neo 3000's industry leading light output combined with interchangeable batteries ensures you have the preferred setup to keep you shooting the video you desire.

The Neo 3000 DX's lumen output and ultra-wide angle of coverage is a great match for wide-angle video and photo solutions.

Three buttons give total control over the light. Press the round button to power the light on. Press again to cycle between 100%, 75%, 50%, and 25% power. Hold the button to turn the light off. The right and left buttons can be used to increase and decrease the light output in 1% increments.

There is also a lock switch to use while traveling, and by pushing the power button at the same time as the left or right button, you can access SOS and flashing modes for emergency use.

The Neo lights can be charge two ways; conveniently through the back of the light leaving the Neo sealed or by removing the battery to charge independantly. Charge one set of batteries while you're using another set. Swap batteries between dive to keep shooting throughout your day. The light module and battery are sealed independently and are water resistant.

The Neo 3000 DX includes a YS mount, ball mount, GoPro Mount, Loc-Line adapter, and a handle to hold the light.

www. fisheye-jp.com

Ikelite Olympus Tough TG-3, TG-4

Olympus is the leader in providing rugged, waterproof compact cameras, perfect for any outdoor adventure! The Tough TG-3 and TG-4 cameras feature a bright, 25-100mm f/2.0-4.9 lens and built-in Wi-Fi connectivity which allows you to easily transfer photos on shore after your dive. Without a housing, these cameras are rated by Olympus to 15 m (50 ft) for care-free snorkeling and no worries in or out of the housing!

With an Ikelite housing you can use these cameras down to 60 metres (200ft) and still have control of all the camera functions.

The housing port is designed to accept 3.0-inch diameter color filters, and wide angle or macro options with 67mm threads.

www.ikelite.com

Aquatica AD7100 for Nikon D7200

Given that the original Aquatica AD7100 did not require any reengineering to accept the Nikon D7200 camera, Aquatica has opted to pass along the saving made on R&D to the consumer by reducing the retail price to $ 2,995 USD, a drop of $ 365 USD from its previous retail price. This housing did not need to lose weight, as at 2.75kg, it is still one of the lightest housings available for this camera, it already has features and ergonomics that are beyond reproach, and its comfortable grips have delighted underwater photographers for the last 30 years plus.

www.aquatica.ca

SeaLife Sea Dragon

SeaLife, the company that pioneered underwater photography and recently launched the first permanently sealed waterproof camera, has introduced its most powerful, advanced underwater lights to date. Featuring compact light heads, high-power with long burn time, and unmatched versatility, the four latest Sea Dragon lights also offer superior brightness, wide beam angles and cutting-edge LED technology. The revolutionary new Sea Dragon lights cater to underwater adventurers of all kinds.

With lighting from the new Sea Dragon line, underwater photographers using a wide-angle camera lens—like those on the SeaLife Micro HD or GoPro—will now be able to illuminate an entire video frame.

www.sealife-cameras.com

Sea & Sea MDX-α7 II housing

Sea & Sea's housing for the SONY α7 II (featuring the world's first 5-axis in-body image stabilization in a full-frame mirrorless camera) is compatible with an Optical YS Converter.

It is also compatible with both the VF180 1.2x and VF45 1.2x viewfinders.

The main features are:
Equipped with two fiber-optic cable sockets.
All camera functions can be used underwater.
The camera's LCD monitor can be tilted up to 10 degrees.
Front case equipped with a lens-lock release button. This allows lenses to be changed easily without opening the housing.
The housing has two accessory ports. One is designed for N-type (two-pin connected) strobe connector and the other is designed for HDMI output.
The port lock can be activated (lock and unlock) from outside the housing.
The camera's lens-lock release button is accessible from the outside of the housing.
The multi-selector has been positioned on the right side of the rear case making it easily accessible while holding the grip, just like operating the camera directly.
Equipped with two sacrificial zinc diodes (one on the front case and the other on the rear) to avoid electrolysis damage.
Sacrificial Zinc Anode (2 pieces)
The mounting screw hole is located on the centre underside of the housing.
Equipped with the Optical Viewfinder 0.5x as standard. Other optional viewfinders may be used.
Built-in leak sensor immediately alerts you to water ingress.
A depth rating of 100m / 330ft makes the housing ideal for tech diving.

www.sea-sea.net

Nauticam Housing for Atomos Shogun

The Shogun is an amazing device, and deserves an ideal housing for underwater use. Leave it to the wizards at Nauticam to craft a beautiful yet absolutely functional enclosure.

The housing provides the best possible view of the magnificent 7" Shogun Monitor, while still providing touch screen access to key functions. Buttons at the bottom right corner of the screen bring activate the Shogun "Waveform Monitoring Functions" and "Monitor Assist Functions" overlays. With the overlay active, three useful monitoring functions are available via a touch screen arm that swings down from the top of the screen, and is pushed to enable a function.

When finished, the touch screen arm can be moved completely out of the way, providing an unobstructed view of the monitor. These tools for judging focus and exposure in water are extremely beneficial, taking much of the guess work out of good video capture.

A touch screen button for record is provided, but isn't needed with most modern cameras sending record triggers over HDMI when the camera record button is pressed. A playback button is also included, allowing review of the last clip in water.

The Shogun mounts securely in the housing with three locking latches. The screen is mounted in the front of housing, face down when open. This mounting strategy allows easy changes of media, batteries, and connection of HDMI and SDI cables.

www.nauticamusa.com

FIX Neo Mini 1000 SW

FIX Neo announces today the all new FIX Neo Mini 1000 SW, The perfect compact video lighting companion.

This new iteration of the Neo Mini features a video pleasing 1000 lumens of white light in a 95° beam angle providing great coverage for today's wide-angle lenses. A single press of the Neo Mini's control button and the beam angle switches to a 25° spot beam to isolate the lighting pattern for dynamic macro results.

The Neo Mini is powered by a rechargeable Li-ion battery system that can be swapped with a fully charged battery between dives. Dive ready at a minuscule 160g, the Neo Mini rounds out with an automatic shut-off feature when a strobe flash is detected, SOS mode and distress mode.

www.fixneo.com

Olympus TG4
Nauticam NA-TG3

The Olympus TG-4 is physically identical to its predecessor TG-3, and drops straight into our existing housing!

The Tough Series Cameras make for great first time systems, and excellent backup cameras for snap shots in extreme environments.

The camera's own water sealing is sufficient for most splash situations, but for real diving use it needs to be put in an underwater housing, and this is the best money can buy. 100m depth rating supporting technical exploration, and nearly indestructible aluminum construction that provides care free use. This is a Nauticam, through & through, with ergonomics and user experience enhancements that are instantly recognizable amongst our user base.

www.nauticamusa.com

Light & Motion Stella PRO 5000

The Stella PRO 5000 is a game-changing light delivering precision performance that rivals high end studio lighting in a rugged, ultra-portable package. With an incredible 5,000 lumens in a beautifully smooth 120 degree beam pattern, this will redefine what is possible in the field.

Each Stella lighting system is comprehensively tested according to the FL-1 Standard and provides you with precise details about the lumen brightness, color temperature, CRI, and FLUX rating.

The Stella is depth-tested to the FL-1 Standard and is certified to be submerged up to 100 meters.

www.lightandmotion.com

SEALUX HXP70 housing for Sony PXW-X70

The housing is made of seawater-resistant aluminium. It is CNC milled out of a monobloc, then anodized and covered with a special powder coating. The camcorder is precision-guided along a special slide and fitted inside the front part of the housing, thereby excluding any fitting errors.

The housing comes equipped with two quick-release locking devices which are protected against being opened unintentionally.

The large display window allows a complete view of the swivelled-open 3.5 inch monitor with excellent screening against ambient light. The viewing angle has a 15° inclination relative to the swimming plane. The sunshade avoids reflections on the glass screen. Enjoy your shots as you are taking them.

www.sealux.de

Zen DP-230 dome

Zen Underwater is pleased to now support the Canon EF 11-24mm f/4L USM!

With the first results coming in from the Canon 11-24mm f/4 underwater, we are extremely pleased with what we are seeing. It is just as sharp, if not sharper, than the Canon 16-35mm f/2.8L II from 16-24mm with significantly less apparent purple fringing.

At 14mm, the 11-24mm is better in just about every way than the Canon 14mm f/2.8L II. Finally, at 11mm we have nothing to compare this lens against, but it holds up surprising well! There is definitely some noticeable corner softness, but it is surprisingly good for such a wide angle lens on full frame.

Stopping the lens down a bit improves it dramatically, and the result is a stunningly wide and distortion free image.

Zen Underwater has developed an updated DP-230 for Nauticam, DP-230-N120-1124, which has a larger port opening to accommodate the diameter of the Canon 11-24mm f/4. It is designed to be used with the Nauticam Extension Ring 70 with Focus Knob for Canon EF 11-24mm f/4L USM (part #21271).

The MSRP is US $1,999.00 and is now available in the Nauticam USA dealernet portal.

www.nauticamusa.com

FIX Neo 1000 DX SW video light

The FIX Neo 1000 DX SW featuring high-output spot and wide beams at a price and with a performance that is a great match for action cameras, professional systems, and all cameras in between. The FIX Neo 1000 DX SW incorporates the other great features of the FIX Neo line to include: interchangeable batteries, two charging methods, 100 power settings, easy-to-read LCD display, 100° beam angle, interchangeable light heads, and optional remote control.

The FIX Neo 1000 DX has a beautiful 100° wide beam. Meaning whether you're using the it for a video light or a focus light, the light cast is an even-arching smooth beam with no light drop-off or distracting edge artifacts. Designed with wide-angle lenses in mind, two Neo's delivering 100° light patterns create an ideal video lighting solution for every level of camera. Achieving macro results has never been easier with the 1000 DX SW's 30° spot beam. One touch on the Neo's control interface toggles between wide and spot modes giving the shooter the right light for the right subject.

The FIX Neo 1000 DX SW continues to use the underwater world's most popular user interface which is easily recognizable by its unique blue LCD display. The LCD displays all the lighting performance information at a glance. Remaining battery time in minutes, output level percentage, mode icon, and remote controller connectivity.

The FIX Neo 1000 DX SW gives the shooter 120 minutes of light on high power in spot mode and 90 minutes of high power in wide mode. In addition, the Neo's output levels are adjustable in 25% steps or in 1% increments making the Neo's the most adjustable lights available.

www.fixneo.com

Sea & Sea MDX-EM5 MK II

Sea&Sea has announced details of their forthcoming MDX housing for the Olympus OM-D E-M5 Mark II mirrorless camera. It features an aluminum construction and isa compatible with ML and NX ports (when used with an adaptor). The housing has an external port lock and a leak detector is available as an optional extra.

The MDX-EM5 MK II will be available from August 2015.

Housing features include:
Depth rating: 100m / 330ft.
Accessory Shoe.
External Port Lock Lever.

Lens Release Button.
FL-LM3 flash On/Off switch.
Luminescent buttons.
Dim. (WxHxD): 215mm x 166mm x 122mm Dim.

www.sea-sea.net

Nauticam NA-D7200

Nauticam is pleased to announce the release of the NA-D7200, the newest aluminum underwater camera housing for the Nikon D7200. This housing marks an incredible degree of refinement, derived from a long list of housings for Nikon SLR's.

For the underwater photographer, there are two key features that distinguish the D7200 from it's predecessor, the D7100 - Focus Performance and Buffer

The NA-D7200 is the latest in a series of housings for the Nikon D7000, D7100, and now D7200 cameras, beginning with the original NA-D7000 housing release in 2010. In fact, this is the 5th housing in this series, not to mention some rolling enhancements along the way. This all adds up to an incredibly refined housing, ideally suited for taking the D7200 into the underwater world.

Some may ask, why even make a special housing for the D7200? After all, the D7200 and the D7100 share the same physical measurements, and the D7200 works fine in the NA-D7100 housing. The answer is simple... Nauticam will continue to innovate and continue to refine housing designs. It is what we do.

The NA-D7200 includes the latest innovations of the Nauticam housing line, including overall weight reduction (15% lighter than original D7100 housing) which makes getting the rig neutrally buoyant very easy, improved (agai n) ergonomics, and the famous Nauticam Vacuum Check System electronics included. The housing also includes a new Fn key lever and updated camera tray lock.

www.nauticamusa.com

FIX Neo Mini 1000 WR

FIX Neo announces today the all new FIX Neo Mini 1000 WR with focus beams in both white and red light. The new Neo Mini reimagines how a new generation of focus lights are designed at a price that can accommodate any budget. Dive ready at a minuscule 160g, the Neo Mini has both white and red focus beams complimented by an automatic shut-off feature when a strobe flash is detected.

The Neo's are powered by a rechargeable Li-ion battery system that can be swapped with a fully charged battery between dives. All-together, the FIX Neo Mini 1000 WR is a perfect compliment to any photography rig to provide excellent focus assist for any camera day or night.

www.fixneo.com

Aquatica Canon 5Ds, 5Dsr & 5D Mk III

The Aquatica Team is proud to introduce the new Aquatica A5Dsr housing for the upcoming Canon 5Ds, 5Dsr and the existing 5D Mk III.

