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# ULTRA compact Housing

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Phil Rudin

# Underwater Photography

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Underwater Photography  
2001 - 2012 © PR Productions  
Publisher/Editor Peter Rowlands  
[www.pr-productions.co.uk](http://www.pr-productions.co.uk)  
[peter@uwpmag.com](mailto:peter@uwpmag.com)

## Diving for photography

Unlike terrestrial photography its underwater counterpart is significantly different and difficult despite the advances offered by digital. The result is that you have to become proficient at something else first i.e. diving before you should even consider taking images.

Learning to dive is easy, comparatively affordable and universally available. Learning to take underwater photographs, on the other hand, is definitely not so easy, almost certainly expensive (and that's just the gear, not the travel) and not everywhere has conditions or wildlife conducive for good images.

Underwater photography tends to be a fairly lone activity. There are very few clubs like there are dive clubs so learning to take and improve underwater images is not as easy.

Fortunately help has always been at hand but I'm not talking about a PADI Certification. I'm talking about dive trips/workshops led by recognised underwater photographers on both liveboards and land based locations. These trips offer you something no text books, websites or, I will even admit, online publications can offer you - the benefit of experience in the field.

Good underwater images only come when everything is under

# Editorial

control. The right place at the right time and the right space in which to operate. Take the Wetpixel trips, for instance. Timed to coincide with manta behaviour, whaleshark aggregations and similar seasonal happenings.

True these trips cost a bit more than an unlead trip but you will have the benefit of your leader's experience together with the opportunity to dive with and exchange ideas with other like minded people. There can be no more fertile situation in which to make great leaps forward in your underwater imaging.

And to all you photo workshop leaders, my PayPal address is .....

## Post Processing

In the last UwP Editorial I was banging on about how ISO was now an important photographic control along with shutter speed and aperture. Then I read Jens Tröger's excellent article in this issue about Macro in the Pacific Northwest and that reminded me of the other new control which digital offers - post processing.

Now let's rewind to 1996. I was interviewing the great wildlife

photographer Steve Bloom at his then offices on Oxford Street. He ran a traditional photo retouching business, Jones Bloom who would enlarge transparencies up to 10" x 8" and then physically retouch them with dyes and bleaches on pin heads. The process was very labour intensive and therefore expensive so was only done when absolutely necessary. It all sounds slightly Dickensian now!

I was interviewing said Mr Bloom because he had recently taken delivery of a 'Barco' suite which offered new electronic retouching and image manipulation possibilities and he was a pioneer in using it to produce realistic looking wildlife shots such as the totally fabricated Ostrich with its head in a hole (they don't apparently) and the pin sharp cheetah and fleeing impala against an action blurred background.

I'm sure you will have seen hundreds of similar images nowadays but remember this was 1996. It was only 30 years since England had won the Football World Cup not 46 so if my maths is correct that's 16 years ago and in digital speak that's almost a lifetime.

You can now fast forward to

2012 where you have a powerful personal computer on your desktop and a pixel sharp, colour calibrated screen on which you can "post process" your images. There. I got there in the end, didn't I?

This capability is not for everyone. Most are happy to take a few snaps on holiday and leave it at that. Others don't have the eye or computer know how to post process so operate within their limitations. But for those who strive for perfection, post processing is a very important tool whilst for those aiming to sell their images, it is a 'must do' process because if the other photographer who can take equally good images is able to enhance them subtly it will make their shots appeal to the purchasers much more.

Whatever level you are at, never forget how fortunate you are otherwise I'll sit you down in front of a 10" x 8" transparency, give you a supply of sticks, dyes and bleaches and say "Right, mush. Make a Mona Lisa out of that lot." (with apologies and acknowledgements to the great Galton and Simpson).

**Peter Rowlands**  
[peter@uwpmag.com](mailto:peter@uwpmag.com)

# News, Travel & Events



## North Sea Film Festival, Rotterdam November 10th & 11 2011

We are proud to announce the fifth edition of the North Sea Film Festival, the only underwater film festival in the Netherlands. It will take place November 10 and 11 in Rotterdam.

The venue is theatre LantarenVenster in Rotterdam, a location surrounded by water. This state of the art cinema with comfortable chairs, restaurant, well stocked bar and huge foyer will guarantee a great festival ambiance. The philosophy won't change: we will still be screening high quality films on surprising topics.

We continue to focus and display other art forms, on which we are still working.

The festival organisation hopes to welcome many filmmakers to interact with the audience through Q&A sessions after the screening of their movies.

The deadline for film entries closes September 17. On the festival website you find all relevant information and the online entry form

[www.northseafilmfestival.com](http://www.northseafilmfestival.com)

## 3rd International Underwater Film Festival November 9th -11th, 2012

## 1st Underwater Photography Festival Oct 26th to Nov 9th, 2012 Kikinda, Serbia

We are very pleased to announce the 3rd International Underwater Film and 1st Photography Festival, in Kikinda, Serbia. We will be honored to present your film(s) or photography to our audience.

The competing films have to be produced in 2011 or 2012, with at least 30% of underwater shots. The supported formats for viewing on

Personal Computers. The topic is free. Competition admission is free.

The deadline is October 15, 2012.

Please, do not hesitate to contact us for any additional information.

**Stojan Bogosavljev,**

Festival President

[stojan.bogosavljev@gmail.com](mailto:stojan.bogosavljev@gmail.com)

An advertisement for two diving expeditions. The top part features a blue boat on the water with the text "Tiger Shark Diving Expedition" in a large, stylized font, followed by "In the Bahamas on a Live Aboard" and "March 8 - 14 2013". The bottom part features a large tiger shark swimming underwater, with the text "Sailfish & Sardine Run" in a stylized font, followed by "Jan 2013 in Isla Mujeres, Mexico" and "www.GregorySweeney.com". At the bottom of the ad, there is a sailfish swimming and the website "www.TigerSharkDive.com".

**Tiger Shark Diving Expedition**  
In the Bahamas on a Live Aboard  
March 8 - 14 2013

**Sailfish & Sardine Run**  
Jan 2013 in Isla Mujeres, Mexico  
[www.GregorySweeney.com](http://www.GregorySweeney.com)

[www.TigerSharkDive.com](http://www.TigerSharkDive.com)

**Bali**  
**The Art of**  
**Underwater Photography**  
**with Shannon Conway &**  
**Graham Abbott**  
**21st Nov - 1st Dec 2012**

Shannon Conway has an energetic passion for his photography and the patience to capture the peak of the action. You'll quickly understand how Shannon obtains such remarkable images time and again – he puts a great deal of effort, energy and research into every shot and he does not give up! Shannon is a popular leader and his enthusiasm is infectious.

An Art of Underwater Photography trip is not about how much you know, how much equipment you use or even how much experience you have. The trip is about making wonderful images, about achieving your potential and, ultimately, having a huge amount of fun. Being amongst a group of like-minded friends who are also keen and eager to improve their photography is a huge advantage over taking a trip with the general diving public.

Joining Shannon for part of the time will be Graham Abbott, dive guide extraordinaire. Divequest has worked with Graham before



*@Shannon Conway*

and we are very pleased to be able to offer our clients his first class services once more. You could not ask for two more passionate leaders! Graham has run many charters for National Geographic, Conservation International and the BBC Natural History Unit in these waters. He will be able to ensure that photographers and marine life enthusiasts alike will get the best from the dive sites for marine life photography.

[www.divequest.co.uk](http://www.divequest.co.uk)



Photo: Martin Edge

[www.divequest-travel.com](http://www.divequest-travel.com)

*The Cayman Photoquest with Martin Edge 5-15th May 2012*

*Bali: The Art of Underwater Photography with Shannon Conway 21 November - 1st December 2012*

*Sharks & Dolphins of The Bahamas with Charles Hood 19 - 26 April 2013*

*Galapagos: The Art of Underwater Photography with Shannon Conway 11-24th June 2013*

*Ultimate Papua New Guinea with Michele Westmorland 19-30th October 2013*

*Truk: The Art of Underwater Photography with Shannon Conway 4-11th May 2014*



## S/Y Maldives Siren



Fresh from dry-dock and annual routine maintenance, the S/Y Maldives Siren is ready to embark on her second year of operation in the Maldives.

Our four itineraries offer a variety of diving options and throughout the past year our guests have experienced some amazing diving. Highlights of which would be the squadrons of eagle rays & schools of grey reef sharks, manta congregations in Hanifaru Bay plus midnight snorkeling with whale sharks in the Deep South and sightings of Mola Mola!

Cruise director Tristan and the team have discovered some exciting new dive sites but also found some sites were no longer as had been expected. Each year we review our itineraries to ensure we bring you to the best dive sites available in the region.

[www.sirenfleet.com](http://www.sirenfleet.com)

[www.uwpmag.com](http://www.uwpmag.com)

## A Festival of Underwater Photography Dahab, Egypt 8th to 16th April 2013

For many years Dahab has been recognised as something of a safe haven for divers travelling to Egypt who want to avoid the hoards in Sharm El Sheikh.

In Dahab, divers enjoy some fabulous shore diving and the atmosphere of a relaxed, sleepy Bedouin town. Dahab's dive sites, due to their un-crowded nature and the fact they offer photographers a variety of habitats and topographical features are an excellent playground for beginner photographers seeking to master the basics of compact photography. Here you can get up close and personal with the ever friendly anemonefish, catch a sleeping turtle or a floating lionfish, and take advantage of the fabulous light shows on some of the caverns and swim-throughs. Dahab has been chosen as the destination for this 'festival' due to its easy access to clear water, pristine coral reefs and distinct lack of currents; thus creating an ideal practice ground for refining key photographic techniques.

Divequest are proud to team up with the brains behind Ocean Optics, Steve Warren and Mark Koekemoer as well as Nick Robertson-Brown



*Lionfish and anthias off the Dahab shores © James Seymour*

of Frogfish Photography and David Moy of The Print Space for their inaugural Divequest trip; a nuts and bolts photography festival for compact camera users. This 'festival' of underwater photography has been designed to help newer underwater photographers really improve their images. Topics covered will include lighting, fish portraiture as well as close up and wide-angle techniques.

[www.divequest.co.uk](http://www.divequest.co.uk)

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[info@worldwidediveandsail.com](mailto:info@worldwidediveandsail.com)

## Free workshop with Jason Isley, Stephen Wong & Takako Uno



Want to take your underwater photography to the next level? Then there's no better place to be than at Eco Divers in Manado this November.

Three world-renowned photo geniuses will be sharing their secrets for FREE, through nightly presentations and joining guests on daily dive trips throughout the week. Also, on a nightly basis individual guests will be able to get personal advice from Jason, Stephen or Takako on any aspect of photography. This special event is part of Minahasa Lagoon Resort's 10th birthday celebrations and the fun will be rounded off with a Gala Dinner. Plenty of diving, learning and underwater fun.

Dates run from 24th November to 1st December.

Says Eco Divers' founding partner, Jim Yanny, "If you're

concerned that you're not good enough at photography to join such a workshop, don't be. Even if you're a complete beginner you won't be made to feel out of your depth, in fact we hope the majority of people attending won't be experts. This is not a competition and the atmosphere will be fun. You'll get a relaxing holiday with a bonus of leaving here with added photography knowledge and experience. Not to mention, the great memories of diving with these hugely entertaining & generous people. All are welcome, irrespective of your skill level."

[www.eco-divers.com](http://www.eco-divers.com)



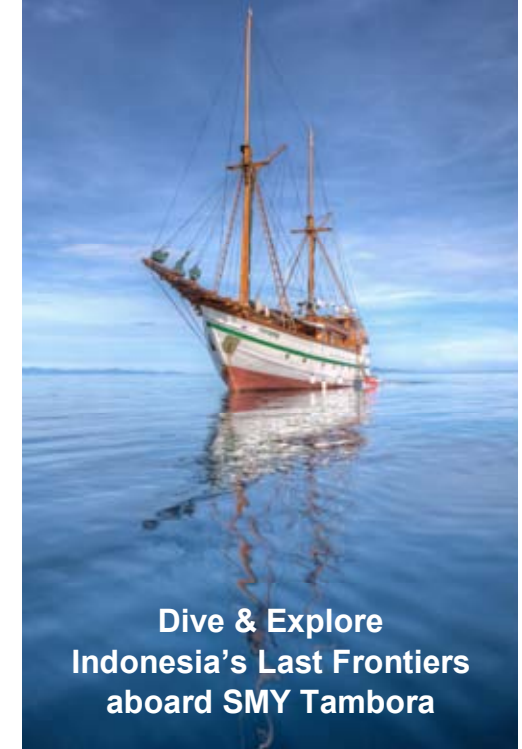
The 2012 San Diego UnderSea Film Exhibition, will be held at Qualcomm Hall on Friday and Saturday evenings, October 5th & 6th.

Each evening will feature up to sixteen videos, limited to a fast-paced five minutes. This exhibition is unique in that there are no entry fees and no prizes except for the prestige of having a film shown. An independent panel of judges will select the films to be shown.

UFEX is incorporated as a nonprofit organization. A portion of the proceeds will go to Birch Aquarium at Scripps.

[www.sdufex.com](http://www.sdufex.com)

## Tambora Dive Cruises



Dive & Explore  
Indonesia's Last Frontiers  
aboard SMY Tambora



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[www.uwpmag.com](http://www.uwpmag.com)



# CITA's UNDERWATER PHOTOGRAPHY COMPETITION 2012

1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> PRIZES available for all 5 categories

- \$4000 worth of prizes
- Photo printed on canvas
- Camana Bay Gift Cards
- Caybrew Beer

...plus 'BEST IN SHOW'  
Win a trip on board the Aggressor fleet to a destination of your choice\*\*

Submit your AMAZING Cayman photos in one or all of these categories...

- Cayman Wrecks
- Turtles
- Macro/Critter
- Scenic
- Creative

Winning photos will be printed on canvas and exhibited at the International Underwater Film Festival  
**Thursday 8<sup>th</sup> November**



Entries accepted  
**July 1<sup>st</sup> - Oct 29<sup>th</sup>**

Competition regulations & entry

[www.cita.ky/photocompetition](http://www.cita.ky/photocompetition)



\*\* Aggressor locations include Cayman, Turks & Caicos, Belize, Bahamas

## Tambora Dive Cruises



Uwe Günther first learned to dive in the cold lakes of Switzerland. Since then, he has preferred the warmer waters of South East Asia and Indonesia in particular, and is probably one of the very few who, over the course of more than 15 years, have dived almost the entire archipelago, from Aceh at the Northwestern tip of Sumatra all the way East to the islands off Jayapura at the border between Indonesia and Papua New Guinea.

Our Experienced Crew has served on vessels of various size and type throughout the country prior to joining us. Tambora's captain has been skipping dive liveaboard vessels through Indonesian waters for many years, and hence knows dive sites, beautiful and safe anchorages,



and tricky passages inside out. Our dive guides, thanks to many years of practice, have developed a keen eye for the many critters and hidden treasures that so easily go unnoticed. Our cook and the entire hospitality team will pamper you in between dives with tasty bites and well prepared cabins. And our mechanics, deck men, dinghy drivers, and sailors ensure smooth operations of the vessel and dive operations.

[www.tamboradive.com](http://www.tamboradive.com)



# AQUATICA™

## AD800

## Digital



[www.aquatica.ca](http://www.aquatica.ca)

# New Products

## Aquatica AD800 for Nikon D800/D800e



The Aquatica Team is proud to introduce you to the Aquatica AD800 housing for the new benchmark in digital photography, the Nikon D800/D800e.

Aquatica has designed the ultimate housing for this new Nikon camera along with the usual comfortable ergonomics usually associated with our housings. The AD800 incorporates a multitude of refinements. Among them, the Aquatica AD800 housing is the first of its kind to offer access to the Fn and DOF preview buttons. This is done via a unique toggle lever that accesses the two buttons, while the depth of field feature in itself is, quite arguably, of little use underwater. The many Custom Functions roles that can be attributed to these two buttons sure is worthy of attention.

The AD800 housing has a newly

designed camera tray; it smoothly and precisely positions the camera in the housing and is easily disengaged by a simple push on a tab. The zoom actuating pinion gear and the lens release lever pull out to allow the user to remove the camera from the back while keeping a lens and zoom gear attached.

Given the unprecedented impact the Aquatica AD800 is bound to have on the underwater video industry, it was deemed absolutely important that this new housing be optimized for this task. All video controls are designed for easy reach and smooth operation. Whether it is for video or for still images the serious side of this housing operation is apparent from the get go.

The AD800 housing's lightness should not be misinterpreted as a weakness. This housing still has the same standard 90m/300ft depth

rating and can still be upgraded to 130m/425ft depth rating. Its knurled knobs and oversized controls mean easy operation no matter what the situation is. Anyone familiar with our climate knows that being built in Canada also means that all housings from Aquatica are born and bred in one of the world's most rugged diving environments. Bottom line, if it works in our local conditions, it will work everywhere else!

The D800 is supported by one of the most established and comprehensive port and accessories systems of the industry. This port system has been a stable platform for over 20 years and remains one of the most reliable and used designs on the market.

Retails at just 3,359.00 USD

[www.aquatica.ca](http://www.aquatica.ca)

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**APSO-NEX7**

Underwater Camera Housing for SONY NEX-7

<http://acquapazza.jp/en>

# Fisheye FIX S100



Underwater Housing for the  
Canon Powershot S100

Best Point and Shoot for 2012

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## Amphibico Rouge housing for RED Scarlet X and Epic cinema cameras



This ground breaking project has been the most ambitious project that Amphibico has undertaken in the past 10 years. We are proud to announce and present the new Rouge underwater housing for the RED Scarlet X and Epic cinema cameras.

Amphibico's development team has excelled to a new level, by using dual electronic Amphibi-grips® and menu control panel. This will allow the user access to all the important key controls of the camera keeping in mind total ergonomics and underwater balance. Most of those who are familiar with Amphibico's products will know that the housing construction quality and reliability is still the highest you could find in the industry. That is why Amphibico once again, is leading the way of technology and performance with underwater imaging.