Our Design team has refreshed the housing design for the 5D line of cameras with new improved operational ergonomics. This precision housing follows in the steps of a very time proven lineage of underwater camera housings for the constantly evolving 5D camera line up. Aquatica has been on top of the 5D program since they introduced the original one a decade ago, much like the 5D camera did, our housing has evolved into a fine imaging tool that mirrors the constant evolution of technology and the input of highly respected professional's image makers from around the world.

www.aquatica.ca

INON X-2 for Canon EOS70D

The INON X-2 for EOS70D is made from aluminum alloy by ultraprecise cast manufacturing technique to fuse design, weight and durability in higher dimension.

Lightweight and durable aluminum alloy body has acquired reliability, durability and controllability even in severe underwater.

Cast manufacturing allows flexible design to put various ingenuities for trouble-free underwater operation as like controlling camera on land, where your right thumb and mid finger securely hold a housing without effort, index finger can naturally access to the shutter release lever and aperture or shutter speed can be easily adjusted without seeing those dials during checking composition through the viewfinder.

www.inon.co.jp

Mangrove housing for Sony PXW-X70

Aditech has unveiled the new Mangrove housing for the SONY PXW-X70. The housing's front case is constructed from marine grade aluminium, machined, hard anodized and the rear case is machined from solid Delrin, it features a state of the art LANC control system that allows accessing almost all camcorder functions, including the White Balance, the external controls on the housing are linked by 12 electromagnetic pushbuttons to corresponding controls on the camera inside the case. The Mangrove housing is designed for optimal grip operation, it is depth rated to 200 meters (660 feet).

www.aditech-usa.com

Acquapazza developments

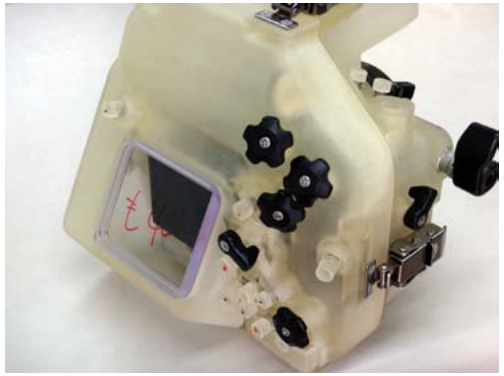
Japanes housing manufacturer Acquapazza are working on various new developments.

The 16FC extension MB for the Sony APSO-A7 aims to make the removal of the camera from the housing much easier and a version for the Sony NEX is under consideration.

A port E90M MB for the Sony 90mm Macro lens is being designed after this new lens was put on the market on June 26.

The development of a heavy duty Flip lens adapter for Acquapazza DSLR housings is underway to hold a heavy close up lens securely in position even when folded away out of use.

A Grip M+ base GM will be available soon with increased adjustment of the positions of the left and right handles. In addition M10 ball joint arms can be attached. These are machined to be as light as possible and will be available in two lengths - 60mm and 80mm.



On the Acquapazza Sony APSO-A72 controls can be operated down to 150 metres (492 feet) and the port mount is the same as the APSO-A7.

On the Sigma APSG-dpQ an LED strobe is improved with an LSS2, there is a double O ring main seal and the control buttons arranged for much easier operation.

www.acquapazza.jp/en

TTRobotix GoPro Seawolf Sub

Measuring 77cm long and weighing in at 7.9kg submerged, the TTR-SB Seawolf does what the previous version of the sub couldn't do—accommodate a GoPro Hero4 (or Hero3) action cam. A five-blade propeller allows the remote-controlled submarine to reach speeds of up to 1.8 knots (3.3km/h) and the built-in 5,000mAh battery is good for 50 minutes.

Three versions will be available when the Seawolf ships this August: a tethered version (5222-F13), and two wireless versions (5222-F11, 5222-F12), one which is designed for freshwater environments and another that can be used in the sea and comes with a Bascom D4 controller with an 8-inch TFT LCD screen. For the wireless versions, a 10-meter cable connects the Seawolf to a mini surface boat for WiFi transmission.

www.ttrobotix.com

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"Often copied, never equaled"

Aquatica AE-M1

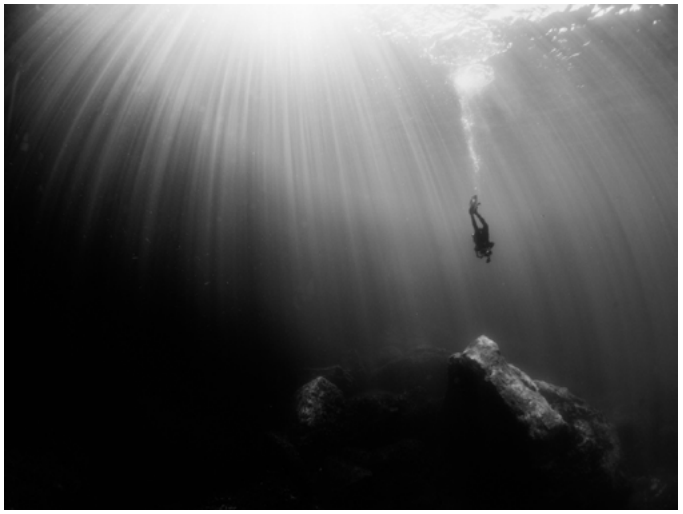
by Dan Bolt

I can't really call this a review because the Olympus OMD E-M1 camera and the Aquatica AE-M1 housing have both been out for some time now. Indeed rumours abound of a mkII E-M1 so I'm sure a new model is not far away. But one can spend a lifetime waiting for the next best thing to come along so with my friends at Cameras Underwater and Aquatica moving mountains to get the housing to me in time for a week diving in Gozo I felt compelled to share my experiences.

I've been wedded to the Olympus m4/3rds line of cameras for some years now and the switch to this rig was from the E-PL5 with Olympus polycarbonate PT-EP10. I'm not going to talk much about the camera (except where it is relevant to the housing) but suffice to say I'm very much enjoying using it, even though it's hardly a 'micro' sized camera anymore.

The Aquatica AE-M1 is a machined aluminium housing depth rated to 300-feet (100m) - more than adequate for 99% of underwater photographers and certainly more than my usual diving/freediving depths. Despite the bulk of the E-M1 body, the AE-M1 still manages to be diminutive when put alongside any dSLR housing. This is great for travelling divers, but because of the lower relative volume to weight ratio it can feel quite heavy in the water at times. That said, adding the superb SW8 dome and a couple of float-arms and you've got a perfectly neutral setup which is a joy to use and certainly helps the shooter concentrate on the images and not handling the kit.

With the SW8 dome this setup is neutrally buoyant



Light and shade. 8mm fisheye. 1/160th, f/8, iso320

Wrasse in nest. 7-14mm @ 14mm. 1/320th, f/5.6, iso200

Peacock fanworm. 8mm fisheye. 1/250th, f/20, iso200

In the weeks I've had the housing I have used it in almost all its available configurations; with the 4" mini-dome for the Panasonic 8mm fisheye, with the large SW8 dome for the Panasonic 7-14mm and Olympus 12-40mm lenses, and finally with the flat port for the Panasonic 45mm macro lens. I have yet to find a situation where I wasn't pleased with the image quality through these ports and the comprehensive offering of additional extension rings means that you can use other popular lenses (like the Olympus 12-50mm, and 60mm macro) as well as future-proofing yourself for new glass.

Cratena peregrina. 45mm macro. 1/60th, f/13, iso200

As you'd expect the housing itself is very robust and, pleasingly for me, has been designed with thick-gloved hands in mind. Using 5mm gloves presented no problem with either holding the housing nor using the myriad of buttons, dials and levers. I often only use a single strobe & handle when I shoot macro and so having easy access

Right-site controls

Seahorse stalking. 7-14mm @ 7mm. 1/250th, f/14, iso400

The left-site controls

Back-plate

Interior

Inside the blue hole. 8mm fisheye. 1/15th, f/3.5, 3200

to remove them was essential to me, as well as having a handle robust enough to hold the weight of strobes, torches and arms without flexing. The Aquatica handles are extremely firm and yet are easy to take on and off with a single screw.

As with most housings of this calibre, the ergonomics have been well thought-out. The OMD series of cameras are well known for their almost endless array of customisable options, so with the AE-M1 you can truly set it up so that all your settings are literally at your fingertips.

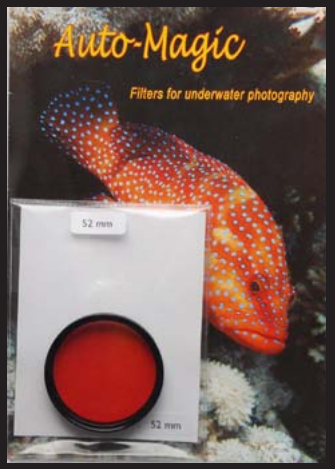
The version of the housing I have does not have the vacuum port, but one is available to fit through the single available bulkhead. It does come with a moisture alarm (with vacuum circuitry) as standard which is a nice little addition.

There are a few of points of note I would like to make, two positive and two advisory. On the very positive side; the EVF in the E-M1 is amazing and a joy to use through this housing (with Live View Boost set to on, the camera was showing me the inside of caves where my eyes had given up!), and the ergonomics means that making many rapid changes to shooting settings is a breeze. On the (subtle) downside; I had to add my own hand-strap for shooting single handed while freediving - I don't think Aquatica offer one of their own - and I found the port-lock on the extension quite tricky to open, especially with cold fingers. Neither a deal-breaker but worthy of mention none-the-less.

Dan Bolt
www.underwaterpics.co.uk

We've got you covered!

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



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

www.magic-filters.com

Olympus E-M5 Mk11 & Ikelite TTL housing

by Phil Rudin

Ikelite Underwater Systems, a US company with world distribution debuted a new housing and port system for the Canon EOS 100D/SL1 at DEMA 2013 which I reviewed in issue #78 of UWPMAG.com. At DEMA 2014 Ikelite again debuted a line of mirrorless camera housings using the same port system as the Canon EOS 100D housing. I had a chance to test drive one of these new housings designed for the new Olympus E-M5 MKII M43 mirrorless camera while instructing the Underwater Digital Fiesta 2015 Workshop in Cozumel Mexico.

OLYMPUS E-M5 MKII

The Ikelite housing is designed around the very tiny Olympus E-M5 MKII camera which uses the 16MP micro four/thirds CMOS sensor. This camera is an upgrade to the original Olympus E-M5 which is one of the most successful mirrorless cameras for underwater use.

Updates include an improved 5-axis image stabilization system for both still and movie modes which has a CIPA rating of 5 stops, 10fps continuous shooting, 5fps with AF, 1/8000 maximum shutter speed with 1/16000 using the electronic shutter, built-in WiFi, a redesigned clip-on rotating bounce flash which only works with this camera, 1080/60p max video resolution rate, better battery life over E-M5, 44 grams less weight and

the E-M1 electronic viewfinder, rear LCD screen, 81-point AF and AF system speed.

Image quality wise EM5 and E-M5 MKII are the same and still lag a bit behind E-M1. Since the original Olympus E-M5 was introduced several new camera lines have entered the market giving the E-M5 MKII much more competition than the original camera had.

While some of these cameras have slightly higher video quality or overall image quality none is a more complete system or has as complete a line of quality lenses suited to underwater photography.

The Olympus 12-50mm with macro function, the dedicated 60 mm macro, the new 7-14 mm F/2.8 Pro, 9-18 mm zoom and 8 mm F/1.8 Pro fisheye and the 12 mm F/2 are some of the best lenses for underwater photography that I have used.

Panasonic also has quality M43 lenses like the 45 mm F/2.8 macro, 30 mm F/2.8 macro, the 7-14 F/4 and 8 mm fisheye F/3.5.

IKELITE E-M5 MKII HOUSING AND PORT SYSTEM

Ikelite Underwater Systems has been making underwater photography equipment for over fifty years. The company has an outstanding reputation for customer service with new equipment and aging equipment, offering upgrades and fast service turnarounds to their many loyal customers.

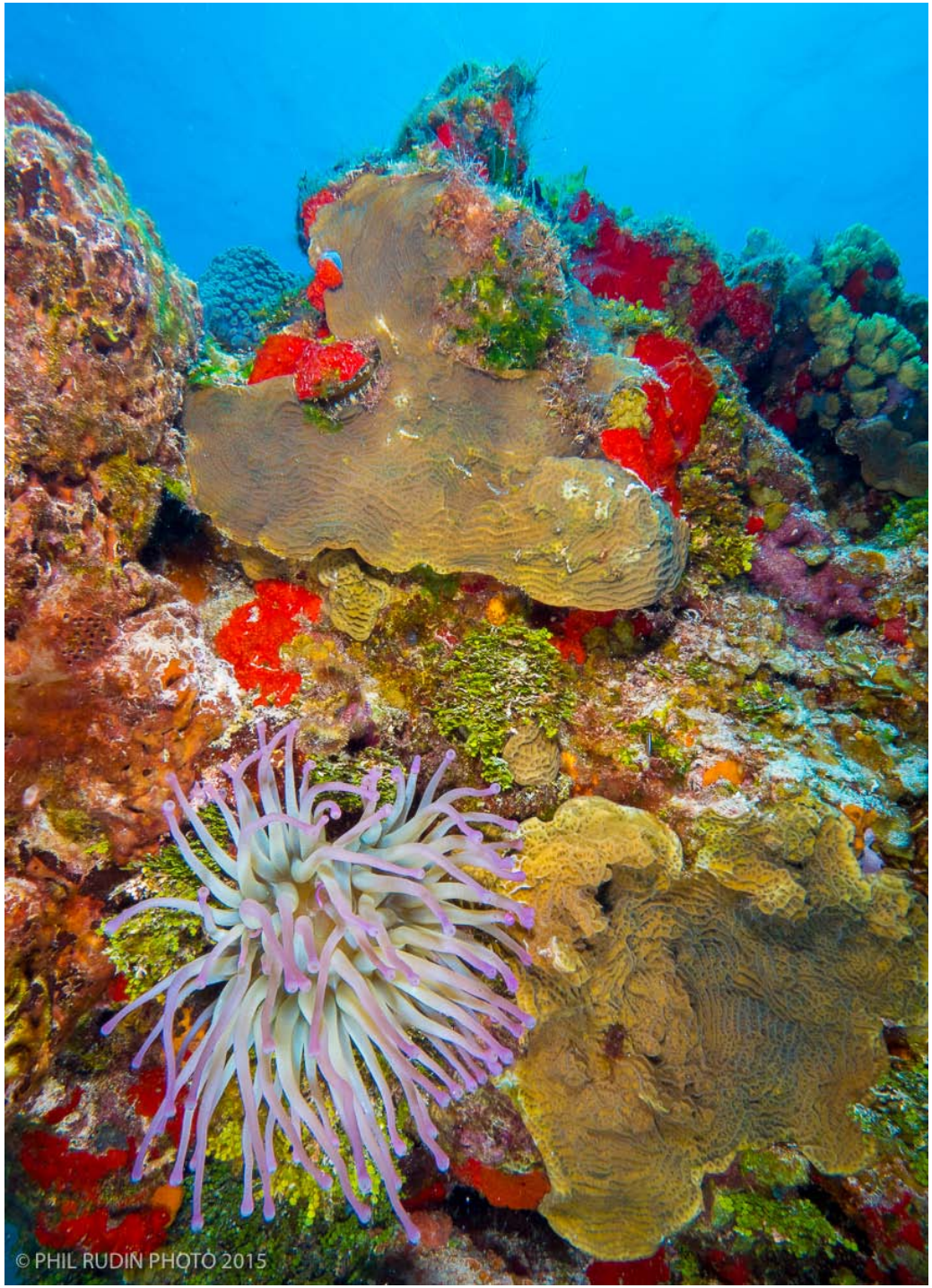
Ikelite's housings are made with a high grade polycarbonate blend which is extremely strong yet remains clear and lightweight. These clear polycarbonate housings provide an excellent view of all of the camera controls and O-rings after the housing is sealed.

The very first thing you will notice about all of Ikelite's mirrorless housings is how small they are. The Olympus E-M5 MKII housing is even smaller than the Canon EOS 100D housing I reviewed last year. This is because the housings use the Ikelite proprietary TTL strobe sync ports which do not require use of the cameras on-board flash to fire external strobes.

The Olympus E-M5 MKII has a quite tall clip-on strobe which adds to the size of the bump over the camera in other housings using fiber optic cords to fire external strobes. Ikelite sync ports come with Ikelite and Nikonos wiring configurations for the type of strobe cord you may be using.

My housing was a prototype which did not have the TTL circuitry so all of my images were shot using manual settings on the Ikelite DS161 strobes I was using. The upside to the

Giant Anemone and Sheet Coral, Olympus E-M5 MKII, Olympus 9-18 mm zoom mm lens at 9mm, Ikelite housing, two Ikelite DS161 strobes, ISO-320, F/9, 1/320th sec.



Candy Cane Lobster, Olympus E-M5 MKII, Olympus 60 mm macro lens, Ikelite housing, two Ikelite DS161 strobes, Nauticam CMC-1 C/U lens, ISO-200, F/20, 1/320th sec.

Bluestriped Grunts, Olympus E-M5 MKII, Olympus 9-18 mm zoom mm lens at 9mm, Ikelite housing, two Ikelite DS161 strobes, ISO-320, F/8, 1/400th sec.

Jackknife Fish, Olympus E-M5 MKII, Olympus 9-18 mm zoom mm lens at 18mm, Ikelite housing, two Ikelite DS161 strobes, ISO-320, F/13, 1/400th sec.

manual strobe settings is that you can cheat on the max flash sync to get higher shutter speeds.

The M-E5 MKII has a top flash sync speed of 1/250 with the onboard flash, but I was able to extend that to 1/400 shooting manual which can be quite useful for both wide angle and macro shooting. I tested the system with my E-M1 which syncs to 1/320 and was also able to trigger the flash at 1/400.

The Olympus E-M5 MKII housing has four main components, the front "box" where the camera sits, a flat rear door, the removable front port and the camera tray which attaches to two mounting points on the bottom of the housing. The front part of the housing where the camera sits has a track at the bottom that the camera tray slides into.

Once the camera is aligned in the housing the TTL bulkhead connector is mounted on the camera hotshoe and the housing is ready close. The rear door of the housing is then secured by facing the housing down and making sure that the rear door O-ring has properly seated in the front half of the housing.

The two heavy duty lid snaps are then secured by pushing down. You should hear the lid snaps click into the locked position and you should not be able to lift the snaps without pushing in the snap locking device. I like to use equal pressure on both lid snaps so that they lock simultaneously.

Once the camera is secured inside the housing you can see the controls on the camera and align then with the housing controls. The right hand side of the housing has the vertical shutter release, while the left hand side has the lens release control which allows you to change lenses by removing the port and not the camera from the housing.

The left hand top of the housing has the sync port for the strobe cord and an on/off dial which also allows access to the locking control for the mode dial. On the right top of the housing are dials to control the two right control wheels which I had programed for Shutter speed and Aperture control, four push buttons also operate the HDR control, live view control, the video start/stop control (which is

in a great location where it won't be accidentally activated) and an additional programable control.

The rear door has the pickup viewfinder which can be replaced with an optional straight or 45 degree optical magnifier to enlarge the view of the electronic viewfinder which is already quite large for a camera of this size.

At the top left is the mode control dial and on the right is the dial which controls the 1 and 2 program level, bellow that are push buttons for Menu, Info, trash and review, these surround the four-way arrows and OK button. These four buttons can be programed to control any number of functions.

The E-M5 MKII is the first of the OMD cameras that defaults to the super menu screen which I use frequently for changing ISO, AF settings, AF area settings and much more. Not included with the housing is an AEL/AFL control level for rear auto focus. This is a function I use on my E-M1 housing all the time to focus in both wide angle and macro work rather than using the shutter half push. I hope Ikelite will offer an AEL/AFL control as an option for those of use who want that

extra bit of control.

Ikelite's port mounting system is simple and ingenious. Rather than having an O-ring on each of the ports the O-ring is located on the port mount on the front of the housing. Just push the port onto the port mount and secure the three small thumbs screws supplied with the port into the grove behind the O-ring to secure the port in place. I found this system to work quite easily and the ports have a very secure feel when mounted. Ikelite has macro ports for the Olympus 60 mm and Panasonic 45 mm macro lenses, both with 67 mm threads for mounting closeup lenses.

Ikelite also has a six inch dome port with built-in zoom control for Olympus 9-18 mm, 12-50 mm without macro control, 12-40 with a 1.2-inch extension, all of the 14-42 mm lenses, Panasonic 7-14 mm, a fisheye port for the Panasonic 8 mm and

Orange Sea Sponge, Olympus 9-18 mm zoom mm lens at 9mm, Ikelite housing, two Ikelite DS161 strobes, ISO-320, F/8, 1/400th sec.

gears for most of these lenses.

A mirrorless port adapter for the modular 8-inch dome is also available with more to come. Ikelite is already designing an extension and gear for the new Olympus 7-14 mm F/2.8 Pro and an extension for the 8 mm F/1.8 fisheye Pro lenses. I favored the 9-18 mm zoom over the Panasonic 7-14 mm zoom during my tests due to better corner

sharpness.

I think the 8-inch dome may be the best choice for the 7-14 mm lenses and for over/under work with any of the wide zooms. These ports can also be used with the other Ikelite mirrorless housings and Canon EOS D100 housings.

FIELD TESTING

For my review I used the Ikelite housing with Ikelite dual handle tray for compact housings, a double ball arm system with top handle an Ikelite Vega Video/Photo light and two DS161 strobes with an Ikelite dual sync cord.

I found the system because of its small size to be a bit negatively buoyant and would suggest adding foam blocks or float arms for better overall balance control. Once in the water the system is extremely easy to dive or snorkel with being every bit as streamlined as many of the small mirrorless housings I have tested in the past.

I shoot with 45 mm and 60 mm macro lenses and the 9-18 mm and 7-14 mm wide angle zooms. I also used the Ikelite fluorescence equipment and a Nauticam CMC-1 closeup lens for super macro. Both of the small macro ports worked quite well and I had no problem installing and removing the CMC-1 from the front of the port.

The wide angle zoom lenses use a gear which simply pushes onto the lens from the front of the lens once the camera and lens are mounted in the housing. The port is then installed over the gear and is held in place between the port mount and the Port so that it is never misaligned. The gear is moved by a knob on the dome port not on the housing which reduces the size of the housing. The zoom control can be reached while holding the left tray handle if you have fairly long fingers.

Octopus, Olympus E-M5 MKII, Olympus 60 mm macro lens, Ikelite housing, two Ikelite DS161 strobes, ISO-200, F/18, 1/400th sec.

Sailfin Blenny, Olympus E-M5 MKII, Olympus 60 mm macro lens, Ikelite housing, two Ikelite DS161 strobes, ISO-500, F/20, 1/400th sec.

The vertical shutter release is also easily reached while holding the right handle and I had no problems with locking AF and holding the half press before releasing the shutter. Auto focus seemed every bit as fast as with my E-M1 for all lenses except in the lowest of light where the focusing light came in handy.

I used the EVF and pickup viewfinder for all of my macro work and split between the EVF and live view LCD for wide angle. This camera has excellent response in live view which I would not hesitate to use with moving subjects like sharks.

I am still sticking to S-AF for both EVF and LCD shooting finding C-AF on E-M5 MKII while greatly improved still not on par with equivalent DSLR cameras.

This is an excellent little housing system for travel, those entering underwater photography looking for a moderately priced system, instruction, for those invested in the Olympus M43 glass and for photographers of any skill level. Ikelite also has housing of similar size for the original E-M5, E-M10 E-PL7 and an E-M1 housing in the works.

Regarding an upgrade from your current OMD, I am not sure that the switch from E-M5 to MKII will be worth the cost for underwater use. Above water the high resolution mode (40+MP's) may interest still life photographers but in its present form it would be of no use underwater.

In addition to the Olympus line of mirrorless housings Ikelite also has mirrorless housings for the Sony Alpha A6000 with Sony full frame A7/A7R/A7S housings in development, for the Panasonic GX7 and larger GH3/GH4 housings and the Black Magic Pocket Cinema video camera. All but the Panasonic GH line use the same port mounting system and ports as the EM5 MKII.

The Ikelite E-M5 MKII housing and tray

Olympus E-M5 MKII, Olympus 60 mm macro lens, Ikelite housing, two Ikelite DS161 strobes, Ikelite fluorescence equipment, ISO-500, F/3.2, 1/400th sec. Converted to B&W in LightRoom 6.

retails for $1050.00, Ikelite ports range from $250.00 for the macro ports to $400.00 for the 8-inch dome port. Ikelite TTL strobes range in price from around $400.00 to around $1200.00 for the DS161 strobe/video light with Li-Ion battery technology which produces over 450 full power flashes, quite impressive.

The Olympus E-M5 MKII retails for around $1099.00. You can contact your local authorized Ikelite dealer for pricing in your area. For further information on this new system including weight and dimensions visit the ikelite.com web site.

I would like to thank Ikelite for their support both for Underwater Digital Fiesta 2015 at Casa Del Mar in Cozumel, Mexico and for the test equipment used for this review.

I would also like to thank Jorge Gonzalez owner and organizer of underwaterdigitalfiesta.com now in its fifth year and the publisher of MEXICANDIVER.com for his continued support.

Phil Rudin

www.ikelite.com
www.mexicandiver.com

Canon G7X & Fantasea FG7X housing

by Phil Rudin

Three years ago Sony raised the bar for pocketable compact cameras when they introduced the Sony Cyber-shot RX100 which is the size of the Canon S-series line with a new 1"-type sensor. The 1-inch type sensor is about 2.8 times larger than conventional compact camera sensors and offers a substantial gain in overall image quality.

Now in its third incarnation I reported on the Sony Cyber-shot RX100 III and Fantasea Line FRX100 III housing in issue #83 of UWPMAG.com. Fantasea Line has since introduced a similar FG7X housing for the Canon PowerShot G7X the first Canon compact to adopt the 1-inch type sensor technology.