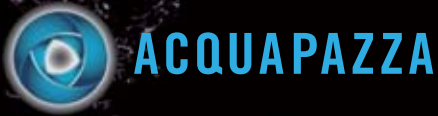
Practically no tools are required to mount camera in housing makes for a quick topside ready camera in minutes.

There is full electronic control of the camera, with a state of the art control system, 14 Electronic push button controls on dual Amphibi-grips® and a menu panel provides direct access to operational camera functions such as Record, White Balance, Shutter Speed, ISO & Aperture at finger tip access.

The suggested retail price is \$12,999USD

[www.amphibico.com](http://www.amphibico.com)

[www.camerasunderwater.co.uk](http://www.camerasunderwater.co.uk)  
Tel: +44 (0)1404 812277



# APOL-XZ1

Underwater housing for OLYMPUS XZ-1

High Picture Quality Close to SLR  
Using a Large f.1.8-2.5 Lens



<http://acquapazza.jp/en>

## Ikelite housing for the Sony HDR-CX580V camcorder



Ikelite's "Clearly Superior" design provides full view of the camcorder, control functions, and assurance the system is safe. Simple one touch white balance adds a professional quality to your video as easily as the push of a button.

Custom white balance is one of the best tools for getting natural colors at relatively shallow depths. We put this powerful feature at your fingertips—just point the camera at a white or near-white surface and press a single pushbutton on the back of the housing. Our proprietary circuitry does the rest, no scrolling through menus required.

The included aluminum tray and handles feature comfortable angled grips and provide superb balance and handling underwater.

A removable UR/Pro tropical water filter is included. Additional green and blue water filters in a variety of sizes are also available.

PRO-2800 LED video light

For the ultimate in brightness and angle of coverage for radiant high definition video Ikelite recommends their PRO-2800 LED video light .

The compact light head produces an incredible 2800 lumens with a natural, daylight balanced color temperature. A 100° spread is great for shooting with wide angle lenses. The rechargeable battery pack attaches directly to the bottom of the SLR tray with just two screws.

Doubles as a great focus light for macro photography.

[www.ikelite.com](http://www.ikelite.com)

## Aquatica A5D Mk III



Underwater Housing  
for the Canon 5D Mark III

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## The Backscatter Flip Magic Filter For GoPro Dive Housing



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## Easydive Leo Pro Canon and Nikon SLR housing



Design, functionality and versatility are the main features of the new housing Leo dedicated to digital SLRs.

Thanks to the USB Control Panel all major controls are remote, avoiding the need to build custom mechanical buttons. You can use the same housing if you buy a new camera. With the inner slide being fully customizable, the ability to quickly change the front porthole and use different types of objectives, special nuts and gears, the total waterproof security (double O-rings on all seals), Leo is the best housing for SLR cameras currently on the market!

Leo Pro was created to meet the competitive needs of professionals and is the most complete version, offering all the advantages of the standard Leo and a special rear panel with 10/12 mechanical controls, dual Nikonos Flash 5pin connector and a window for displaying data (if available).

The revolutionary innovation that



makes Leo unique is that Easydive can provide a kit with a second control panel in order to manage the camera and a slide dedicated to fix it, so it can be used for shooting in video mode too! To record you can either use the optical viewfinder, a back video or an external 16:9 monitor with a quick-fit connector.

[www.easydive.it](http://www.easydive.it)

**Nauticam**  
USA

## Nauticam NA-NEX5N Sony NEX-5N housing



### "Back to the future"

The Sony NEX-5N provides DSLR image quality with the full HD video of a camcorder in a compact size. The Nauticam NA-NEX5N extends that capability with a form fitting aluminium housing and a full range of ports from fisheye to macro.

But the most innovative twist is a port adaptor to use Nikonos lenses from the pin sharp 15mm UW Nikkor to the super macro combination of 35mm and extension tubes.

For decades the Nikonos range of lenses were world leaders but the advent of digital saw them put on the shelf. Now we can use them all over again to benefit from the past with a camera for the future.

[www.nauticamusa.com](http://www.nauticamusa.com)

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more responsive, more precise, more reliable



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**VERSATILE** TTL, DS-TTL II & Manual EV Control  
Slave & Hardwired  
**ERGONOMIC** No Slave On/Off Switch,  
Optional Strobe Mounts  
**DEPTH RATING** 100m!!

WWW.SEA-SEA.COM

**SEA&SEA**  
THE UNDERWATER IMAGING COMPANY

## Nauticam NA-EM5 for Olympus OM-D E-M5



Nauticam is excited to announce the NA-EM5 for Olympus' flagship Micro Four Thirds (m4/3) format camera, the OM-D E-M5. As the dominant force in mirrorless interchangeable lens camera housings, Nauticam continues to bring professional quality engineering to this rapidly expanding segment of the photographic community. The NA-EM5 should prove to be one of the most potent underwater imaging tools ever developed for this segment, proving once again that great things can come in small packages.

As the Olympus OM-D E-M5 represents a new standard of performance in the popular m4/3 format, Nauticam sought to create a housing that would exploit this new level of capability to the fullest. Designed by underwater photographers to maximize the

essential features most important in these specialized circumstances, the new NA-EM5 meets and exceeds expectations in virtually every regard.

A big part of the Micro Four Thirds format's popularity is a great lens selection for both topside and underwater. Nauticam manufactures an extensive line of compact ports to accommodate many of the best lenses for m4/3. Lenses that are particularly well suited for underwater use include the Panasonic 8mm fisheye, Panasonic 7-14mm, Olympus 9-18mm, Panasonic 14mm, Olympus 14-42, Panasonic 14-42mm, Panasonic 45mm macro, 60mm macro (upcoming), new Olympus 12-50 w/ macro (Supported by a special new Nauticam port for power zoom and macro switch).

[www.nauticamusa.com](http://www.nauticamusa.com)

**Nauticam**  
USA

Nauticam Olympus  
XZ1



**"Total control"**

This camera and housing package offers complete control and image quality of an SLR system with the ease of use expected of a compact system.

Controls are simple but well thought out, with familiar push buttons for quick access to functions like macro mode, flash mode, etc. Dual control rings immediately access frequently used manual settings like ISO, F-Stop, and Shutter Speed. With a dedicated movie start/stop button recording 720P / 30fps video clips is only a pushbutton away.

[www.nauticamusa.com](http://www.nauticamusa.com)

Want a Quality Compact?



# MDX-X10

Digital Compact Camera Housing

For the Fuji X10 Pro/Enthusiast Camera which features Fuji's unique 12mp 2/3" EXR-CMOS Sensor and bright f/2-2.8 (28-112mm equiv.) lens.



(Shown with optional CU125 Close-Up Lens)

- Machined Solid Block Aluminium Compact Ergonomic Design
- 67mm Threaded Port for Accessory Wet Lenses
- Locking Rotary Latch
- Fibre Optic Cable Socket x2
- 100m Depth Rated



WWW.SEA-SEA.COM

**SEA&SEA**  
THE UNDERWATER IMAGING COMPANY

## Ikelite housing for Panasonic Lumix DMC-TS20, FT20



The Ikelite ULTRAccompact digital housing really delivers when performance and durability matter. The ULTRAccompact housing is high quality, built to last and backed by Ikelite's reputation for excellence.

The housing features drop-in camera loading and provides access to all camera controls. The o-ring seal can be seen through the polycarbonate.

The housing is compatible with wide angle and macro lenses and is depth rates to 200 feet (60m)

A great system for beginner and intermediate divers looking for a small, simple system to shoot both stills and videos. Automatic modes make photos and video a breeze allowing you to simply turn on the camera, point and shoot.

[www.ikelite.com](http://www.ikelite.com)

## INON compatibility with Olympus E-M5/PT-EP08

INON INC. is pleased to announce compatibility of existing INON accessories with Olympus E-M5 PT-EP08.



The highly accurate "S-TTL" Auto mode of INON Z-240/D-2000/S-2000 is supported when connecting via INON Optical D Cable Type L Double Hole Rubber Bush Set.

By using combination of dedicated lens port PPO-EP01 and macro lens adapter PMLA-EP01 for the PT-EP08, INON M67 Mount series UCL-165M67 and ULC-330 close-up lenses are compatible.

Attaching the Micro Four Thirds adapter MMF-3 on the E-M, port adapter PAD-EP08 and port extension ring PER-E01 on the PT-EP08 enables to use ZUIKO 8mm Fisheye or ZUIKO 50mm Macro with the INON E-SYSTEM port.

There are many more compatible products on their website.

[www.inon.co.jp](http://www.inon.co.jp)

**Nauticam**  
**USA**

## Nauticam NA-EPL3 Olympus E-PL3



### "Full HD and 12mp"

The NA-EPL3 housing from Nauticam delivers the advanced functionality of the E-PL3 in style and with the ergonomics that people have come to expect from Nauticam.

This is a very compact and lightweight housing, with all of the E-PL3 camera controls available from the ergonomic grip sculpted into the side of the housing. A choice of hand strap and left/right handle means the shooter can customize the housing to meet their specific needs.

Depth Rating: 100m  
Dimensions: 168mm x 138mm x 91mm. Weight: 1.03kg (2.2 lbs.)

[www.nauticamusa.com](http://www.nauticamusa.com)

## UK Aqualite 90 eLED Video Light

Bring out the incredible underwater colours and intricate detail of marine life with the Aqualite video light. Fish and invertebrates hiding under ledges and in holes often receive little ambient sunlight and require additional lighting for underwater images to come to life.

Lighting the foreground with “daylight” coloured Aqualite illumination, while allowing the delicate blues and greens of the open water background to fade into the depths can produce prize winning images. Two Aqualites set at



different brightness levels can add an additional dimension and beauty to an underwater subject.

There are two Beam Angle Options:- Supplied with 90° Lamp Head which covers the area seen by



most wide angle underwater cameras or there is an optional interchangeable 65° Lamp Head available which covers the area seen by most standard underwater cameras with a more intense beam. The brightness can be



stepped up from 120 to 600 lumens in 4 levels using the rear power dial and is held at a colour temperature of 5000° K. Two threaded screw holes allow the Aqualite to be adapted to most underwater photo arms.

Power is supplied by a lithium ion battery which is charged from any USB power outlet or the included wall socket adapter. An additional battery is also included so that one can be on charge while the other is out diving!

Non-magnetic switching prevents dive compass interference and an aluminium bezel acts as a heat sink for maximum performance underwater. SRP: £220.95

[www.sea-sea.net](http://www.sea-sea.net)

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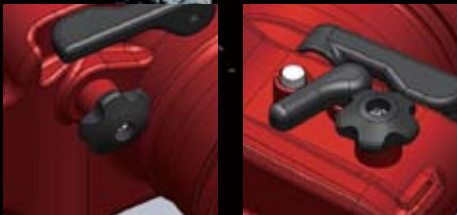
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APSO-RX100

Underwater Camera Housing for SONY RX100



<http://acquapazza.jp/en>

## SeaLife Fisheye Wide Angle Lens



The SeaLife Fisheye Wide Angle Lens allows the underwater photographer to come very close to the subject and capture all of its amazing surroundings by increasing the field of view by an astounding 80 percent. With its universal-fit design, it quickly and easily snaps onto any SeaLife DC-series camera for breathtaking seascape images, and it creates a 16mm effective focal length when attached to the DC1400 digital underwater camera. That's an increase from 61 degrees to 111 degrees with the Fisheye Wide Angle Lens attached to the DC1400. On the DC1200, you can almost instantly increase your standard 44-degree field of view to 86 degrees.

Individually depth tested and guaranteed waterproof to 200 ft., the Fisheye Wide Angle Lens also includes a Lens Dock that quickly and securely attaches to your flash-mount base, and there is a lanyard that attaches to the camera to ensure you



don't lose the lens.

With slightly negative buoyancy, the Fisheye Wide Angle Lens weighs 13.8 ounces above water, and it measures just 1.8 X 3.8 X 3.8 inches.

The SeaLife Fisheye Wide Angle Lens (SL975) is available for pre-order now, and will be delivered this September.

The lens has an MSRP of \$299.95, and it is backed by a one-year warranty.

[www.sealife-cameras.com](http://www.sealife-cameras.com)

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APSO-NEX5N

Underwater Camera Housing for SONY NEX-5N



<http://acquapazza.jp/en>

## Sealife ReefMaster Mini



SeaLife has announced its new deep dive ReefMasterT Mini, a self-contained 9-megapixel digital dive camera that's waterproof down to 200 ft. The ReefMaster Mini features enhanced underwater color correction, and it includes a quick detachable wide-angle lens.

With its intuitive Easy Set-Up Mode, you simply navigate through the ReefMaster Mini's graphic on-screen guide to select the mode that suits your environment—from Land to Snorkel to Dive—and the ReefMaster Mini does the rest for you.

There's also an External Flash Mode that precisely calibrates color and exposure for taking underwater pictures with an optional SeaLife Digital Pro Flash.

The suggested retail price is \$259.95.

[www.sealife-cameras.com](http://www.sealife-cameras.com)

[www.uwpmag.com](http://www.uwpmag.com)

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[www.plasticase.com](http://www.plasticase.com)

## Mini LED strobe MLS



The Mini LED strobe MLS fits Canon and Nikon SLR cameras and saves the camera battery by not using the built-in flash.

It is powered by 2 coin cells which will give up to 10.000 shots and, unlike strobes, it can trigger up to 6 times per second. The MLS only works in manual mode and has no TTL- function.

When the batteries are connected the MLS starts up and does a test of all the led's attached. Then the it goes into sleeping mode with almost no power consumption. The batteries can stay inside the "MLS" when not used and consume almost no energy. However, when not used for a very long time it is advisable to remove the batteries.

The low-battery indicator led



flashes 4 times when the battery is almost empty. Voltage is checked after each strobe fire.

Depending on the housing you must attach the LEDs so they are aimed in a straight line with the fiber connection and about 5mm to 10mm distance from the fiber.

[www.owfotograaf.be](http://www.owfotograaf.be)

## Acquapazza APSO-RX100 housing for the Sony DSC-RX100



Towards the end of September 2012, Japanese underwater housing manufacturer Acquapazza will release its latest housing for the Sony DSC-RX100 compact camera.

Even though the DSC-RX100 is considered a compact camera, its 20MP sensor is much larger than most other compacts and the Carl Zeiss-designed Vario-Sonnar T\* lens at f1.8 is bright and will focus up to 5cm in front of the lens.

The Acquapazza APSO-RX100 is machined from solid aluminium so is much more robust than a polycarbonate housing and the rear door incorporates a 3.2mm double O ring seal for maximum security. The front port has a 67mm thread for accessory lenses and there is an option of an INON 28LD mount.

The rear window has a rail for

attaching an optional magnifying hood for detailed viewing of the LCD screen. Additionally, there are seven types of adaptors that will fit the mount base and the M10 ball joint hole will allow the attachment of double strobes or LED lights.

The combination of the Acquapazza APSO-RX100 and the Sony DSC-RX100 is an extremely small and light package that is big on image quality and performance.

[www.acquapazza.jp/en](http://www.acquapazza.jp/en)

## Ultralight BA-AQN-UK



Ultralight Control Systems have announced a new adaptor designed especially for the Underwater Kinetics Aqualite eLED video light.

The BA-AQN-UK screws into the underside of the light and allows ball joint arms to be attached for precision position control.

As with all Ultralight adaptors they are made in America from 6061 aluminium that is machined and then hard anodized, to withstand the harshest treatment.

In addition to arms, we offer a full line of trays, pivots, adapters for all strobes, and video applications, along with numerous accessories.

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## INON LE700-W



INON INC. has announced the release of new LE series LED flashlight the LE700-W. It provides a 700 lumen beam which is 25% or more brighter than the previous model at more competitive price.

The LE700-W is only for use underwater and runs on 3 x AA batteries. The burn time with Eneloop pro rechargeable batteries, is approx. 75 minutes.

The LE700-W has a specially designed reflector to produce wide and seamless 75° beam coverage which is ideal for photography and videography. Also included are three "Filter LE" in red/pink/orange to change colour tone.

If you already own 3AA operated LE series flashlight, the LE700-W Light Head is available to purchase to change original Light Head of your LE series flashlight to use as LE700-W.

[www.inon.co.jp](http://www.inon.co.jp)

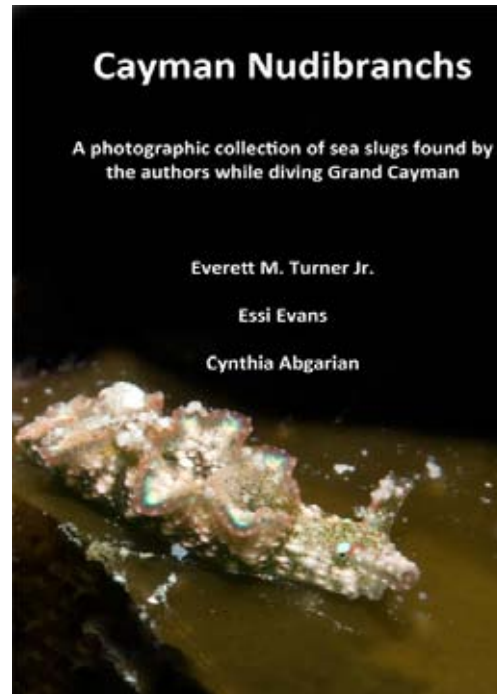
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## Cayman Nudibranchs



Everett M. Turner Jr., Essi Evans and Cynthia Abgarian have announced the publication of their book Cayman Nudibranchs. The authors have spent many years diving the waters of Grand Cayman. The book includes photos of over 80 species of nudibranchs, documenting their discoveries.

They put together the collection because they were often hearing that there are no nudibranchs in Cayman, and wanted to provide a guide for other divers and photographers.

[www.createspace.com/3949565](http://www.createspace.com/3949565)

## Life in the Seas

I am contacting you to let you know that I have just released a pictorial essay of marine life that is available for the IPAD. It's only \$4.99 and available at this link:

Thanks you, and congratulations on keeping your website free!