Canon G7X

Compact cameras have been very popular among underwater photographers for years both as reasonably priced entry level systems and for more advanced underwater shooters.

Canon's PowerShot G7X compact has generated substantial interest among underwater enthusiasts and is clearly aimed at competing with the Sony RX100 III.

The Canon G7X has the large 20 MP "one inch" (13.2 mm X 8.8 mm) BSI CMOS sensor which falls between the larger M43 sensors for mirrorless cameras and the more commonly used 1/2.3 inch to 2/3 inch sensors found in most of todays digital compacts.

This larger sensor provides excellent image quality for a truly pocketable compact camera. Canon G7X sports a 24-100mm (35 mm) equivalent F/1.8 to 2.8 lens with a click control dial around the lens, a dedicated exposure compensation dial, 3.0" 1.04m dot LCD (740 X 480 pixel) a 3:2 format flip-up design, built-in ND filter, Wi-Fi and much more.

The camera records in RAW and has 1920 x 1080 (60p, 30p) max resolution video in MPEG-4 and H.264 formats. The NB-13L lithium-ion battery life is not as high as some of the competition but unlike the Sony line it has an external battery charger which plugs directly into a wall socket so that you can be charging a second

battery while using the camera.

The Canon G7X image quality is excellent and I could see no noticeable differences between the Canon G7X and Sony RX100 III raw and jpeg files.

Fantasea FG7X housing

Fantasea Line is an international company with world distribution of water sports photo products and accessories.

The Fantasea product line includes an assortment of affordable underwater housings for Canon PowerShot, Nikon Coolpix and Sony Cyber-Shot compact cameras. Fantasea also offers a complete line of underwater optics, adapters, lens holders, color filters, arms, trays, connectors, underwater lighting, LED lighting and more. Fantasea has established an good reputation for affordable equipment and excellent customer service.

The Fantasea FG7X housing for Canon PowerShot G7X is quite small for an injection molded Polycarbonate housing offering complete control over all camera functions.

Without accessories the housing is 16 X 11 X 12.5 cm (6.3 x 4.33 x 4.92 inches) This housing is rated to a respectable 60 meters (200 feet) and is ergonomically designed in every respect for a housing of its size.

The main issue with housings of this size in general is that with a growing number of controls especially on the rear of the housing the control buttons tend to be bunched together making it difficult to distinguish between control functions when wearing gloves.

The control wheels, zooming lever and push buttons on the Fantasea housing are large, well laid out and nicely labeled for ease of use. The housing

is a clam shell type housing with the front and rear sections of the housing held together by the hinge on the left side of the housing when viewed from the rear.

The right side of the housing has a rotary cam locking device which will not open without depressing and holding the red cam locking latch. The front and rear sections of the housing each have an o-ring providing an excellent dual seal when the housing is locked shut.

The front half of the housing is made from black Polycarbonate while the rear door is clear allowing a view of the interior camera controls and any leakage into the housing.

A moisture detection system is also included with the housing and has both a red flashing light and audible alarm which will sound in the unlikely event of a leak. The moisture detector uses a 3V lithium CR 1220 battery which is included and can be commonly found in most parts of the world.

The large three inch LCD has a removable anti-glare hood which attaches to a rail at the top and bottom of the LCD on the rear of the housing.

Boaz_Samorai

All attachments come with a lanyard so they won't be lost if removed or knocked loose.

The left hand side of the housing has a dial which can be turned counter-clockwise to popup the cameras onboard flash. This is a very useful control when using external strobes being fired with fiber optic cords. On more than one occasion I have forgotten to pop up the camera flash before going in the water and it is a real pain when you realize you have no control over that mistake except to surface and open the housing.

The rear door cluster of controls to the right of the LCD surrounds the Function set/Control Dial. The Drive Mode/up arrow push button is above the Control Dial and the Display/down arrow is below the Control Dial. To the left is the drive Macro/Left arrow and to the right is the Flash/Right arrow push button. Above the five push button cluster to the left is the Ring Function Selector/Delete button and to the right is the Video button which I did to manage to accidentally activate.

Below the cluster to the left is the playback button, a Menu button and to the right of the Display button is a Mobile Device Connection lever which turns counter clockwise. The top rear door has the Exposure Compensation dial and the front top of the housing has the on/off push button, shutter push button, lens zooming control lever, a metal cold shoe for mounting strobes and focusing lights and the Mode Dial.

The front of the housing has a removable fiber optic mounting plate for two optical cords. When removed you find a clear window which can be used with the pop-up flash and a supplied defuser for basic strobe lighting. The flat lens port is the rectangular shape common to all Fantasea housings except for the Sony RX100 III housing.

An accessory EyeDapter which snaps to the front of the port allows you to mount 67 mm threaded accessory lenses and filters like the SharpEye M67 +8 closeup lens.

The left side of the housing also has a unique control wheel which accesses the lens control ring and is operated with the left hand. I really like the versatility of this arrangement and had aperture control assigned to the control wheel allowing me to change F/stops with my left hand while I controlling the shutter release with my right hand.

Included with the housing along with the things listed above are a hand lanyard, silicone grease, screwdriver, silica gel packs, spare O-rings, O-ring remover, diffuser quick release security strings and a very useful hand strap which adds a good deal of extra support when hand holding the housing.

A very user friendly downloadable instruction manual can also be found at the fantasea.com web site. This manual provides information on setting up the camera and housing for underwater use along with other useful information.

In the field

I used the Canon/Fantasea system with several different configurations of trays, strobe arms and accessory lenses shooting both closeup and wide angle with my Inon Z-240 strobes. I also used the on-board pop-up flash and included diffuser for some pool shots with a model and found it to work well in the proper setting.

For wide angle I used the Fantasea Line housing with two Inon Z-240 strobes mounted on standard arms. Mounts for a verity of excellent strobes are also available from Fantasea. For wide angle I used the Fantasea BigEye lens F series

wide angle adapter which snaps over the front of the lens port and is quite secure when mounted in place. This wide angle lens has an anti-reflective coating and is designed to work with the camera set to the macro mode. This may sound counter intuitive but it allows for a field of view recovery (magnification) of 127% (0.57x).

Other manufactures wide angle lenses can also work but make sure you have checked with your local authorized dealer for lens compatibility with this and other compact cameras.

What is most appealing to me about Fantasea compact systems is the ability to go into the water with one or two small accessory lenses and photograph absolutely any size animal you encounter. I can't begin count the number of dives I have made with an interchangeable lens camera where I have missed the most interesting subject of the dive because I had the wrong lens for the subject.

In the water the Canon/Fantasea Line system is a very well balanced and easy to hold with one hand. The included wrist support added extra value to the system while handholding and made long dives far less fatiguing to the wrist and forearm. I had a few issues locking auto focus in dim lighting conditions which were resolved with a not to powerful focusing light.

As an entry to mid-level camera and housing system I found the Canon G7X/Fantasea Line FG7X housing combination to be a compelling choice both for quality and price. After testing both the Sony and Canon systems my personal preference in cameras tips towards the Canon while I found both Fantasea housing to be of equal quality.

The Canon G7X camera retails for around $699.00 US and the Fantasea Line FG7X housing retails for around $499.00 US. The camera and housing kit retails for around $1199.00 US. The Fantasea Line BigEye F series wet lens retails for around $299.00 US. Additional information can be found at the fantasea.com web site or at your local authorized Fantasea Line retailer.

Phil Rudin

www.fantasea.com

Fix Neo 3000

by Marc Montocchio

From the moment the tiny packages arrived, I was blown away by the size and weight of the FIX Neo's. Just picking them out of the small box it was unbelievable that these tiny units could produce 3000 lumen of light! Because I travel extensively, weight and size are huge considerations for me.

First impressions were of a well-made product with a well thought out, easy to understand display and easy to use controls. The display is clear with options to see power settings or time remaining in minutes. Output can be controlled in 25% increments with a single push of a button or by 1% increments by using the arrow switches.

Have I mentioned how small these lights are? First dive I used them on was a night dive. The quality and quantity of light was fantastic. The light was constant through out the wide bean with no hot spots and no modifier or reflector shapes. There was more than enough output at 3000 lumen to shoot the lens stopped down to where I wanted it at and the ISO I wanted.

The Neo lights can be charged in two ways; conveniently through the back of the light leaving the Neo sealed or by removing the battery to charge independantly. Charge one set of batteries while you're using another set. Swap batteries between dive to keep shooting throughout your day. The light module and battery are sealed independently and are water resistant.

The Neo 3000 DX includes a YS mount, ball mount, GoPro Mount, Loc-Line adapter, and a handle to hold the light.

The Neo can be used on the surface. It has an automatic power reduction mode when the light gets hot so you do not have to worry about damaging the light while preparing for a night dive, or after getting out of the water.

The shot list called for shots of shallow coral heads. On a pass of some glassy sweepers hanging around a hole in the reef, I switched on the lights hoping for a little extra foreground color and shadow fill but not expecting much shooting up against the sun so closed down. The results were amazing, the lights bought the scene to life popping the color, balanced well against daylight and filling in the dark holes and shadows perfectly. I couldn't be happier with the performance of the Neo 3000's, add that to their reasonable price and great feature and I'm really happy with my purchase.

Have I mentioned how small they are?

Marc Montocchio
www.marcmontocchio.com

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

Buy back issues here

Ikelite Fluorescence

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 a complete line of fluorescence equipment to complement the underwater photographers growing quest for unique photo challenges.

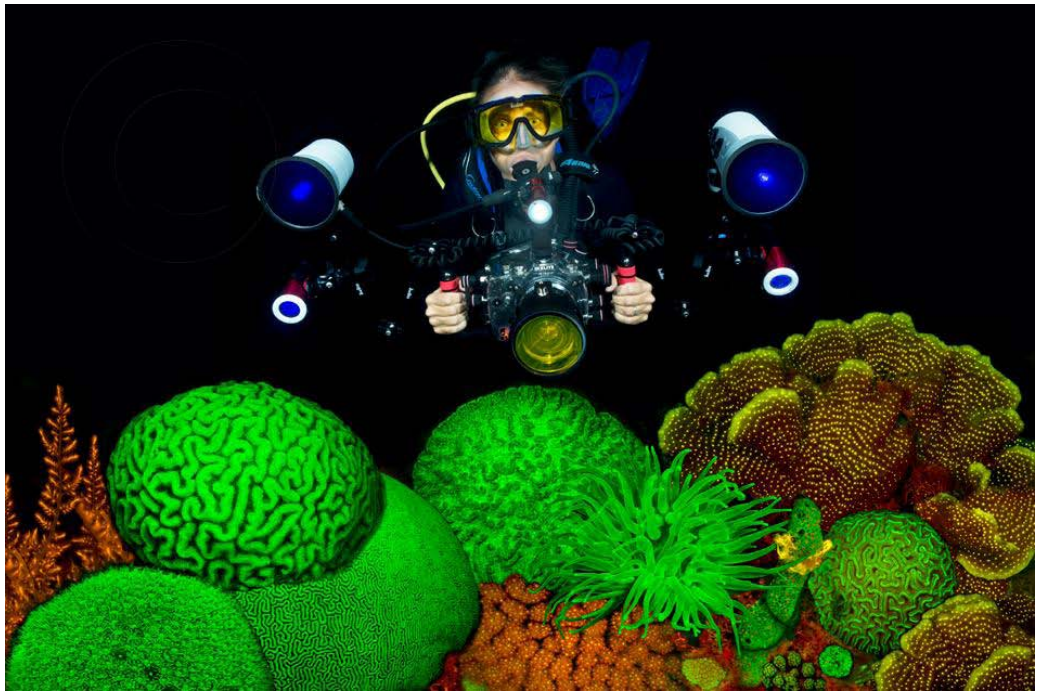
Underwater fluorescence photography is not new but is once again gaining popularity among photographers looking for exciting ways to capture unique marine images with todays sophisticated fluorescence equipment.

Fluorescence (Fluo) photography works much like the UV black light except that rather than using an ultraviolet black light source Fluorescence diving is now done with blue lighting. This blue light once absorbed and emitted from some marine life returns to the lens with a longer visible wavelength than the one projected from the original blue light source. This “emission” of longer wavelengths of light visible to our eyes differs from a reflected white light source like a dive light and should not be confused with the bioluminescence from some marine animals which does not require a light source.

The projected blue light creates excitation in some marine life much like the “Psychedelic black-light posters” of the 1960s resulting in an explosion of colors lighting up the marine world like downtown Tokyo on a Saturday night.

I ducked out of most of my physics classes so if you are interested in the science of how this process occurs you can find a wealth of information on the internet.

Ikelite’s fluorescence system includes Dichroic Excitation Filters, which thread onto Ikelite Vega Photo/Video lights, Dichroic Excitation Filters for the Ikelite DS161, DS160 and DS125 strobes, an assortment of Yellow Barrier Filter to cover the camera lens and a Yellow Barrier Filter to cover the face mask while in the water.



Ikelite composite photo of the equipment in use.

The focus light excitation filters kickstart the process allowing you to see the Fluorescing marine life using the face mask barrier filter and the lens barrier filter allows the camera to record the fluorescing marine life the same way you are seeing it through the mask.

Shooting stills photos with the Ikelite DS strobes excitation filters creates the same blue light which is then captured back through the lens barrier filter. The Vega video lights allow you to record fluo video using the same process but without strobes.

In the field

I shot with the fluo equipment in Cozumel Mexico and Florida using an Olympus E-M5 MKII, Ikelite housing, Ikelite dome and macro ports, two Ikelite DS161 strobes, two Ikelite Vega Photo/Video, using Olympus 9-18 mm zoom and 60 mm macro lenses.

Fluo equipment included two M46 thread-on excitation filters for the Vega focusing lights, two push-on excitation filters for the DS161 strobes, with yellow barrier filters for the lenses and mask.

Full discloser, I would be lying

if I didn't admit that fluo photography is a complete blast and the most fun I have had with my wetsuit on all year. Most divers associate fluo diving with macro and night photography but I was able to shoot both day time photography and wide angle as long as the ambient lighting did not over power the fluo lighting.

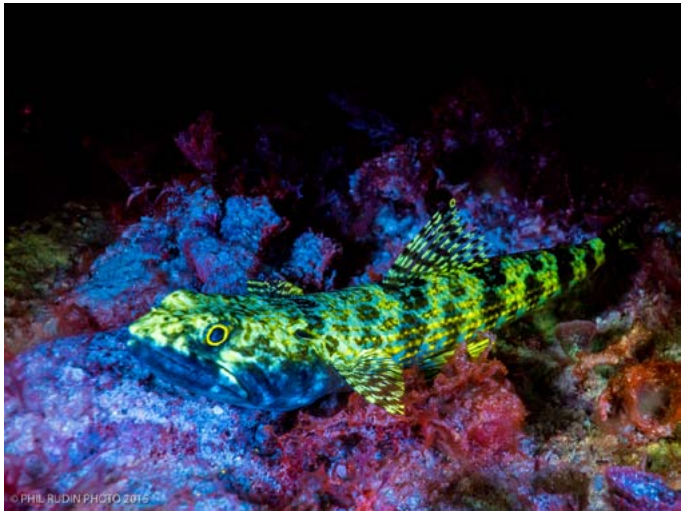
I did my day dives in the shadows of the Blue Heron Bridge and got some respectable results. The dichroic filters reduce the output of both the focusing lights and the strobe lights by several stops or EV values of light.

To achieve proper exposures higher than normal ISO settings and wider aperture settings will be required. This is a type of photography where larger sensor cameras with better high ISO sensitivity will excel.

The yellow barrier filter worn on the face mask will also reduce light so expect your first couple of night dives to be a bit challenging. The name of the game with fluo photography is getting close to your subjects so they will be well lit and in focus. If you're diving and bounce skills are suspect you may find yourself head butting the reef and this is not a good thing. I would suggest that you be a skilled diver/underwater photographer before attempting fluo photography.

When viewing your LCD screen many of the captures will appear dark and under exposed, don't be overly concerned as most under exposures can be recovered during the post-processing phase. This is not to say that you should not attempt proper exposure but that some post recovery is inevitable.

If you are diving with a group of non-fluo photographers don't be surprised to see their white lights killing the fluorescence in your scene. I had one dive master who attempted to assist me by



Sand Diver, Olympus E-M5 MKII, Olympus 9-18 mm zoom lens at 16 mm, Ikelite housing, two Ikelite DS161 strobes manual full power, two Ikelite Vega lights, Ikelite fluorescence equipment, ISO-500, F/5.6, 1/500 sec. Post processing LightRoom 6.

shining his white light onto a subject I had ask him to locate for me. The problem was that he didn't move his light after showing me the subject and I was never able to get the shot. This was entirely my fault for not explaining the fluo process prior to the dive and I now let the dive staff know that I will hang back a bit to avoid the white lights from other divers.

Once surrounded by near darkness the reef will explode with glowing fluorescences from the many potential photographic subjects being bathed in blue light.

I suggest that you begin photographing corals and other stationary subjects to prefect your technique then move on to more mobil subjects. You don't need to know the physics of fluo photography to understand how dramatic and in your face the

Smooth Flower Coral, Olympus E-M5 MKII, Olympus 9-18 mm lens at 9 mm, Ikelite housing, two Ikelite DS161 strobes manual full power, two Ikelite Vega lights, Ikelite fluorescence equipment, ISO-500, F/5.6, 1/500 sec. Post processing LightRoom 6.

results can be. A virtual explosion of color on an almost black background can be quite visceral and compelling. I believe each photographer will incorporate his or her own style during the post-processing ritual to make the final image a personal vision of photographic art from their perspective.

During the post processing phase the first thing I did was to get a proper white balance, without this

Batfish, Olympus E-M5 MKII, Olympus 60 mm macro lens, Ikelite housing, two Ikelite DS161 strobes manual full power, two Ikelite Vega lights, Ikelite fluorescence equipment, ISO-500, F/2.8, 1/400 sec. Post processing LightRoom 6.

it is hard to tell if the colors you are seeing are those created by the fluo equipment or just a complete color imbalance. How much vibrance and/or saturation is added then becomes a personal preference which starts the artistic process.

I also found that punching up some of the glowing colors to the extreme and then converting to black and white added drama to those shots, the sky is the limit as to what may work best for you.

Before investing in fluorescence equipment you may want to take a fluo class, attend a factory demo session, rent some fluo equipment or ask other fluo divers who's opinion you trust so that you will have an idea how well you may warm to this type of photography. I think most hard core photographers will be as excited as I was to get their hands on a set of fluo equipment and see the underwater world in a new light.

Ikelite M46 excitation filters for Vega lights retail for $125.00, the excitation filter for DS161, DS160, DS125 strobes retail for $175.00,

the barrier mask filter retails for $50.00 and barrier filters for flat ports range in price from around $55.00 to $70.00US depending on port size. I used a direct mounted yellow filter on the 9-18 mm zoom lens inside the dome port for wide angle shots.

Please contact your local authorized Ikelite dealer for pricing in your area. For further information on Ikelite's new fluo system visit the ikelite.com web site. I would again like to thank Ikelite for their support both with Underwater Digital Fiesta 2015 at Casa Del Mar Cozumel, Mexico and for the test equipment supplied for this review.

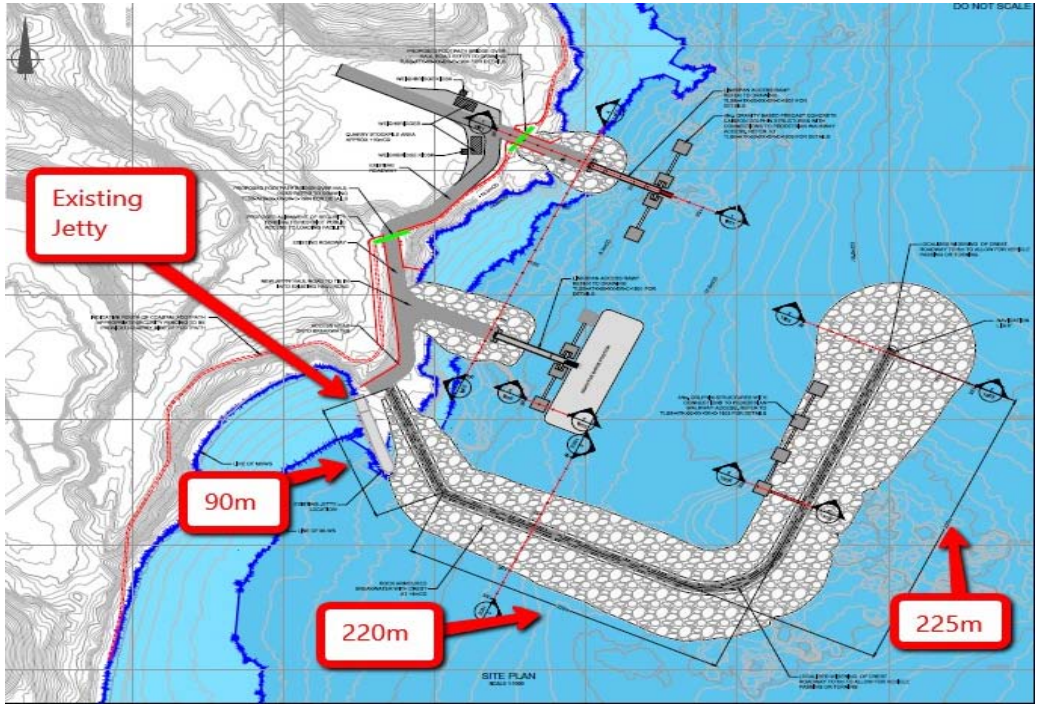
Phil Rudin
www.ikelite.com

SouthWest Ramblings

by Mark Webster

This installment from the far south west is more about grumblings and protest rather than gentle ramblings…..read on. I am very fortunate to live in the county of Cornwall which possesses some of the best diving in the United Kingdom and much of this is just a short hop from my front door. One of the best known locations, for divers and underwater photographers, are the collection of reefs known as the Manacles just offshore from the Lizard peninsula. Many divers will be familiar with these treacherous reefs as the graveyard for numerous wrecks, but below the water they also offer the most spectacular array of colourful marine life, which of course is the draw for those of us with a camera. In fact the marine life here is so good that parts of the Manacles have been declared a Marine Conservation Zone (MCZ) in order to protect a number of rare and threatened species.

However, in the last six months or so this infamous reef system has come under threat from a development which purports to be part of a green energy project centered in Swansea Bay. The Lizard coast which borders the Manacles area has a history of quarrying and there are several redundant sites here at Porthkerris, Porthoustock and Dean Quarry on Lowland point, whose new owners are proposing to reopen. The new owners of Dean Quarry are Shire Oak Energy which is one of a group of companies all under the same ownership. One of the subsidiaries, Tidal Lagoon Power, is the development company for the giant tidal lagoon proposed for Swansea Bay. So the plan is to reopen Dean Quarry to supply up to 1.5 million tons of rock per year to build the six mile tidal barrier in Swansea. In order to transport the rock the quarry development plan includes the construction of a 600m breakwater offshore to protect two new jetties all of which would encroach into the MCZ. The first phase of the planning application to rebuild the quarry buildings has already been passed



Dean Quarry proposed plans for breakwater and jetties.

Vast beds of jewel anemones are common throughout the manacles and provide a riot of vivid colour. Nikon D300, Subal ND2 housing, 10-17mm FE zoom, Inon Z240 flash guns, ISO 200 f9 1/80.

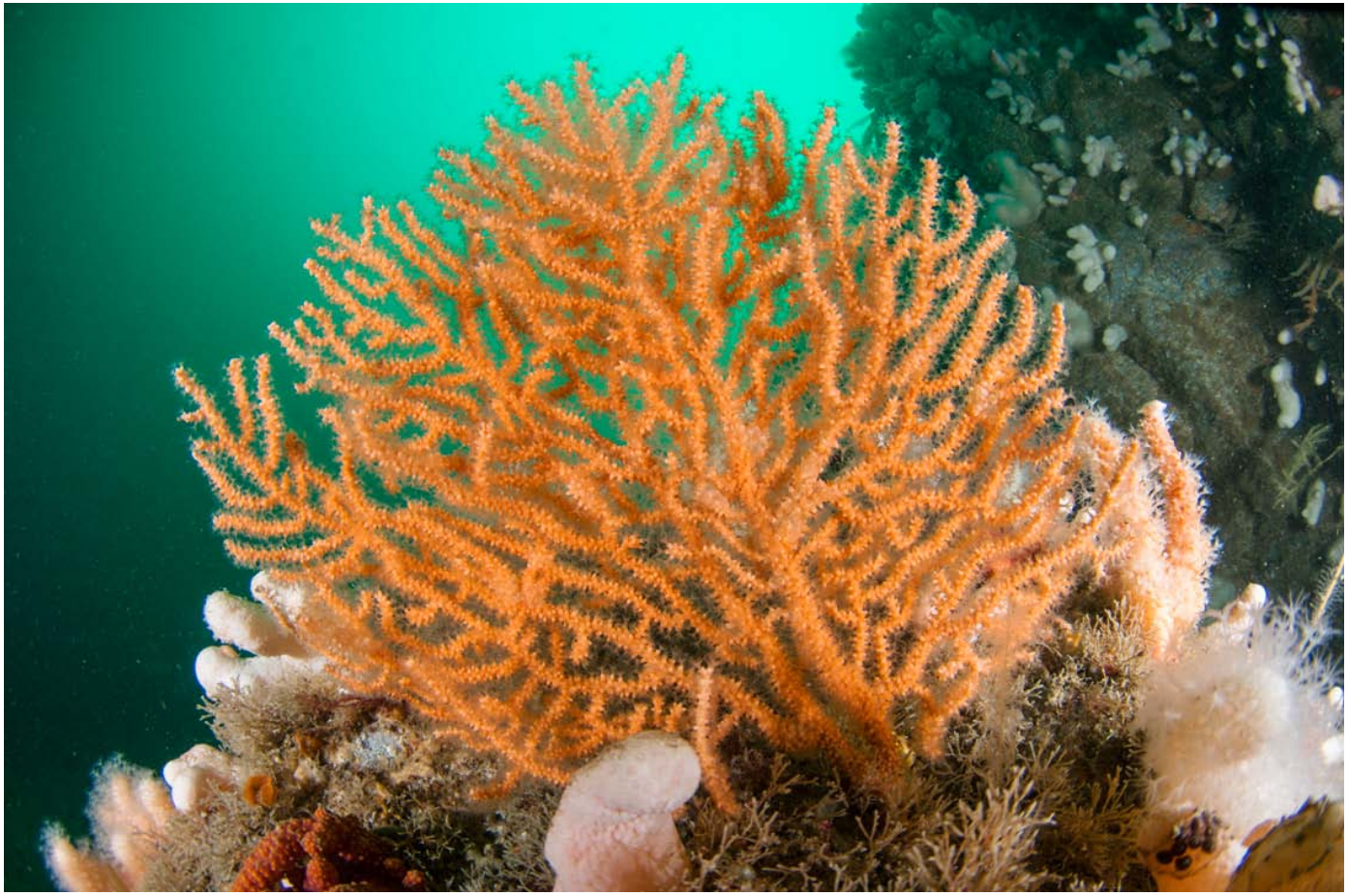
Plumose anemones extend to feed in the currents that sweep the Manacles. If you dive during a totally slack water period the anemones will be completely closed. Nikon D7100, Subal ND7100 housing, 10-17mm FE zoom, Inon Z240 flash guns, ISO 250 f8 1/100.