Best wishes,  
George Perina

[www.lifeintheseas.com](http://www.lifeintheseas.com)

<http://store.blurb.com/ebooks/234286-life-in-the-seas>



## British Columbia video

We've recently put together a really nice four-minute video with images from British Columbia (most of them from my book, Beneath Cold Seas) and original music by Matthew Mayer. The video has been posted to YouTube

<http://www.youtube.com/watch?v=14bgD9ZN6hM>



## Underwater Photo Tutorials.com

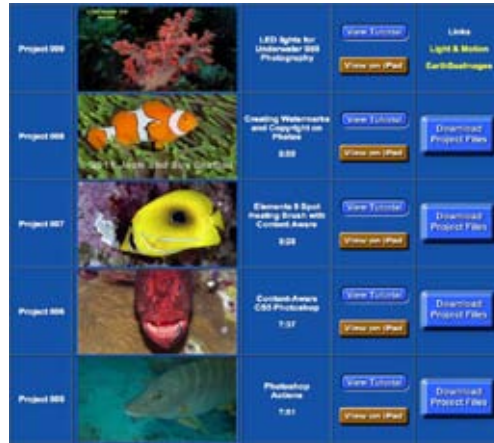
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to follow along and try your hand at making the same corrections.

[www.uwphototutorials.com/freetutorials.html](http://www.uwphototutorials.com/freetutorials.html)



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never equaled”

# Olympus TG-1 & PT-053 Housing

by Rob Spray

If you're a lifestyle kinda dude/dudette you may have heard of the Olympus Tough range. If you're always living life to the extreme and hanging ten you might well have one or perhaps one of the many rugged, flat little cameras that their success kicked off. They were all well and good and as robust as these flat cameras usually were, photographic capability sometimes took a back seat. That situation has had some relief airlifted in... enter the lens fetish camera for masochists!

I have a great life and it got better recently when I was asked out to Gozo to test some cameras. This was a chance to eye Olympus' underwater range and rates as the kind of invitation that has a 'yes, please' floating in the air beside ready to use immediately. Of course there were big cameras and medium cameras but in true three bears style there was also a baby camera. The baby of this party was the new Tough TG-1. Lined up beside the big boys it may not have shouted "I'm really going to surprise you" but it was a unanimous hit with those who tried it.

In the last couple of years we have seen the (very welcome) return of creative compacts with decent lenses. After the pixel wars ended photographers proved their good taste by snapping up enthusiast compacts with bright glass. It's obvious that letting more light in is a good thing and the TG-1 rewrites the class rules by adopting this mantra.

The TG-1 has an f2.0-4.9 lens, nearly 4 times brighter than almost every other rugged camera

(I think the recently superseded Canon D10 is the only rival which is honourably close at f2.8). It's not as bright as the current lens fetish king (the XZ-1) but it is as bright as something quite serious like a Canon S100 and although it is 20mm shorter in reach than the S100 it stays brighter through the range it does cover. It has an interesting 25-100mm (equivalent = 82 – 24°) 4x zoom range too.

On a compact with a small sensor even f2.0 doesn't give you much subject isolation, the big advantage is that the camera has way more light to play with for focus and image capture. The auto focus system is branded FAST (Frequency Acceleration Sensor Technology) just like the latest Pen range. That initially sounds over ambitious but it really is a very fast little camera... on a par with the XZ-1 and kicking other high end rivals into touch without much effort. It's great for grabbing impromptu snaps in social situations or subtle street shooting.

Another surprise was stellar battery life – on a diving day I managed 380 shots! It's fair to mention however that shot life was achieved before all the bells and whistles were powered up. There are some good ones – including a tracking GPS and a 3D compass – but they consume power and that eats into shooting time. You can power down the features you don't need but if you don't the 3.6 V 1270mAh battery will top out at a more modest 220ish pictures. The down side of a hefty battery is long (2-3 hour) recharge times via the camera's USB port – a USB power supply is included in



*The Olympus TG-1 - not wafer thin but easily pocketable*



*Me, by a diver trying a camera for the first time, excuse the flash scatter, but not bad eh?*

case you travel back to the 1980's. I'd buy another battery so a weekend of shooting could be self sufficient but if you are normal this could last you much longer.

The GPS acquires lock faster than previous

models and can log your track as you travel with your family surfing, skiing, zorbing and flower arranging. Position is recorded to one second of precision (1/3600th of a degree) which is about 30m. Of course the included software will let you playback your adventures but the data is also easily accessible in plenty of other ways. Pictures are tagged with position information whenever the GPS is on and can be viewed in common software such as Picasa, the optional tracks are stored as .log files which Google Earth can open.

The 3D compass looks wonderful, and would be even more useful if it displayed a heading, the display is fast and clear. Last year's TG-810 had to be held vertically to check direction but the TG-1 works in all planes so you can look at the screen however you want (that's the 3D bit).

The 'manometer' measures pressure, so it can assess altitude in air and depth in water. On aircraft you can see how mean the cabin pressure is, and coming back from Gozo I was lucky enough to sit next to an aircraft engineer who helped by confirming that Easyjet were operating within safe limits! Phew!

For those who doubt they'd cope with the fairly tiny buttons in ski gloves the TG-1 offers 'Tap control' which can mimic the 4-way cursor

pad quite intuitively – you can even dig around in the menus if you insist. Rapping the outer faces of the camera is pretty unambiguous and there's no fiddly touch screen type shenanigans. I felt it worked better than the system on the TG-810 I tried last year.

## Plumbing the depths

The spec headline for me (and probably most people) is the 12m depth rating... whether you exploit it or just impress your chums this rating is amazing for an unhoused camera. I've tested cameras way, way beyond these limits and believe it or not the quoted figures are quite safe. As with all underwater cameras you need to make sure the door seals are clean for those ratings to last. To go deeper there is a 45m housing – the PT-053 – which can protect against other nasties as well as covering you for more sea water than 99.9% of amateur divers will ever need. If nothing else it means you can wash salt, soup, sand and sundry splashes off after a busy day at the beach (or clown school).

The housing has a 52mm thread for filters or lenses but the camera itself can also host a filter thread adapter which replaces the lens surround to provide a 40.5mm mount. If it just allowed creative filters this would still be noteworthy for a point and shoot but there are matching tele



*A very, very tough little housing*

and wide lenses to follow too! Even more remarkably these are safe to the same 12m depth as the unhoused camera. It's a pretty, thoroughly, tough package. The body is sleek but not small, around the same size as the XZ-1 sans lens, well placed rubber patches and a front grip make a secure hold simple.

Video is now 1080P, recorded in Blu-ray format which is simple to play if you have upgraded your home cinema kit from standard definition but needs a meaty computer to edit. I didn't spend long looking at this aspect but the results look good. The 25mm wide end still leaves you a decent field of view after the frame is cropped to a stabilised 16:9 HD aspect ratio.

This is a premium bit of gear so the rear screen is a 3"OLED rather than LCD and looks as good as they always do. Life always looks pretty vibrant on these displays but the TG-1



*Controls couldn't really be clearer*



*Hi Ho Hi Ho, it's off to work we go! 25mm wide gives you enough for a scene*

makes a good fist of mixed lighting and coping with drastic dynamic range which the display shows off very nicely.

For anyone getting serious about creative light (including underwater) another treat is waiting in the menus. The flash, as well as being self sufficient, can also send simple trigger pulses or operate Olympus' own remote flash protocol. It's like having an invisible hotshoe and makes it very much more versatile.

Macro performance is excellent too. It can focus down to 10cm at all focal lengths, making full zoom macro a very useful tool along with great flash control. Super macro will focus within 1cm at around \_ zoom but prohibits firing the flash so is primarily an outdoor option.

## Is it any good?

Olympus have been suggesting in their press that the TG-1 is SLR quality in a tough package. To be diplomatic that is over egging the pudding. The TG-1 may have a bright lens and a backlit sensor but it's the typical chip size for a compact so you simply can't expect miracles. In fact noise performance is on a par with its peers but the lens means it can usually be 2 stops better off – holding faster shutter and lower ISO. It uses its exotic lens and image stabiliser to offset the need for higher ISOs so shooting without flash is viable in some very dingy situations and where there is marginal light it does well.

Looking close up at the images I saw a step in processing at ISO200, at 200 and below the images are really excellent, looking clean and lightly processed, good enough to publish. I could easily see things which were invisible to the human eye like pollen, pores on fish and eyes on sea slugs. Above ISO200 noise filters start to reduce pixel detail but the road isn't steeply downhill from there and higher ISOs maybe softer but the noise and processing are kept pleasant and optimised for print. Images are usable to ISO1600+ because the noise is fine and well managed.

Flat cameras have been with us for a while and Oly's own are some of the toughest. These flat jobs are simple(r) to waterproof and the line has quite a name for itself – Tough. The TG-1 has a naked depth rating of 12m, and a housing for full-on diving to 45m. This means leaks are less stress, snorkelling is on the cards and as a deck camera you can't phase it. As well as water it doesn't fret about freezing, drops or shock and can even support sizeable backsides (100kg!) if they settle on it.

This sleek, little, metal slab is aimed at point and shooters but loaded with good things. There are millions of modes and three of those are underwater ones. Of course you can take the tiller and in Program mode you can drive all the good stuff



*Macro at full zoom. Brings you down to an area about 30mm across. Nice Cratena peregrina*

bar shutter speed and aperture. In practice, likely buyers will find that plenty of scope but there are more bonuses tucked away. I particularly like that choosing one mode doesn't lock out other useful controls – you can be in sports mode and select macro or underwater mode and set custom white balance. If you spend time configuring killer set ups you can store two of them as custom modes for rapid recall.

Uniquely, you can run Olympus's UFL-2 strobe in full remote TTL, as well as simple copy-TTL like



*Shoaling fish around Comino Caves, Malta*

other baby compacts. It's like it has wired control in RC mode without any additional risk of water ingress – that's really grown up. You can also just fire slave trigger pulses. The housing even comes with a neat clip on fibre port which masks the internal flash. The threaded port allows wet lenses to be added without any expensive adapters. As a further bonus underneath the housing there's a three hole mount for a strobe tray – hallelujah! Having to crank a single fixing super tight to stop a camera twisting becomes a thing of the past.



*It's the f2.0 that sets the TG-1 apart on paper*

*A painted comber, full zoom of a fidgety fish – not normally compact fodder*

The TG-1 is a bullseye on its target market. If there is any frustration for me it is that it is aimed at the outdoor fraternity and stops just short of being an enthusiast camera. Nerds like me always want more manual control which is rarely needed when the automated modes are done well. It has stayed focussed on the real market which is for a better roughneck point and shoot and pulls it off with aplomb. Just maybe they'd add an M to the dial for a Pro version for me (drifts off into geeky day dreams!)

The lens is head and shoulders above any competitor which gives it a huge advantage but, for me, the clincher is its AF and operation speed. It is probably the fastest compact I have used.

For starter divers it can knock out good shots straight from the box but it won't frustrate them as they get

more ambitious. The combination of the fast camera, slick well thought out housing and expansion potential make it a great option without annoying limits. On top of all that it won't disgrace itself as a surface camera between extreme sports holidays.

The polish on the icing on the cake is that it looks great. Last years lumpy looks for the range have gone and no one would remark that you must be taking a break from wrestling barracuda if you whip it out at a royal garden party. It isn't particularly small or light but it is easily pocketable and that pocket can go pretty much anywhere.

**Rob Spray**

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**HERE**

# SAGA 67mm Flip Lens Holder

by Phil Rudin

SAGA Diving Technology is a Spanish manufacturing company located in Barcelona. They produce a wide variety of underwater photography products from strobe arms and trays to the completely unique fiber optic ring flash which always draws stares and a “what is that thing” from the DEMA show crowd each year.

There are several product like the cell phone and I-Pad that until you have one you never realize how you were able to get along without it. The SAGA 67mm Flip Lens Holder is one of those types of products. I have been using 67mm threaded closeup lenses for many years now and I have always had them mounted onto a threaded caddy or stuck into a BCD pocket when not in use. Once I found a subject tiny enough to need magnification beyond the range of my 1:1 macro lens I would fumbled to attach the closeup lens to my threaded macro port often losing sight of my subject in the process. With the SAGA flip holder I acquire focus on a subject, flip the closeup lens into place and then reduce distance to regain focus all without taking my eye away from the viewfinder.

This greatly improves my ability to gain quick focus with the lens and is much less disruptive to the subject you are trying to photograph. The SAGA flip holder is a well crafted tool made from anodized aluminum with a total diameter of 85mm and a total length overall of 110mm when in the closed position. When a closeup lens is in use it is locked into place by a ball bearing and spring housed in the movable joint attaching the two halves of the lens holder. When the lens is flipped out of the way it locks again when opened 180 degrees. A 67mm mounting ring secures the lens holder to the threaded macro port. The lens holder can be secured in any position around the port. So it can flip to the top, sides, bottom or anywhere in between. Once you position the lens holder on the port two metal pins are used to tighten the mounting ring securely to the macro port. A counterclockwise turn will loosen

*Hermit Crab, Panasonic 45mm Macro, ISO-200, F/20, 1/60th, SubSee +10 Closeup Lens*





*Jawfish, Panasonic 45mm Macro, ISO-200, F/16, 1/250th, SubSee +10 Closeup Lens*



the mounting ring at the end of your dive so that the flip lens holder can be removed for proper cleaning in fresh water.

The single flip lens holder is available on the [sagadive.com](http://sagadive.com) site for 150,00€ and in the US for around \$198.00. A dual flip lens holder for two powers of closeup lenses is 250,00€ and \$300.00 in the US.

**Phil Rudin**

## Two Worlds One Camera

**New SeaLife DC1400 HD**  
An easy way to capture amazing underwater images, the DC1400 features Super Macro Auto Focus down to one inch, and colorful HD video.

"Piano Keys" instead of buttons, stunning HD video and a depth rating of 200 feet.

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**ACQUAPAZZA**

**ACQUAPAZZA APSG-DP2x, DP1x**  
<http://acquapazza.jp/>

# King of the compacts or SLR Killer?

## Olympus PT-EP08 Housing and OM-D E-M5

If you've wondered whether the latest, greatest mirrorless heavyweight will change your life underwater Alex Mustard has done a bang up, pro review of the kind I could only dream of writing... ISO sequences in dark tunnels! \_ second macro shots of fish! It's a technical appraisal with knobs on, perhaps aimed at SLR folk. However if you're a compact zealot maybe you fancy a rundown from your point of view?

I'm quite quixotic, swapping between compact, mirrorless and SLR kit so I appreciate cameras of any persuasion. SLRs don't cure all ills, and ever since my first SLR I've known there are pros and cons on both sides. I prefer a viewfinder for macro, quite like a screen for wide angle and enjoy that compacts don't need the lashings of light that SLRs do close up. The holy grail (for me) is a camera which can slug it out on quality with the best and still travel in hand baggage.

So for a compact owner, or maybe a Pen upgrader, what can the step up to the OM-D E-M5 do for

you? Well, like my old E-330 it can do all its stuff through the finder of your choice so you can mix and match the way you shoot – you don't have to give up either option. That's certainly true on land and the first thing I looked for on the housing was the kind of optical eyepiece that would serve the EVF... and I struck out. The EVF gets a flat window in the case with a little hood – it doesn't let you get a full view and so divers are effectively limited to the rear screen. There, I said it, and that's the biggest let down so lets move on and not dwell on that missed opportunity...

Luckily that screen is an awesome looking OLED unit, not record breaking res but sharp with great looking colour. You can't tilt it in the housing - that would need more space – but the viewing angle is excellent. It's a 16:9 unit so you give up some of the edges for native 4:3 stills but video fits the 3" area like a glove. For what it's worth the EVF is 4:3 so the trade off is vice versa up top. It's LCD and looks good down the shaded EVF, on land.



As someone who came up from the ranks I know that you can shoot great macro with a rear screen – it needs practice. I found the Pens easier in this regard and wonder whether the larger EP08 obscures more of the scene and makes it tougher for a returnee like me to spatially position the camera for small subjects.

When I first held the EP08 I had the feeling of compact controls on an SLR housing. The dials and buttons are small and seemed a little mean on a fair sized housing. Actually they are pretty much the same as those from the Pen housings. When I compared them with previous



Olympus SLR cases I saw where the tactile disappointment stemmed from, the bigger heads and thicker stems on my E-620 housing are smooth and comfortable. They spare me needing the same precision I'd expect to use on a smaller housing and dials for primary controls are operable with finger tips, they don't need to be held between a finger and thumb. There are plenty of worse user experiences on offer for a great deal more money but the full pleasure of handling PT housings is missing here. My case was a prototype and another of my enquiries to Mount Olympus was if this was the final fit and finish, as most of my reservations could be answered with a mild change of mouldings. As I haven't heard back I'd guess it was deemed ready to go as is.

Video is a strong suit and one where more and more of us expect to shoot via a screen not a finder – so the EP08 gets let off there too. Top mode is 1080P H.264, with compression this heavy considered, settled shooting pays dividends and this IS is a real bit saver too. The video is wrapped as .mov (Quicktime) files which are less awkward than the Blu-ray structure often used. The lower resolution 720P motion JPEG .avi option is more resistant to compression artefacts if you can't hold still. All modes are 30 fps, where the spec says 60 it

really means segmented 30 – which is just a different presentation of the same thing. Mixing frame rates is easy these days but I've pointed out to Oly HQ (often) that offering 24 or 25 is a quality issue – less frames means more bits available for each one. The EM-5 is limited to 20Mbit/s so who wouldn't want more capacity? Hopefully the OM-D is attractive enough as a video platform to encourage the kind of firmware hacking which has made the Panasonic GH series such a force.

The Pens are barely bigger than some large compacts but this isn't so modest. It's nearly as small as the PT-E03 was for the E410, very small for an SLR, but not tiny per se. The reason it isn't super svelte is the new port system. The mount is fresh to Olympus and appears to be their version of the Sea and Sea RDX port. It's a two lugged system with a large, red ring that locks the bayonet of the port in place. I can see this pleasing and annoying people in equal measure. As it's all polycarbonate it'll be tough and it's certainly faster than the old PT threaded ports but it can't possibly be as strong.

The RDX port seems to be designed with adaptation uppermost in the creator's mind as there aren't many native ports but several inserts which convert it to other formats in almost zero space. Olympus included



*Couldn't be clearer*

an adapter to PT thread with the housing, Sea and Sea have adapters to NX and CX ports – so there's prospect of more. The one most people have asked about, as the OM-D is seen as a logical step up for Pen users, is to the bayonet the E-PLx series housings have used. If Olympus keep up their insistence that those ports cannot be changed we may never see an official item but people like Zen may well decide it would be a cost effective way to carry their ports over. The zoom gear drive is, quite cleverly, aligned with the same size rings, teeth and body position as the Pens so it's



*A single cam lock secures the case without removing finger nails*

not rocket science. Olympus suggest using PT ports with the full size 8mm fisheye and 50mm macro lenses – the EM-5 cannot focus those at full speed so the micro lenses are to be preferred if they cover your range.

One lens which will provide a challenge to port and zoom ring makers is the enigmatic 12-50mm kit zoom often bundled with the E-M5. Unimpressive on paper but notably versatile, underwater it presents a lot of flexibility in a package that is simple to house but tough to operate. That's because the modes are swapped by shifting the zoom ring back and

forth (not round and round) and to reach the macro setting you have to simultaneously press a button. It's not impossible, my thought is that using the mid position (power zoom) the extremes of the zoom movement could be used to nudge the ring forward or back against a fixed cam. As the button can be held down permanently without problem it doesn't present an obstacle.

So far I've just made a simple zoom ring so I could exploit the lens in 'standard' zoom modes and I have to shift it into macro manually pre-dive. The results are impressive for what has become a puzzling lens for landlubbers. The lens is just a bit wider than a typical kit lens – it starts at 12mm (24mm equivalent) and stretches further than most to 50mm (100mm equivalent). Although it reaches portrait lengths the maximum aperture is a dusky f6.3 out there. The lens zooms and focusses internally so there is no physical change of length at all. Focus is very fast and nigh on silent. When clicked into macro mode it motors to 43mm (and reduces the maximum focus distance to 20cm from the sensor) the max aperture is f6.0 in this mode which is hardly a problem while shooting and since even the feeblest focus light has it snap into lock not too big a deal for composition either.

I first tried the OM-D in Gozo



*The dials are small and can't be rolled with a single finger*

while acting as tech support for a review trip. My time with it was limited – even more so as we were ironing out strobe battery issues during the pre-event dives when I had it. But I've been able to exercise it for longer since and now dived with it back in the UK. That has provided an extra perspective on it as a companion for regular dives. Use under a bit of duress gave it a chance to shine. The low profile controls and light weight make it simple to carry and stow, not an egg fragile, lead heavy burden. One vulnerability is to fine sand which can creep in around the buttons and take ages to evict.

AF performance is SLR fast and makes a mockery of most other mirrorless attempts. You can argue the toss about whether it's in a top 10 but since it works from the sensor image rather than phase detectors



*Pete Bullen – who organised all the hard parts of the review trip – in the Xlendi tunnel*

it is definitely different. I'd suggest that it doesn't offer/suffer from the limited/precise scope of SLR AF and that can be a strength and weakness. Its pattern driven focus tracking can lock on whatever was at your chosen focus and chase it around the screen – haven't exercised that underwater yet! There's potential there for it to do great things but I've yet to try to pick a single fish out of a shoal. I think the water would need to be very clear and my reflexes superhuman!

Only dives will tell how all the configurations work out but



*Cerianthas lloydii burrowing anemone – Falmouth*

I was mightily impressed by the combination of the 12-50mm in macro mode and an Inon 165 - the fastest macro setup I've tried. When the 60mm lens arrives it will be quite an interesting comparison.

The E-M5 (as Alex noted) makes a step up in low light performance and dynamic range. Rumours still abound about the source of the sensor but whether it's the best Panasonic can do or really is from Sony the results are up there with some of the best. That means it's much less vulnerable to focus paralysis up the dark end of a

modest lens than small sensor compacts (and a lot of SLRs). That's obviously a bonus when you are shooting video under ambient light too – when to a certain extent any video camera is doing its own thing.

To neatly reduce the height of the housing, just a smidgeon, the EM-5 allows its clip-on pop-up flash to fire in the down position – once its underwater modes are enabled. There's no need to use those modes, you just need to assign them to one of the many reprogrammable buttons. It doesn't have to be applied to the prime real estate of Fn1 so I put the rather handy 2x teleconverter mode there - for video the sensor has res to spare so it aids shooting small subjects. I set the magnify function which reduces the size of the focus to the Fn2 button on top. In fact the Fn2 can be set to offer numerous functions but accessing that choice needs three hands once housed - fortunately it remembers the last one used.

The housing has two L-type fibre ports so there's no shock that strobe control is optical. The 5 pin Olympus bulkhead is history, I don't suppose it'll be mourned by anyone but me. Olympus would love you to use their UFL-2 which offers the multi-channel RC protocol with real optical TTL - my choice for macro. It works so simply it would be a boon for many strobe struck divers. At present you're limited to 1/160th second shutter which is really odd since the normal x-sync speed is 1/250th. I suspect it may be an oversight in a corner of the firmware and have an enquiry in to Olympus HQ to see if they have noticed too. However, it's an acquired taste which the majority of people will never sample as keeping a brand specific strobe in stock has little retail appeal (the slow recharge when used at full power doesn't help). So for the masses



*I had a pre-production PT-EP08 to play with*

it's just as well that the EM-5 will happily drive all the usual suspects in TTL or manual modes.

Olympus use a pre-flash for their TTL lighting, which works in all modes, manual included - of course. Manual slave triggering is present too with fractional powers available for low power triggering or overriding simple slave 'TTL' strobes.

Battery life isn't stellar... which I reckon is due to the very impressive image stabilisation. You can hear it as soon as the camera powers on although it doesn't respond to image movement until you choose. It floats the sensor centrally within the mechanism ready to go at a moments notice. The stabilisation it provides is excellent, very effective for stills and uncannily good for video too. It seems to be well judged as it smooths jitters, shakes and wobbles but doesn't fight gentle panning. To give it a real workout I tried shooting oncoming traffic from a moving car along country roads and even that was fairly successful.

The EM-5 is an heroic piece of kit but the



*Lesser spotted catshark (nee Dogfish) – kit lens*

EP08 housing doesn't match the finesse of the camera. With Nauticam producing a more spiffy choice that's more an indication of its market position than a criticism. If you are a compact shooter looking for an upgrade the EM-5 is a very convincing proposition. The Olympus housing really doesn't showcase it as an SLR rival, more as a Super Pen. As such any Pen user could pick it up in seconds (well I did) and if you're migrating from other cameras it has the same choice of user interfaces (simple, normal and uber thorough) as the Pens so there is no need to fear the full menus - which do offer immense flexibility. The Micro 4/3 market is head and shoulders more mature and complete than the other mirrorless formats. The EM-5 is, at present the pinnacle of the format and has closed the gap between SLR and mirrorless to create a large sensor continuum.

As the high guru of our sect (the wise Alex M) has said there is a core of capability here which is on a par with SLRs and there's no excuses or



*Black faced goby – Panasonic 45mm macro*

explanation needed for why you make this choice. The PT-EP08 is an enabling housing, not the class leading offering which I'd hoped. The absence of a real port for the EVF is a shame but perhaps not a fatal mistake for those who retain their rear screen coordination from shooting with compacts. Also not such a downside for many video shooters. It may be that the EP08 is the housing for the compact user trading up and the Nauticam becomes the option for the SLR user breaking free of bulk. A complementary and amicable split of the business I hope :-)

**Rob Spray**  
[www.1townhouses.co.uk](http://www.1townhouses.co.uk)

### **Acknowledgements**

*Of course I need to thank Olympus for the chance to try the EM-5 and PT-EP08 but lots of Kudos goes to Pete Bullen (OceanFoto) and Mark Cassar (Moby Dives) out in Gozo for their sterling efforts in setting up a great evaluation event. It wouldn't have been the same without a great cast of buddies and I hope Nige, Mario, Alex, Ele and Bea would have me back too.*



**THE  
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# The Nikonos Conversion System

by Andrej Belic

This is the story of how a decade long underwater photographer's dream came true.

The first personal encounter I had with a Nikonos RS was in 2002 at one of Kurt Amsler's famous workshops. Before I've only read about it and considered it an overpriced Nikon F70. Kurt back then was sponsored by Nikon and Subal. He had a Subal Procace for the Nikon F5 as well as a Nikonos RS system consisting of camera, lenses and strobes. Once I asked him which system he preferred since I was a big fan of housed cameras (I was using a Seacam Nikon F100), he smiled at me and pointed to the RS. I argued: "This is an outdated F70 in a housing selling for way more than Seacam, Subal, etc..." Again he smiled and answered: "You don't care about the optics and this is what it's all about."

Ok, during the next days I got the chance to compare. I had a Nikkor 17-35/2.8 which was the best wide-angle zoom 10 years ago. I also had a coated 24 cm dome with an exactly matched extension ring sitting in front of my housed Nikon F100. This has cost me a small fortune and I was very proud of it since it took me a lot of mind work to get everything as perfect as possible. Kurt has also taught me how to place focus points away from the center in order to maximize corner sharpness. Actually in 2002 this was by far the best setup available to the enduser. At least I thought so until I compared a film slide shot with the Nikonos RS. Now my pictures looked dull, lacking contrast, losing sharpness and when you looked into the

corners you only saw some mug. Happily this saddening event was only for a holiday week because still my setup was the best of any housed camera.

With the digital revolution that came in 2004 the Nikonos RS was forgotten. Some aficionados were cheering about the optics but most photographers were just happy with the advantages that digital photography brought to them. At the beginning I was quite skeptical about digital SLRs since for wideangle it featured more problems than benefits: pictures lacking contrast and lack of availability of good wideangle lenses in DX format. In 2007/2008 the Nikon D3 came out and a lot of things changed. I also had to switch my uw-housing supplier. However this change also provided me with some new domeports. The first one was a huge 10" monster that had its' caveats but was quite sharp with the Nikkor 16mm fisheye lens, the other being an inside/outside coated strongly curved 9" dome delivering good results behind a very good lens. This very good lens was the Sigma 8-16 rectilinear DX lens. On a D7000 it produced remarkable results at f11.

In early 2012 it seemed that a new era in digital photography was about to emerge. DX format was already better performing than FX in many terms and many pros asked why they should waste their money again on new lenses and camera bodies and housings after they had spent so much time to get the DX system work as it should. I was one of them. Ok, there was a D800 with more pixels



*The Nikonos RS Fisheye lens on a black Subal ND3s housing*

but I seldom made large prints. The DX format gave me way more depth of field which improved macro and wideangle and was way more forgiving to errors. The lenses for macro were the same but gave me an increased magnification (of course the opposite is true, the sensor gets smaller, not the fish bigger). A lens like the Sigma 8-16 performed equal to a double-priced Nikkor 14-24 and giving more

depth of field (again this is not true: the sensor gets smaller, not the depth of field bigger). But still in practical terms the DX format had many advantages. So the 'full frame' FX format in order to get attractive needed some new lenses.

In my search for new lenses I soon started to ask myself why nobody has ever tried to put a Nikonos RS lens on a Nikon camera. In March 2012 I tried it and from that moment on I was sold.

The Nikonos RS lens bayonet is the same as the one for Nikon so a Nikonos lens fits on a Nikon camera. Actually a few people have ever tried this, even those that own lenses and Nikon cameras! Now I knew that I could do this even if it meant to stick broken matches inside the lens to block the aperture and prefocus on land with a screwdriver. However after a few months of investigating and hearing various opinions from various engineers mostly on why this is not possible I started to develop the system that is behind the electronic modification to make a Nikonos lens work a Nikon camera. This idea I have posted on such acclaimed websites as [www.wetpixel.com](http://www.wetpixel.com) or the pdf edition of [www.uwpmag.com](http://www.uwpmag.com).

A lot of great people have contacted me after this news and expressed their interest in my



invention. Most of them used different housing brands: Nauticam, Subal, Seacam, Sea & Sea, etc.

This was the second part of my investigation and this one took me a lot of work. The Aluminum engineers were more cooperative than the ones from Nikon but still it represented an even greater challenge for someone like me. After weeks of intensive work and sweat we were able to produce the first Nikonos waterproof adapters for housings from Subal and Nauticam. Here we were confronted with the differences of each housing manufacturer. For example the Nauticam with its' large mount and the easy to use locking mechanism proved most suitable for future applications like the adaptation of Nikonos lenses. The Subal with its' smaller mount worked without having to remove any parts of the housing. The Seacam proved most problematic.



Here certainly some parts have to be removed.

We did some testing in Croatia. I was at 60m with a customized Subal ND3s and it was waterproof with the 13 mm RS lens. The pictures were remarkable especially regarding corner sharpness. The small dome of the Nikonos could easily surpass by sharpness with large 9" domes at larger apertures but still offering depth of field characteristics of small domes at smaller f-stops – and that with full FX frame. A dream came true. We had some issues with AF at depth however we now know where the problem lies and by mid September the serial production of the Nikonos Conversion System can begin. It will include the 13 mm RS Fisheye and the 28 mm for Seacam, Subal and Sea & Sea mounts. The Nauticam can additionally house the 50 mm macro lens. Feel free to gather information on my work at my newly launched website: [www.abelic.net/wp](http://www.abelic.net/wp) or to ask any questions at [andrej@abelic.net](mailto:andrej@abelic.net)

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# Olympus Nauticam NA-EM5 housing

by Phil Rudin

The Nauticam NA-EM5 housing is the eleventh in the industry leading line of mirrorless camera housing from the Hong Kong based manufacturing company.

I think the NA-EM5 is another excellent fusion of advanced engineering, innovation, pleasing style, ergonomics and compactness. Nauticam's patented port locking system has been designed into the left side of the housing complete with a Nikonos V retro style push and twist lock/release. Above the port lock is the zoom/focus wheel which is easily reached with the left thumb while holding the left grip. The mode dial is also accessed with ease using the left thumb.

The locking clasp for this clam-shell style housing is a push button rotary buckle incorporated into the ergonomic right-hand grip complete with mounting points for an adjustable wrist support strap. The wrist strap is a must during long dives or multiple diving days. When using the right-hand grip all of the controls are within easy reach of the right thumb and index finger. The right thumb rests just

below the F/stop dial and the index finger aligns with the shutter release and is just in front of the shutter speed dial. These dials and several of the buttons are user programable so you may change the arrangement if you like.

The top of the housing has a cold shoe and threads for a standard mounting ball for modeling lights, video lights and other accessories.

The rear of the housing has an antireflective, scratch resistant LCD window, controls for all push buttons, a switch to move between the LCD and EVF, an alarm window which flashes red if moisture is detected along with the addable alarm and on the lower right the is the on/off switch. Nauticam has moved the Main housing O-ring to the rear door which makes it very easy to clean and service.

To the right of the F/stop dial is a spring loaded push lever to turn video on and off. This is one of the only housing I have used where I did not accidentally trigger the video function.

The Fn1 button on the rear of my



*Nauticam NA-EM5 housing with the 7-14 dome port*



*Comparing in size and by inference weight from left to right the compact Olympus XZ-1, the NA-EM5 and the SLR Canon 7D housing*

housing is set up to activate auto focus, a number of other functions can also be assigned as well. I have the Fn2 button on the top of the housing to the right rear of the shutter speed dial programmed to control the ISO setting rather than having ISO assigned to a command wheel. Inside the housing is a tray which mounts to the camera via a tripod screw, the tray then slides neatly into the housing. The tray has no built-in locking device so caution should be used when opening the housing to prevent the camera from falling out. The camera shoulder strap mounting triangles can also get in the way when sliding the camera into the housing so be sure that they are turned up. I have also removed the rubber eye piece cup from the EVF to avoid having it pushing against the LCD window when closing the housing.

The front of the mounting tray has a lens release lever built in so that you can remove the front port and mount a different lens without having to remove the camera from the housing. The battery and SD card can also be removed from the camera without taking the camera off of the tray.

The E-M5 body has no in-body popup flash and comes with a small hot shoe mounted flip-up flash included which can trigger all strobes supporting fiber optics. A “wedge” has been mounted to the inside front half of the housing which will pop the flash up if you forget when installing the camera. This has been a real buzz kill for me on several occasions when I gotten to thirty or forty meters and realized I forgot to deploy the popup flash. If you prefer to use hard wired strobes a Nauticam single Nikonos 5-pin or single S6 bulkhead can be installed on the right top of the housing. Nauticam also offers an HDMI bulkhead for accessories like the Nauticam NA-DP4 housing



*Panasonic 7-14mm, at 7mm ISO-400, F/5, 1/250th, Cooper's Reef, Dry Tortugas Florida USA*

for an HD DP4 4.3” monitor for video use.

The rear door of the housing leaves room for the large 3” OLED LCD touch screen to be angled up about fifteen degrees. During my field tests I found this angled LCD viewing position was much more comfortable compared to a flat screen for shooting in both portrait and landscape. The housing has a depth rating of 100 meters (328ft.) well beyond the limits of recreational divers.

My housing was equipped with the optional flexitray with dual grips which I used for much of my field testing. The tray handles are laterally adjustable to allow for greatest comfort with or without gloves and for hands of all sizes. The grips are also threaded on top for attaching a verity of strobe arm mounting balls. Two optical flash connectors for the Sea & Sea type fiber cords are located above the port opening and provided



reliable automatic flash exposure while I was using the Inon Z-240 and S&S YS-D1 strobes.

Like the Nauticam NA-NEX-7 housing the NA-EM5 housing has been designed to take full advantage of the electronic viewfinder (EVF) and a standard EVF pickup viewfinder is included with the housing. The EVF finder worked well and allowed a full view of the information on the EVF screen much like a quality DSLR optical finder would. An accessory LCD window is being released which can be user installed and accepts the excellent Nauticam 45 and 180 degree accessory optical viewfinders. This will be my choice when using the EVF because it allows a much larger 1:1 view into the viewfinder.

Nauticam also has a range of seven acrylic dome ports to cover most of the lenses I listed above.