Shear walls and overhanging reefs on the Pen Wyn are covered by jewel anemones in a stunning selection of colours. Nikon D300, Subal ND2 housing, 10-17mm FE zoom, Inon Z240 flash guns, ISO 200 f11 1/200.

and the second phase application will include the damaging breakwater and jetties.

Local opposition has been mobilized since the proposal first emerged and it is now gathering pace and strength with support from organisations such as the Joint Nature Conservation Committee , Marine Conservation Society, Natural England, Sea Search etc. The small village of St. Keverne borders the mineral rights boundary of Dean Quarry and has become the focus for a protest movement led by a lobby group - Community Against Dean Super Quarry – which, together with the Porthkerris Dive Centre, has been gathering data and organizing a number of challenges to the claims of Shire Oak Energy that the MCZ and Manacles reef would remain untouched by the construction work and vessel activity. Building the breakwater by depositing thousands of tons of armour rock on the seabed will not only destroy marine life under it but the dust on the rock itself and the disturbed seabed will be carried by tidal currents to the neighbouring reef systems smothering marine life. Once operational the plan is for 9000 ton barges to be maneuvered by tugs in and out of the new dock with the inevitable disturbance from propeller and thruster wash and of course the risk of wrecking which the area is so famous for.

I have been diving from Porthkerris since the mid 1970's when it was the BSAC national beach. Since then it has been in private the ownership and is now home to a well equipped dive centre which has the Manacles as a spectacular dive site on its doorstep. Part of the developer's planning application for the breakwater includes an assessment of the marine life including a, somewhat cursory it seems, subsea survey of the location to convince the planners that no damage will ensue.



The pink sea fan anemone (Amphianthus dohrnii) is a rare species which is specifically protected in the Manacles MCZ. Nikon D7100, Subal ND7100 housing, 105mm micro, Inon Z240 flash guns, ISO 100 f25 1/250.

The Manacles boasts a number of sponge species including many large yellow boring sponges that thrive in the strong currents. Nikon D300, Subal ND2 housing, 10-17mm FE zoom, Inon Z240 flash guns, ISO 200 f10 1/40.

To combat this stance Mike and Jo Anselmi at Porthkerris Dive Centre have organised a number of their own marine surveys by professional marine biologists accompanied by photographers to reveal the marine life under threat in the MCZ. This gave me the opportunity to support the opposition forces and I gladly joined the team to survey an area mirroring that of the developer's submission with a focus on the threatened species defined by the MCZ.

Our brief was to survey the area and record any species of interest but with a particular focus on those that are protected under the MCZ. There are also a number of species commonly found here which are protected nationally, such as the pink sea fan (Eunicella verrucosa). In two dives on the first day we were able to record at least three of the species protected within this MCZ, the rare sea fan anemone (Amphianthus dohrnii), the spiny

Nodules of Maerl (an MCZ protected calcified seaweed) have been recorded throughout the location of the proposed breakwater. Nikon D7100, Subal ND7100 housing, 10-17mm FE zoom, Inon Z240 flash guns, ISO 200 f16 1/50.

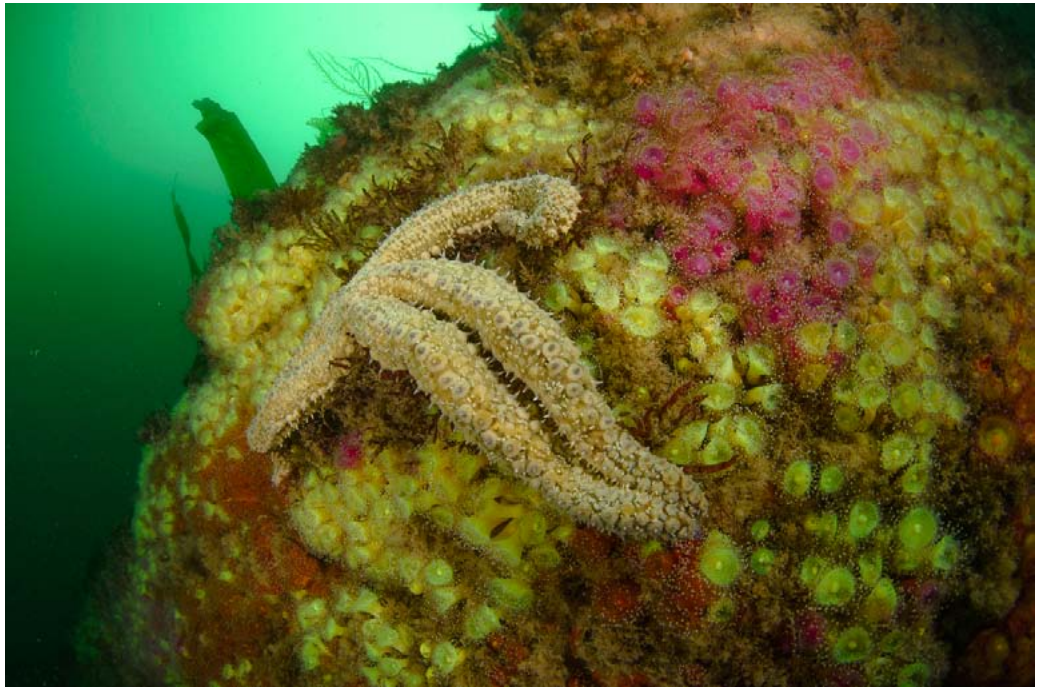
The delicate Ross coral is in fact a colonial bryozoan that can grow to an impressive size if left undisturbed. Nikon D300, Subal ND2 housing, 10-17mm FE zoom, Inon Z240 flash guns, ISO 200 f9 1/40.

lobster (Palinurus elephas) and Maerl (a calcidied seaweed) within metres of the location of the breakwater. We were also able to confirm that sand cover over the reef areas on the breakwater route would require significant dredging, which the developers had declared unnecessary.

Anyone who has dived on the Manacles will understand why there is such strong motivation to oppose the proposed development. These reefs and pinnacles are high energy sites exposed to the full force of the tides which can make them tricky to dive as you need to catch periods of slack water or time your dives during neap tides when the current can be more manageable. If you don't know the area then please make sure you acquire the local knowledge or better still dive with Porthkerris Dive Centre. The benefit of these strong currents is the nutrients they carry that feed the prolific colourful sessile marine life and even if you have only come to dive the wrecks you cannot fail to be impressed.

There are rich reefs throughout the Manacles area but perhaps the most spectacular are those in the outer manacles where seabed depths reach 40m and more. The big name reefs are the Vase, Pen Wyn and Raglans which break the surface at low water and drop quickly below the surface with a series of walls, ledges and gullies to the seabed. Raglans sits on the outer edge of the system and resembles a church steeple when viewed on the echo sounder with shear walls and narrow ledges and is a thrilling dive in good visibility. These reefs can be dived when there is a little current running as there is always a sheltered face and in fact are at their best with some tidal flow which ensures that the colourful beds of plumose and jewel anemones will be extended to feed. However, make sure you have good boat cover and follow the reef towards the surface when ascending to make

In March this year we have already had an early invasion of the huge Rhyzostoma jellyfish which have been cruising through the Manacles on the tides on a daily basis. Nikon D7100, Subal ND7100 housing, 10-17mm FE zoom, natural light, ISO 200 f9 1/160.



The shear reef walls of Raglans Reef are covered with jewel anemones where even the starfish have to cling on tight to feed. Nikon D7100, Subal ND7100 housing, 10-17mm FE zoom, Inon Z240 flash guns, ISO 200 f13 1/60

a safety stop in order to minimize the distance you travel on the current when you surface.

The Vase rock is perhaps best known as the location of the wreck of the SS Mohegan which foundered on only her second Atlantic voyage in 1898 with the loss of 106 lives (the Mohegan made her first Atlantic crossing named SS Cleopatra). Many of those lost in the wreck are buried in a mass grave at St Keverne churchyard where there is also a commemorative stained glass window. The loss of the Mohegan is surrounded in mystery and in fact a recent book (MOHEGAN - A Cornish Titanic by Chris Holwill) claims that the captain actually survived the wreck having deliberately steered a course for the Manacles. Captain Griffith was a shareholder in the financially troubled Atlantic Transport Line and it is claimed the ship was wrecked deliberately for an insurance claim. Griffith fled to his brother's home in North Wales and subsequently committed suicide when he realised the consequences of his role in the scheme. Although the wreck is well broken up the boilers still stand proud and local dive clubs continue to make interesting finds. The wreck itself has good fish life and supports many of the reef sessile species, but you will be struck by the rich habitat on the reef as soon as you drift off the wreck.

The shallow elevations of all the reefs are topped by thick kelp which is home to a diverse range of species, but it is once you dip below the kelp line that colour begins to dominate. Hydroids, jewel anemones, plumose anemones and soft corals (white, yellow and red varieties of 'dead men's fingers') cling to any surface exposed to the tide. The protected pink sea fan or gorgonian coral (Eunicella verrucosa) is abundant with the largest examples reaching 40-50cm in diameter. Inspect the polyps

The pink sea fan cowrie (Simnia patula) is another rare species that is extremely difficult to find due to its small size and near perfect camouflage on its host. Nikon D100, L&M Titan housing, 105mm micro, Inon Quad flash, ISO 200 f25 1/125.

Soft corals (Dead Men's fingers) are abundant on the Manacles reefs with striking colour contrasts between the red and white varieties. Nikon D7100, Subal ND7100 housing, 10-17mm FE zoom, Inon Z240 flash guns, ISO 250 f9 1/30.

closely on these sea fans and you will find numerous sea fan nudibranchs (Tritonia nilsodneri) and their neat spirals of eggs in the spring time. With a little luck you may also find the rare sea fan anemone (Amphianthus dohrnii) which consumes the polyps over a small area of the sea fan and clings to the branch in small colonies. Further luck may also reveal the sea fan cowrie (Simnia patula) which also feeds on the polyps and has a smart striped livery. All three species make excellent macro subjects but you may need an additional wet lens to capture the nudibranchs.

The British spiny lobster, or crawfish, was all but fished out in the late 1970's once commercial fishing fleets targeted them. They are now beginning to make a slow comeback in the region (don't tell the fishermen though!) and we have seen a number of juveniles over the past couple of seasons. Having found one on the first survey is yet further evidence that the MCZ status of the Manacles area is more than justified.

So if this news stirs you to opposition then please visit the websites listed below and add your support to the petitions and comments and if you visit the area to dive then make sure to include the Manacles to sample the spectacular topography and marine life for yourself.

Mark Webster
www.photec.co.uk

Don't settle for 2nd best

Film - No Filter No White Balance

Digital - No Filter Manual White Balance

Magic Filter Manual White Balance

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

www.magic-filters.com

Photographing Sea Turtles

By Joseph Tepper

Without question, one the most popular marine creatures is the turtle. Green, hawksbill, loggerhead, leatherback—we love every one. And best of all, they can be found and photographed in almost every destination. With a little bit of preparation and technique you can separate your turtle shots from the rest and produce images that even Crush the turtle from Finding Nemo would call "righteous!"

Types of Turtles to Photograph

There are seven species of sea turtles, which inhabit mostly coastal, tropical waters. The seven species (in order of frequency of encounter) are hawksbill sea turtle, green sea turtle, leatherback sea turtle, Olive ridley sea turtle, Kemp's ridley sea turtle, loggerhead sea turtle, and flatback sea turtle.

The hawksbill is the most commonly seen and photographed turtle, inhabiting coastal areas on every major continent. Also common, the green sea turtle is most often photographed in the waters off Hawaii and throughout the Pacific.

Unfortunately, four of these species of sea turtles are classified as endangered, making them a more rare occurrence to see and photograph. The Kemp's ridley sea turtle is listed as critically endangered. For this reason, it is always important to respect a turtle's space while taking pictures.

Finding Turtles to Photograph

Although turtles can be seen quite often on dives in the Caribbean and Indo-Pacific, there are a few situations that are more likely to end with a quality photo. The first, and perhaps least common, is a turtle just cruising by on top of the reef or along a coral wall. If this should happen to you, feel grateful you've found a comfortable, calm subject and even try to incorporate a dive model alongside the turtle.

Another situation that should entice underwater photographers is finding a turtle during its many meals. Both green and hawksbill turtles enjoy spending time on the reef chowing down on algae or sponges. Most turtles eating on the reef won't be inclined to move as you approach as long as you do so from the front. As an added bonus, you may be able to photograph commensurate relationships, such as a pair of angelfish picking up the scraps from a hawksbill.

A final opportunity is to photograph the turtle at (or near) the surface as he takes a moment to breathe—sea turtles are reptiles after all! Here you can capture splendid split shots of the turtle underneath and the sky/landscape above. Note: Make sure you never get between a turtle and breathing at the surface to avoid stressing the animal.

Equipment for Photographing Turtles

Unless you want a tight portrait image of a turtle, you're going to want a wide-angle setup. For DSLR users this means either a fisheye or wide-angle zoom. Your go-to wide-angle zoom lens will be versatile enough to capture both friendly and shy turtles, as there can be great variety in how much these finned friends tolerate your presence. It's a bit risky to rely on a fisheye lens if the turtle doesn't want to come within arm's reach; but for those subjects that will let your dome port practically touch their nose,

Using a fisheye lens will allow you to come within inches of the turtle's face, for a truly eye-popping effect with the lens distortion

With larger turtle subjects, using two strobes will help achieve even lighting

a fisheye can produce an eye-popping perspective.

Similar to the wide-angle zoom lens for DSLRs, compact users will likely find the built-in lens suitable for most turtle encounters, especially those where the subject is swimming several feet away. But to achieve a close-focus wide-angle image of a cooperative subject, you'll need to pop on a fisheye wet lens.

For these close-focus wide-angle images, using two strobes is a must. Since you're so close to the turtle, using a single strobe will cast an undesirable shadow on the scene.

Turtle Photography Tips and Techniques

Be Patient: The worst thing you can do is chase a sea turtle to get an image. A turtle positioned for a would-be side-on compositional, will quickly turn his shell to you when stressed as a defense mechanism. No underwater photographer wants a fish butt shot—you can avoid a turtle butt (shell) shot by swimming calmly and letting the animal approach you.

Don't Shoot Down: Especially when the turtle is planted on top of the reef, it can be all too easy to be shooting at a horizontal or (even worse) downward angle. Turtles have evolved to blend in with the reef, so you need to create separation between the subject and the reef as much as possible. You can do this by shooting at an upward angle and ideally including blue water in the background.

Try your best to shoot up, capturing a blue water background to make the turtle subject "pop" a bit more with the contrast. Adding a sun ball is another nice compositional element

Photograph Behavior: To really make your turtle images stand out from the rest, it's crucial to photograph the turtle engaged

Try your best to shoot up, capturing a blue water background to make the turtle subject "pop" a bit more with the contrast. Adding a sun ball is another nice compositional element

Working with a dive partner, you can position a model into the scene for a human element and to add a sense of scale

A hawksbill sea turtle tears off a piece of sponge from the reef

in some sort of interesting behavior. The most common of behaviors, as already mentioned, is feeding. However, other behaviors that present great photo opportunities include breathing and getting cleaned. For turtles at cleaning stations, make sure to approach very slowly, as both the reptile and its cleaner fish are more easily spooked in this vulnerable position.

Add a Model: Adding a diver as a secondary compositional element has a tremendous impact on the viewer. Primarily, it adds a human element in the sense it gives a viewer (especially a non-diver) a feeling of familiarity with the subject material. For large turtles, such as the leatherback or big green sea turtles, adding a diver also gives the viewer a true sense of scale.

Turtles as Subjects of Conservation

We would be remiss if we didn't end this article with an important message on conservation. Taking images of sea turtles is made all the more special by the fact that four of the species are listed as endangered, with several being critically so. Sea turtles face a myriad dangers from humans, including habitat loss; illegal trade in their eggs, shells, and meat; pollution; by-catch; and climate change.

And while as divers we are fortunate enough to encounter sea turtles on a regular basis, it is always important to remember that we must respect them as endangered animals. Taking stunning sea turtle shots, as outlined in this article, can help raise awareness that these are not only animals worthy of a snapshot, but also protecting.

Want to learn more? Visit the Sea Turtle Conservancy website.

www.conserveturtles.org

Joseph Tepper
www.divephotoguide.com

Small ads

SOLD! – Ikelite housing for a Canon 5D MKII

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

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

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

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~~Subtronic Nova analog version no ttl converter~~

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

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

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

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

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Crown of Thorns

by Christophe Mason-Parker

The Crown of thorns starfish (Acanthaster planci) belongs to the phylum Echinodermata, a diverse group of marine organisms that includes sea urchins, sea cucumbers and the sea stars. Crown of thorns starfish (COTS) inhabit the entire Indo-pacific region, where they prefer sheltered reef environments away from wave action and turbulent water.

The sea stars are found in a variety of colours ranging from crimson and grey to royal blue and black and are covered in an armour of needle sharp spines, which can reach 5cm in length. These menacing, yet strikingly beautiful marine invertebrates can grow up to 40cm in size, though individuals of 80cm have been recorded. The adult starfish may have over a dozen spine-covered arms, which they are capable of regenerating if damaged or lost to predators.

Crown of thorns sea stars are themselves coral predators. The animal feeds by eviscerating its stomach, forcing it out through its mouth before retracting it back into its body post feeding. During the feeding process the stomach releases enzymes, which digest the soft coral tissue and leave behind a white skeleton in its place. These feeding scars are easily identified in areas where crown of thorns are present. Coral skeletons are quickly covered by algae and before long the structure of the colony collapses, leaving behind a pile of coral rubble in its place.

A natural part of a healthy reef environment, COTS are usually found in low densities across their range, where their effect on coral reef ecosystems is limited. The sea stars show a feeding bias towards certain species of Acropora coral, though during 'outbreaks' when food becomes limited they will consume virtually all coral species, including soft corals.

An 'outbreak' is a term used to describe a sudden increase in COTS numbers, where the population is viewed to be adversely affecting the coral reef. It is difficult to quantify as in some areas an 'outbreak' may number thousands of individuals, while in others the figure may be

COTS are commonly observed feeding at night Canon 7D, Tokina 10-17mm, Ikelite housing and twin Ikelite DS160 strobes. ISO 160, f/13, 1/250

Close up of a COTS feeding on a coral, with the tissue already having been removed from the coral skeleton. Canon 7D, Canon 100mm Macro, Ikelite housing and twin Ikelite DS160 strobes. ISO 320, f/18, 1/125

a few dozen animals in a localised area. A key factor that 'outbreaks' have in common is evidence of high coral mortality. The species is usually nocturnal, though it will also feed during the day if competition is high. While small COTS are cryptic by nature, a coral reef where large individuals are observed feeding during daylight hours often means numbers are elevated above the carrying capacity.

Crown of thorns sea stars are voracious predators and can decimate large areas of coral reef in very little time at all. Increasing numbers of outbreaks are posing a threat to coral reef health and resilience. The reason for these 'outbreaks' remains poorly understood, despite much research into the subject. That said, several hypotheses have been suggested as contributing factors. One of these is a reduction in the animal's natural predators. Few marine organisms predate on COTS but the giant triton shell, Charonia tritonis is one such animal. Unfortunately, the mollusc has been over harvested

The Star Puffer (Arothron stellatus) is known to feed on COTS Canon 7D, Tokina 10-17mm, Ikelite housing and twin Ikelite DS160 strobe. ISO 160, f/11, 1/250

Close up of some COTS recently removed from a reef. Canon 550D, Tokina 10-17mm, ISO 200, f/8, 1/200

A feeding COTS observed on a morning dive. Canon 7D, Canon 100mm Macro, Ikelite housing and twin Ikelite DS160 strobes. ISO 250, f/13, 1/160

A bucket of COTS collected as part of a removal campaign. Canon 550D, Tokina 10-17mm, ISO 200, f/8, 1/800

across its range leading to depleted population numbers. The same is true of Cheilinus undulatus, more commonly referred to as the Napolean or Maori wrasse. The species is known to prey on adult crown of thorns, but sadly has the dubious honour of being one of the first coral reef fish to be listed on the IUCN Red List as Endangered. Certain species of puffer also feed on COTS but they tend to be found in extremely low densities. In reality it is unlikely that predator reduction is a major factor in crown of thorns sea star outbreaks. While these species undoubtedly feed on COTS, they are unlikely to consume an entire animal and with the sea stars ability to survive the loss of multiple limbs, in all probability many would survive predation.

Another theory behind the 'outbreaks' of crown of thorns sea stars is that of increased terrestrial runoff leading to phytoplankton blooms. It is thought that the increased nutrients entering coastal waters enhance larval survival. The hypothesis is given weight by several observations of 'outbreaks' adjacent to areas of land with high runoff.

Regardless of the exact cause, what is known is that 'outbreaks' are increasing in frequency at numerous locations throughout the Indopacific. In response to this government agencies, local NGOs, and dive centres have gone on the offensive and now actively remove crown of thorns from dive sites within the region.

COTS are highly venomous and produce a painful sting if contact is made with the spines. The effects can last weeks and in extreme cases can lead to hospitalisation. Care is therefore required when dealing with the animals and traditionally long spikes or tongs have been used to impale or grab the seastars before removing them from the reef.

Methods for tackling the outbreaks differ depending on the location but all have the ultimate aim of reducing COTS numbers on affected reefs In recent years, new methods of control have been developed, which involve injecting the COTS with bile salts or sodium bisulphate. Both methods eliminate the need to manually remove the animal from the reef and reduce the risk of divers becoming spiked in the process.

A pair of COTS make their way across a table coral leaving behind them a skeleton devoid of living tissue Canon 7D, Tokina 10-17mm, Ikelite housing and twin Ikelite DS160 strobes. ISO 200, f/11, 1/200

It is estimated that globally seventy five per cent of coral reefs are under threat from a multitude of natural and anthropogenic factors. Pollution and overfishing are difficult subjects to tackle as they are intrinsically linked with the socioeconomics of a locality, whilst climate driven threats such as ocean acidification and coral bleaching are challenging issues to address on the local level. COTS outbreaks, however can be equally damaging yet they provide an opportunity to combat an invidious problem that requires minimal financial input, few tough political decisions, and can help bring together different key stakeholders to collaborate for a common goal.

Further research is being undertaken into the exact causes of COTS population explosions, but until we have the answers, removal campaigns will continue to provide the best solution to an increasingly persistent problem.

Christophe Mason-Parker
www.archipelagoimages.net

Magnificent Pelagian

by Karen Stearns

A cruise aboard the dive yacht Pelagian is a ticket to some of nature's most memorable underwater experiences

The setting sun ignites the western sky in shades of orange and red as you step into the dive tender, ready to embark on a long-anticipated adventure. As always, the crew has your dive kit secured, and all you need do is make final adjustments during the short ride towards shore. Adjacent to a concrete pier, you roll overboard to discover a shallow coral plateau that slopes gently downward from a depth of five meters. You level off a meter above the bottom, and begin a slow swim along the underwater structure of the pier. At first there's nothing, just a few unremarkable coral heads scattered among the rocks and sand. Then you see them. Though scarcely 6 cm in length, there's no missing the half dozen small fish that hover over a pile of coral rubble. They display a riot of colors: vivid blues, bright yellows and oranges, electric greens and purples, all mixing together in swirls, stripes and spots, as if graffitied by an abstract artist.