Some of the flat ports include the 67mm thread for accessory closeup lenses. Nauticam is also developing a port for the Olympus 12-50mm zoom which will allow the lens to zoom over the entire range and be switched into the macro mode. A new port for the Olympus 60mm macro lens with access to the focus limiting switch is also being considered for the system. All use the excellent port locking system that Nauticam is well known for and all ports are interchangeable between the current eleven and future mirrorless camera housings.

If you are a longtime user of DSLR systems the first thing you will appreciate about the NA-EM5 housing is how compact and easy it is to move around with both in and out of the water. Like all of the compact aluminum housing it is somewhat negative with both the 45mm macro port and the larger six inch port for the



*Spotted Moray Eel, Panasonic 45mm Macro, ISO-200, F/11, 1/250th*

Panasonic 7-14mm wide angle lens. I have been using Inon float arms to offset the negative weight and have had no issues with fatigue in my right wrist holding the housing for extended periods of time.

When I use the E-M5 above water I always have the vertical battery grip attached to the camera because it makes the camera much easier for me to hold and control. Even with the battery grip the size and weight of the system is less than most DSLRs. Underwater I found the

camera controls easier to use while in the housing than on land with the battery grip. This may just be because I have used the camera underwater so much more than on land but it still says a lot about the well laid out design of of the Nauticam NA-EM5 housing.

While the controls are not as well spread out as those you would find on many DSLR housings they are still quite easy to use and I found myself spending a lot more time looking into the viewfinder than at the controls.



*Panasonic 7-14mm, at 7mm, ISO-200, F/7.1, 1/250th, Avanti Wreck, Dry Tortugas Florida USA*

is a major upside when shooting macro and trying to keep a very small animal in sight from frame to frame without having to look away from the viewfinder for shooting information. While I still firmly believe that a quality optical viewfinder on a DSLR is without doubt superior in overall image sharpness the EVF still has several note worthy advantages.

The E-M5 auto focus speed was both accurate and fast in the AF-S mode with all of the lenses I used during this review. I have not fully evaluated the AF-C shooting mode on the E-M5 at this time. Most of the mirrorless cameras I have reviewed in the past have not worked all that well for me in AF-C mode either above water or below water so if fast moving subjects are your passion this should be taken into consideration. One of the things that really sets the E-M5 apart from other mirrorless cameras is its excellent resolution and dynamic range. Even at the higher ISO settings it produces image quality that rivals all but the best DSLR\_s in todays market. This is the first camera from Olympus with the in-camera 5-axis image stabilization system which when used with the high ISO image quality of the E-M5 will open an entire new range of very low light imaging possibilities both above and below water.

Of all the digital cameras I have used the E-M5/NA-EM5 combination has by far been the easiest for me to warm up to. It has features that make it an excellent choice for all but the most demanding of underwater photographers. Image quality is in a word outstanding, on par

with the very best APS-C sensor cameras and quite expectable for both large prints or full page publication. As a travel system this camera and housing will be hard to beat. I am able to fit two camera bodies, four to six lenses and gears, the Nauticam NA-EM5 housing, three ports and three or four strobes all into my carry-on bags along with extra batteries and chargers. The file sizes are quite manageable with my current laptop and storage device and the images look great in the new Lightroom 4.

If you are looking to downsize or to move up from a consumer compact without giving up DSLR quality this could be the system you have been waiting for.

**Phil Rudin**

### **Getting Help Along The Way**

*I would like to thank Nauticam-USA Sales Manager Chris Parsons for his assistance along with the fine staff at Reef Photo and Video for much needed technical support. Also the excellent crew at Spree expeditions for the help they provided during my recent trip on the M/V Spree to the Dry Tortugas where part of this review was done.*



After several years of using mirrorless cameras I still prefer looking into a viewfinder far more than composing with the LCD screen and I have come to appreciate the upsides of the EVF as a result. The instant feedback of information with the EVF viewfinders is excellent. I can review the image I have just taken in the viewfinder with or without the histogram, view shooting information, see +/- EV level changes in real time and on the histogram. I can also preview the effects that applying art filters will render and much much more all without ever removing my eye from the viewfinder. This

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# British Underwater Photography Championship 2012

by Brian Pitkin

Underwater Photography is not an Olympic event and never will be. Diving does however require skill and photography is an art. The combination presents a real challenge. Each year the British Society of Underwater Photographers (BSoUP) holds the British Underwater Photography Championship. This year the event was held as usual at Mount Batten, Plymouth, Devon on Saturday 14th July. Underwater Photographers from all over the UK were invited to participate.

On the Friday evening before the event 38 photographers registered to compete by photographing a registration sheet with a unique number and their name on the first frame of their camera's memory card. They had from midnight until 6.00pm. on Saturday to capture images underwater before selecting one image to enter in each of three main categories Marine Life, Mankind in the Sea and this year's Theme Crustaceans. They could, if they chose, also enter one image in the Humorous category. Compact camera users competing in the three main

categories were also eligible for the Best and Runner-up Compact shots.

Following an evening buffet at the Hotel Mount Batten all submitted entries were projected at the Mount Batten Centre. Judging of the three main categories was carried out by Paul Ives, Senior lecturer Marine & Natural History Photography at University College Falmouth, Mark Webster, Photo-journalist, Author and Award winning underwater photographer and Linda Pitkin, Photo-journalist, Author and Award winning underwater photographer.

Judging of the Humorous category was carried out by the audience present.

Congratulations to Tim Priest who was the Overall winner .

A couple of weeks before the event Tim lost his own camera when it was accidentally dropped during transfer from one boat to another into several hundred metres of water. Undaunted Tim bought a new camera and housing for the competition and took the winning image of a spider crab lighting his subject with a Solar torch.



*Tim Priest was the Overall winner and the winner of the Marine Life category with his shot of a spider crab.*

Tim, won a 7-day luxury liveaboard holiday for two in the Maldives (exclusive of flights and taxes) courtesy of Maldives Scuba Tours, a ScubaCool dive cylinder cover and an individual engraved glass BSoUP trophy.

Tim also won the Marine Life category with the same image and winning the new Underwater Visions Trophy, a £250 Voucher from Underwater Visions, a ScubaCool dive cylinder cover + canvas print of entry and an individual engraved glass BSoUP trophy.

As Tim had retired to bed, Gordon Brown accepted the trophies and prizes on his behalf from Paul Ives, a senior lecturer at University College Falmouth and one of the three competition judges.

The runner-up in the Marine Life category was Joss Woolf with an image of a cuttlefish.

Joss won a BSoUP photobook – Images Taken in British Waters, the book Beneath Cornish Seas by Mark Webster, ScubaCool dive cylinder cover and an individual engraved glass BSoUP trophy. She was



*Rob White was the winner of the Theme category - Crustaceans with an image of a hermit crab.*

presented with her awards by Paul Ives

Charles Erb was the winner of the Mankind in the Sea category with a self-portrait.

Charles won the Sport Diver Trophy, a £200 voucher from Sea & Sea, a ScubaCool dive cylinder cover + canvas print of entry and an individual engraved glass BSoUP Trophy.

Charles was presented with his trophies and prizes by Mark Webster

The runner-up in the Mankind in the Sea category was Dan Bolt with

an image of a John Dory and diver.

Dan won a BSoUP photobook – Images Taken in British Waters, the book Beneath Cornish Seas by Mark Webster, ScubaCool dive cylinder cover and an individual engraved glass BSoUP trophy.

Dan was presented with his trophies and prizes by Mark Webster, one of the three judges.

Rob White was the winner of the Theme category - Crustaceans with an image of a hermit crab.

Rob won the BSoUP Trophy, £150 Voucher from Subaquatic



*Charles Erb was the winner of the Mankind in the Sea category with a self-portrait.*

Art, ScubaCool dive cylinder cover + canvas print of his entry and an individual engraved glass BSoUP trophy.

Rob was presented with his trophies and prizes by Linda Pitkin, one of the three judges.

The runner-up in the Theme category was Bob Soames with an image of a spider crab.

Bob won a BSoUP photobook – Images Taken in British Waters, the book Beneath Cornish Seas by Mark Webster, ScubaCool dive cylinder cover and an individual engraved

glass BSoUP trophy.

Bob was presented with his trophies and prizes by Linda Pitkin, one of the three judges.

Martin Davies took the best Humorous image as judged by the audience present

Martin won the AP Valves Trophy, a Buddy BCD donated by AP Valves, ScubaCool dive cylinder cover + canvas print of entry and an individual engraved glass BSoUP trophy.

Martin's trophy and prizes were presented to him by new BSoUP

*The Best Compact Camera image was taken by Paula Bailey.*



Committee Member Sarah White  
The Best Compact Camera image was taken by Paula Bailey.

Paula won the new Ocean Visions Trophy, a free place on a one-day course run by Maria Munn courtesy of Maria, a copy of Maria's DIVER Award-winning book 'Underwater Photography for Compact Camera Users' by Maria Munn, ScubaCool dive cylinder cover + canvas print of entry, Ocean Visions, donated by Wiley Nautical and an individual engraved glass BSoUP trophy.

Paula's trophy and prizes were presented to her by Maria, who commented 'I don't think there is much I can teach you'.

The runner-up was Gabi Beeny with an image of a spider crab.

Gabi won a copy of Maria's DIVER Award-winning book 'Underwater Photography for Compact Camera Users' by Maria Munn, Ocean Visions, donated by Wiley Nautical and an individual engraved glass BSoUP trophy which were presented to her by Maria Munn.

BSoUP is grateful to Paul Ives, Linda Pitkin and Mark Webster for judging the competition and presenting the awards; to all or

sponsors Maldives Scuba Tours, Underwater Visions, AP Valves, Ocean Visions, Sea & Sea, ScubaCool, Sport Diver, Subaquatic Art and Wiley Nautical, without whom no prizes and trophies would have been presented; and to all BSoUP Members who worked so hard both behind the scenes in advance and on the day to make the event such a success.

Next year's event will take place on Saturday 6th July 2013 at Mount Batten. We hope to see you there.

**Brian Pitkin**

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# Scottish Basking Sharks

by Dan Bolt

'They' say that every cloud has a silver lining. And so it was for me when just a few weeks after having to cancel a Maldives liveaboard holiday due to illness, I was able to fill a cancellation-space on a trip to the Scottish island of Mull to spend a week snorkelling with basking sharks. In actual fact the cloud's lining turned out to be made of gold rather than silver because the trip in question was being attended by my friend and all round photographic genius Alex Mustard.

Not re-booking the Maldives holiday was, for me, an easy choice to make as I personally think there are greater opportunities for original and captivating images in cold water marine-systems than there are in many warm water ones. I would love to know how many 100's (or 1000's?) of photographers visit the Maldives annually compared to the 50 or so spaces available each year during the 10 weeks that the Mull based is available for.

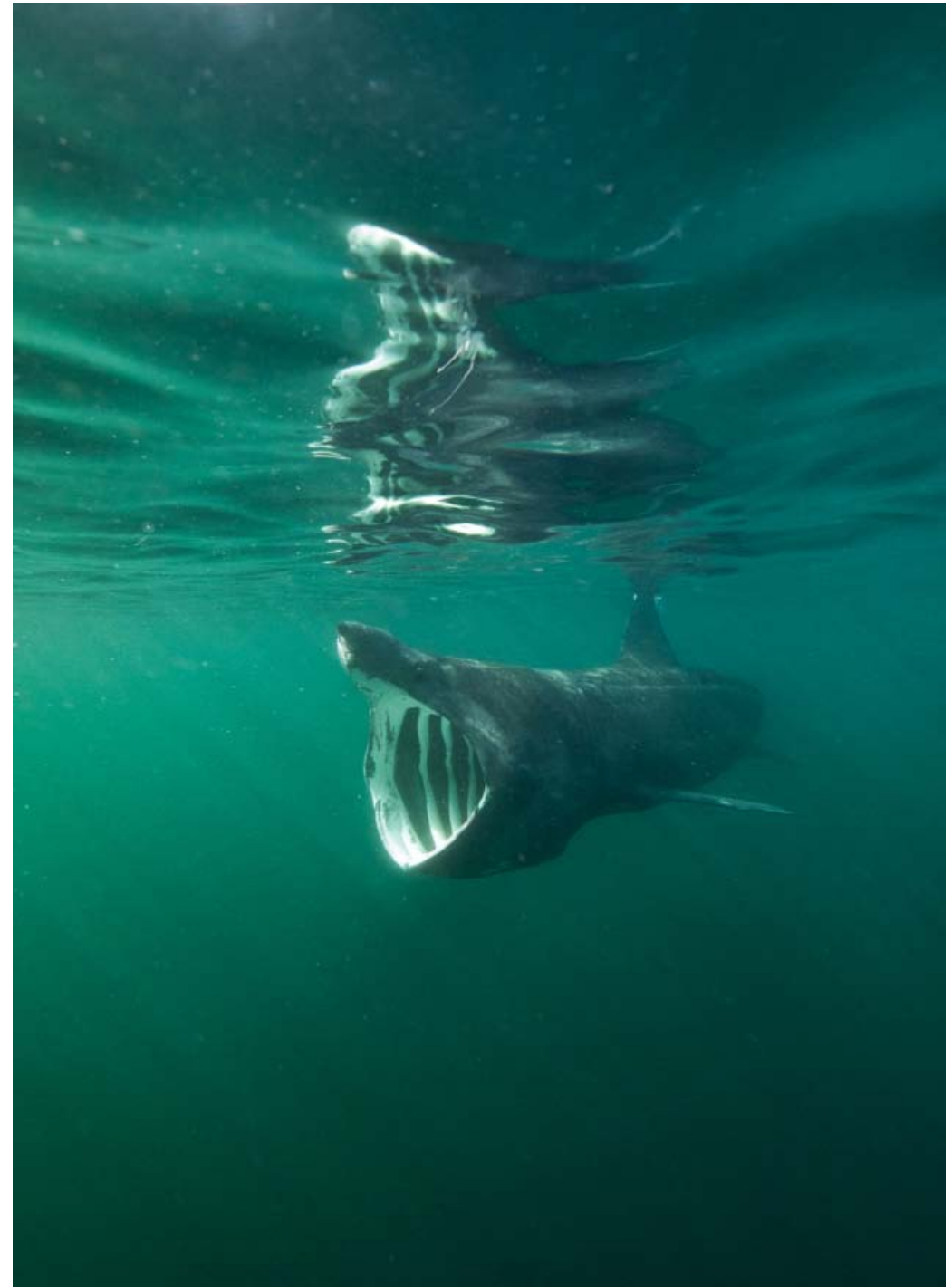
As well as Alex and his girlfriend Eleo, I was accompanied by my regular buddy Terry Griffiths and two other divers from Northern Ireland and the north of England. Making

up the numbers on the boat were the trip organiser Mark Harding, captain Jimbo and various other crew-members during the week.

Mark runs a travel firm called Acuators and had put this package together to make the most of such an amazing destination. Our accommodation was in the pretty town of Tobermory in a self-catering cottage overlooking the picturesque harbour, an easy 3min car journey to make each morning. The boat for the week was the 9m long Sula Crion which is operated by wildlife watching specialists Sea Life Surveys. When not taking snorkelers out to see basking sharks, the Sula Crion normally takes tourists on short trips to see the seals, dolphins, whales and sea-birds that frequent these cool, rich waters.

The ultimate purpose of the week was obviously to snorkel with the 2nd largest fish in the world and

*The calmest water we had all week allowed for some reflections. Olympus E-PL1, 9-18@9mm, f/7.1, 1/100th, iso400*





*Sula Crion at dusk. Fuji X-S1. f/11, 1.6sec, iso100*

only a matter of minutes until we saw that first glimpse heading at us out of the gloom and what an experience! No matter how much you tell yourself that this is a benign, filter feeding shark, it is still a shark none-the-less and a bloody big one too - so that first encounter is a heart-stopping moment when the enormous white mouth looms out of the plankton filled water heading straight towards you.

That first encounter actually turned into a frenzy of shark sightings over the next few hours with everyone on the boat getting some great passes and bagging lots of superb images. It may be useful to know that this May/June/July period was one of the wettest, and dullest, on record in the UK and it was with no small amount of glee that we greeted the sun as it made an appearance late into this first afternoon.

Getting good images of basking sharks is actually quite simple, and being in the right place at the right time (and behaving appropriately) will



*Home for the night, the Cairns of Coll. Fuji X-S1. f/5.6, 1/340th, iso200*

do the job on most occasions. Alex had briefed us about the best way to pre-set our camera so all we had to do was get into position. A shark's day consists mainly of swimming through the shallows filter-feeding with their mouths wide open, occasionally swallowing, and then feeding some more. So the difference between a good photo and a great photo is often down to the conditions you're shooting in, and to have the sun shining through relatively calm waters late in the afternoon was just about perfect to make the subject really come alive in our viewfinders.

Being so far north and just a few days off the summer solstice meant that it was light until 11 o'clock at night and we were still shooting the sharks well past 8 o'clock that evening. And because the sun had decided to stay out, we decided not to return to Mull but instead to camp on a small island amongst a group called the Cairns of Coll. A more peaceful and idyllic end to such an amazing



*A fairly big 7m shark. Olympus E-PL1, 9-18@9mm, f/9.0, 1/125th, iso400*

day we could not have asked for, with the local seal population providing a backdrop of inquisitive faces just off the beach.

The Cairns of Coll are a superb snorkelling destination in their own right, with both common and gray seals (though neither are very used to divers so there was no fin nibbling going on), sea-grass beds, nudibranchs, starfish, jellyfish and plenty of anemones too. The opportunity arose later



*The classic basker pose. Olympus E-PL1, 9-18@9mm, f/8.0, 1/100th, iso400*

in the week to swim around the granite outcrops, over the white sand and through the tall sea-weeds and we accepted willingly. Given a sunny day with good vis this spot would definitely have produced some cracking wide-angle images, but with the overcast skies that we had I was glad to have on my trusty 12-50mm (on an Olympus E-PL1) with subsea +10 dioptre for the nudibranchs and smaller critters.

Unfortunately that first afternoon and few hours of the next morning was the last we would see of the sun for the rest of the week, but happily the same was not true of the sharks. They just kept coming and coming. In all we reckon to have seen over 40 individuals that week and had multiple passes every day giving us all ample opportunity for photography, and plenty of time to just enjoy the encounters for the real privilege they were.

At this time of year the water temperature ranges between 10 and 14 degrees and we had



*Breach! Fuji X-S1. f/6.4, 1/1600th, iso200*

it relatively warm at 12 degrees. I was a little apprehensive that attempting this kind of activity in for a week in a wetsuit might have shortened the time I was able to spend in the water due to the energy sapping nature of the cold. But even though the weather was not kind to us with plenty of rain and some fairly strong winds, the advantage I gained in the water over the other folks in their drysuits was well worth the odd shiver and those horrible moments when you put on a cold, wet wetsuit. That advantage came from the ease of movement and ability to quickly get in to position ahead of a 'player' and was a real bonus. Being able to swim between individual sharks rather than waiting for the boat to pick me up & drop me off meant that I was able to get one or two passes to myself before the other snorkelers were dropped back in again.

I said earlier that basking sharks tend to just swim and eat, swim and eat. While that is true



*Dr. Planktonstein goes fishing. Fuji X-S1. f/4.5, 1/850th, iso200*



*Tobermory as seen from the accommodation. Fuji X-S1. f/6.4, 1/800th, iso640*



*Common seal. Fuji X-S1. f/5.6, 1/500th, iso200*



*Lions mane jellyfish. Olympus E-PL1, 9-18@12mm, f/6.3, 1/125th, iso500, 1xYS-02*



*Polycera quadrilineata. Olympus E-PL1, 12-50mm@50mm, f/14, 1/160th, iso200, 2xYS-110a*



*Sunset on the Cairns of Coll. Fuji X-S1. f/5.6, 1/160th, iso200*

for 99% of the time, they also do something totally out of character for such a large, seemingly docile fish: breach. It wasn't until just a few years ago that science started to believe the fishermen's tales of giant sharks leaping out of the water, and even today no one understands why they do choose to launch themselves clear of the surface. But boy is it an impressive sight to witness and we saw a breach on four out of the five days during this trip with each shark breaching at least twice.

There are few images of a

breaching basking shark in existence and it became some-what of a game on the boat when a breach was spotted to scabble around for our top-side cameras and get ready for the second jump just a few seconds later, normally to end in failure for not being ready or simply aiming cameras in the wrong direction. On the penultimate day my friend Terry was on standing the bow of the Sula Crion looking for sharks and spotted a breach about 100m from the boat. We were already photographing sea-birds so the game was on to guess where the

shark was going to appear next and be ready! I am happy to say that my plan to pre-focus and setting my lens fairly wide paid off. I was lucky enough to grab 3 frames before the shark disappeared behind a mountain of water at it belly-flopped back into the sea - simply one of the most amazing things I have ever witnessed.

As all good things must come to an end so it was that we reached the end of the week and it was time to pack up and head off to the mainland. We had planned a couple of dives in the Sea Lochs of western Scotland

after the week based on Mull which meant getting the first ferry off the island at 0630 the next morning. In hindsight we should have planned an extra day or two either side of the holiday to explore the stunning scenery to be found on the island with it's mountainous centre and golden-white sandy beaches, and even go on wildlife excursions to photograph otters or sea eagles.

**Dan Bolt**

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# NASA Extreme Environment Mission Operations

by Mark Widick

I often dream, while soaring over a dive site, am I flying or swimming, drifting through inner or outer space? Tranquil, effortless and beautiful, set free... divinely free. We glide at will through the water, unencumbered by gravity. Soaring like raptors over a cliff updraft, we are as close as divers can get to the experience of a space walking astronaut. For me, it is a lazy fantasy.

For those charged with planning how we may make our next deep space journey this is an opportunity to stage full dress rehearsals. In October 2011 and June 2012 I became a team member of NEEMO 15 (NASA Extreme Environment Mission Operations) and NEEMO 16. I was charged with photo-documenting a full-up underwater simulation. The plan was the simulated, rendezvous and exploration of a near Earth asteroid.

Armed with my medium format Hasselblad camera, placed in an Ultima Digital housing, and the Nauticam housing for the Sony NEX 7, I set out to photo document the planned 12 day saturation dives at the

Aquarius Reef Station (ARF) located about three miles south of Key Largo, Florida.

NEEMO has been a series of projects to further understand and prepare for issues relative to deep space exploration. Although the October mission was cut short due to an approaching tropical storm, the lessons learned contributed directly to success in the recently completed 12 day NEEMO 16 in June.

*A “Killer Barracuda” nearly stops testing, but the brave crew weathers the attack in style. Many large animals were regularly seen including tarpon, goliath grouper, rays and an ever curious loggerhead turtle. Hasselblad H3DII-°©\_31, ISO 200 f/4.8, 1/60 sec, 28mm.*

*Splashdown on day one the aquanauts get photographed with the ARB before entering the wet porch. Aquanaut Team are: Dorothy Metcalpf-Lindenberger, NASA Astronaut Timothy Peake, European Space Agency Astronaut Kimiya Yui, JAXA Astronaut Steven W. Squyres Ph.D., NASA Goldwin Smith Professor of Astronomy, Cornell University Chair, NASA Advisory Council James Talacek, Habitat Technician Justin Brown, Habitat Technician (not shown). Hasselblad H3DII-°©\_31, ISO 200 f/5.6, 1/125 sec, 28mm.*

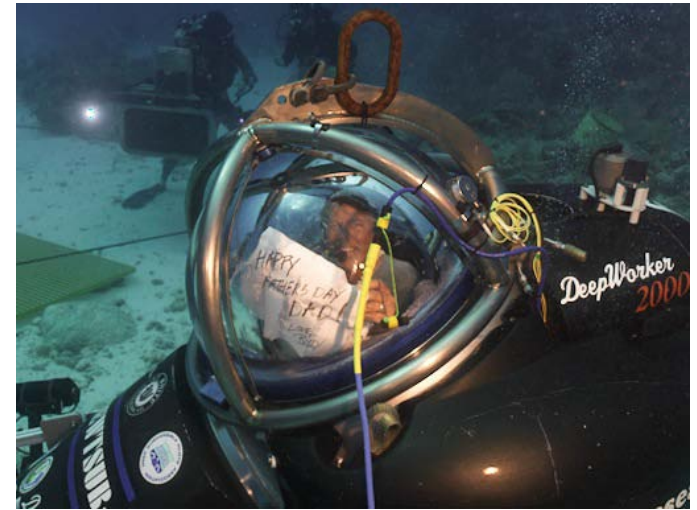




*Tim Peak EVA activity using guide lines to translate across the “asteroid” surface. His task is then to drive a “Seismic Sensor” into the surface of the asteroid. Hasselblad H3DII-°©\_31 ISO 200 f/5.6, 1/125 sec, 28mm.*



*Bill Todd in the Deep Worker Sub prepares to take mission commander Dottie Metcalf Lindenbergger to a new exploration site. Hasselblad H3DII-°©\_31 ISO 200 f/4 1/125 28mm.*



*Billy Todd flashes a note to his dad on Father’s Day. I am certain his dad Bill Todd Sr. understands his absence that day. Hasselblad H3DII-°©\_31, ISO 200 f/4.8, 1/125 sec, 28mm.*

NEEMO 16 was based on a steady progression, the complexity of the projects has increased to rival that of a true space flight. The NEEMO 16 project brought together an array of technologies including two Deep Worker Nuytco one man submarines, Pegasus Thrusters (tank mounted underwater torpedo shaped propulsion for divers), diving umbilical’s, underwater communications, the Liberty Star NASA support vessel, numerous smaller surface support work boats, divers and a contingency of interested spectators including an IMAX film crew,

Land support, included a mission control trailer, with a “Cap-Com” running differing scenario’s including simulated and real emergency management. The trailers are brought from the Kennedy Space Center prior to the start of the

mission. To add to the realism, communication delays of up to 50 seconds were added to portions of missions just as would be dealt with in missions sufficiently distant from Earth.

Why bother with such an elaborate simulation? Many simulations are already done at the Neutral Buoyancy Laboratory (NBL) located at the Johnson Space Center in Houston? Mission director Bill Todd explains, that while much can be learned AT NBL; it lacks the intrinsic stress encountered in true space flight. “At the end of a test, if you make a mistake you can still go home and worry about it tomorrow”. Real space flight, especially as we leave low Earth orbit is totally different. To best simulate that aspect, nothing quite matches the real stress and isolation offered by saturation diving. Each NEEMO mission involved a team working



*Mission control van is loaded with sophisticated mission communications materials allowing realism when dealing with the offshore aquanauts. iPhone 4 ISO 125, 3.9 mm, f2.8, 1/15.*



*Spacecraft may be used to navigate space walking astronauts around the surface of an asteroid.*

*The medium format H3D Hasselblad has resolution to an extreme. The inset above the image was taken with the Hasselblad, the inset below with the Sony NEX 7 at similar distances from label.*

do meaningful work, one needs a means to anchor to the surface. Without an attachment you would just float away from the asteroid. Several means of coping with this issue were tested including driving an anchor into the surface and translating across the surface with ropes or rotating beams, personal “jet packs” simulated by the Pegasus thrusters and finally locomoting at the end of a foot restraint attached to the Nuytco submarine. The sub representing a surrogate for an space vehicle with



*Sub Docking was achieved by an electromagnet and an iron plate. Pilot is Mike Gernhardt, a four Space Shuttle Flight Veteran. Asteroids may have sufficient iron content to allow for this type of attachment. Hasselblad H3DII-°©\_31 ISO 200 f/4 1/350.*

propulsion ability.

It was during the EVA portion of the testing that I had my chance to contribute. Photography becomes an invaluable tool in the documentation of the test results. High quality images allow the review of the challenges and how they were solved. This hopefully then may suggest a means to do things better. Engineering new tools and techniques may fall on those who were not present at the testing site. Still and video documentation can stand in for their personal involvement.

What was it like getting this close and photographing the NEEMO missions? Incredible! I wanted to maximize my documentation, so I attached a Go Pro to the dome port of the Hasselblad housing. This allowed continuous video capture of the EVA’s. The engineers were interested

together. Two “Hab Techs” provide technical support during the mission and join four aquanauts that carry out the simulated extra vehicular activities “EVA’s”. During EVA activity, dives of four or more hours are completed engaging in interacting with equipment simulating what could be expected during and actual interaction with the surface of an asteroid.

Unlike the moon missions, an asteroid has little mass and as a result, little gravity. In order to

in a running video of the tests.

In order to satisfy everyone, I needed to create detailed engineering photos for analysis and eye catching action shots that would play well to the NASA PAO need for keeping the public engaged and excited in what was happening. I found the Hasselblad H3D 31 medium format a quite capable tool when pared with the 28 mm wide-angle lens. The water quality at Aquarius Reef station varied considerably, and the lens allowed a field of view large enough to include divers and equipment while approaching close to the subjects to limit backscattering from the two Sea & Sea YS-250Pro TTL strobes.

NASA had gone to considerable effort to provide realism in all white wet suites and I intended to keep them looking white and not blue even at 65 feet. Through considerable testing, I was able to strike a balance illuminating the stainless steel superlight dive helmets worn by the aquanauts and the less reflective dive gear. Focus was not difficult as long as the center focus was aimed at an area of sufficient contrast. Some areas on uniform color on the wet suites would prevent focus lock. The very high shutter speeds (at 1/800 sec) that stills synchronize with the flash allowed me to create a outer space look by vastly underexposing the background while throwing enough flash to illuminate the fore ground. The trick did the job awarding me the distinction of NASA image of the day during NEEMO 15.

The NEX 7, with its more liberal search for areas of focus outside the center of the viewfinder proved quite capable as well. Background “Black Out” was less satisfactory with synchronization limited to 1/180 second. The Sony provided RAW conversion software proved less than intuitive when



*Inside view of Deep Worker Sub piloted by Steve Chappell.*

doing large numbers of images, and I found my version of Adobe Bridge CS3 incapable of opening the ARW format. For images required the day of the dive, I was forced to color balance with the JPEG files I had the camera set to output in addition to the RAW format.

Very limited time was available to work through unfamiliar software at the end of the day. I had to get equipment turned around and deliver imagery at the end of each day. I shot on average 300 images a day. We left the dock at 7 AM after a 6:45 briefing and usually would return 12-14 hours later. Dive gear, Nitrox testing and provisions (late night run for Publix sandwich and chips, image processing and battery charging followed.

Here Hasselblad “Phocus” software is clearly superior allowing me to quickly color balance large numbers of very large RAW photos. Fine image resolution was nothing short of spectacular with the Hasselblad, and very good to great with the NEX-



*Kimiya Yui and Timothy Peake the Aquarius Reef Station in background. Image Sony NEX-7. ISO 100, Lens 18 mm (18-55 zoom), F/5, 1/100 sec.*

7. I suspect upgrading to CS5, will likely solve the RAW file conversions, just may now be the time to take the plunge with CS5.

The significantly heavier Hasselblad housing was quite stable and easy to handle. I found the two Sea & Sea strobes to act as equalizers in handling due to their significant size on the surface and in a strong current. What was it all like? I felt like a member of a James Bond film underwater crew crossed with a true Space Shuttle Launch. (Another area of my special interest and a reason I shoot Hasselblad cameras... see additional images at MarkWidick.com).

I am used to having the largest camera in the dive group, but there was this group from IMAX 3D shooting really big gear that appeared throughout



*This support vessel is equipped with a portable one diver decompression chamber and is named after an icon in saturation diving development.*

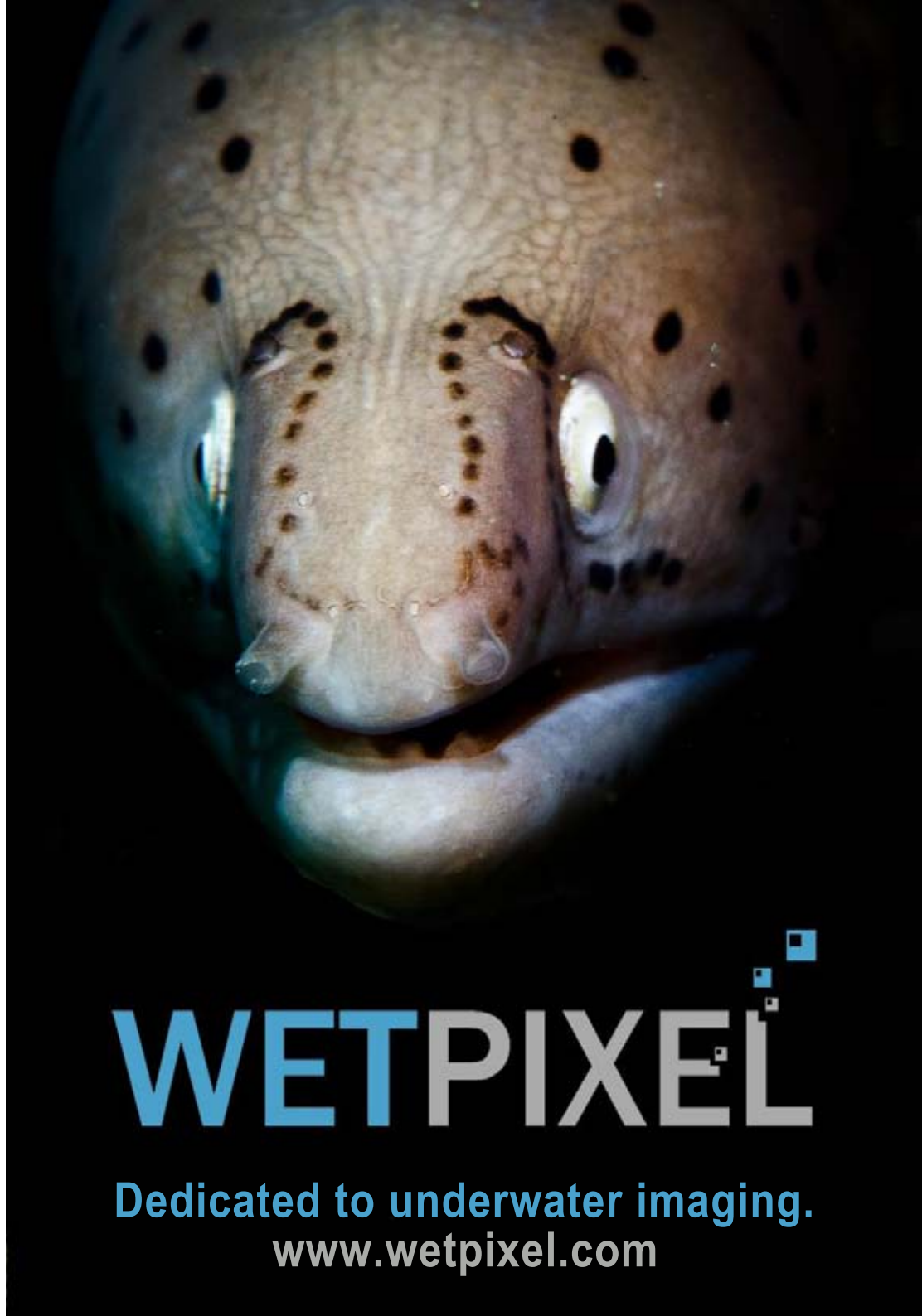
the mission.

Anyway, the mission was an astounding success. What is next for the ARB? There is only one confirmed Aquarius Reef Station mission this year. Primary intent is demonstrating the unique abilities of research during saturation diving. It is starting mid July and is featuring National Geographic explorer-in-residence Sylvia Earl and videographer D.J. Roller in saturation dive mode. A priority will be study of the role of sound pressure waves emitted by

Goliath Groupers while feeding.

The future of ARB needs our help. Like so many of the inspirational science efforts the funding is in jeopardy. This mission is to reach out, educate and try and engender enough support to keep space, ecologic and marine science continuing at ARB.