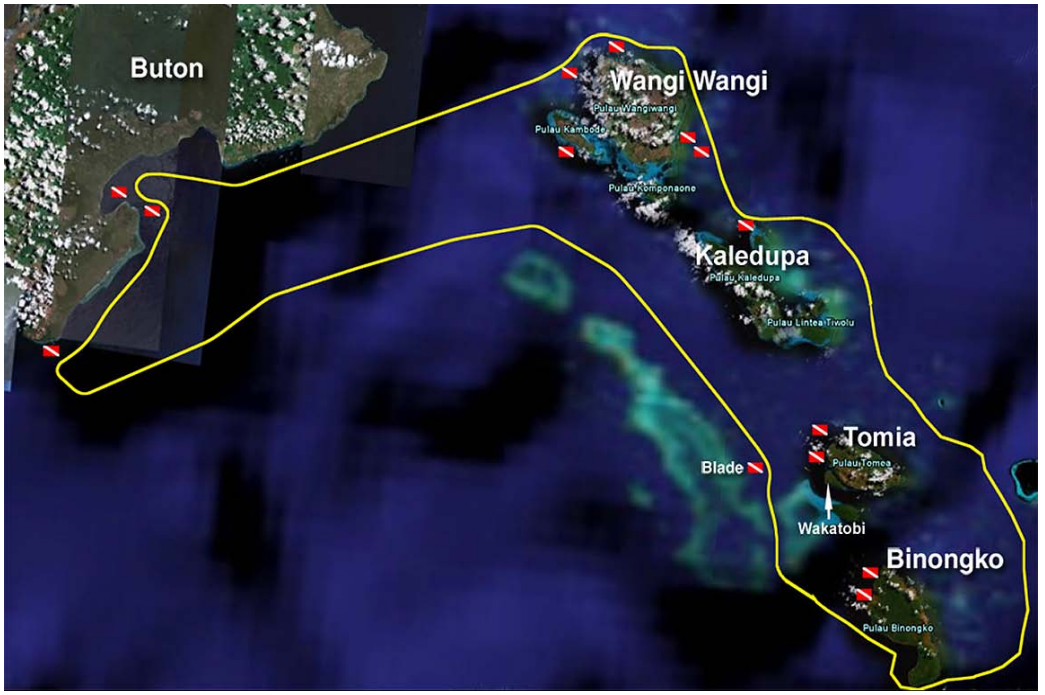
From the pre-dive briefing, you recognize this as a group of male mandarinfish. The school jostles among themselves, their enlarged pelvic fins fluttering like hummingbird wings. As you settle in to watch, a pair of slightly smaller mandarinfish come into view, and the males take immediate notice. The ladies have arrived, and the show begins. The males swirl about, strutting their stuff, and two lucky bachelors are singled out for companionship. A female nestles up to a male's extended pelvic fin, as if taking his arm. They align themselves belly-to-belly and begin a slow, swirling dance that caries them upward a meter above the reef. At the apex of their ascent, they release simultaneous clouds of egg and sperm into the water. The dance is done, but the show has just begun.

This dive site, known as Magic Pier, is famous for the courtship displays staged by amorous mandarinfish each evening, and that alone is reason enough to visit this otherwise unremarkable bit of sea floor. But there's more. As dusk turns to full darkness, dive lights are

Pelagian after a night dive. Photo by Wakatobi Dive Resort

Mating Mandarinfish at Magic Pier Photo by Steve Rosenberg

Reef scenic by Mark Snyder



switched on to reveal a nocturnal cast of characters. Moray and Napoleon snake eels slither through gaps in the coral rubble, bizarre mantis shrimp emerge from their burrows, their eerie, chromium-tinged eyes reflecting in the beam of your light. A pile of sediment seems to move, then reveals itself as a perfectly-camouflaged octopus. Schooling razorfish flash silver, then scatter as a trio of pulsating cuttlefish appear. Turning your attention back to the reef, you begin a close-up search of a stand of gorgonians, where you hope to discover the tiny form of an ornate ghost pipefish hiding among the branches.

The dive stretches on for more than an hour, and the cast of characters continues to entertain. Back on the surface, a short boat ride takes you home to the inviting sight of your dive yacht, riding serenely at anchor, with cabin lights aglow. On deck, you enjoy a refreshing shower and a warm towel, knowing that the crew will have your kit rinsed, filled and ready for tomorrow's dives. Within a few minutes, you'll be enjoying a nightcap in the salon while recounting the evening's adventures.

This is liveaboard diving at

Camera Room by Didi Lotze

Squid free swimming by Wayne MacWilliams

Reef scenic by Warren Baverstock

White eye eels by Nigel Wade

it's finest. With just ten guests, the 36-meter dive yacht Pelagian has provided you with a level of personal service, spaciousness and diving freedom far above any other liveaboard you've ever experienced. The onboard chef has created some truly memorable meals, the dive staff has proved both helpful and informative, and every member of the crew has gone above and

Flamboyant cuttlefish by Walt Stearns

Pelagian cruising Photo by Wakatobi Dive Resort

beyond expectations of service and hospitality.

Even more memorable than the onboard amenities is the diving. Your underwater adventures began with a stay at Wakatobi Dive Resort, where you spent a week on the resort's famous House Reef, and exploring the 40-plus sites accessed by a fleet of custom dive boats. It might seem a tough act to follow, but your cruise aboard Pelagian has proven even more amazing. This cruise has carried you farther afield to remote corners of the Wakatobi archipelago, and to the southern shores of Buton Island. The itinerary included walls, reefs and offshore seamounts. Some sites offered calm, sum-dappled shallows where you spent more than 90 minutes searching for small treasures. Others placed you in blue water, where currents propelled you past submerged ridges and dramatic cliffs. A drift dive at aptly named Gone With the Wind yielded the sensation of effortless flight, along with a chance of sighting of a school of tuna passing by in blue water.

Pelagian also provided access to a whole different type of underwater experience: muck diving. Along the shoreline of Buton Island's Pasar Wajo Bay, the shallows are yielding a wealth of intriguing subjects. Amid the subterranean detritus of the site known as Asphalt Pier, you captured great video of a swivel-eyed jawfish, methodically cleaning out its burrow by spitting out sand and small stones from an impossibly big mouth. What at first seemed like a lifeless sand bottom yields a spectacular variety of life, from frogfish to flounders and flying gurnards. Hermit and sponge crabs scuttle about; blue ribbon and garden eels poke their snouts into the sunlight, and nudibranchs slither slowly about.

As the week comes to a close, you take stock of all you've seen and done. From grand underwater vistas to micro-environments, this week aboard Pelagian has provided an unrivaled range of underwater adventures. Your cabin seemed more like a luxurious hotel room than a cramped ship's berth, the other guests were delightful, and the staff without reproach. Looking back, you congratulate yourself on having the foresight to add this cruise to your stay at Wakatobi.

Karen Stearns
www.waktobi.com

Book Review

Glass and Water by Mark Harris

Reviewed by Peter Rowlands

Freediving is enjoying increased popularity nowadays and it was only right that a good book should be produced on how to freedive specifically for underwater photography. Mark Harris and Dived Up Publications have done just that and come up with a very informative book which will help freedivers improve their images should they feel the need.

Just as with scuba diving you need to adjust your activity to maximise your photographic potential and "Glass and Water" starts by covering the equipment you should consider to increase your performance in the water for it is only by doing this that your image success rate will start to improve.

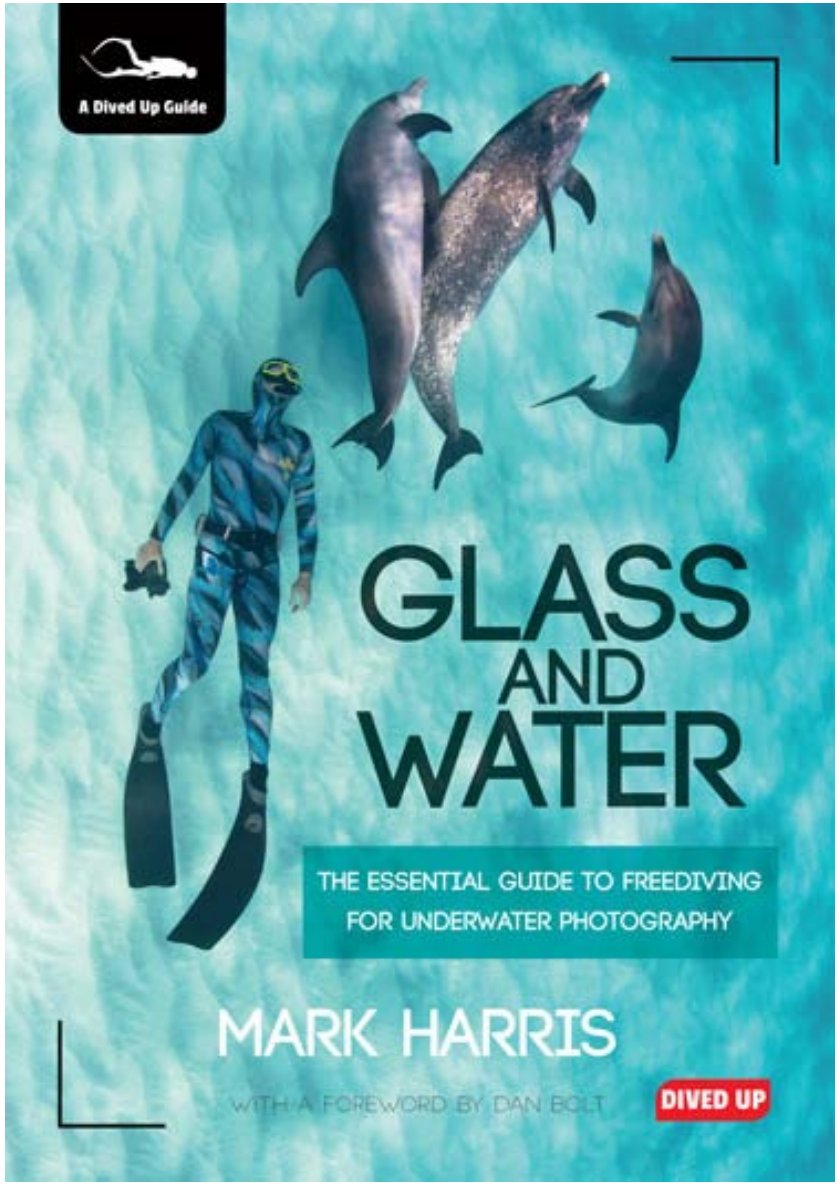
Then there follows a useful chapter on the choice of photographic equipment with informed opinion on what does and doesn't suit freediving. There are differing requirements for this skill set and this chapter will help you decide what's best for you.

This is followed by a chapter on Underwater Photography Basics which by its own admission "Glass and Water" just skims the surface of this extensive subject and I think it was right to do so. There's plenty of other publications which go into far more detail. "Glass and Water" then devotes the majority of the book to go into detail about the Techniques of Freediving aimed at helping you become a much better freediving underwater photographer and that is the core aim of this book - an aim which it achieves very well.

A section on the creatures you can encounter whilst freediving is very informative in terms of how to approach and work with them. They have included most subjects you are likely to come across whilst freediving and even though the list is not comprehensive, the techniques imparted can be applied equally well to those subjects not covered.

The nicest surprise for me was the 'Virtual Dive" chapter. As the name implies it takes you on a hypothetical trip to the Hebrides on the remote NW coast of Scotland. The delivery is as if you are being watched from above and guided as to how to conduct yourself and make your decisions in order to get the best images from the trip. The result is a subtle body of information which will prove invaluable and I suspect will live in the minds of those emerging freedivers, on location, keen on perfecting their underwater images. This chapter alone is worth the price of the book which is £16.95.

"Glass and water" is obviously aimed at freedivers but scuba divers would also benefit from the content of this book. We are, after all, after images.



Peter Rowlands
peter@uwpmag.com

Guidelines for contributors

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

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

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

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

How to submit articles

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

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

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

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

Nikon D90, Ikelite housing, Tokina 10-17mm lens at 17mm, 1/100, f8, ISO 200, single Inon Z240 strobe

Over 30 years of diving I have seen some amazing marine animals, but one creature had always eluded me, the rare dugong. Living in Brisbane, home to one of Australiaís most accessible dugong populations, I had seen plenty of dugongs from the surface, but never underwater. These shy sea cows are very wary of divers in Australia (unlike the Red Sea it appears), and every attempt to get in the water with one has failed.

Recently I was in Bundaberg, 300km north of Brisbane, for a weekend of diving as the area has some lovely shore and boat diving locations.

After a couple of nice macro-focused shore dives I was looking forward to boat diving the local artificial reef, only to hear from Julian Negri from Aqua Scuba, that the dive had been cancelled. Usually I would be disappointed by such news, but Julian then told me that he had encountered a dugong at a local shore diving site called Barolin Rocks that afternoon. I couldn't believe it, the boat dive forgotten I was now looking forward to a shore dive.

Early the next morning I was down at Barolin Rocks with a wide angle lens on my camera. I jumped in the water at 7am, and with a maximum of depth of only 8m I knew I had plenty of bottom time to find the elusive mammal.

I quickly swam to the reef edge to find the sandy bottom quite stirred up, only 3m visibility. It was like a sandstorm and I knew it would be hopeless for underwater photography, but I would have been happy to just see the dugong.

After fifteen minutes I was certain that there was no way I was going to see this dugong, having done fruitless searches like this before. Just as I was thinking that I felt a presence on my right, I turned to find a very cute face with thick lips and a tiny eye looking at me - THE DUGONG!

I couldn't believe it; the dugong had snuck up beside me and was now staring at me from only a metre away. I slowly raised my camera (no time for any camera adjustments) and quickly snapped off a few photos of the 2.5m long mammal.

After swimming side-by-side for several seconds, sizing each other up, a turtle suddenly shot off the bottom and startled the dugong, causing it to kick its wide tail, turn and glide away.

I did two more dives at Barolin Rocks hoping to see the dugong again, but it never reappeared. It had given me my brief encounter and a wonderful, if green, parting shot.

Nigel Marsh
www.nigelmarshphotography.com

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