**Mark Widick**  
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# Macro in the Pacific Northwest

by Jens Tröger

The Pacific Northwest is a fantastic place to dive. The Puget Sound and the San Juan Islands north of Seattle are a playground for macro photography (weather permitting), and this only gets better as we head further west out onto the Olympic Peninsula, or north to Vancouver Island, its inlets and islands that are scattered along the Canadian coast. The topside weather varies a lot throughout the year, from the most beautiful sunny summer days, drizzly winter weeks completely drained of any color, to the crisp, clear and freezing snow days under blue skies.

Diving here is challenging at times, but also great fun. The Alaska Current brings in waters from the polar regions, thus ensuring a supply of cold water at around 10C to 15C throughout the year. Except for students during their checkout dives and the occasional courageous diver in a wetsuit, these are drysuit conditions, and drysuit means undergarment, which means more buoyancy, which means more weights. It also means neoprene hood and thick gloves.

This is green water diving at its best, and visibility ranges from

nothing to 15 meters and more. I remember a dive a few years ago in the San Juan Islands where we had no measurable surface current and the usual dark waters beneath us; the boat sat next to a rock and the surface vis looked quite decent. In we went, and after about 5 meters we began to descend into what looked like ink. The light from our torches would simply vanish, and I could not see the computer when I felt it bang against my mask. Those sort of conditions aren't particularly suited for photography. Then there are the crisp and cold winter days, when there's no algae bloom and the water is just freezing cold; on those days we can get 15 or 20 meters of vis, and diving becomes a whole different experience.

There is an abundance of marine life out here, from Orcas, Humpback and Minke Whales, otters, seals and sea lions, to large and small fish, jellies, corals, colorful anemones and sponges, and, of course, invertebrates. It's these small and tiny critters which I have taken to the most, and I'd like to share a bit of my experience of how to photograph some of them in our cold water conditions.

The thing with macro



*Juvenile Decorated Warbonnet . Canon 7D and a Canon EF 100mm/2.8 macro lens, Nauticam housing, and Sea&Sea YS-120 strobes. 1/320th @ F5.6. ISO 100 The panorama was taken with a Canon 40D and a Canon EF 17-85/4-5.6 lens, and then stitched together.*





*Cockrell's Dorid. Canon 7D and a Canon EF 100mm/2.8 macro lens, Nauticam housing, and Sea&Sea YS-120 strobes. 1/320th @ F11. ISO 100*

photography is this: I'm taking a picture of something tiny, with a camera that is, compared to my subject, rather huge. That means that what is an almost unnoticeable movement of the camera translates into a large movement for the subject, and this can ruin a picture because the focus of my picture moves.

The subjects for macro photography are tiny, and sometimes it's hard to see all of their details with the naked eye. It does take

some practice to learn how to handle the viewfinders of both camera and housing combined, and to use them and the lens as a live magnification glass. Most of the time I work with Servo Auto-Focus for two reasons: one, to offset subtle movements of the camera or the subject automatically; and two, to be faster with narrowing in on my subject and where I wish to place the focus point. Manual focus can take quite some time to set up, it can be difficult to judge through a



*Blackeyed Gobi. Canon 7D and a Canon EF 100mm/2.8 macro lens, Nauticam housing, and Sea&Sea YS-120 strobes. 1/320th @ F13. ISO 100*

mask and viewfinder extensions and it's harder to adapt to movements rapidly.

On one hand, macro photography is about finding an interesting subject and being lucky that it sticks around long enough to take pictures. I've learned early that it is a vain endeavor to try to recapture a picture that I've taken in the past and would like to "improve" or "take it differently," or to imitate a picture that I've seen elsewhere. This only just hinders my

own creativity and being open to what a dive can present.

On the other hand, macro photography is also about a non-distracting negative space, i.e. the background and context of the subject itself. I prefer to work with a narrow DOF (depth-of-field) to blur the background and to guide the viewer's attention more easily. This is the point where things get a wee bit tricky because a narrow DOF for a tiny subject means that even a small

movement affects the control of the focus point. Ah well, so I just need to be a bit more careful here.

The negative space is easily forgotten, but it can be the Yay or Nay for a picture. If there's too much going on in the background concerning color or forms, then this only distracts from the main subject. In contrast, too little can, sometimes, make a picture seem boring because it may isolate a subject too much from its natural context. I like the negative space that compliments or matches color with the subject and the overall mood of the image, but doesn't intrude on the subject at all; the kind of negative space that conveys some of the natural context.

The most interesting aspect to me, however, is perspective. To make a subject, for example a nudibranch, more personable and interesting, I like to take its picture from the same "eye level" or from slightly below shooting upwards. Topdown shots can often seem flat and unengaged. An interesting perspective usually takes some maneuvering and, if possible, trying out different angles and changing distance. Sometimes, though, it also means that a picture just doesn't work out because I can't position my camera and strobes the way I'd require them. Perspective also means the side or angle from which I approach my subject: ideally

it should swim or crawl towards the camera, and therewith the observer. If my subject moves away from the lens and I get only a backside then the feel of the final picture is somewhat incomplete, an open story of sorts, moving away. Twice I got very lucky and, searching for its way, the nudibranch turned its head right into the camera: a beautiful and engaging head shot.

The composition of the picture defines what I want to show of my subject and its context. The traditional composition rules like the Rule of Thirds or Leading Lines or Framing come into play here. This is where modern cameras help me out a little bit: high pixel rates allow for a certain amount of freedom to crop an image later during development. Generally though, it is important to pay attention to the immediate surroundings of my subject, for example the stick or hydroid or rock that a critter may sit on, and to make this a part of the captured picture. Composition and perspective often times complement each other, and both together should convey the natural context in which the critter lives.

While the environmental conditions for underwater macro photography are different from "traditional" macro photography, all rules and experiences apply just the same. Here in the Pacific Northwest



***British Columbia Aeolid. Canon 7D and a Canon EF 100mm/2.8 macro lens, Nauticam housing, and Sea&Sea YS-120 strobes. SubSee 10x diopter . 1/320th @ F16. ISO 100***

I usually shoot a 100 mm prime lens, and a SubSee 10x diopter on top of that. This kind of setup allows me to get very close to very tiny critters, while, at the same time, focus and DOF are a little challenging to implement well. One goodness of modern DSLR cameras is precise auto-focus and the many focus points. As I mentioned earlier, composition is essential, and that is guided by the positioning of the focus point which I

usually place according to the Rule of Thirds or in the center. With a shallow DOF it is important to place the focus well, ideally at the eye of a small fish or the head of the nudibranch or crab. Everything else will gradually fade out of focus, thus guiding the eye of the beholder to whatever I put into focus.

Fortunately, shooting macro underwater is somewhat independent of vis, although less silt and other

particles do make for a cleaner picture. It is, however, quite dependent on tides and currents because water movement interferes with me being able to stabilize my camera (Think buoyancy here!) and, even more so, it moves my subject around. To deal with that I either rest the lens dome of the camera on a rock (if there is one that I can use), or I invent funky finger stretches to stabilize the camera while resting my hand on a rock. You can also use a small metallic stud as a monopod connected to the bottom of your housing to stabilize the camera.

As I mentioned earlier I do like to play with focus and DOF to guide the viewer's attention. Therefore, I often times shoot with a larger aperture (i.e. smaller aperture value) to narrow down the DOF. However, as aperture and shutter speed always go together and because I prefer fast shutter speeds, I soften the available light by adjusting the strobe's strength and distance to the subject, and sometimes using a diffuser. In the end, these three, aperture, shutter speed, available light, need to balance each other to make for a well lit picture.

I found that the best way to shoot macro underwater is by having the maximum amount of control over the camera, that is fast focus and focus points, aperture and shutter speed, and bursts and quick recycle times. DSLR cameras, while on the more expensive side, give me that control by providing a manual mode. I do admit that it took me a long time to arrive at such a rig, but I wouldn't want to go back again. Another advantage of these cameras is that they capture raw sensor data instead of compressed and preprocessed .jpg images; I always shoot raw and process later.

To avoid noise, i.e. color or bright pixel grains, I usually shoot in lower ISO speeds up to a maximum of 400. Since there isn't much ambient



*British Columbia Doto. Canon 7D and a Canon EF 100mm/2.8 macro lens, Nauticam housing, and Sea&Sea YS-120 strobes. SubSee 10x diopter . 1/320th @ F9. ISO 100*

light around here in the Northwest, strobes are quite necessary, and that in turn allows me to lower the ISO speed. Most of the time I shoot with two strobes on short arms, one for the subject and one to brighten up the background if I want to use that. One may think that green water diving and low light conditions don't make for colorful pictures, but I quickly learned that this is not true: the abundance of color here is amazing.

## Post Processing

I do all of my post processing in Photoshop. However, that doesn't mean that I pay less attention to the capturing process itself; there's only so much I can fix. A picture that's out of focus or has too much backscatter or is poorly composed or lit just can't be "photoshopped" into something that it's



*Scalyhead Sculpin. Canon 7D and a Canon EF 100mm/2.8 macro lens, Nauticam housing, and Sea&Sea YS-120 strobes. SubSee 10x diopter . 1/320th @ F13. ISO 100*

not.

The first step of developing the raw image into something printable is to import it into Camera Raw for some initial adjustments. Sometimes I tweak the white balance a little bit, I always disable sharpening (that comes later) and I remove noise only if there is some. Depending on the shot, I may also adjust exposure and vibrance a little, but all



*Orange Cup Coral. Canon 7D and a Canon EF 100mm/2.8 macro lens, Nauticam housing, and Sea&Sea YS-120 strobes. 1/400th @ F4.5. ISO 200*

the contrast and color adjustments follow later. Camera Raw has preset lens profiles which help to remove some of the chromatic aberrations and vignetting, and sometimes those come in handy. At this point I also crop the image to align it better with one of the compositional rules I mentioned earlier. Then I import that image into Photoshop.

The first thing I do in Photoshop is to zoom in to 100% and use the content-aware spot healing brush

to remove some of the residue backscatter. The beauty of this kind of brush is that it doesn't merely replicate a close-by spot of the image, but it composes an approximation based on the context of the spot to be fixed, noise and all. While this works well on "chaotic enough" spots in the picture, it doesn't work well when I touch lines that define shapes and forms of my subject. In that case the traditional clone stamp tool might be of better use, but generally a picture

isn't a keeper if I spend more than a few moments trying to clean it up.

Next, I change the color mode to LAB. In contrast to RGB (Red-Green-Blue, the default color mode), LAB (Lightness-A-B) separates lightness information of the picture from its color information. That has the advantage that sharpening (i.e. increasing of local contrast) doesn't cause colors to clip. So, in LAB mode I select only the Lightness channel and sharpen the whole picture using the Unsharp Mask from the Filters menu. After sharpening I add a Curves adjustment layer and apply an S-curve to the Lightness channel, thus increasing the contrast of the image. To further tweak the overall contrast of a picture, I sometimes add a Levels adjustment layer, and there I push the shadow and highlight input levels closer together if there's no Lightness information present at either end of the spectrum. All that without modifying the colors of the image.

When that's all done I tend to the colors. Just like shifting the white balance, so can I now change the overall tone of an image (or that of the highlights, mid-tones, or shadows separately) by slightly changing their Curve adjustment layer and its input or output values for either the A (green to red) or B (blue to yellow) channels separately. To saturate the picture's colors, I sometimes

squish the input values of the Levels adjustments closer together, thus spreading out the color range and increasing color intensity.

Finally...

And that's it. When I'm done with all that, I sometimes upload one or the other picture to my personal website. Mostly though, these images bit-rot on my hard-drive until one or the other editor likes them enough to use them in an article, so that I can share the fun and excitement of diving and underwater macro photography in the Pacific Northwest...

**Jens Tröger**

<http://savage.light-speed.de>



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# South West Ramblings

from Mark Webster

Regular readers of this much revered periodical will know that I have enormous enthusiasm for UK diving and, although I spend a large part of my year working away from home, I am fortunate enough to live in an area that offers fantastic diving. I thought it might be useful to start a series of short articles discussing dives sites, finding subjects, equipment choice and techniques used to capture particular images. As a confirmed Luddite I would be horrified to think I was writing a blog, so I will describe this as an occasional diary of events and observations, but maybe that is the same thing in the modern parlance? I will leave you to judge that for yourselves.

## Little and Large

At the mega fauna end of the scale this year has been another poor one for basking sharks in the south west, which may have been around in larger numbers but have been difficult to spot due to rougher seas. At the macro end of the scale it has been a good year again for nudibranchs, although strangely there have been very few sea hares around. The weed beds have been very productive again for nudibranchs but we have been unable to capture the colourful vistas of the weeds with wide angle due to reduced visibility caused by constant storms and relentless rain - a classic British summer! We have seen all the usual species plus a few more unusual ones like *Aegires punctilucens*,



*Tritonia nilsodhneri nudibranchs are only found on sea fans where they feed and breed. Vary your exposure to record both a black and ambient background but be patient when working at slow shutter speeds. Nikon D300, Subal ND2, 105mm micro, Inon wet lens, Inon Quad flash, ISO 100 F16 1/20*

*Rostanga rubra* and *Eubranchus farrani*. I also saw the greatest concentration I have ever seen of the *Tritonia nilsodhneri nudibranch* which is only found on orange gorgonians (*Eunicella verrucosa*) at a site near Plymouth regularly visited by Magic Charters (note the subtle plug for our revered editor...).

The *Tritonia nilsodhneri nudibranch* is normally (in my experience) hard to find and I have only seen single specimens on a sea fan previously. In Plymouth Sound there is the remains of a steel tubular structure in perhaps 10-12m depth at high tide which is exposed to tidal current and has a very healthy colony of *Eunicella verrucosa* sea fans growing on it – between 15 and 20 individual fans. These are normally found in greater depths



*Aegires punctilucens nudibranch – a tiny species which is not often seen and requires additional magnification to capture the textured detail of this critter. Nikon D300, Subal ND2, 105mm micro, Inon wet lens, Inon Quad flash, ISO 100 F16 1/20.*

but the often gloomy visibility and high nutrient levels in the sound must promote growth here. We were surprised and pleased to find that each fan had at least two, and some more, of the elusive nudibranchs busy feeding and mating leaving delicate egg spirals over the polyps. In these situations I try to shoot a variety of compositions and angles to gather a broad portfolio of the species. Mixing the classic black background with a longer balanced green water exposure was tough as the sea fans are constantly vibrating in the current. But persevere as there are lulls in the flow and the fan will cease oscillation long enough for a couple of sharp images!

Another rarely seen species of nudibranch is *Aegires punctilucens* which apparently spends most of its life burrowed into the sponges and sea quirts it feeds on. Occasionally these very small (perhaps 12mm) but elaborate sea slugs can be seen when moving to a new feeding site but I have only spotted one on two previous occasions. This year I was lucky enough to find one traversing a piece of kelp surprisingly quickly although he seemed to be lost as he kept traversing both the front and the back of the kelp frond. Referring to a nudibranch as a he may of course be sexist as they are hemaphrodites.....but his constant wanderings gave me a number of opportunities to vary my composition and background. These guys are extremely small and need 2:1 magnification (although if you have a D800 you can crop successfully!) and are covered with textured tubercles and blue spots so make a very attractive subject, if nudibranchs are your thing of course!

## Year of the Black face blenny

I have spent many years photographing what I assumed to be female black blennies (*Tripterygion delaisi*) which sport a predominantly brown camouflaged livery. Although I had seen images of the male in its splendid black and vivid yellow livery I had never seen one in the wild. This year we have had a very extended spring temperature period due to the poor weather and so I think many species have continued breeding for several weeks due to the lower water temperature. So this year when I have visited the sites I regularly spot these fish I have seen numerous males in full conjugal livery strutting around their reef estate to attract a mate. The females I have observed with the males are indeed much drabber in colour but also much

***Black faced blennies (*Tripterygion delaisi*) are a stunning looking fish but are difficult to spot despite their bright colours. However, they are patient subjects if you approach cautiously. Nikon D300, Subal ND2, 105mm micro, Inon Quad flash, ISO 100 F16 1/125***

smaller. Now that I have observed the various colour change stages of the males I realise that the fish I assumed were females are in fact males in their normal colours! When you see the males at the peak of their mating period the contrast between the jet black face and vivid canary yellow is stunning.

The black face is a species of triple fin blenny and each of the males seems to have a piece of reef real estate that is around 1-1.5m square which they will be seen vigorously defending if a neighbouring male comes too close. They tend to favour overhanging reef edges which are clear of kelp and heavy weed growth, but you will occasionally see them on the reef top. I have observed one or two smaller females in each estate and the males will often be seen flitting around the female and posing lifting his dorsal fin which has a fine bright blue edging. There seems to be a distinct pattern to these movements and I have read that they follow a figure of eight movement around the patch but I could not swear to that.

Once spotted these are incredibly bold fish that will hold a pose for the camera for extended periods as you work closer and closer for the perfect portrait. For a tight head and shoulders portrait you will need a 105mm macro lens or similar or a 60mm macro lens if you want the whole fish and some environment in the image. As they favour overhanging ledges you will often find yourself



photographing with the image or perhaps camera upside down and you will need to consider your flash positioning to create the correct lighting effect.

## Micro dome for WAM

Those of you who have tried the technique of wide angle macro will know that you need a small dome port to allow you to get close to your subject and also to be able to light it effectively. Even with the current crop of mini domes available from various manufacturers there is not a perfect dome

solution and you may end up using different combinations for different subjects and situations. I often find that I want to work very close with quite small foreground subjects like nudibranchs and quite often the shade on a small dome will not allow me to light the subject without shadows. The solution for me was to look for an even smaller dome port without a shade which allows me to light subjects potentially touching the dome without shadows.

If you are a vintage photographer, like me, with a good memory you may recall that when the first housings from Subal appeared for the F801 there was no fish eye dome available. We all made our own home engineered solutions but one that was briefly commercially available came from that fine emporium of UWP retail Ocean Optics, which of course in those days was run by our own revered editor. The dome was designed for the 16mm Nikkor fish eye which is a relatively short lens that barely reaches the throat of the port hole in the Subal housing, so the dome needed to sit flush with the edge of the throat. The dome itself is a section of a 4" (100mm) compass dome mounted in an aluminium bayonet that seats level with the edge of the throat. Because the dome is so small (and due to the minimum focus distance of the 16mm) the Nikkor fish



*Selection of mini domes – Subal DP-54B (for 20mm Nikkor); 3" dome originally for Sea & Sea 12mm Nikonos fish eye; Ocean Optics fish eye mini dome originally for Nikkor 16mm FE*

eye required a +2 diopter installed on the back of the lens to enable it to focus on the virtual image.

Fast forward to today and the combination of 10-17mm fish eye and 2X teleconverter that I favour does not need a dioptre of course as it focuses well into the macro range right down to the dome surface. The smaller shadeless dome allows more flexible lighting without shadows, but of course needs extra care in use as it is very exposed to contact and scratches with rocks or corals. However being perspex you are able to polish out the minor indiscretions. I don't know if our RE has any more of these available but there are a number of engineers and retailers in the UWP



*The fish eye zoom and teleconverter can be used to capture true macro subjects such as these nudibranchs with some open water and a sunburst to complete the image. Nikon D300, Subal ND2, 10-17mm FE + 2X teleconverter, Inon Z240 flash guns, ISO 200 f18 1/125*

market that could make up something similar if you wanted to experiment with a smaller dome.

So at the 17mm end of the lens combination you have true macro capability and can still capture some background in the image or the surface and a sunburst. Getting close to inquisitive fish with this small dome also produces interesting results as the subject can see its reflection – tompot blennies, black face blennies and scorpion fish are good examples

of those that are either fascinated with their reflections or assume that it is a competitor.

### **Quad flash - an old war horse dies.**

I suffered a heart stopping drama at the end of 2011 when my Inon Quad flash failed just before I left for Sipadan and the Lembeh Strait. This wonderful piece of kit has been working very hard for me since I bought it back in 2001 (in



*Inon Quad flash mounted on Subal ND20 housing. Inon wet lens designed for quad flash installed*

*Variable blenny – the quad flash or a similar ring flash is an ideal tool for lighting a subject in a hole or tube like this. This little fella was living in the end of a piece of pipe work on a boiler and the quad flash has provided even lighting around the subject. Nikon D300, Subal ND2, 105mm micro, Inon Quad flash, ISO 100 F16 1/125*

those almost forgotten celluloid days) so I should not have been surprised that it had finally worn out, but it led to desperate thoughts of life without it! There followed a flurry of e-mails with Inon who confirmed that although the quad is no longer manufactured they could replace the electronics module, for a price of course. I had almost committed to this when lady luck struck and Steve



Warren at Ocean Optics said he had a very lightly used second hand quad flash....was I interested? I bit his hand off of course and now I am a happy photographer again in macro mode and hoping this unit will last just as long. The original can still be repaired of course!

Not everyone likes the lighting in ring flash photography but I love it and can thoroughly recommend it if you are considering one of the current alternatives. Generally speaking you can light anything that you can see through the lens and the perfect lens for this is the 105mm micro (on DX



*Red gurnard blend perfectly with a dull or grey seabed until you add artificial light and the character of the subject changes instantly. Nikon D300, Subal ND2, 10-17mm FE + 2X teleconverter, Inon Z240 flash guns, ISO 200 f11 1/30*

or FX) although I also use it with both my 60mm micro and a Sigma 180mm macro. With the 60mm you have to watch your subject distance as 1:1 reproduction often puts the flash too close to light a subject without shadows. One quirk I am convinced of is that nervous fish are more approachable with a ring flash as your rig lacks those two large eye shaped objects looming from above which perhaps resembles are large predator.

## Seeing Red

You don't have to be involved in underwater photography for very



*Red dead men's fingers are a true cold water soft coral. The strong red colour make a good wide angle macro image and allows you to capture the fine detail of the polyps and also include some background detail. Nikon D300, Subal ND2, 10-17mm FE + 2X teleconverter, Inon Z240 flash guns, ISO 200 f11 1/125*

long before hearing the old adage that finding a red coloured subject or at least including a splash of red in your composition will make an image pop. This is a good guideline to follow when you can and of course is easy in



*There are several anemone species that have a vibrant red colour in the UK. The strawberry anemone is one of them which creates an interesting abstract composition when closed. Nikon D300, Subal ND2, 105mm micro, Inon Quad flash, ISO 100 F16 1/250*

tropical waters where there are many vivid red corals and fish but can we apply the same rule in UK temperate waters?

Whilst the UK does not have the same abundance of red subjects as the tropics, there are many opportunities if you do a little research, look carefully and perhaps make use of a spotting torch to check if apparently drab colours are in fact red. There are some species of fish that are almost completely red or feature a

high percentage of red in their livery, although this may not be obvious without additional lighting, and so they are worth seeking out and planning specific compositions.

Red gurnard, scorpion fish and Corkwing wrasse all come to mind as examples of fish which can be entirely red or feature red in their patterns. They are also very appealing subjects and it can be an interesting challenge to capture them with different lens or lighting combinations to show

the fish in a portrait or environment composition. There are a number of anemones that sport a red hue with beadlets, dahlia and the strawberry being the most common but it is often hard to include them in a larger composition due to their size and normal positioning on the reef in nooks and cracks or under overhangs.

At the macro level it is worth seeking out red seaweeds and looking for contrasting subjects which may feed on them. There are numerous species of nudibranch and sea hares that graze on these weeds and can produce a dramatic contrast with a red background. We also crustaceans that sport red in their livery or perhaps

have red eyes in an otherwise drab colouring. If you are shooting wide angle then seek out the colonies of red dead men's finger soft corals which really do have a tropical feel to them.

So hopefully you have found one or two of the subjects engaging in this first tranche of ramblings, there will be more to follow at irregular intervals!

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# Honeymoon or Dive Vacation

by Michael Wicks

The words were still hanging over my head as I attempted to fall asleep. “This isn’t a dive vacation!” the words that my Amina, Amina, had just said to me. We were planning our honeymoon, and we wanted to go to a beach place where neither of us had gone to, and, Cozumel, the home of the drift dive and waters so clear that you’d swear you were topside not below the depths would be that place.

I knew diving on our honeymoon would be a touchy subject as my now wife was not a diver. She is, however, an avid snorkeler and on most occasions it would be me who would drag her out of the water at the end of the day. But how could I not dive in Cozumel? 11 Days and 10 nights in a diver’s paradise. So when asked how many dives I thought I was going to log on our honeymoon, four was a reasonable and rational number that came to mind. This statement elicited said declaration: “This isn’t a dive vacation.” As I drifted off to sleep I could hear Amina mumble from the den, “Wow the diving does look amazing there...” Oh the torture.

I resigned myself to 2 dive days, one early and one later in the vacation. There would be quite a bit

of snorkeling and when everything was said and done I did prefer to be in the water with my bride as her giddiness at seeing new creatures in the water did so make me happy.

After a red-eye in to Miami that continued on into Cozumel, we got hustled a bit at the airport. For those going to Cozumel, after getting your luggage and dive gear, go past all the workers in white shirts and badges to either your transportation or to the window where you buy transportation tickets. If you get snagged by one of the swarthy white shirted clad men you may get suckered into a timeshare sales pitch at some point. Not a bad thing, but better to go on your terms rather than theirs.

We booked our stay at the Cozumel Palace, an all-inclusive resort which of course included all libations as well. Even after a long red eye trip from Los Angeles we were quite amped and ready to schedule our activities. The Palace gives you credits that you can use towards excursions and spa days. We booked the typical activities; Massage for my birthday, honeymoon dinner, dolphin swim, Chichen Itza excursion and of course diving. For



*Honeymoon cake, Canon G9 ©Amina MacLeod*

those counting this would be my first dive of the trip.

We settled in for the evening with drinks in hand and a resort show for entertainment. In the morning I checked with the dive shop, and to be honest I was less than impressed. They had booked me on the 11 AM boat rather than the 8 AM. When asked why, they said that they couldn’t guarantee an 8 AM trip. When I asked where they typically went for the dives I got a blank stare.



*Coral Formations – Canon Rebel xTi, 10-17mm lens Dual Ikelite DS125 strobes and Ikelite housing F8.0 Shutter 1/125 ISO 200*

Needless to say I decided to cancel this trip and book with Deep Exposure dive operations. A very wise decision. They offered a snorkeling package for Amina so that she could join in.

The dive trip was scheduled for our 2nd day there and the boat picked us up right at the resort pier promptly at 8 AM. Very convenient. There were only 4 other divers on board,

one discover diver and one other snorkeler. We were accompanied by 3 dive masters. Not bad ratios. I was surprised by how long the trip took to get to our first dive destination: Palancar Reef.

Knowing that I would be drift diving I set up my camera rig for wide angle. Although I am drift certified I have never shot in drifts before so this would be something new. After some technical difficulties with my camera gear on the first dive I was able to settle in and enjoy the seascapes and creatures on the 2nd dive. Upon surfacing, Amina told me that she had been snorkeling with the captain and although it was a short stint in the water she enjoyed it immensely. She was able to swim with barracudas and play with turtles. The next dive site was Columbia reef where we were able to catch garden eels. There were also fish that when alerted would shoot into the sand head first as if it were butter. I spent my time trying to capture one of these illusive wonders but alas to no avail. They were much too fast and the dive had to continue on.

Heading below deck I caught one of the divemasters preparing what would be some of the best guacamole I've ever tasted. Lunch was quite tasty and no one went hungry. It was about an hour ride back to our hotel and I gathered all our equipment and bid the crew adieu, we jumped on to the pier and headed in. Later that evening I received a call confirming that I had in fact forgot my regulator and would need to come to the shop.



*Hawksbill Turtle Grazing – Canon G9, no strobe,*

This was not such an issue as it would give us the chance to explore downtown and would, of course, give me an excuse to sign up for my next dive. For those keeping track this would be my last dive of the trip. Or so I thought.

The next few days were filled with the rest of the excursions we had book upon arrival. Chichen Itza was incredible but be prepared for a 3 hour trip there, temps in the 100's and 1000's of vendors trying to hawk their wares to you. The mantra of the trip became, "Almost free my friend".

After a short ferry trip to Playa Del Carmen we boarded a shuttle for an hour, to embark on a turtle encounter in a small town known as Akumal. Since we're new to the area we decided on the



*Feather Duster Worms – Cropped - Canon Rebel xTi, 10-17mm lens Dual Ikelite DS125 strobes and Ikelite housing F8.0 Shutter 1/125 ISO 200*

guided tour. Just one other family booked this trip besides us so it was very intimate and stress free excursion. We spent 40 minutes swimming with the loggerheads, watching them graze, come up for air and then graze again. They come to this small bay due to the lush underwater grass fields. After a healthy lunch Amina asked if we had time to go out again. This time it was unguided and we were able to locate a few of these sea creatures and hang with them for the rest of the afternoon. As with call good things it came to an end and I proceeded to drag Amina from the water, pruned but jubilant.

Chankanaab Park is an Eco-Archaeological

park for all things water. They offer dolphin and sea lion encounters, but our focus on this day would be the Manatees. Both Amina and I have been in awe of these creatures for as long as we could remember. The odd thing is this is the least expensive encounter at the park and the fee includes park entrance fees. We were able to get in the water and hold these massive animals as well as free feed them. Apparently these creatures will continue to eat most of their waking life and are extremely gentle considering that although on the small side, they weighed in at over 650 lbs. I can honestly say that you haven't really lived until you've placed your finger in the belly button of a Manatee.

Stingray Beach is another excursion that is a must when staying on Cozumel. Although you're bound to see rays anywhere you go in Cozumel water and this includes of the hotel reef area, there's nothing like getting in the water with 20-30 of these creatures at the same time. Stingray beach offers snorkeling with a guided interaction session where you can feed and handle the rays. Snorkeling with these animals is truly memorable. I had taken my G9 without strobes for the snorkeling as the water, at it's max would only be 18-20' deep. Although I was able to breath hold and get some shots on



*Reef with Sea Fan - Canon Rebel xTi, 10-17mm lens Dual Ikelite DS125 strobes and Ikelite housing F8.0 Shutter 1/100 ISO 100*

the bottom, I couldn't hold a candle to the guides ability. I truly believe that they're all part fish.

I could feel Amina squeezing my hand, as she always does when she gets excited in the water. But this was a very special moment because, although she has snorkeled with various fish and turtles in the past, she's never had close encounters underwater with rays.

As we were leaving the beach I



*Sting Ray - Canon Rebel xTi, 10-17mm lens Dual Ikelite DS125 strobes and Ikelite housing F8.0 Shutter 1/200 ISO 200*

asked the attendant if, by chance, they ever allowed divers in the park. She smiled and said "of course we just don't advertise it as much." Amina asked if she could do a discover dive as well. She was intrigued by being completely submersed with these animals she was still hesitant on the diving aspect. Again the answer from the attendant was an affirmative. Either way we were definitely coming back to dive and snorkel before we

disembarked from Cozumel. And for those keeping track, I was just able to get a 3rd dive into our honeymoon.

The next day on what was supposed to be final dive day, Amina decided it would be her final Spa day. I left her in our resort room and headed to the pier. I had booked with the same company, Deep Exposure, as I had with my first dive. This time on the boat there were only 2 other divers from Miami. One diver was

still shooting film in fact. On this trip we would dive Columbia Gardens and Torments reef. Again armed with my wide angle we descended on Columbia Gardens only to find very little current and lots of macro opportunities. Always the angst of an underwater photographer; Wrong lens at the wrong time.

It was still a great dive, however. Sharks, barracuda, rays and other creatures were bountiful. After a nice and lengthy surface interval we headed to Torments reef. Typically known for strong currents that can change directions at times this dive can provide spectacular scenery including huge barrel sponges, sea fans and a terrestrial sand dune that can be seen from the air. For my first encounter diving the 2nd largest barrier reef in the world I couldn't have really asked for more. Or could I?

Upon returning to the hotel I discovered that Amina had already made arrangement for both of us to dive Stingray beach. She was going to do her first open water discover dive amongst the Stingrays. She had completed some pool skills in CA but never got to the point of being in the open ocean. I was probably as excited as was she. It's not often you get to share this experience with a newbie, but even rarer with a loved one.

We made our way over to

Stingray Beach to meet up with the instructor that would be overseeing Amina's dive. An extremely laid back gentleman who used to work in the Red Sea as well as other areas. After some initial instruction and obligatory paperwork, we donned our gear and entered the water. First task was for Amina to demonstrate basics skills such as mask clearing. During this procedure a Sting Ray with a wingspan of about 1 meter swam between her and the instructor to check her out. I could feel her giddiness in the water.

Throughout the dive I could feel her glee and see her eyes beaming. Upon exiting the water she said "Ok I get it, I need to get certified." We flew back after 11 days and 10 nights of honeymooning and diving bliss. So to answer that original question, it's a honeymoon that also became a dive vacation. And as Amina still dreams of water and swimming with Mantas and Sting Rays I can safely say that most of our vacations will continue to be honeymoons and dive destinations.

**Michael Wicks**



*Don't settle for 2nd best*



Film - No Filter  
No White Balance



Digital - No Filter  
Manual WB



Magic Filter  
Manual WB

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](http://www.magic-filters.com)*

# Guidelines for contributors

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

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

**Uw photo techniques** - Balanced light, composition, etc

**Locations** - Photo friendly dive sites, countries or liveaboards

**Subjects** - Anything from whale sharks to nudibranchs in full detail

**Equipment reviews** - Detailed appraisals of the latest equipment

**Personalities** - Interviews/features about leading underwater photographers

**If you have an idea for an article,  
contact me first before putting pen to paper.  
E mail [peter@uwpmag.com](mailto:peter@uwpmag.com)**

## How to submit articles

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

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

2. Images must be attached to the e mail and they need to be 144dpi

Size - Maximum length 15cm i.e. horizontal pictures would be 15 cm wide and verticals would be 15cm.

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

Following on from Mark Webster's 'Do we need depth?', I dug up this shot I did in April as part of a three-month photographic study on Cornish Rockpools. The majority of my work involves me staying dry and the rockpools provided the chance to get underwater shots while staying high and dry (often not so high). Having lived in Cornwall for three years, I was spoilt for choice on dive locations but it was the rockpools that really interested me. The species in rockpools go through daily struggles with predators, low oxygen and water level changes. Cornwall has over 300 miles of coastline to choose from, with exposed shores bearing the brunt of the Atlantic, to sheltered shores harbouring all manner of seaweeds and invertebrate life. One location in particular, the Helford, at low tide is a vast expanse of exposed shore with weeds and rocks holding some of the most biodiverse waters in the entire UK. Located in the mouth of the Helford estuary, it is truly a fantastic place to get photos above and below the water. Species like Cornish clingfish, Montague's crabs and beadlet anomies are not uncommon. I prefer to work with slow-moving subjects as it gives me time to compose the shot and experiment

with settings and exposure. With the blue sky I knew I wanted a split shot but had to find a willing subject. Blue skies are big favourite of mine as they provide a nice contrast with the clouds and the subject matter rather than a blown-out white background. The shot could have worked underwater but splits often add something to the image and show the best of both worlds. Cornwall's shores are full of life and this edible crab found nearby had the habit of running straight towards the dome port and myself! With the subject being only centimetres below the surface of the water I can make full use of natural light, which I find gives it a certain quality that strobe lighting just doesn't seem to have. Getting as close to the crab as possible meant that it was a prominent feature in the image. Intense sunlight can be a hindrance as most rockpool creatures shun it but it lights up the entire rockpool opening up an unseen world. With the small crevices a compact can be very handy for use in rockpools: otherwise when using a DSLR finding the larger rockpools leads to more success. Donning a wet suit and getting into the larger rockpools means that you can compose the image a lot easier and don't have to lift a heavy housing



which can be tiring after a few hours. You only have a few hours depending on what part of the shore line you work on; with the very furthest tips only being exposed for a short time, it's good to have an idea of where and

what on the shoreline you would like to capture.

**Jack Perks**

[www.jackperksphotography.co.uk](http://www.jackperksphotography.co.uk)

Do you have an image which has a 'story within a story'?  
If so we'd love to hear from you.

**E mail us and yours could be  
the next "Parting shot".**

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